Strategies for Sustainable Globalization: Business Responses to Regional Demands and Global Opportunities

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Strategies for Sustainable Globalization: Business Responses to Regional Demands & Global Opportunities

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In a world in which economic security, environmental balance, and income distribution are of growing concern, globalization takes on renewed meaning and importance in the conduct of international business. As globalization of international trade, investment and production continue to serve as a model for growth and development, it is important to deepen our understanding of both trends and policies as new concerns arise. We dedicated the 7th International Business conference to facilitate sharing of research that takes into account regional strategies for successful globalization; the changing mission and strategies of individual firms and industries, criticisms of global integration; rising environmental concerns; and growing demands for addressing the adverse effects of globalization on the distribution of income. The overwhelming response received from scholars and practitioners from around the world bear testimony to the importance of the theme and currency of the conference.

The Center for International Business of the School of Business at Montclair State University, New Jersey played a leadership role in presenting six major conferences in China, India and Slovakia in collaboration with a number of partner universities. The 7th conference, "Strategies for Sustainable Globalization: Business Responses to Regional Demands & Global Opportunities" is co-hosted by the *School of Management, Asian Institute of Technology in Bangkok* in January 8-11, 2003.

The conference received over 300 submissions and accepted approximately 170 scholarly papers from over 200 universities and organizations representing about 40 countries. All the pre-screened and refereed papers are included in the conference proceedings. In view of the size and scope of the conference, the proceedings are published on a CD-Rom format.

The organization of the conference and publication of the proceedings were professionally aided by several individuals at a number of universities and organizations. Dr. Susan A. Cole, President, Montclair State University and Prof. Jean-Louis Armand, President, Asian Institute of Technology in Thailand provided the inspiration and support to make the conference a big success. We are also grateful to Dr. Alan Oppenheim, Dean of the School of Business at Montclair State University for his invaluable support and leadership in planning and implementing this major conference in Bangkok.

The 7th IB conference is generously supported by a number of organizations and universities. We received significant financial support from *Ford Operations (Thailand) Ltd, Shinawatra University, PTT Exploration and Production Plc, Loxley Plc, Sony Thai Co Ltd, Thai Fuji Xerox Co Ltd, Asia Books Co Ltd, University of Memphis CIBER and the UNDP, Thailand. The School of Management of the* Curtin *University of Technology, Australia had generously supported the 7th IB conference by sponsoring the publication of the conference proceedings.* We sincerely appreciate their support and thank them for their generosity. Because of their generosity we were able to facilitate the participation of several doctoral students and faculty from the developing countries.

Several faculty members from the School of Business at Montclair State University and the School of Management, Asian Institute of Technology have liberally donated their time energy to the tasks of conference management. In particular, we would like to thank Dr Singha Chiamsiri, Director of the Management Development Center, School of Management, Asian Institute of Technology who helped us in the capacity of the Conference Host Coordinator. We sincerely appreciate his dedication and the enthusiastic support in not only locating and enlisting corporate and institutional support but also for helping in managing the event in Bangkok.

The professional advise and the tireless work of our regional coordinators have assured a high level of response and ensured quality of papers. Several colleagues have generously contributed their time and effort in coordinating and administering the timeline set for the conference. We are grateful to: Silvia Dorantes (UNIVA, Mexico), Bernard M. Wolf (York University, Canada), Nitin Sanghavi (Manchester Business School, UK), Guy Schulders & Sonia Seghir (University of Paris I-Pantheon-Sorbonne, Paris), Juhary Ali (Universiti Utara Malaysia), Sudhi Seshadri (Indian Institute of Management Bangalore, India), Tim Beal (Victoria University of Wellington, NZ), Samir Chatterjee (Curtin University of Technology, Australia), Zhao Zhongxiu, UIBE, Beijing), Martin Rahe (EADA, Spain), Sherriff Luk (Hongkong Polytechnic University), Alessio L. Lokar (Universita degli Studi di Udine, Italy), Jan Rudy (Comenius University, Slovakia), Mark Speece (AIT, Thailand), Jong-Chan Park (Korea University, S. Korea) and Phillip LeBel (Montclair State University) for their professional commitment and cooperation. While thanking them, we would like to acknowledge the logistical and administrative support provided by their respective institutions.

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Thank you,

January 8, 2003

Dr. Himangshu Paul Dr. C. Jayachandran

The 7th International Conference on Global Business & Development "Strategies for Sustainable Globalization: Business Responses to Regional Demands & Global Opportunities"

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Changing Parameters of International Business and the Proposed Strategies for Developing Countries

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Abstract

The globalization process had always favoured international business. More recently, the decline in transportation costs, reduction in tariffs, and the adoption of economic liberalization policies by most countries has added to the speed of globalization and expansion of international business. The fast progressing information and communication technologies (ICTs) are further promoting the process by changing the perception of time and space and by enhancing the outreach of big businesses. As a result of these factors, all the elements of international business are showing enormous growth.

The benefits of globalization in terms of higher efficiency of resource use and greater opportunities for international business and economic growth are, however, not evenly distributed among countries and regions. The negative factors in the world economy such as the widespread poverty, environmental degradation, and lack of economic growth can cause a backlash and compel nations to abandon the economic liberalization policies. To meet this challenge, there is a need to aim at a sustainable world in which globalization benefits most people.

In terms of international business, the globalization is affecting the basic economic parameters in a big way. It is increasing competition in global markets and improving the efficiency of production and investments. But at the same time, it is causing financial instability, greater foreign exchange market volatility, and economic uncertainties. Generally it has favoured big enterprises and can hurt local businesses that are small and operate at the lower end of technology. The increasing convergence of international tastes and the changing profiles of business corporations does not show favourable environment for small enterprises or small countries.

The purpose of this paper is to identify some of the major factors that are changing the structure and orientation of international businesses. The paper also seeks to identify suitable strategies and programmes that will help to enhance the participation/relative share of developing countries in global business and, thereby, improve their development prospects. A case study from the Malaysian food industry is included in the paper as an example of innovative international business development from a developing country.

Introduction

The *twentieth* century saw remarkable progress in all the facets of human life. To mention a few - the world gained access to basic infrastructure such as potable water, electricity and telephone; benefited from new inventions of radio, TV, computer, Internet, life-saving drugs, automobile, aircraft; experienced a significant improvement in the average life expectancy; rising standards of living for many countries/regions; and developments which helped the international business to grow fast and become more open [6]. In terms of political life, the world witnessed a strong movement towards democratic rule and a greater acceptance of market-based economic systems.

Coupled with progress, the *twentieth* century also recorded tragic events such as the world wars and many conflicts, resulting in enormous loss of life, health problems like AIDs, environmental deterioration, and oppressive regimes in some countries. Despite the remarkable economic progress, poverty still haunts bulk of the world population; almost one-fifth of the people live with per capita incomes of less than US$1.0 a day.

Despite these mixed trends, experts believe in a brighter future for the humanity in the *twenty first* century. This belief stems from the fact that technological advancements offer hope to tackle most economic problems, while the push towards democratic rule and market based economic systems will help to promote peace and progress and, thus, further invigorate international business. However, all of this will not happen automatically, or realized as a matter of course. The nations will have to make efforts to achieve a sustainable world which benefits most people and protects the positive aspects of technological and economic progress [5].

International Business-Structure and Growth

International business is defined as '*transactions that are devised and carried out across national borders*' and mainly takes the form of export-import trade and direct foreign investment [4]. Additional types of international business are licensing, franchising, and management contracts.

International business has existed since the national borders were formed and has shown growth throughout the history with greater peace and security, economic prosperity, and technological progress. In the twentieth century, *globalization* - the process of free trade and economic integration influenced the international business in a more profound way. However, the globalization process was interrupted in the 1930s by the Great Depression, and then by the Second World War. In the post-war era, the world economy experienced a revival of growth and a technological explosion. As a result, international business had phenomenal growth and a major impact on firms, individuals and the nations. During the last 30 years of *twentieth* century (1970-2000), the volume of international trade in goods and services expanded from a level of US$200 billion to over US$6.8 trillion - a 34-fold increase. Direct foreign investment (FDI) reached a level of US$4.7 trillion by 2000. The sales of foreign affiliates of multinational corporations (MNCs) recorded a level twice as high as global exports. The driving force behind the growing/changing international business is the process of globalization which has been accelerated during the last 2-3 decades.

Factors contributing to these phenomena have been:

- The *liberalization* of trade policies and reduction in tariffs by many countries.
- Major *developments* in transportation and communication industries, resulting in falling costs and improved services.
- *Advances* in information and communication technologies (ICTs) and the advent of Internet, providing easy *connectivity* and *speedy* processing, storage, and analysis of data at a very low cost.
- *Technological explosion* - widespread advances in science and technology, which have resulted in raising productivity, broadening product range, and improving production processes.
- *Creation* of global institutions/agreements (GATT/WTO) to facilitate open and free trade and investment activity.

In terms of the size and structure of the international business, the following trends are noteworthy -

- The growth in international trade has been much faster than the world output (34-fold increase in trade as compared to 6-fold increase in world output), showing greater specialization and dispersal of production.
- The share of manufacturing in merchandize export-import trade has substantially increased - from 66% to 80% for exports and from 54% to 77% for imports during the 1980-1998 periods [13].
- The services trade showed rapid growth and reached US$1.3 trillion by 1998. The share of travel, insurance and financial services, ICTs, and miscellaneous services in total service trade also improved.
- The foreign direct investment increased from 1.7% of world GDP in 1988 to 3.8% in 1998. However, bulk of the FDI was channeled to developed countries and a few newly industrialized nations.
- The stock markets showed high growth as stock market capitalization increased from US$9.4 trillion in 1990 to US$27.5 trillion in 1999.

- Global links in the form of trade, tourism financial markets, technology, and living standards has been significantly strengthened. This has resulted in greater economic, social, and cultural interdependence in the world. In terms of business, the world has become one big market place.

Changing Parameters of International Business

The globalization process is bringing about major changes in the basic parameters of international business. Some of these are listed in the following.

Globalization of Production

The falling costs of transportation and advances in *ICTs* have enabled firms to source goods and services from locations around the globe to take advantage of the differences in the cost and quality of inputs. Today, more products manufactured by international corporations have parts and components made in many countries. Industries such as automobiles, aircrafts and computers, are good examples of the global dispersal of production activities. With the globalization of production, the national identity of the products is also fading away.

Globalization of Markets

Globalization is merging national markets into one huge market place. With the convergence of consumer preferences, the process of globalization of markets is being further promoted. In the past, markets for industrial goods and materials were global. Now this is being extended to consumer products as well (e.g. coca cola, cars, tractors, aircrafts, fashion clothing, etc.)

Demographic Factor

Over the last 30 years, the world output and trade picture has changed. In 1960's, the United States accounted for 40.3% of world's output. By 2000, US relative share in world output declined to 22.0%. The same was observed in the case of Germany, France and UK. This shows that several other economies particularly in Asia (Japan, South Korea, Taiwan, Malaysia, Thailand and China) grew faster. Similarly, the US dominance in exports has shifted to Germany, Japan and the Newly Industrialized Economies (NIEs) of Asia and Latin America. China, with its large population, has shown very rapid growth. India, another country with a large population, has done well in the recent past and has a high growth potential for the future. If these trends continue, the economic geography will dramatically change, implying that many of tomorrow's economic opportunities may be found in the developing countries.

Changing Foreign Direct Investment

US firms accounted for 66.3% of worldwide direct investment flows in 1960's. The British were second, with 10.5% while Japanese firms had only 2% share of the total FDI. By 2000, world's 7 top national FDI sources were USA, Germany, UK, Belgium/Lux., Canada, Netherlands and France. In terms of FDI inflows, mostly developed countries were the recipients - US, European Union and Japan. The developing countries received only 20% of the total FDI, with China as the biggest recipient. Also, cross-border mergers and acquisitions (M&As) remain the main stimulus behind FDI. Least developed countries (LDCs) received a negligible proportion of the world FDI inflows. Analysis of drivers of FDI location shows a significant change - from natural resources and unskilled labour and national markets to skills, technological capabilities, supply networks, good logistics, and strong support institutions to attract FDI [10]. This changing trend does not favour LDCs or even most developing countries.

Role of Multinational Companies (MNCs)

The World Investment Report [10] provides information on the top 100 MNCs. Out of these, only 3 are from the developing countries. The remaining 97 MNCs are from the developed countries; European Union (46), North America (28), Japan (18) and others (5). The *MNCs* had US$2.1 trillion assets and almost the same amount in sales. The employment for these MNCs was 13.3 million (total) and 6.0 million foreign. The *'transnationality index'* - showing the foreign dimension of their activities (i.e. foreign assets, sales and employment) rose from 51% in 1990 to 53% in 1999. Given the increasing liberal policy environment in which MNCs operate, their transnationality is expected to increase further.

The World Investment Report also lists largest 50 MNCs from the developing countries. A large proportion of these (70%) are from South-East Asia. These had US$531 billion assets, US$367 billion sales and 1.1 million employees. The median foreign assets holdings are small, $1.6 billion as compared to $15.2 billion for the groups of top 100 MNCs in the world. Nevertheless, their role in international business is growing.

Changing World Order

With the collapse of the Soviet Union, many of the former communist nations of Europe and Asia seem to share commitment to democratic politics and free market economy. If this materializes, the opportunities for international business are tremendous. Similarly, changes are taking place in China and Latin America, where markets are being opened up to foreign investment and businesses. China and India, together with a population of 2.2 billion, offer a big market for export and investment.

If free trade and economic liberalization becomes permanent in Russia and the CIS countries, Eastern Europe, China and India, the global economy is expected to become stronger and competitive. However, the production structures and trade links will change drastically, favouring those countries/regions which turn out to be more competitive and attractive to investors.

Implications for Developing Countries

The changing parameters of international business are likely to have the following implications for the developing countries.

- *Increased competition* - emanating from liberal trade regimes, reduction in tariff and non-tariff barriers, efficient and low cost transportation systems, advances in ICTs and increased strength and outreach of MNCs, and internationalization of consumer tastes.

- *Threats from big business and fast advancing technologies* - as big MNCs enjoy new economies of scale by virtue of their global operations and are able to invest in R&D. These factors favour low cost of production, better quality and access to international markets as well as enhanced ability for product differentiation.

- *Access to global market* - is more open and easy with globalization and advances in information technologies. However, entry to international business is not costless. Lack of brand-naming, and heavy expense of advertising make it difficult for small firms from the developing countries to access global markets. If at all, entry takes place, the small firms operate at low margins and modest turnovers.

- *Economic uncertainties* - have increased with the 11 September tragedy and slow-down in the world economy. Economic situation in US, Japan and some Asian countries remain unclear. This is creating business uncertainties for many export businesses and investment activities.

- *Financial volatility* - in 1997 financial crisis, and subsequent currency crises in Argentina and Brazil, have shown the volatility of financial/currency markets. Large movements in currency exchange rates create a serious impact on economic growth and international business. Basic factors creating exchange rate 'volatility' are the unchecked speculative activity and capital flight which have become more intensified with the integration of financial markets. Appropriate national policies and global action are required to check undue volatility of exchange rates [2].

- *Un-even distribution of FDI and technological progress* - is observed among nations/regions. With globalization, the un-even distribution of FDI, technological progress, and economic growth still continues, raising disparities in the world. Poverty, indebtedness, and lack of development are found in a number of countries of Africa, Asia and Latin America. Unless this trend is checked/reversed, there could be a socio-political backlash hurting the international business and global economy.

- *Growth of international business* - very much depends on people, prosperity and economic diversity. The number of people is projected to increase from 6 billion to 7.5 billion by 2020. The world economy, on the other hand, is not showing steady growth. In fact, some analysts believe that the world economy is slowing down from an average of 3.5 per cent (1960-1980) to 2.5 per cent (1980-2000). Future prospects look quite uncertain. Although a high growth potential exists in many developing countries, the distribution of FDI and technological progress are not favourable to achieve this potential. The demographic factor (i.e. large population is Asia, Africa) can only play its role in promoting international business if poverty is removed and purchasing power is created in a big way.

Proposed Strategies to Enhance Participation of Developing Countries in International Business

In this section, strategies and programmes are proposed to achieve the dual objective of promoting international business and enhancing participation of developing countries in the global market. However, in tailoring programmes, contextual approach is recommended [3].

Building a Harmonious World Community

We should aim at creating a sustainable world. The global economy must remove instability in human affairs brought about by 11 September events and find a new balance with Earth's natural systems [5]. There is a need to address the environmental issues, remove extreme poverty, stimulate economic growth, and introduce new business objective of '*profits with social responsibility*'. A peaceful and secure world, with a concern for the betterment of all, is essential for the continuous growth of international business.

Business Development Strategies

Business development strategies at the firm/industry level are generally lacking in the developing countries. Most strategies and programmes adopted by *DCs* are macro/sectoral in nature and aim at attracting FDI or promoting industrial development. Policy instrument like the fiscal and monetary policy, trade policy are well suited to create a favourable environment for business and industry, but are inadequate to assist business development at the firm/product level. As firms in *DCs* are not at par with MNCs in developed countries, it is important to introduce strategies and programmes to strengthen promising firms and promote well-selected businesses for the global market. Strategies may include provision of consultancy services, and grants for R&D, market research, product development and technology acquisition and development and training, and social recognition of successful players. Special finance schemes can also be helpful. The programme should focus on creating mini MNCs.

Technology Transfer and Development

Technological advances are making a big impact on economic growth and business development. Productivity and efficiency of resource use, product range and development, marketing and delivery of products, management styles and their effectiveness, are all being influenced by the technological advancement. Actually, the division between the 'developed' and 'developing' countries is created by the 'technological divide', which must be narrowed down to accelerate economic growth and promote business development. Emphasis on science and technology, human resource development, R&D, building technology acquisition and development capabilities, and creation of a large skilled workforce, will greatly help *DCs* in reducing the technological divide. Country models like the one followed by Korea - vigorous efforts in technology acquisition and development and HRD; China - partnering with foreign business [7]; and Malaysia - building linkages with foreign companies, are useful learning cases for the LDCs. Government policy and concrete promotional/support programmes play a crucial role in technology transfer and development [10].

Create Purchasing Power Locally

The DCs (particularly LDCs) are facing problems of unemployment and poverty. The globalization has brought many products which have broadened consumer choices. But at the same time, it has adversely affected the growth and development of local products. In order to benefit from globalization and international business, the strategy should be to create local purchasing power. The following modes of action are recommended -

- *Stimulate economic growth* - in DCs by creating essential infrastructure, promoting productive investment activity, building human resources, promoting science and technology, and attracting FDI. With accelerated economic growth, the standard of living will improve and provide a base for business development.

- *Create employment* - through economic development and promoting technologies that suit the resource endowment. Countries such as China, India, Pakistan, Bangladesh, Indonesia, Philippines, and Thailand have large populations. Best way to raise purchasing power is to achieve economic development by using the most abundant resource - labour. Globalization/international business and technologies should be aligned to the achievement of this goal. However, the leading countries of the world (which are the home to core technologies) have a different resource endowment (more capital and knowledge and less labour) and, hence, technological advancement is not favouring labour intensity. The DCs, therefore, have to supplement the R&D effort and modify technologies to their advantage, at least in sectors where most of the population draws its living (e.g. agriculture, trade and transport, tourism, etc.). Global action is also needed to encourage 'core technology countries', to evolve technologies for the DCs and actively participate in development through FDI and global production structures.

- *Local business and enterprise development* - is important for adding value to local resources, creating employment, and improving traditional products for the global market. Korea's ginseng and sweets, which are exported in many forms/sizes and product variations, is a leading example of producing and exporting 'traditional products' in a modern way. Another example is Taiwan's herbal teas, dried/pickled fruits, India-Pakistan cooking spices, pickles and chutneys, Malaysian ready-to-cook traditional foods and paratha, are interesting innovations in business development. The potential for further development is vast and should be exploited. Modern machinery and technology can help in product design and development, mass production, standardization and quality control, packaging and transport. The 'new economy', especially based on IT related services, can also help business development for small firms since I*CTs* are size neutral [9]. Programmes to assist local business and enterprise development should have the objective to *'produce locally and earn globally'*.

Regional Networking and Alliances

Regional networking and business alliances are extremely important to developing countries to pool resources and create economies of scale. Regional networking and alliances are particularly useful in business and enterprise development, R&D activities, science and technology and market development. Regional blocs such as the ASEAN should cooperate in preparing member countries for global business development.

Learning from the Late Movers

There are a number of companies which have successfully built a profitable business from their home countries in recent years. A study of 12 emerging MNCs, operating in a wide range of business environment, shows some common elements which can be useful for new entrants. The main elements found in the success stories by Christopher Bartlett and Sumantra Ghoshal [1] are listed below:

- Break the marginal mind-set **-** get out of the prison of local standards
- Have confidence and prepare yourself to move to higher margin business
- Irrespective of the home country's average standards, the *MNC* should aim at creating a pocket of excellence/world class standards
- Develop a culture of continual cross-border learning
- Devise suitable strategies as a late mover - two types of strategies found. *First*, benchmarking the established global players and often exploiting market niches left out by larger companies, *second*, the late comer challenges the rules of the game and introduces new business models
- Strong leadership, committed to global business and open to new ideas, plays an important role in the success of late movers.

Similar to the above study, we should highlight the local success stories and learn from it. The *Case Study of Kawan Foods* exporting paratha from Malaysia is included in this paper as an example of a bold initiative in international business development.

Case Study

The Malaysian Paratha - Exports by Kawan Food Manufacturing Sdn Bhd

The owners of two sister concerns, namely KG Pastry manufacturing and Kawan Food Manufacturing, started their business in 1983 by producing spring roll pastry on a small scale and selling it to hawkers in Kuala Lumpur. The business showed a good potential and the owners had a vision to expand it. The Kawan Foods and KG Pastry manufacturing were established in 1978 and 1992, respectively.

In the formative years, the KG Pastry focused on spring roll pastry and traditional Chinese pastries. The Kawan Food produced paratha, nans (i.e. flat bread) for non-Chinese Asian consumers. In the next development stage, product range was broadened to add frozen buns and loaves (flavoured and plain), mixed vegetable spring rolls, curry spring rolls, samosa, frozen fishes, chapattis, and oriental curries, all packed in plastic or open ended boxes. As the scale of production increased, modern machinery and equipment was introduced to increase productivity and ensure good hygiene and quality.

Keeping in line with the Government's desire for local manufacturers to export, the company made aggressive moves to export its wide range of products. By using the existing marketing channels (agents, wholesalers and supermarkets); the company has been able to make international business as its main component, about 60% of the total. Markets used so far are quite sophisticated and include Europe, USA, Middle East, Australia, Hong Kong and Singapore.

The management right from the beginning focused on business growth. This was necessitated by the small size of the local market for a single product. By producing a wide range of products (about 75), the management was able to achieve economies of scope as well as large-scale production. This helped the company to sustain a heavy investment expenditure on modern machinery, quality control, and R&D activities.

The business related to traditional food products normally produced by small manufacturers and the household sector. The company adopted a strategy to produce hygienic and quality products to create a *'niche'* for reliable and safe foods. The scale of production helped to achieve reasonable costs and build up sufficient capacity to meet large orders - both at home and from abroad.

By now, the two companies have made an investment of RM40 million and employ 80 production workers and 20 technical/administrative staff. Top management consists of family members.

Success Factors: Dynamic and ambitious management; Malaysia's good reputation for clean/hygienic foods; strict standards enforced by the Health Authorities; location near a major port (*Klang);* and good transport and shipping infrastructure; and pro-business attitude of the Government.

Conclusion: A small Establishment, producing traditional food items, has successfully entered the international market by using modern food production, packaging and transport technologies.

References

[1] Bartlett, Christopher A. and Samantha Ghoshal, “Going Global - Lessons from Late Movers”, *Harvard Business Review. March-April 2000*

[2] Bello, Walden, Nicola Bullard and Kamal Malhotra, *Global Finance:Z*ed Books, London and New York (1998)

[3] Child, John and David K. Tse, “ China's Transition and Its Implications for International Business”, *Journal of International Business Studies, Volume 32 Number 1 (2001)*

[4] Czinkota, Michael R, Iikka A. Ronkainen and Micheal H Moffet, *I international Business.* Harcourt College Publishers (2002)

[5] Flavin, Christopher, Hillary French and Gary Gardner, S*tate of the World 2002 - A Worldwatch Institute Report*. W.W. Norton & Company (2002)

[6] Hill, Charles W.L., *International Business*, McGraw-Hill (2002)

[7] LUO, Yadong , “Partnering with Foreign Businesses: Perspective from Chinese Firms”, *Journal of BusinessResearch* (June 2002)

[8] Porter, Michael, Jeffrey Sachs, Andrew Warner and Klans Schwab, *The Global Competitiveness Report 2000* Oxford Press (2001)

[9] Sahlmar, William, “The New Economy is Stronger than You Think” *Harvard Business Review. Nov-Dec 1999*

[10] United Nations – UNCTAD, *World Investment Report 2001*

[11] United Nations – UNDP, *Human Development Report 2001*

[12] Vernon, Raymond, “Big Business and National Governments: Reshaping the Compact in a Globalized Economy”, *Journal of International Business Studies (2001)*

[13] World Bank, *World Development Indicators (2000)*

China and India: The Firm, Industry and Nation Linkage Revisited in the Context of Globalization

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Abstract

In the context of globalization and liberalization in China and India, most studies have looked at the phenomenon at three levels of micro-organizational firm, industry and at the macro- national policy level. According to another nomenclature, researchers have looked at the socio-economic, industrial and cultural characteristics of these countries. More studies have tended to identify issues of extent of decentralization of decision making at national and provincial government level as also enterprise level, as factors contributing to the robustness of the globalization process to withstand international competition. Also contributing to the robustness and success was the macro-economic policy priorities of export led growth or domestic consumption led growth. However in most studies the possible impact of the increasing role of the new generation post-liberalization organizations on future industry structure and hence macro-economic policy making has not been postulated. This study attempts to highlight where and how the new generation of organizations could impact industry and national level policy. For globally competitive new generation organizations, they have to be export competitive at a global level. Essentially attracting FDI in high technology industries, a different set of policies with respect of Intellectual Property Rights (IPR), physical infrastructure etc. was essential. This paper attempts to investigate the issue of co-evolution of technology, industry structure and supporting institutions in the context of prevalent policy environment.

The findings of the study indicate that while technological changes in an industry has put pressure on industry structure to change in a certain direction, government policy response to this has often been reactive. Based on industry specific priorities of control and protection against appropriation, the findings suggest that, lack of existence of functional institution structure that could form the linkage between policy and firm level technology driven decisions is instrumental in the emergence of the final structure of an industry post-liberalization. This is quite uniform in both China and India.

Introduction

In the late 1970s, China emerged from an even more dirigist isolation strategy than India did in 1991. However, by 1990s it was the second highest recipient of FDI, after the US, with export intensity pushing from 18.2% to 23.5% between 1991 and 1998. Some of the reasons for reforms were stated as (a) Economic growth in the pre-reforms period of communist rule between 1949-1978was slowing down, (b) state protection and support as also absence of competition had perpetuated inefficiencies – technical, pecuniary and organizational. And finally liberalization was bringing success to small neighboring states like Hong Kong, Singapore and S.Korea which registered GDP growth rates in excess of 8% per year (Sandesara, 1995). China decided to attract private foreign capital to spur economic development. By absorbing foreign direct investment, China hoped to gain access to new sources of capital, advanced technology and management skills (Pearson, 1995; Sandesara, 1995; Brahm, 2001). However the Chinese leadership wanted to apply to the foreign sector, the same tool of socialist state that it used to control its domestic economy in the past- the state plan, extensive government participation and regulation of the economy. Against this background, the first joint venture law was passed in 1979 and the first of four Special Economic Zones (SEZ) created in 1980. The foreign partners, because of their stakes, would be committed to the success of the joint ventures and would be willing to supply advanced technology and management. Even in ushering in the Internet era, while China wanted to become a dominant global player, and wanted foreign participation in the field, the state wanted to retain control with respect of content and foreign ownership. Hence in a balancing act, private entrepreneurs were going beyond official authorization (Brahm, 2001). But as observed by Brahm, the new generation of E-entrepreneurs, the start-ups could be expected to use all the possibilities that technological development offered to bypass government regulation (2001). This was expected to lead to more subtle ways of change in corporate and business landscape. The new generation of entrepreneurs is said to push the envelope everyday with respect to what initiatives the system could live with. They were creating a wider berthing space for themselves, knowing how to slow down- in order to avoid any harsh adverse reaction- and how to put general disarray and confusion to their advantage (Smadja, 2001).

The above changes bring in the issue of changing pattern of Chinese State's unified bargaining with foreign investors, often TNCs. The technology, international markets and management skills that the Chinese leadership wanted were frequently found in industries dominated by few firms. Hence globally bargaining capacity of the Chinese was seriously limited. Often the bargaining power of the state was limited by the characteristics of the industry or sector. Strength of the host government here depending on the extent of dissemination and standardization of the technology (Pearson, 1991). Often complaint of transfer of outdated, excessively expensive, insufficient and/or inappropriate technology together with lack of backward linkages to sources of supply of raw materials/components plagued the process of setting up foreign joint ventures in China. As it was proved in many research, technology transfer as part of market oriented reforms, helped in achieving rapid economic growth (Balassa, 1985; Greenaway and Sapsford, 1994; Chen and Tang, 1996; Doraisami, 1996). Adopting the foreign direct investment route it represents transfer of a package of capital, technology and management expertise to host country. For a developing country the technology transfer and not capital may lead to greater increase in efficiency (Haishun et.al., 1999).

To increase the exports of hi-tech industries, India needed to attract export oriented FDI. Most MNEs till recently came to serve the large domestic market. To attract export oriented FDI, a different set of policies are needed. For example reforms of the banking sector, customs and ports administration, physical infrastructure facilities and easy access to info highway. In the short run, soon after liberalization, massive import of technologies through intra-firm transfer and arms' length purchase of technology against lump sum payments and licensing took place. The ability of less developed countries like India to exploit advantages of WTO regime depended on the locational advantage India provided, which in turn depended on the government policy, ownership advantage of intangible assets possessed and infrastructure facilities available for networking. For this India needed to introduce several domestic reforms and create domestic institutions to face the global challenge.

The long term efficacy of liberal policies for the developing countries will largely be determined by the impact these policies have on the development of technological capability among firms in these countries. The policy makers will have to gradually evolve instruments most conducive to technological dynamism and enterprises will have to explore various methods of technological acquisition/management. There seems to be evidence on a complex set of relationships between indigenous technological effort, market structure and external economic linkages through FDI, technological licensing and trade. The role of IPR in changing appropriability conditions and therefore firm's technology related choice need to be highlighted. Observed significant differences in technology performance across developing countries and firms are often traced in literature to different policy environments which influence firms' response to given market incentives. These can differ significantly across markets, industries and firms. Changes in economic policy can influence firm behaviour vis-à-vis their investment decisions to develop technological capability by changing the incentive structure. The state in developed and developing countries has sought to formulate policies that encourage technological capability building at the firm level. The realization that technology has codified and tacit elements impacting transfer of technology, policies have to be geared to facilitate this transfer. For example, a strong IPR regime discourages borrowing, copying and learning from a common pool without paying for it. Else the transferor of technology will transfer lower levels of technology by restricting flow of tacit knowledge. In a pre-liberalization protective government policy that deterred entry, incumbent oligopolies in the Indian industry did not compete fiercely and accommodated each other. However in the post-liberalization regime, spate of mergers and acquisitions between foreign and Indian firms (Basant, 1999) has brought about significant changes in industry structures with significant changes in technology strategy of Indian firms.

In an evolutionary theory of economic growth, aggregate growth can be looked at as cumulative of economic growth at industry or sector levels. Central to the theme being technological advancement as an evolutionary process where new technological alternatives competed with each other and with prevailing practices (Nelson, 1998). After product design standardizes, focus is on process improvement which gets related to development of skills and specialized economic activity. Firms that do not produce a variant of the standard design either drop out or serve a focussed small niche. With the market less fragmented and more predictable, firms try to exploit economies of scale and a new/ reoriented industry structure emerges. Empirical studies by Gort & Klepper (1982) and Utterback and Suarez (1993) have supported the theory. Firms get linked to their suppliers, markets and draw on talents and skills to impact the wider economy. A society's institutions – both general and specific to the sector will influence the model. Various features of the institutional environment tend to adapt and change in response to the pushes and pulls exerted by the industry. Industry or trade associations form, that help organizations to lobby for regulation to its liking, for protection from competition from outside the group, for public programme to support it etc (Nelson, 1998). Researchers like Perez (1983) and Freeman (1991) have argues that to be effective with evolving technology a nation requires a set of institutions compatible and supportive of them. According to Lipsey (1997), the existing technology interacts with the existing facilitating structure to produce economic results, like specific outputs at micro-level and size and distribution of GDP at macro-level. Globalization has been looked at as a technological change with cross-border integration in the production processes of TNCs. As an example, use of mechanical hand in surgery has allowed the technology to be transferred to developing countries that need the life saving skills. But it needs to be seen if and to what extent the new technology will influence the industry structure and institutions in the developing country and hence its entire economy.

Research Gap

As has been highlighted in the discussion above on China and India's efforts to liberalize, focus was on attracting private foreign capital to spur economic development. By absorbing foreign direct investment, these countries hoped to gain access to new sources of capital, advanced technology and management skills. To be export competitive at a global level, the export capability had to be in high technology industries. But for having high-tech industries, export oriented FDI in these industries was required. To attract such specialized FDI, a different set of policies with respect of Intellectual Property Rights (IPR), physical infrastructure including information technology for firms to network, banking sector was essential. In discussing Chinese policy makers attempt to implement the changes within the broad framework of state retaining control with respect of foreign ownership and autonomy of business decisions, researcher have observed that private firms would try and use technology at their disposal to bypass government regulation.

This paper attempts to investigate the issue of co-evolution of technology, industry structure and supporting institutions in the context of prevalent policy environment. The discussion above brings to relief the linkages between government policy and the technology levels of a country particularly highlighting the issues peculiar to third world countries attempting to globalize after being in a high protection policy regime for long. It looks at the causality relationship between macro-state, industry level policy changes and firm behaviour. It would like to investigate if firm behaviour with regards to choice of technology and hence business focus has proactively influencing the overall economy. This can then be contrasted to the more prevalent causality argument of policy changes attempting to attract firms and their modern technologies to a liberalizing/ globalizing countries.

Choice of Sample

This study looks at the evolution of the telecommunication and automobile industry in the wake of liberalization in both China and India. Today the development of communication infrastructure and availability of telecommunication media and links is sine-qua-non for any form of development. There is a strong two-way co-relationship between economic development, general awakening of a region with teledensity. Telecommunication helps develop private sector, delivery of public services and integration of isolated rural areas with the rest of the country (Kumar, 2002). The field of telecommunication is facing challenges of technological convergence. Instead of being geographically based and hardwired for voice service, telecom companies now compete on the basis of coverage and functionality. From being state monopolies, the field had been fragmented with large private and state owned players. Reach was becoming central to success in the field for being able to deliver a critical mass of connected customers in order to exploit economies of scale in a capital intensive technology area (Chan-Olmsted et.al., 2001). However liberalization and globalization are creating new strategic challenges for telecommunication companies from developed countries. Many of the new market opportunities are in developing countries that lack strong, stable legal and regulatory institutions and have business practices unfamiliar in most developed countries. One way to circumvent these problems being entry through alliances with well connected local players (Whalley and Williams, 2000). Technology changes often drive globalization in these industry by not only altering the type of service provided but also altering the production and sales cost structures, demand from clients, degree of product substitution and ability to attract capital investment (Chan-Olmsted et.al., 2001).

Beginning with the US, the automotive sector was considered the engine of growth for any economy. It was considered to be the source of industrial revolution in the US (Womack et.al., 1990). As in advanced countries, market structures are closely related to automobile industry in developing countries. In fact, in case of Asian automotive industry, an inefficient market structure pervades the industry. In most cases, the automotive sector has been initiated and sustained by government policies that feature high levels of protection and high local content requirement (Abrenica, 1998). The nature of automotive investment is indivisible to the extent that there is a minimum efficient scale. The evolution of the post-Fordist industrial production system heightens the requirements for continuing ascent on the technological ladder. In present times the new global trading and investment order reduces the scope for state promotion that fostered automobile industry in the past. Together with the fact that market growths for automotive have been depressed in developed countries (2-3% annually), the developing countries form attractive markets for automakers from US, Europe and Japan. With the persons per car ratios of 125.4 in China and 172.4 in India, these countries are priority investment areas because of the huge latent demand (Abrenica, 1998).

Automotive development undergoes successive stages distinguished by the level of efficiency attained in parts manufacturing. In the infancy stage, a wide variety of vehicles are assembled from imported CKD kits. A limited domestic market inhibits adequate scale. Consumers absorb cost penalty as local assemblers are protected by high tariffs. As late as 1998, countries like China and Vietnam were in this stage. The next stage or growth stage, is identified by a rapidly expanding domestic market and a developed network of parts suppliers attracting global assemblers to set up operation. Countries like Phillipines, India and Indonesia were in this stage by 1998.

We therefore see, that while the automobile industry is an engine of growth for an economy, the levels of technology in the industry and its suppliers distinguish stages of evolution in the industry. These stages are identified to be different for China and India. As an industry whose growth is fuelled by government policies, this industry is a suitable one for the study of linkages between firm, industry and national level policies, technology, industry structure and institutions.

The choice of the automobile industry and telecommunication industry has some contrasting characteristics. Although both industries are technology intensive, the rate of change of technology and hence obsolescence is higher in the telecommunication given the convergence taking place. Automobile industry, though driven by government policy has been less of state monopolies than telecommunication industry till very recently. Inspite of having liberalized and globalized, China and India’s trajectories with respect to the automobile and telecommunication industry have not been identical (Tureq, 1995; Saez and Young, 2001). Hence the choice of the telecommunication and automobile industry to understand links between national policy, industry structure, firm and institutions in China and India.

Industry Focus

Telecommunication

With their historical baggage, India and China have chosen to follow paths of liberalization and globalization differently. Although both China and India represent huge opportunities for international telecommunication providers, according to some authors, their different industry structures, regulatory environments, services and equipment call for separately tailored approaches to business development (Tureq, 1995). Nearly two-third of China's telephone capacity was operated and managed by Ministry of Posts and Telecommunications (MPT). In 1998, the MPT and the Ministry of Electronics Industry's regulatory functions were merged to form Ministry of Information Industry (MII). Under MII's guidance two carriers dominated the transmission of telecommunication: China Telecom and China Unicom. MII had a 76% stake in China Telecom which in turn controlled 95% of China's telecommunication. China Unicom only operated pager and limited mobile services and no fixed line services. China was the third largest mobile phone and second largest fixed line network in the world. In 1999 it had 43 million mobiles and 100 million fixed line telephones. Compared to this India's telecommunication industry was much smaller. It was estimated to have, 1 million mobile phones and 14 million fixed line phones (Saez et.al., 2001). Most telecommunication was under the Department of Telecom (DOT). The provision of telecommunication services was controlled by coordinated monopoly: Videsh Sanchar Nigam Limited (VSNL) and Mahanagar Telephone Nigam Limited (MTNL), both states outfit. Whereas VSNL was sole provider of international telecommunication and controlled 75% of telecommunication service provided, MTNL provided local and long distant services in the two metros of Delhi and Mumbai. However liberalization of the telecom sector started earlier in India with the drawing up of the National Telecom Policy in 1994. Private sector players were invited first in pager and then mobile telephone. These were done through competitive bidding of telecom circles (there are 19 of these approximating the state boundaries except one for the states in North-East India). However in China, as late as 1998, the Chinese government announced that it was delaying the deregulation of China Telecom indefinitely. The deregulation fell through due to MII's split over how to proceed with the deregulation. Was it to be along business lines (e.g. paging, satellite data, long distance and mobile) or along regional lines (e.g. geographically). Hence we see that inspite of the effort by both China and India to liberalize their telecommunication industries and usher in latest and varied technologies, their priorities were different and hence trajectories of liberalization expected to be different.

China

The telecom industry in China has to be broken into (a) Telecom Equipment industry and (b) Telecom services industry to exactly understand the impact of liberalization on each and the overall telecom industry of China.

Most projections of booming telecom business in China refer to telecom equipment and related electronics business in China. Powered by strong growth in mobile and broad band use in China, telecommunication sector growth of 18% by the end of 2002 is expected to take revenues to \$1.23 billion (wireless). The increase in mobile sector at 12% would take revenues to \$77 million (Ken, 2002). This growth was to be based on upgrades in 2.5G, GPRS and CDMA technology. As the largest telephone production base it turns out about 100 million sets per year.

On the services side, the fixed and mobile services would increase significantly with total capacity of PABX and mobile exceeding 100 million lines. Aggregate growth in this sector has been 40% in the last 10 years (Ken, 2002). Chinese MII strategy states:

Telecommunication industry entails the import of technologies, establishment of joint ventures with companies leading the world in specific areas and development of telecom products with Chinese Intellectual Property rights. Goal is to make China ***LESS DEPENDENT*** *on imported technology products, and to export its own telecom products after meeting domestic demand.*

(As mentioned in Ken, 2002)

Although 98% local exchanges are manufactured in China and there are more than 50 wholly owned Chinese companies, the experience of foreign companies have not always been pleasant. With promise of a large market and attracted by the aggressive telecom infrastructure spending by Chinese government, many large MNCs like Siemens, Motorola, Lucent, Ericsson entered China. However as late as August 2000, Ministry of State Security shut down the website of New Culture Forum. Government officials accused the Forum of posting "Counter-revolutionary content", sending a very strong message of control of communication media. Wire reports contend that this was governments effort to contain spread of political dissidence and pornography over the net (Li et.al., 1999a).

Much of the confusion may lie in the role of the government in controlling the liberalization process of the telecom industry and the contradictions inherent in the system and ideologue. Foreign investment in China was governed by the "Law of the People's Republic of China" on Chinese-Foreign Equity Joint Venture. Lack of clarity in these laws is highlighted by the development and eventual demise of the ill fated China-China-Foreign (CCF) investment vehicle (Chuang, 2000) in Unicom's foreign ventures. The vague legal framework made such investments extremely unpredictable. Besides the MII, another body MOFTEC (Ministry of Foreign Trade and Economic Cooperation), under the State Council was in charge of administration of China's foreign trade and economic cooperation. It formulated policies, laws, regulations for foreign trade, foreign investment and economic development (MacLellan, 1998). The Chinese Telecom industry comes under MOFTEC section on Prohibitive Foreign Investment Industries Chapter. Hence inspite of government ministries of Electronics (MEI), Power (MOP) and Railways (MOR) being significant stakeholders in Unicom, it could not save the CCFs entered into by it from being declared illegal by the state. Essentially foreign investors were providing capital for Unicom's projects in return for share of revenues from it. Between 1994-2000, 40 foreign companies had invested US$ 1.4 billion into the CCF ventures. In it a foreign investor formed a JV with a Chinese company not prohibited from forming foreign JV. The JV would then sign various contracts and agreements with a Chinese company that was prohibited from forming foreign joint ventures, which would then use the money of foreign player as project fund. In return foreign investor got a share of the revenues that were allocated to the first joint venture. It met two government prohibitions of (a) foreign companies having direct equity control over network operating ventures and (b) foreign companies having direct ownership over networks (Dernelle, 1994). In 1999, on order from MII, these CCFs were declared illegal and in September, Unicom notified CCFs that it was ceasing cash flow distribution. In the hard bargain for settlement that followed, Unicom agreed only to return the money put in initially by foreign investors and interest under terms of Chinese bank and did not compensate for the operational costs in the intervening period. Inspite of the signing of the bi-lateral WTO agreement with US, Chinese officials said the CCF contracts were illegal and did not form part of WTO negotiations.

China's legal framework reflected a tension between encouraging foreign investment and maintaining state control over economy (Potter, 1996). Irrespective of Chinese interest in bringing latest technology into the country and self-sufficiency, government policy prohibits joint ventures that allow foreign management and administration of post and telecommunication services (http://www.moftec.gov.cn/moftec/html/laws_and_regulations/investment25.html).

Inspite of WTO accession, China has expressed view that approvals for foreign investment would not be automatic but would be done on a case to case basis.

Studies on the China's telecom equipment market have shown that MNCs were open to transfer of latest technology in scales not even considered in other markets and agreeing to cut equipment cost (Rehtak & Wang, 1996). Fibre optic cables and switching technology central to the development of the telecommunication infrastructure have been provided by companies like AT&T, Intel and Motorola (WTEC, 1997). It has been a primary importer of SDH fibre-optic transmission equipment. MNCs had adopted the policy of (a) heavy capital/technology investment, (2) highly paid skilled labour (3) large intangible asset transfer into China. Even in Chinese market, research has shown that high level of technology leadership led to high marketing effectiveness and efficiency resulting in high profitability (ROA). This was considered to be preferred criteria for Chinese state authorities in choice of foreign firms in telecommunication sector (Li et.al., 1999b).

India

The liberalization of the Indian Telecommunication industry became necessary due to its slow rate of growth. Between FY80 and FY90, the installation of fixed lines increased at CAGR of 8.6% per annum from 2.016 million on March 31, 1980 to 4.59 million on March 31, 1990. As at the end of March, 1990, the waiting list represented

37.3% of the total business, a potential subscriber had to wait for an estimated 42 months to get a telephone connection. The teledensity increased at a snail's pace from 0.3 in 1980 to 0.4 in 1985 to 0.6 in 1990. The low penetration rates were due to supply side (low investment) than demand side constraints. Prices for residential access services were below cost and led to excess demand and supply shortfall (ICRA, 2001). Hence liberalization of telecom services began tentatively in 1992 with allowance of private players in electronic and voice mail, data services, video conferencing, radio paging and cellular services.

The National Telecom Policy 1994 (NTP) gave licenses after competitive bidding to 6 basic service operators, 8 cellular operators in the four metros, 14 cellular operators (34 licenses) in 18 state circles and to paging operators in 27 cities. Large latent demand and foreign equity participation upto 49% attracted foreign players. However high license fee bids, tariff distortions, unattractive interconnection and revenue sharing arrangements between Department of Telecom (DoT) the government telecom monopoly and private players failed the efforts. Absence of a powerful and independent regulator (Telecom Regulatory Authority of India-TRAI) added to the failure.

Even in the improved New Telecom Policy, 1999 the regulatory system functioned through the government bodies of Telecom Commission (TC); DoT; TRAI. Attempt was made to separate issues of formulation of telecom policy, licensing authority and regulation of tariff and interconnection (ICRA, 2001). To address the issue of convergence, Government of India (GOI) constituted the Group on Telecom and IT convergence in 1999 under the ministry of finance. In 2001, this group formulated the Draft Communications Convergence Act, 2000. Under the Act, GOI could by notification, in public interest, exempt any person or class of persons from payment of the license fee, determine appropriate tariffs and take measures to protect consumer interests and promote and enforce universal service obligation.

In bidding for fixed and cellular services, under NTP'94, the companies had to be Indian, foreign equity holding only upto 49% and license was for 15 years which was revised under 1999 policy to 20 years with subsequent extension of 10 years at a time. A minimum of 10% of the phones had to be in villages. Tariffs of local calls were not to exceed that of DoT. There were serious problems of transparency in the policies with regards to granting of circles, fixing of tariffs etc.

In the fixed line services, under pressures of competition government monopolies BSNL(earlier MTNL) & VSNL installed 4.92 million lines in FY2000 alone. But due to increasing demand the waiting list of 1.98 million in March, 1999 increased to 4.21 million in August, 2000. In the new revenue sharing model, licensee had to pay, besides the one time entry fee an annual fee as percentage of annual gross revenue of 12% in Category A circle (Metros); 10% in Category B circles (States with large towns). Efforts were on to Corporatize the government monopolies VSNL and MTNL.

Privatization efforts in cellular saw large MNCs like AT&T, NTT, Bell Atlantic, Swiss Telecom enters India. Indian players also came like Bharti/Airtel, Birla, Reliance, BPL either in fixed or cellular services or both. Many players like Reliance won license to operate in as many as 13 states through the "aggregation strategy". By owning national networks, operators had flexibility of regional pricing plan. Only some players who had multiple services like fixed and cellular over large number of circles, found it economical to set up the connectivity (backbone) to offer Long Distance services (both national and international). In the past the international gateway was with the government monopoly VSNL.

Researchers have observed that NTPs as also Convergence Bill fail to highlight regulation of competition issues, role of appellate bodies. Convergence can lead to sector specific actors losing out to convergent competitors as they have divergent interests and revenue sources although they may be inferior to sector specific actors in their sector technologically. Most issues of Telecom Policy continue to be in hands of TC. Overlapping role of TRAI and DoT could delay decisions. In convergence due attention needs to be given to allocation of bandwidth under the heading of spectrum. Political intervention and role of Prime Minister's Office (PMO) in setting up of GOT to look into convergence issues may bring in vested interest. When BSNL charged advance rentals from its customers, telecom minister intervened to cancel the charge, indicating political intervention in organizational issues. The major issue is of ensuring ex-post competitive behaviour among players in the sector. Although ex-ante efficiency can be ensured through licensing. This is more so when multi-service provider regime threatens mergers & acquisitions as also vertical integration. Together with a neutral Telecom Dispute Settlement and Appellate Tribunal, a Competition Commission replacing MRTPC is essential (Jain, 2002; Basant, 2001).

Unlike in case of China, in both the NTPs of 1994 and 1999, as also other government initiatives, the telecom manufacturing sector has been neglected. Most of the manufacturing has been fibre optic cables due to their high transportation cost from abroad. For handsets and other technology, Indian telecom industry has mostly depended on imports. Indigenous manufacture is only of low end equipment dependent on indigenous R&D (Dikshit, 2001).

Automobile

In the 1970s automobile industries in developing countries were rebuked for their failure to set in motion the technological learning and industrial externalities that justified state promotion. Capacity utilization and automation levels remained low and not turnaround was foreseen (Abrenica., 1998). Automobile industry, for the purpose of this research refers to manufacture and assembly of parts of four wheelers- cars and commercial vehicles. It excludes two-wheelers. Although in most developing and newly industrializing countries in Asia, automobile industry has gone well past the “screwdriver” stage and have entered higher value added, technology intensive mass manufacturing, Korea is the only country having an indigenous auto manufacturing base capable of competing in the international market. Therefore, in the case of nascent automobile industry, in countries like China and India the focus is on what role the state plays in a liberalizing market? What policies ensure that the national economy benefits from integration of this industry to the global economy ? Rapid market expansion in the 1990s was spurred by sustained economic growth and radical policy changes. While in 1991, India removed its labyrinth of investment and production restrictions, China, in 1994, adopted an automobile industry policy aiming at 3 million vehicle units by 2000, stimulating production and foreign investment. Despite these efforts scale economies failed to be realized rapidly due to the fragmented nature of the market with wide array of brands and models. As a result capacity utilization were as low as 25 to 37 percent, depriving of any scale economies.

China

In 1978 when China began to liberalize, unlike in India where there was a fairly developed automobile industry for both passenger cars and commercial vehicles, China did not have any privately owned motor vehicle. In two decades, it has close to 3 million. Around 1985, it was producing 5000 passenger cars a year. The policy decisions and market responses to development of auto industry in China have been confusing over the years to leave the automobile assemblers in a limbo (Xing, 1997). High growth rate of investment in passenger car facilities, the large number of foreign joint ventures as also saturation of capacity adversely affected the efficiency of the industry. In 1997 itself, with car manufacturing capacity of 900,000 units per year, actual production was only about 450,000.

Initially development of the automobile industry was the responsibility of Central government’s Ministry of Machine Building (MMI). The oldest First Auto Works (FAW) built trucks with Soviet design in 1956. The other unit being Second Auto Works renamed Dongfeng Motor Company in Hubei Province. Later by 1997 there were the “big seven”including China National Heavy Duty Truck (CNHTC);Beijing Automotive Industry Group(BAIC); Tianjin Automotive Industry Group(TAIC); Shanghai Automotive Industry Group (SAIC) and Yuejin Automotive Group (YAGC) besides the above two. These units were in the manufacture of trucks and commercial vehicles. In the passenger car segment there were eight firms – six were Sin-foreign joint ventures. The big three were DMC, FAW, SAIC; the little three were BAIC, Guangzhou Peugeot and TAIC; the two minis were Chang An Automobile and Guizhou Aviation.

In the control of the above auto manufacturing units, the Central State Planning Commission had authority over CNHTC, DMC and FAW. The rest were under the control of provincial or even municipal governments. BAIC, SAIC and TAIC were under respective city municipal government while the Guanzhou city government oversaw Guangzhou Peuggeot. Guizhou Aviation was under China National Aviation Industry Corporation (AVIC). Hence in the decentralized government control of activities under central, state and municipality government, even planning of automobile companies were decentralized.

China's passenger car market has remained principally an 'institutional" market unlike an 'individual" market as in India. Only government institutions, states owned companies and taxi fleet used to buy cars. Hence the nature of demand influenced the models selected for priority investment. These were sedans to replace old ones and essentially with the objective of reducing foreign exchange outflow in importing these sedans for government use. Hence Shanghai-Volkswagen Co. Ltd. Which was set up in 1985 and holds a 52% share of car market manufactures the 1.8 litre sedan "Santana". SAIC's tie up with GM was also in a mid sized sedan project for $1.5 million and a $50 million technical center. Only the two mini units have negotiated setting up JVs with Japanese companies to make small cars – Chang An with Suzuki Motors to boost production of 0.8 litre Alto and Guizhou with Fuji Heavy Industries for 0.54 litres Skylark. Chinese government adopted tactics of trading market access for pledges of transfer of technology, higher local content requirement and better export performance as conditions for entry. It tantamounted to auto manufacturers being less protective of their IPRs.

There were restrictions to many of the above units in diversifying to different products. Chryslers JV with Beijing Motors (one of the oldest since 1980s) has been churning out multipurpose vehicles like Cherokees and Beijing Jeep annually at 100,000 units but have not been allowed to introduce new models as it fell short of government requirements of meeting capacity of 150,000 vehicles per year. Together with overcapacity, due to the mad rush of Japanese and European companies to manufacture sedans (having low volume and high margins), Chryslers hope of diversification seemed bleak.

Demand for family cars in China are elusive inspite of urban population having one car for every 400 residents. This inspite of increase in privately owned automobile in China at 27% per year for over a decade. Experts believe this not to change drastically upto 2005 when per capita annual household income was to reach $7000 (Xing, 1997). Until then typical Chinese family would not afford a car. The reasons are many. One being taxation. Taxes that apply nationwide for purchase of a car include 5% consumption tax, 17% value added tax and 10% vehicle purchase tax. Regional variations can be as high as 20 different taxes amounting to more than one-third of the retail price of car. In some ways similar to India where excise and tax was as high as 40% value of the car. Lack of good road infrastructure deter people from buying cars. Rise of the inexpensive farm vehicle not only highlights skewed taxation policy but also impact of market forces. There was a market for three firms to produce and sell as many as 250,000 farm vehicles each year. There was over 10 million farm vehicles on the road. Low technology, run on diesel and low speeds of 50 kph these farm vehicles were still in demand as family vehicle or community vehicle. With very little state support these products are cheap $ 750 in place of $12000 for a sedan including all taxes and fuel was government subsidized. 80% passenger cars (sedans) were bought on credit by taxi fleet operators and government institutions whereas 99% farm vehicles were privately owned by individuals.

As many as 202,250 cars were being assembled and sold in China. As many as 50,000 were being exported. However, most of these could be assumed to be assembled units from CKD/SKD kits imported from abroad, because in its 1994 automobile industry policy (AIP), China stopped allowing new entries to allow existing players to attain economies of scale. Future entries were to be "people's car" with focus on indigenous production using local manufacture of components either in-house or through domestic components industry. Hence pre-condition of entry for foreign players was development of local components industry. Inspite of this most car makers led by Porsche and Daimler-Benz came up with proposals of local manufacture. Low labour cost attractions continued to be there.

In its first phase of liberalization, Chinese government had to be satisfied with local content requirement by foreign JV to avail of tariff concessions. For first three years of entry preferential tariffs of 33.3% could be availed in place of usual 100-150%. To qualify for further tax benefits these local contents had to be raised to over 40%. Since 1994 this localization requirement became even stiffer. Under the AIP, 40% local content attracted only 37.5% duty on imported components. For 60% and 80% local content tariffs on imports came down to 30% and 20% respectively. Besides problems of co-ordinating provincial and municipal government policy, the industry suffered from proliferation. In its two stage policy AIP wanted in 1996-2000 to have only 6-7 national vehicle manufacturers taking production to 3 million units of which 1.5 million would be passenger cars. The 3000 parts and component manufacturers were to be consolidated in to 300 companies as OEM suppliers. In the second phase of 2000-2010, total vehicle production was to reach 6 million per year including 4 million passenger cars. Each assembler was to have over 1 million capacity per year with 4-5 component groups for the OE and after sales market. Auto component units were grouped into those for passenger car and commercial vehicle segment. Rules prevented one foreign player from having more than two automobile joint venture in China to prevent monopoly. In critical JVs like for engine, foreign player was not allowed more than 50% equity. These were however against WTO regulations to which China was a signatory.

India

In the Indian automobile industry, the history of high regulatory policy environment has given technology a unique relevance in industry evolution. Both government policy and industry strategy having manifested through technology. Most critical government policies were in the areas of technology transfer- technology licensing, technology collaboration, technology indigenization. Firms in the industry therefore decided on their levels of competition through the route of technology by way of models to launch, levels of automation of production by importing technology and even subsequent transfer of technology to suppliers for critical components to develop an ancillary base (Rao et.al., 1994). Of course some other policies like licensing of production capacity, product and modelwise choice helped create entry barriers against competition

The broad direction of government policies can be identified into four distinct phases as:

<u>Phase – I: (1950-1965)</u>

Identified as the government control phase, this phase saw the increasing role of the Tariff Commission of India recommending indigenous manufacturing capability. As a result the foreign collaborators that operated in India like Leyland with Ashok Motors and Daimler Benz with TELCO for trucks; Morris Motors, UK with Hindustan Motors for passenger cars ; Fiat of Italy with Premier Automobiles also for cars, focussed on limited indigenization of non-critical parts like springs, fuel tank, axles mostly through in-house production. Under the phased indigenization programme, not only were critical parts like engine, transmission, rear axle and suspension of vehicles manufactured in India, but vehicle assemblers focussed on developing a localized, captive ancillary base to share manufacture of critical and non-critical parts mutually. This was also a phase of financial crisis (first currency devaluation).

<u>Phase – II: (1965-1980)</u>

Besides terminating successful collaborations like TELCO and Daimler Benz, mostly in the area of technology transfer for manufacture of automobile parts in India with Daimler technology, including diesel engine, Government Of India (GOI) brought in the Monopolies and Restrictive Trade Practices (MRTP) and Foreign Exchange Regulation Act (FERA). While MRTP restricted automobile manufacturers from either expanding capacity in their existing products or diversifying into new products by not granting license quotas, the FERA reduced all import of capital goods and technology on paying license fee by restricting flow of foreign currency. Together with a depressed world auto industry due to the two oil shocks, Indian automobile industry had very little technology infusion, no competition and scarcity of products in the market artificially jacking up price of automobiles. By this phase, indigeniation, which was previously at 50% level had reached 100%. Many Indian companies like TELCO in commercial vehicle production grew very vertically integrated by acquiring small companies like Investa Machine Tools and Engineering Company Limited in 1975. However Indian companies were unable or unwilling to design and develop new cars and trucks or create car manufacturing technology suitable for Indian or third world countries. Technology was of 1950 vintage and total population of vehicles was approximately

2.5 million (excluding two wheelers). Whereas GOI wanted low cost cars, as much as 40% of the value of the car comprised of taxes and duties levied at various stages of manufacture and sale of car (Satia & Thomas, 1987).

It was in the above conditions that Maruti Udyog Limited (MUL), a company for the manufacture of small "peoples" car was incorporated in the state sector in April 1981. Objective was to have 75% imported components (excluding tyres, batteries, lamps and upholstery) and export half of the production of about one hundred thousand cars a year. The project had the then Prime Ministers blessings. This ushered in the growth/ early liberalization phase of Indian automobile industry.

Phase – III: (1980-1990)

Foreign firms were allowed to have collaboration entry into India with a local partner. Firms could diversify into manufacture of related products under the broad banding of license scheme. Import of raw materials, technology, capital goods and components were permitted. MRTP Act was eased and complete delicensing of the auto components/ ancillary industry was done by 1985. By 1982, MUL tied up with Suzuki Motor Company, Japan (SMC) known world over for their small (sub 1000cc) cars. In a complete reversal to earlier conditions, agreement was signed for lumpsum payment, royalty and CKD price for SMC to transfer technology and know-how. In a technical joint venture, SMC was given 26% stake in MUL after signing a licensing agreement. Between 1982-1985, MULs imports from Japan stood at US$ 60 million. The auto ancillary industry was not only small but technologically primitive manufacturing non-critical parts. London Economist observed that the ingenuity of the Indian parts supplier is great but productivity poor and quality unreliable (Satia & Thomas, 1987). Critical components were made in joint ventures floated my MUL with local producers as MUL wanted to make only 30% value of car in-house. Inspite of government restrictions on foreign exchange outflow, MUL and SMC had agreed on dollar payment for imports. However to escape exchange rate fluctuations, if dollar-yen exchange rate fluctuated beyond a range, a formula split differences in gains/losses 50:50.

GOI policies did affect automobile industry adversely. However companies like MUL tried to hedge against such escalation and canvass with GOI to revise the rules. The excise duty increase in 1986 from Rs. 5906.25 per vehicle to 25% ad valorem made MUL pay Rs 860 million to exchequer in 1985-86. However after representation to GOI this was reduced to 20%. Customs duty was reduced from 60% on all components import to 55% by end-1986. All these adversely affected price of MUL cars and hence demand in a price sensitive domestic market.

Phase - IV: (1990 onwards)

The liberalization of the economy brought about by an economic crisis together with record growth in commercial vehicle and passenger car production hailed in the decontrolled era in automobile industry. Foreign Direct Investment (FDI) was allowed in most sectors with permission to set up 100% subsidiary after restricting initially to form Joint Ventures. Most form of licensing requirements was removed. The FERA was converted to a management act called FEMA. Many global automobile companies, particularly in the passenger car segment entered India. However to take limited exposure and also meet government requirements most entered in JV with Indian companies. These included GM with Birla Group; Mercedes Benz with TELCO; Honda with Sriram Industries; Ford with Mahindra & Mahindra and Daewoo with DCM. Only Hyundai set a 100% subsidiary. Many of the companies wanted to export their products from India with vehicle exports growing five times value wise between 1980-81 and 1995-96 from Rs million 3120 to 16706 (ACMA, 1996).

As early as December 1994, auto manufacturers were trying to use policy restrictions to fight competition. Whereas heads of MUL and DCM-Daewoo wanted restrictions on diesel cars citing misuse of the diesel subsidy and loss to national exchequer, heads of TELCO, Hindustan Motors came out in protest citing the insignificant size of the market and initial cost disadvantage of diesel engine. These companies had their indigenous and Mitsubishi collaboration diesel cars in the pipeline respectively. Government had already increased excise duty on 10 seater vehicles from 15% to 25% of value which was welcome by MUL which had Gypsy in the 8 seater category and was at an excise disadvantage with vehicles like M&Ms jeep and Bajaj's Tempo Trax (Business India, 1995). In the EXIM policy declared in 1995, many items of the reserved list were transferred to Open General License (OGL) for free imports. However much of this was with a focus to provide a boost to exports with incentives like issuance of special import license(SIL) against exports. Even capital goods import above a c.i.f. value was to attract concessional customs duty if they were earmarked for use in export of the manufactured product.

As early as 1995, places in India like Tamil Nadu had share of Rs 1,705 crore in the Rs 5,200-crore Indian market for auto component industry, with Rs 112 crore coming from exports. With 33 per cent of the country's production in the auto component industry, out of the 40 companies that have an ISO 9000 certification in the country, 14 were in Tamil Nadu.. Sundram Fasteners, an early ISO 9000 supplier won GM's global tender, as the 100 per cent supplier of radiator caps. At a meeting of the auto ancillary, R. Seshasayee, deputy managing director of Ashok Leyland remarked "earlier, the ancillary industry clustered around Tamil Nadu because of the OEMs (Standard Motor, TAFE). Now, manufacturers will get attracted to the state because of the competitive component industry". Subsequently Hyundai set up its Rs 2000 crore green field facility for manufacturing its Santro, Accent and Sonata cars in Tamil Nadu as also Ford India Ltd. and the HCV manufacturer Volvo of Sweden.

TELCOs history of developing an indigenous small car "Indica" is indicative of policy environment in India having become favourable to new technology development. Whereas TELCO was able to collaborate with the best companies in the world for technology transfer and absorption like AVL of Austria and Pugeot of France for petrol engine, IDEAS of Italy for body design, it could also set up international ventures for many other items with Johnson Controls of US for seats and Cummins of US for producing diesel engines in India. Indica's machine tools division with robots was an existing Nissan plant shipped into India from Australia. Even for Indica's distribution TELCO was permitted to tie up with Jardine Matheson group of Hong Kong to form Concorde Motors Limited (CML).

Discussion

The discussion begins by first looking at the similarities and differences between the telecom and automobile industries and then looking at the specifics of these two industries in China and India.
In discussing the telecommunication and automobile industries in China and India, it may be pointed out that both industries are technology intensive and efficiencies and effectiveness dependent on level of technology. However unlike telecom industry which was focussed on domestic penetration, automobile industry had equal focus of policy makers on export opportunity. Whereas automobile has the attraction of cheap labour in markets like China and India, telecommunication has greater problems of appropriability of technology due to weak intellectual rights protection.

In the telecom industry, state monopolies prevailed in China and India preliberalization. The prevailing perception of government in both countries seemed to be of state control of technology leading to control of information. Stemming from this was the idea that role of telecom was to provide controlled connectivity. But being capital intensive, demanded in bulk (see waiting list of telephone subscribers in India prior to liberalization) and focus changing worldwide to providing functionality and coverage, the industry had to be liberalized. To bring private capital for investment, but also control for monopoly, increased competition and multiple players were encouraged in bringing the functionality and coverage. Challenges being thrown up by weak legal, regulatory system and IPR.

Given its historical root, China's focus on telecom, as in other industries, was on export benefits. Hence it focussed on attracting telecom equipment manufacturing technology, to absorb it and become a net exporter. While foreign players saw sense in transferring technology to a cheap labour base and a potentially huge domestic market, investments did not have protection of legal system and intellectual property. This became a bigger problem due to the hick ups in privatization and spread of technology services in such a geographically dispersed and densely populated country. Essentially demand for equipment was a derived demand from spread of services. Spread of services was linked to loss of control on information and the major access routes to population at large (as highlighted by the severity of government reaction in banning website of New Culture Forum). From the operational point of view, Unicom, through its CCF projects was trying to raise money and technology to take services to interior China while MOFTEC, the central state body was fearing loss of control. Scrapping of CCF sent very negative signals to foreign investors. As integrated providers of products and services foreign players were keen to see development in both telecom equipment and services in China. One gets the impression of political tussle between government bodies to wrest control of telecom services; attempts, under a weak IPR regime, to appropriate modern technology from foreign players and then disqualify them and also consciously liberalize and globalize telecom equipment industry having export potential but not the services. Much of this could arise out of experience of market forces and competition inherent in the modern telecom technology.

In case of Indian telecom industry, the focus of liberalization was clearly services and not equipment. The need was for capital and technology but of a more domestic nature. Early experience of allowing private players direct access to customers through open bidding for license of geographical circles, exposed the government to its gross inadequacy in understanding market forces in the industry by asking for very high license fee, not doing homework on interconnectivity, tariff distortions and lack of independent regulatory authority to deal with disputes. It also came to know of the future role of erstwhile state monopolies like VSNL & MTNL. Although problems like information control to general public was not very serious, government retained its control for unilateral intervention as in case of telecom ministers role in reversing BSNL decision or role of PMO and ministry of Finance through GOT. Like China government structural confusion of overlapping roles for TC, DoT and TRAI existed. Government failed to address the issue of continued competition among private players post licensing. With MNCs as integrated players in a world of technological convergence , this could become serious. Again, like China, with a weak legal and IPR regime all these problems may not be solved through market mechanism. In the age of fast changing technology the debate could well be-would technology decide industry structure in future or government intervene to decide and put some sort of constraint on technology’s role? Would globalization and WTO regime look at the latter option favourably?

The automobile industry too was sustained by government policy in both the countries. However unlike in telecom, it had multiple players. Besides, players in India were mostly in the private. Together with importance of multiplicity of suppliers in the industry, the currency of the technology dictated levels of competition of the industry by deciding minimum scales of operation. Although licensing was used to control technology, in a oligopoly industry with demand exceeding supply, firms used non-availability of new technology as an opportunity to seek rents by creating scarcity of supply, limited model choice and transferring cost to customers. In case of India, in early industrialization, inspite of the industry being in private sector, foreign firms did not seem to have transferred the tacit knowledge of their technology which would otherwise have given Indian firms ability to do indigenous research when self reliance era began. Together with restrictions on import of capital equipment, technology remained static, industry remained oligopolistic and supplier base weak with most assemblers having vertically integrated technology in-house for fear of appropriation. Under its continued focus on private ownership of cars, Indian government realized that a modern “peoples car”, at affordable price needed volume and hence mass manufacturing expertise. Not hoping to achieve this in the given structure of industry and firm capability, government liberalized many of its controls in setting up MUL. Even taxes and imposts were revised to meet the perceived price of the car. Whereas in India, an existing well-developed ancillary base encouraged Hyundai and Ford to locate units in Tamil Nadu, in China it was made mandatory on new entrants to develop ancillary base. In India ancillary industry was liberalized in 1985, well ahead of automobile industry in 1990-91.

Although both Indian and Chinese governments had requirements of re-export for MNCs to enter, where as in India, MNCs chose their products and target segment as well as market price for both domestic and export, in China most entry was in collaboration with state enterprise, models were in mid-luxury class sedans to meet the captive needs of government. A small family car was a last priority when volumes lay there, and need for an affordable family car existing as proved by the many farm vehicles in rural China. Capacity planning was poor in China (installed 900,000 per year and actual 450,000) due to the autonomous operations of government at state, province and municipality levels executing independent tie-ups for car manufacture. In India it was centralized. Essentially in a modern, capital intensive plant, capacity utilization was low, resulting in increase in costs and high price in sedan segment. With sale only to government institutions and taxi services on credit (a) incentive to make small affordable cars for family at competitive price may have been low, (b) industry structure and government policy may have been a hindrance. Having opened up for production by MNCs using post Fordist manufacturing technology, natural course would have been for more players to exit, price wars OR the natural replacement of any semblance of market mechanism by government dictum against entry of new players. This did manifest in Chinese governments AIP 1994. In regressing to a more coercive way of controlling the industry, government in China forced technology transfer in return for tariff concessions, restricted entry and forced ancillary development in the face of weak IPR regime. In the absence of diversion option to different products (Chrysler experience) under broad banding (like that in India), Chinese auto industry reeled under poor capacity utilization and related problems. It seems that in the case of more market focus of Chinese auto industry, independence of choice of both customer and manufacturer of a small car with appropriate technology (may not be Sedan with sophisticated technology) and volumes at reasonable price could turnaround the industry. Fragmented industry, poor IPR, lack of ancillary, low automation may have tempted MNCs to use cheap Chinese labour to assemble CKD units, severely hindering transfer of tacit part of knowledge.

Conclusion

Whereas low level technologies have forced governments to change policies (MUL), so also decentralized decision making (API-1994, CCF) in high technology environment. Given broad policy level decisions to liberalize a country's economy, the emergent structure of an industry is more of an outcome of reactive national level policy and proactive firm level decision of bringing in emerging technology like convergence in telecom. Often it was ultimately the fear of appropriability, risk and uncertainty in the absence of developed institutions that have shaped industry structure

Many issues whether it be of appropriability of technology or policy level intervention into firm level decisions (CCF), arise due to the failure of development of independent and functional institutions which could play the intermediary role between policy making and firm competition. The lack of a distinct role for institutions has often hampered a technology driven change in industry structure post-liberalization. Where existing, a (re)definition of the role of policy makers and institutions was needed. This was seen in both the cases of strong ideology nation like China and relatively weaker ideology nation like India liberalizing and globalizing. However the study looks into the issues without considering country level differences in culture, behaviour or social practices which can be looked upon as a limitation of the study.

References

[1] Abrenica, J.V. (1998) The Asian automotive industry: Assessing the roles of state and market in the age of global competition. *Asia-Pacific Economic Literature*, 12,1, 15.

[2] ACMA (1996) *Facts and Figures: 1995-96 in Automotive Component Manufacturers Association of India*, New Delhi.

[3] Balassa, B. (1985) Exports, policy choices and economic growth: Further evidence. *Journal of Development Economics*, 18, p23-35.

[4] Basant, R. (1999) Technology, Market Structure and Internationalization: An Indian Perspective. *Economic and Political Weekly.* Vol XXXIV No. 23. June 5-11, pp 1418-1426.

[5] Basant, R. (2001) Interface between sector-specific regulatory bodies and competition agencies: A case of the Indian telecom sector. In Morris, S (Ed.) *India Infrastructure Report 2001: Issues in Regulation and Market Structure,* 3iNetwork, N.Delhi, OUP, 391p.

[6] Brahm, I.J. (2001) *China's centurey: The awakening of the new economic powerhouse*. Singapore, John Wiley & Sons (Asia) Pte., 421p.

[7] Chan-Olmsted, S. and Jamison, M. (2001) Rivalry through alliance: Competitive strategy in the global telecommunications market. *European Management Journal*, 19,3, p317-331.

[8] Chen, T.J. and Tang, D. (1996) Export performance and productivity growth: The case of Taiwan. *Economic Development and Cultural Change*, 38, 3, p 577-585.

[9] Chuang, L.D. and Leontine, D. (2000) Investing in China's telecommunications market: Reflections on the rule of law and foreign investment in China. *Northwestern Journal of International Law & Business,* Spring, 20,3, 21p.

[10] Dernelle, G.J. (1994) Direct foreign investment and contractual relations in the People's Republic of China, 6 DEPAUL BUS.L.J. 331, 333 n. 13 as quoted in Chuang, L.D. and Leontine, D. (2000) Investing in China's telecommunications market: Reflections on the rule of law and foreign investment in China. *Northwestern Journal of International Law & Business*, Spring, 20,3, 21p.

[11] Dikshit, S. (2001) *Giant markets in offing*, The Hindu Survey of Indian Industry, p133-134.

[12] Doraisami, A. (1996) Export growth and economic growth: A reexamination of some time-series evidence of the Malaysian experience. *Journal of Developing Areas*, 30, January, p 223-230.

[13] Freeman, C. (1991) The nature of innovation and the evolution of the productive system, in *Technology and Productivity*, Paris: OECD.

[14] Gort, M. and Klepper, S. (1982) Time paths in the diffusion of product innovations, *Economic Journal*.

[15] Greenaway, D. and Sapsford, D. (1994) What does liberalization do for exports and growth?, *Weltwirtschaftliches Archives*, 130, p152-174.

[16] Haishun, S. (1999) Economic openness and technical efficiency, Economics of Transition, 7,3, 22p.

[17] Jain, R. (2002) WLL, Governance, Corporatization and SWANS: A review of institutional developments in Morris, S. (Ed.) *India infrastructure report 2002: Governanance issues for commercialization*, 3iNetwork, N.Dehi, OUP, 337p.

[18] Ken, F. (2002) Telecom down, but not in China. *Electronic News*, 24th June, 48, 26.

[19] Kumar, D. (2000) *Indian Rural Telephony - Post reform challenges.* Paper presented at Conference on telecommunications reform in India- Asia-Pacific Research Centre, Stanford University, November 9-10.

[20] Li, J.L. and Gongmin, K.Q. (1999a) High-tech industries and competitive advantage in emerging markets: A study of foreign telecommunications equipment firms in China. *Journal of High Technology Management Research*, Fall, 10,2, 17p.

[21] Li, J.; Khatri, N. and Lam, K. (1999b) Changing strategic postures of overseas Chinese firms in Asian emerging markets. *Management Decision Journal*, 37, 5.

[22] Lipsey, R.G. (1997) Globalization and national government policies: An economist's view. in Dunning, J.H. (Ed.) *Governments, globalization, and international business.* United States, Oxford University Press, p73-113.

[23] MacLellan, D.C. (1998) *The China telecommunications industry and implications for strategic private investment industry2*. unpublished paper for The MacLellan Group Inc., December 29.

[24] Moving towards freedom –Feature. *Business India*, 10-24 April, 1995.

[25] Nelson, R.R. (1998) The Co-evolution of technology, industrial structure, and supporting institutions in Dosi, D; Teece, D.J. and Chytry, J. (Ed.) *Technology, organization and competitiveness: Perspectives on industrial and corporate change*, United States, Oxford University Press, 345p.

[26] Pearson, M.M. (1991) *Joint ventures in the People's Republic of China*, New Jersey, Princeton University Press, 335p.

[27] Perez (1983) Structural change and the assimilation of new technology in the economic and social systems, *Futures.*

[28] Potter, P.B. (1996) Foreign investment in the People's Republic of China: Dilemmas of state control. in Lubman, S. (Ed.) (1996) China's legal reforms 155 as quoted in Chuang, L.D. and Leontine, D. (2000) Investing in China's telecommunications market: Reflections on the rule of law and foreign investment in China. *Northwestern Journal of International Law & Business*, Spring, 20,3, 21p.

[29] Rao, C.B. and Sarma, L.V.L.N. (1994) Structural analysis of the Indian automobile industry. *Decision*, January-June, 21, 1&2, 27p.

[30] Rehak, A. and Wang, J. (1996) On the fast track. *China Business Review*, Mar/Aprl., 23, 2, 6p.

[31] Saez, l and Yang, J. (2001) The de-regulation of state owned enterprises in India and China. *Journal of Comparative Economic Studies*, 43, 3, 29p.

[32] Sandesara, J.C. (1995) Chinese economic reform: Path, progress and prospects. *Vikalpa*, 20,3, p3-17.

[33] Satia, J.K. and Thomas, P.S. (1987) *Maruti Udyog Limited: Industrial Analysis and Policy*. Case with Indian Institute of Management, Ahmedabad, 29p.

[34] Smadja, C. (2001) Dealing with globalization, in Brahm, I.J. (Ed.) *China's centurey: The awakening of the new economic powerhouse*. Singapore, John Wiley & Sons (Asia) Pte.,p24-37.

[35] Siddharthan, N.S. (1999). WTO and the Globalization of Enterprises, *Economic and Political Weekly*, XXXIV,21, May 22-28, p1287-1291.

[36] Tureq, D. (1995) India and China: Asia's non-identical twins. *McKinsey Quarterly*, 2, 18p.

[37] Utterback, J. and Suarez, F. (1993) Competition and market structure, *Research Policy.*

[38] Vineet Nigam (Analyst Contact) (2001) The Indian Telecommunications Industry. ICRA Industry Watch Series, New Delhi, ICRA Limited, March, 545p.

[39] Whalley, J and Williams, H. (2000) *Exploring the geography of international investment activity: the case of the RBOCs 1984-1998*. Department of Management Science, Strathclyde Business School (unpublished).

[40] Womack, J.P.; Jones, D.T. and Roos, D. (1990) *The machine that changed the world.* Canada, Macmillan.

[41] WTEC. Chapter 3: Hong Kong- China competitiveness. WTEC Hyper-Librarian, http://itri.loyola.edu as quoted in Li, J.L. and Gongmin, K.Q. (1999) High-tech industries and competitive advantage in emerging markets: A study of foreign telecommunications equipment firms in China. *Journal of High Technology Management Research*, Fall, 10,2, 17p.

[42] Xing, W.W.J. (1997) Shifting gears. *China Business Review*, Nov/Dec, 24,6, 8p.

Chinese Regionalization: A Necessary Stage for Globalization

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Abstract

At the end of the twentieth century, a series of shocks disrupted most of the major economies of the world. These events redefined the balance of political and economic power among the major countries of the world. As these changes have taken place, the world center of gravity has moved in largely unanticipated ways :

Economic growth in western countries and Japan has slowed considerably, with GDP expanding at rates generally below 3 percent ;
Economic reform in Latin America has sunk under the weight of political problems, making it impossible to proceed with globalization ;
Economic growth in Africa has all but ceased as the continent suffers from the combined effects of political instability, rising rates of poverty and disease, and in which steps toward democratization move slowly if at all ;
Asia generally has enjoyed high rates of economic growth, albeit with far less impressive gains in social progress and in which economic sustainability has become less apparent.

As these events have unfolded, geopolitical relations depend less and less on national borders as regional groupings and supranational institutions evolve. Henceforth, no country can define economic and social policy within the sole context of national boundaries. Each is obliged to make common cause with a larger regional politico-economic zone in which national sovereignty is reduced. NAFTA, CARICOM, MERCOSUR, the E.U., the CIS, GUUAM, ASEA, APEC, ARF, ECOWAS, ECCAS, GCC each define such groupings through which economic policy is defined. Moreover, individual countries must further adhere to larger global standards as defined by the IMF, the World Bank, and the WTO that define the regulatory and support structure for the larger regional organizations to which they belong. As such, the image of national sovereignty of individual countries acting independently through such organizations as the United Nations belies the greater reality of these underlying economic and political forces. Within this framework, the case of China's regional development strategy becomes of exceptional interest, given the historical political and economic influence of China in Asia, and increasingly in the global economy.

Introduction

As economic and political reforms around the world proceed, China represents one of the pivotal countries that will define the success or failure of globalization. Following the death of Mao Tse Tung, the new economic policy first articulated by Deng Xiaoping, then by Jiang Zemin, first focused on the relative empowerment of the peasant and small farmer community. In turn, increased emphasis was given to the liberalization of activities in the manufacturing sector, then on opening the Chinese economy to the outside world. This policy was designed to bring China into the post Cold War era while engaging in management reforms that were no longer relevant to Chinese and global geopolitical realities. The challenge is to meld these internal changes into a successful strategy for globalization.

China's economic reforms are defined partly by internal policies and partly in reference to larger institutional policies such as those of ASEAN and the WTO[i]. The case of the ASEAN is particularly symptomatic of the phenomenon of regionalization. ASEAN had more or less established in 1967 between five "capitalist" countries to make block in front of a "communist" stranglehold both on geographic as political level: Singapore, Malaysia, Indonesia, the Filipinos, Thailand versus China, former North Vietnam, Laos, Cambodia, Burma. However, membership in any new political, economic or commercial dynamics, even if well organized by governments and strongly supported by the populations for the advantages that they expect from it, imposes difficult alternatives, particularly in terms of independence and free choice regarding major options. Every membership sometimes requires high budgetary costs as well as the associated social costs of cultural change and disruptions to the existing historical and political order.

For China, as well as for other countries that once were part of the Soviet socialist system, the shift to a market-based economy is daunting at best. As improved statistics become available, it is clear that economic growth is at best uneven, particularly in that economic liberalization brings with it corresponding pressures for political reforms that are not easy to implement against an entrenched social order. While the pressure for market-based reforms have been powerful and pervasive, the transition has been anything but smooth. In our view, successful globalization must take into account a number of underlying factors, among the most important of which we note :

How globalization affects the distribution of income and wealth in the pursuit of an acceptable social contract :

- The necessity of providing for basic needs in the form of health care, food production and distribution, education, and the expansion of a transport and communications infrastructure ;
- The need to identify a priori how globalization expands the level of risk and of the need to establish institutions necessary for its management ;
- The need to develop suitable benchmark indicators of globalization that take into account not just economic performance but also the social dimensions.

We now turn to the Chinese experience to illustrate how and why these considerations are important, not just to China, but to the process of globalization in other parts of the world.

Key Aspects of Modernization in China

The entry of China into the global economy, as symbolized by its accession to membership in the WTO is a remarkable achievement. It represents a shift from a policy of relative isolation often dominated by warlords, and more recently by the excesses of the Cultural Revolution under Mao Tse Tung, to the market-driven policies under Deng Xiaoping and Jiang Zemin. Given the profound nature of change in China under Deng Xiao Ping and Jiang Zemin, it is clear that success will require a gradual process of transformation, one that can take account of differences among regions and in which the fruits of globalization can be extended to the majority of the population on a sustainable basis. As such, the success of globalization for China requires emphasis not just on the promotion of coastal zones, but also the interior regions that have hitherto functioned largely outside the boundaries of the world economy. To better understand this challenge, we examine some of the differences between China’s coastal and interior zones.

China possesses an extreme diversity in its human and natural resources. This diversity is most pronounced between the coastal and interior zones, and it reflects both China’s historical legacy as well as its future prospects. Under the first wave of market-based reforms, China’s spectacular economic growth depended largely on the dynamism of its coastal enterprise zones. The success of these reforms have propelled China to the second tier of global economic powers, and which has now been acknowledged through China’s accession to membership in the WTO in 2001. However, this has resulted in a growing economic division between the coastal and interior zones, which is why Chinese policy has placed increased emphasis on harmonization of coastal economic reforms to a more rapid development of the interior.

Closing economic and social gaps between the coastal regions and the interior is likely to be a long-term process. Success will require increasing participation of each province in the elaboration and utilization of natural and human resources. Since China’s political ideology is cast essentially in market socialist terms, this means the identification of mechanisms to harmonize the largely polar growth rates of the coastal zones and the interior. This means using dynamic zones of the coast that are linked to ASEAN and other groupings of the global economy to the interior zones. Thus, Shanghai, Shenzhen, Canton, Beijing, and other dynamic zones will serve as locomotives for the interior.

To illustrate the nature of the balanced growth challenge, consider the rapid development of Shenzhen, which is in close proximity to Hong Kong. Construction workers built a plant and office complex in record time in Shenzhen. They came from neighboring provinces, working around the clock while living in temporary housing to which they returned after each shift. Earning relatively high wages, they remitted significant portions of their earnings to relatives and friends in the interior to build new family homes, only to return from them to take up new construction jobs in Shenzhen as economic activity advanced. The result has been the huge growth of urban settlements in and around Shanghai. The question is whether this form of locomotive development is consistent with sustainable development of both the coastal and interior regions.

It is clear that the locomotive model has resulted in significant increases in total factor productivity. At the same time, it has placed new pressures on the renovation and expansion of the transport and telecommunications infrastructure. With the emphasis on regional development, expansion of China's infrastructure must complement the development of new investment in buildings and industries that link the interior to the coastal region. In most developed countries, this process usually involves regional planning to coordinate public and private sector development. In France, for example, the Regional Development Administration, DATAR (Délégation à l'Aménagement du Territoire et à l'Action Régionale) works in close cooperation with regional assemblies that have existed since the 1970s to facilitate the expansion of regional infrastructure and industry as part of a balanced growth initiative. China's efforts in this regard consist in the establishment of special economic zones and the accelerated construction of new infrastructure in the 14 coastal city areas, all with evident success, even though the challenge of diffusing economic development to the interior remains to be fulfilled.

Economic Growth Theory in the Chinese Context

Theories of regional economic growth derive basically from established macroeconomic models. What has confounded both theorists and policymakers is why macro-economic growth in many countries, and by extension, regional economic growth, is all too often so uneven, proceeding in fits and starts rather than expanding along the smooth continua as postulated in theoretical models. Interestingly, China conforms more closely to the theoretical model than most other cases, not just by its efforts to raise economic growth by implementation of the associated necessary incentives, but also by the fact that its growth rates have been much smoother in comparison to many other developing countries.

China's adoption of market-driven reform incentives appear to confirm that its long-run rate of growth conforms to the underlying rate of profit[ii]. This is consistent with the basic conclusion of neoclassical growth theory, albeit as we have noted, in China's case, it is geographically unbalanced[iii]. The question is whether China's currently unbalanced growth is sustainable, or whether measures to provide greater uniformity across regions is a necessary pre-condition for sustainability. Theorists such as Harrod and Domar never explicitly took this into consideration in the formulation of the neoclassical theory of growth[iv].

In the Chinese case, balanced growth of both supply and demand means the coordination of investments and spending in such a way that bottlenecks do not produce differential gaps across regions. In contrast, the unbalanced growth that has been taking place in China places additional pressure on the avoiner of waste in investment and in the inefficient utilization of capital resources. The market socialist locomotive model historically in placed is thus based on identifying a priori those sectors most susceptible to effective returns and in which regional disparities can be reduced. The empirical approach of Chinese economists is not to lock themselves into abstract theoretical models that ignore key determinants of growth. Rather, they point to long-term factors, including :

- The incidence of complex determinants of growth across regions ;
- The determinants of demographic policies that examine the impact of family planning on labor market dynamics ;
- The determinants of country risk, including education, literacy, and technology transfer that are often ignored in simple capital accumulation models ;

- Policies that affect political and administrative decentralization, and the associated production of public goods and services ;
- Trends in privatization in other emerging market economies that affect rates of economic growth.

Geographic Dimensions of Development in China

Given the importance of achieving a more balanced pattern of growth in China, we now examine some of the key dimensions of development across major geographic regions. Given the commitment to a market socialist framework, we find that China's efforts to achieve balanced growth involves extensive government intervention while at the same time committing the country to a progressive implementation of market-driven economic reforms. This means, for example, finding ways to induce a shift in investment from coastal zones toward the interior while at the same time engaging in a progressive reduction in tariffs, quotas, and subsidies in conformity with standards to which China has pledged itself as a condition for membership in the World Trade Organization. In turn, Chinese officials recognize that global standards for traded goods may exceed those historically produced for local markets, and that if China is to succeed, it must inevitably countenance the closure of inefficient and lower quality firms even as it seeks to attract new investment toward the interior.

China's reliance on special economic zones constitutes its efforts to adopt regional planning in its efforts to achieve sustainable and balanced growth. Investment codes and development documents spell out in considerable detail how economic agents at home and from abroad can benefit from the development of a canton, a district, a municipality, or a province through the creation of jobs, and thus the expansion of purchasing power among targeted regional populations. The 9.6 million square kilometers of China currently consist of 22 provinces, 5 autonomo9us regions, 4 municipalities linked to central authority and 1 special administrative region[v]. The provinces, as with the autonomous regions, are divided into autonomous departments, districts, or cities. Districts are divided into cantons and towns. Municipalities dependant on central authority are divided into administrative neighborhoods. Table 1 illustrates some of the basic differences by zone.

Table 1 : REGIONAL ZONES IN CHINA

	Square Km.	1000' Population
Coastal Zone	1,069,192	464,086
Central Zone	3,101,300	483,370
Northwest Zone	3,041,400	88,080
Southwest Zone	2,354,000	194,240
Total	**9,565,892**	**1,229,776**

Source : Facts and Figures, 2000

The Coastal Zone in China

The coastal zone consists of two municipalities, nine large provinces, and two special administrative regions : Hong Kong and Macao. With a combined population of 465 million, representing 37 percent of the Chinese population, and a territory of 1.07 million square kilometers, it is far and away the richest area and the source of almost all of the economic growth that China has enjoyed over the most recent years since the reforms of the post Mao era. It also is in this region that for the past fifteen years more than seventy-five percent of foreign direct investment has been placed. Table 2 summarizes the basic profile of this region.

Table 2 : COASTAL ZONES IN CHINA

	Capital	Square Km.	1000' Population
Beijing Municipality	Beijing	16,800	12,400
Tianji Municipality	Tianjin	11,300	9,530
Heibei Province	Shijiazhuang	190,000	65,250
Liaoning Proince	Shenyang	145,700	41,380
Shanghai Prov ince	Shanghai	6,200	14,570
Jiangsu province	Nanjing	102,600	71,480
Zhejiang Province	Hangzhou	101,800	44,350
Fujian Province	Fuzhou	120,000	32,820
Shandong province	Jinan	153,000	87,850
Guangdong Province	Guangzhou	186,000	70,510
Hainan province	Haikou	34,000	7,430
Hong Kong Special Region	Hong Kong	1,092	6,500
Macao Special Region	Macao	700	16
Coastal Zone Total		**1,069,192**	**464,086**

Source : *ibid.*

The Central China Zone

The central zone is the targeted growth region of China for the next several years. Although geographically larger, it has a population roughly comparable to the coastal zone. Chinese investment incentives are designed to attract a growing share of investment to this region as part of an effort to generate inductive growth. The zone includes eight provices and two autonomous regions, Guangxi and Inner Mongolia. Guangxi borders the central west region that is connected to the southern coastal region while Inner Mongolia is less connected to the main economic arteries of the coastal region. Furthermore, Inner Mongolia's relatively low population density has resulted in lower levels of school enrollment and training, with the result that it has a more difficult challenge in attracting investment from the coastal region. Even Heilongjiang, which has a coastal port, is grouped among the central China zone because it has yet to attract the levels of investment that other coastal regions have succeeded in doing. Table 3 summarizes the basic profile of the zone.

Table 3 : THE CENTRAL CHINA ZONE

	Capital	Square Km.	1000' Population
Shanxi Province	Tiyuan	156,000	31,410
Inner Mongolia Autonomous Region	Hohhot	1,183,000	23,260
Jilin Province	Changchun	187,000	26,280
Heilongjiang	Harbin	469,000	37,510
Anhui Province	Hefei	139,000	61,270
Jiangxi province	Nanchang	166,600	41,500
Henan province	Zhengshou	167,000	92,430
Hubei Province	Wuhan	187,400	58,730
Hunan provice	Changsha	210,000	64,650
Guangxi Autonomous Region	Nanning	236,300	46,330
Coastal Zone Total		**3,101,300**	**483,370**

Source : *ibid*.

The Northwest and Southwest Zones

The other provinces and autonomous regions cover the greatest area of China (56.2 percent), consisting of the Northwest with more than three million square kilometers and the Southwest with approximately 2.35 million square kilometers. Despite their geographic expanse, they contain less than a sixth of China's population, with 88 and 192 million, respectively. The six provinces, three autonomous regions, and municipality that comprise these two geographic zones are thus far even less affected by the economic growth in the coastal region. As they lack adequate infrastructure and lower levels of human resource development, they suffer the most in terms of economic growth. In short, as one moves from the coastal zones toward the interior, one finds a progressive decline in rates of growth and development[vi]. Table 4 summarizes the basic profile of these interior zones.

Table 4 : THE NORTHWEST AND SOUTHWEST ZONES

	Capital	Square Km.	1000' Population
Shaanxi Province	Xi'an	205,000	35,700
Gansu province	Lanzhou	450,000	24,940
Qinghai province	Xining	720,000	4,960
Ningsxia Autonomous Region	Yinchuan	66,400	5,300
Xinjiang Autonomous Region	Urümqi	1,600,000	17,180
Northwest Zone Total		**3,041,400**	**88,080**
Chongqing Municipality	Chongqing	82,000	30,420
Sichuan province	Chengdu	488,000	84,340
Guizhou Province	Guiyang	170,000	36,060
Tibet Autonomous Region	Lhassa	1,220,000	2,480
Yunnan Province	Kumming	394,000	40,940
Southwest Zone Total		**2,354,000**	**194,240**
Northwest and Southwest Zone Total		**5,395,400**	**282,320**

Source : *ibid*.

The figures in these tables are based on official statistics for 1999[vii]. Following the imposition of a one-child per family policy by Deng Xiao Ping, the Chinese population has begun a gradual process of slower growth in comparison to past years. The slowdown in population growth rates still results in large absolute changes, given the large absolute level of China's population. With 19.1 million birth and 8.1 million deaths in 1998, this still meant a net growth of 11 million. In turn, higher rates of economic growth in the coastal zones are producing rising pressures on internal migration, which further complicates the challenge of human resource development in the interior which is a central element in China's efforts to secure more geographically balanced growth.

At this point we have limited data on China's interior provinces that could shed light on the crafting of an effective regional development strategy. Apart from these basic demographic aggregates, it is clear that if Chinese policymakers hope to attract investment to the interior regions of the economy, feasibility studies will be necessary for both local and foreign investors. We have only a few indicators on China's interior physical infrastructure (roads, airports, railway connections, water supplies, and electricity, for example), its human resource infrastructure (school enrollment capacity for national and expatriate families, local health care facilities, banking, and judicial systems), each of which are essential preconditions for a successful regional program of economic development. In many instances, only large-scale firms have the capacity to engage in regional investment programs in the interior. Younger foreign entrepreneurs face the more daunting challenge of adapting to vastly different conditions than they may know from new industrial development along the coast.

Conclusion

In our view, China's efforts to provide balanced regional growth will succeed if two basic conditions are satisfied :

1. It takes place in reference to an established economic development zone (such as those along the coast)
2. It is undertaken primarily by firms strong enough to withstand the risk of unexpected financial loss for a given period of time.

As an example, the expansion toward the west of the urban region of Shanghai (with its 14 million population) can succeed if it follows the Yang Tse Kiang basin[viii]. Upstream, each industrial installation in this region can benefit from capital equipment transported by one of the largest ports in the world, along with downstream connections to Nanjing (with its 4 million population), Wuhan (with 4.5 million), and more to the west, Chongqing (with 6.8 million, including the greater part of Yunnan[ix].

The southern China region is emblematic of this challenge. It abuts several ASEAN countries (Myanmar, Laos, Vietnam), and it can take advantage of links to major international financial centers, especially those operated by Chinese expatriates living in Thailand, Malaysia, and Singapore. However, any postulation of simple geographic realities is insufficient to resolve the regional investment challenge, given the physical and human resource constraints we have noted. At this point, China has precious little time to craft an effective policy, given its accession to membership in the World Trade Organization. As it seeks to revitalize its interior provinces it must do so under universal international norms of the WTO and other international organizations to which it belongs. As globalization proceeds, the challenge for China thus is to develop a consistent economic policy that reflects the economic and social transparency that membership in the global community demands.

References

Ren Shuyin (2001). *Géographie de la Chine* , German original as *Landeskunde China* (Beijing : Verlag für Fremdsprachige Literatur).

FMI/IMF. *La République Populaire de Chine et le FMI*, and *Statistical Communiqué*. http://www.imf.org.

OMC/WTO. Organisation Mondiale du Commerce, *Statistiques Générales*. http://www.wto.org.

PNUD/UNDP. *Rapport sur le Développement dans le Monde 2001*. http://www.undp.org.

Chine (2001). *Faits et Chiffres 2000*, (Beijing : Nouvelle Etoile).

End Notes

[i]Along with those organizations noted in the abstract, we refer to them as : the North American Free Trade Association ; the Caribbean Community ; Mercado Comun do Sud ; the European Union ; the Commonwealth of Independant States ; Georgia , Ukraine, Uzbekistan, Azerbaidjan, Moldova ; the Association of South-East Asian Nations ; Asia-Pacific Economic Cooperation ; the Asian Regional Forum ; the Economic Community of Western African States ; the Economic Community of Central African States ; the Gulf Cooperation Council.

[ii] GNP or GDP, consumption, investment, saving, government expenditures and taxes, trade balances, monetary aggregates, interest rates, and exchange rates, for example.

[iii] J. von Neumann (1938), « Modèle de l'Equilibre Général », Séminaire Mathématique Karl Menger, Vienne.
[iv] R.F. Harrod (1939), « Towards a Dynamic Economy », London.
[v] Official Report in *Chine*, Editions Nouvelle Etoile, Pékin, 1999.
[vi] See the following note, « Regard théorique sur l'espace chinois ».
[vii] Beijing authorities base official policy on the principal of « one China ». This includes not only the provinces listed in Tables 2 through 4 but also the Province of Taiwan (with 36,000 square kilometers and 22 million inhabitants), and whose historical and political situation remains unique. Relations between Beijing and Taipeh have not been normalized since the second world war for the capitulation of Japan in 1945 and the creation in 1949 of the People's Republic of China.
[viii] Hook, Brian (2001). *Shanghai and the Yangtze Basin.* (Hong Kong : Oxford University Press).
[ix] Province in Southwest China that borders ASEAN countries, is connected via the Mékong delta, and rich in minerals, with a population of 40 million that increasingly are enjoying the benefits of more rapid economic growth.

Globalization and Sustainable Development: European Experience

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Abstract

The contemporary issues of sustainable development and globalization for a subset of European countries are addressed. The paper evaluates these two issues at the national level when some development specialists argue that there is often a trade-off between them. The study database consisted of last two decades relevant national indicators extracted from centralized information sources of international agencies. Due to data incompleteness and missing, 22 countries were selected for detailed analysis for the ten-year period of 1985 to 1995. The globalization indicators reflect cross-border flow and exchange of products, people, resources, and information. The sustainable development indicators reflect human and ecosystem well-beings. They consisted of measures reflecting economic, environmental and social development characteristics. The univariate and multivariate statistical analyses of the database showed interesting results and relations between globalization and sustainable development for the period of study. Elasticities of sustainable development indicators with respect to globalization indicators were studied. For some countries, the elasticity appraisal showed sustainable development parallel with globalization. For others, the evaluation did not indicate a promising period. The study confirmed the significance of the globalization and sustainable development balancing challenges of the 21st century.

Introduction

Originating from two different ideas, Sustainable development and globalization issues have some similarities. The main characteristic that is common between sustainability and globalization is their multidimensionality. Several researchers have claimed that these issues are interrelated and may even play dual rules. Many ecologists are now defending localized economic development as a key recipe for ecological enhancement.

Introduced by Brundtland Commission [1], sustainable development is a concept that has increasingly extended since 80's, requiring balanced intra-generational and intergenerational attentions. Its initiation was a natural response to scientists' anxiety to negative impacts of past shortsighted growth and developments. Sustainability and sustainable development have now acquired prime significance in planning and decision-making at all levels. Nevertheless, the practical implications have remained far from perfection. Studies have shown that the continued poverty of the majority of the planet's inhabitants and excessive consumption by the minority are the two major causes of environmental degradation conducive to unsustainable courses for human development [2].

Globalization is a term used to describe the acceleration and intensification of economic interactions through increasing internationalization of production, distribution, and marketing of goods, services and information [3]. The basic ingredients of globalization can be summarized as its four I's, namely industry, investment, individuals, and information [4]. In the twentieth century, the transactions costs for international trade decreased not only because of technological advancements, but in addition, because of a wave of deregulation and cooperation among many countries. In particular, the costs of transportation and communication have fallen significantly, which have been conducive to creation of the new world economy. Globalization is shaping new economic and socio-environmental settings at all levels with profound implications for developments. Prospering from globalization facilitations, for example, East Asian economies have increased their share of world GDP from 5 to 20 percent and their share of world manufactured output from 10 to 23 percent between 1965 and 1988 [5]. Currently human race is going through a globalization process that started some times ago, that will possibly last for decades, that demands many decisions of humanity and will transform human relations in such a manner that could led to different destinations according to the path and options selected.

Sustainable development and globalization are two contemporary issues that have often been separately addressed in the literature [3, 5-7]. However, their interrelations are primary to relevant development at all levels. In this study, sustainable development and globalization for a subset of European countries were addressed. The study objective was to shed some light on the interrelationships of these two issues at the national level. Although the study findings are based on rather limited database time and geographic scopes, the same methodology can be applied to any other time and geographic scope for determination and elaboration of the involved issues. The study thus is of more methodological value than quantitative results.

The study database consisted of last decade relevant national indicators extracted from centralized information sources of international agencies. Due to the study limited resources and centralized data resource accessibility, data incompleteness and missing, only 22 countries were selected for detailed analysis for the ten-year period of 1985 to 1995 [8-10]. The selected national globalization indicators reflect cross-border flow and exchange of products, people, resources, and information. The selected sustainable development indicators reflect human and ecosystem well-beings. They consisted of measures reflecting economic, environmental and social development characteristics. The selected indicators are neither standard nor unique; nevertheless they reflect the basic dimensions of sustainable development and globalization. The univariate and multivariate statistical analyses of the indicators showed interesting results and relations between globalization and sustainable development for the period of study. Elasticities of sustainable development indicators with respect to globalization indicators were studied. For some countries, the elasticity appraisal showed sustainable development parallel with globalization. For others, the evaluation did not indicate a promising period. The study confirmed the significance of the globalization and sustainable development balancing challenges of the 21st century.

Descriptive Analysis

After preliminary evaluations of the accessible databases, the limited study resources confined the final data collection to 7 relevant national indicators [6-8]. The selected set included 4 indicators representing globalization and 3 indicators representing sustainability aspects, respectively. Due to missing data 22 countries were finally selected for detailed analysis. The analyses also were curtailed to a ten-year period covering 1985 through 1995. Table 1 describes these variables.

Table 1: DESCRIPTION OF THE DATABASE INDICATORS

Variable	Category	Description	Dimension
GAPS	Globalization	Civil Aviation Passengers Carried	Thousand Passengers
GFDI	Globalization	Foreign Direct Investment Net Inflows	Million US$
GNIF	Globalization	Net Income From Abroad	Million US$
GTRD	Globalization	Trade	% GDP
SCO2	Sustainability	CO2 Emission	Thousand Tons
SGDP	Sustainability	GDP	Billion US$
SUNE	Sustainability	Unemployment	% Total Labor Force

The univariate statistical analysis of the 7 indicators for period of 1985 to 1995, shed light on the study database variability. The statistics minimum, maximum, mean, standard deviation and coefficient of variation for years 1985 and 1995 are summarized in Table 2, respectively. The table shows that the CO_2 emission, SCO2, on average decreased 0.07% per year. The GDP, SGDP, showed an average increase of 3.97% per year. The unemployment, SUNE, showed an average increase of 1.07% per year. The civil aviation passengers carried, GAPS, showed an average increase of 7.53% per year. The foreign direct investment net inflows, GFDI, showed an average increase of 60.84% per year. The net income from abroad, GNIF, showed an average decrease of 16.65% per year.

The trade, GTRD, showed an average decrease of 0.69% per year. Table 2 shows these statistics for the selected 22 countries.

The civil aviation passengers carried, foreign direct investment net inflows confirmed positive globalization process for the selected countries. Nevertheless the net income from abroad and trade indicators showed a globalization process not always desirable for the selected countries. The CO2 emission and GDP showed a desirable trend for sustainable development, where as, the unemployment trend was not always promising. The ascending order of variability, based on coefficient of variation among globalization indicators was for trade, civil aviation passengers carried, foreign direct investment net inflows and net income from abroad, respectively. The ascending order of variability, based on coefficient of variation, among sustainable development indicators was for unemployment, CO2 emission and GDP, respectively. The least variability was observed for globalization indicator for trade as percentage of GDP. The largest variability was observed for net income from abroad.

Table 2: DESCRIPTIVE ANALYSIS OF THE DATABASE

	Minimum	**Maximum**	**Mean**	**Standard Deviation**	**Coefficient of Variation**
GAPS85	384.1	28229.4	6293.3	7675.3	1.22
GAPS95	862.7	59688.8	11029.4	14229.8	1.57
GFDI85	-430	5480	745	1300	1.74
GFDI95	4	23700	5280	7050	1.34
GNIF85	-2900	8230	-560	2260	4.04
GNIF95	-15000	19000	-1500	6410	4.27
GTRD85	34.8	160.8	78.4	34.4	0.44
GTRD95	43.3	140.3	72.9	27.6	0.38
SCO285	322	152535	35754.2	42862.9	1.21
SCO295	471	147964	35501.9	40526.7	1.14
SGDP85	2.01	719	169	221	1.31
SGDP95	3.83	949	236	296	1.25
SUNE85	0.9	21.6	8.2	5.4	0.66
SUNE95	2.6	22.9	9.1	4.9	0.55

Multivariate Analysis

To develop an understanding of the interrelationship among the observed values for indicators, pairwise correlation analysis was performed for individual years. The results for years 1985 and 1995 are presented in the Table 3. For significantly correlated matrix entries, all the sustainable development indicators were positively correlated with civil aviation passengers carried and foreign direct investment net flows. Desirably, only GDP should have been positively correlated with civil aviation passengers carried and foreign direct investment net flows indicators. Furthermore, for significantly correlated matrix entries, all the sustainable development indicators, CO2 emission, GDP and unemployment, were negatively correlated with globalization indicators of net income from abroad and trade. Desirably, only CO2 emission and unemployment indicators should have been negatively correlated with net income from abroad and trade indicators. Correlation coefficients are unable to capture non-linear relationships among indicators, and some of the non-significant, NS, entries of the matrix are due to this situation. For statistically significant correlations of Table 3, at a significant level of 5%, the observed linear relationships among sustainable development and globalization indicators do not always look very promising. Sustainable development would have been more achieved if CO2 emission and unemployment indicators were found negatively correlated with globalization indicators. Furthermore, sustainable development would have been more achieved if GDP were found positively correlated with globalization indicators.

Table 3: RESULTS OF CORRELATION ANALYSIS

	GAPS85	**GFDI85**	**GNIF85**	**GTRD85**
SCO285	0.76	0.72	NS	-0.49
SGDP85	0.91	0.78	NS	-0.44
SUNE85	0.34	0.39	-0.38	NS
	GAPS95	**GFDIS95**	**GNIF95**	**GTRD95**
SCO295	0.83	0.65	-0.31	-0.42
SGDP95	0.88	0.73	-0.37	-0.41
SUNE95	NS	NS	-0.42	NS

Evaluating the correlation matrices showed that there were some undesired significant correlations among sustainable development and globalization indicators. To develop an understanding of individual country's relationship between sustainability and globalization issues for each of the selected countries, the elasticity of sustainability characteristic of countries with respect to that of globalization were studied. The elasticity E of a variable Y with respect to a variable X in a period starting at t1 and ending at t2, reflects the percent variable Y changes with respect to one percent change of the variable X during the period. Equation 1 shows the arc elasticity of two variables.

$$E_{Y/X,t1\text{-}t2} = [(Y_{t2} - Y_{t1})/(Y_{t2} + Y_{t1})] / [(X_{t2} - X_{t1})/(X_{t2} + X_{t1})] \quad (1)$$

Where $E_{Y/X,t1\text{-}t2}$ is the arc elasticity of variable Y with respect to variable X during the period t1 to t2. The elasticity of 3 sustainable development indicators with respect to 4 globalization indicators resulted in 12 arc elasticities for each country for the period of 1985 to 1995. For sustainable development, positive values were found desirable for 4 elasticities of $E_{SGDP/GAPS,t1\text{-}t2}$, $E_{SGDP/GFDI,t1\text{-}t2}$, $E_{SGDP/GNIF,t1\text{-}t2}$, and $E_{SGDP/GTRD,t1\text{-}t2}$. Furthermore, negative values were found desirable for the 8 elasticities of $E_{SCO2/GAPS,t1\text{-}t2}$, $E_{SCO2/GFDI,t1\text{-}t2}$, $E_{SCO2/GNIF,t1\text{-}t2}$, and $E_{SCO2/GTRD,t1\text{-}t2}$, $E_{SUNE/GAPS,t1\text{-}t2}$, $E_{SUNE/GFDI,t1\text{-}t2}$, $E_{SUNE/GNIF,t1\text{-}t2}$, and $E_{SUNE/GTRD,t1\text{-}t2}$.

The observed arc elasticities for the period of 1985 to 1995 for the selected countries are shown in Table 4. The last row of the table shows the desirable signs and countries were appraised accordingly. Sweden and United Kingdom elasticities have all desirable signs. Cyprus, Ireland, Spain and Turkey have 8 elasticities out of 12 with desirable signs. Austria, Belgium, France, Hungry, Malta, Netherlands, Norway, Portugal and Switzerland have 7 elasticities out of 12 with desirable signs. Bulgaria, Greece, Iceland and Poland have 6 elasticities out of 12 with desirable signs. Finland, Israel and Italy have 4 elasticities out of 12 with desirable signs. These results are dependent to the selected indicators. As they are not unique or standard, the conclusions have more methodological value. Based on the selected indicators and countries, for the period of 1985 to 1995, the globalization and sustainable development were not always in harmony. Using desirable signs, Table 5 shows the ranking of each country with respect to the environmental, economical and social indicator elasticities. Each country can be in one of the 100%, 75%, 50%, 25% and 0% sign desirable categories, respectively.

Combining different system characteristics in an overall performance measure could provide a composite appraisal measure. For each country for the study period of 1985 to 1995 and the selected elasticities, a composite elasticity index, CEI, was developed. Firstly, the Z score of each elasticity, ZE, was computed by the following equation:

Table 4: ARC ELASTICITIES FOR THE PERIOD OF 1985-1995

Countries	SCO2/ GAPS	SCO2/ GFDI	SCO2/ GNIF	SCO2/ GTRD	SGDP/ GAPS	SGDP/ GFDI	SGDP/ GNIF	SGDP/ GTRD	SUNE/ GAPS	SUNE/ GFDI	SUNE/ GNIF	SUNE/ GTRD
Austria	.11	.08	.13	-8.7	.36	.27	.41	-28.	-.30	-.23	-.34	23.9
Belgium	.06	.03	.01	-.66	.35	.17	.02	-4.2	-.26	-.12	-.02	3.09
Bulgaria	.51	-.21	-.28	-2.4	.06	-.03	-.03	-.28	-2.1	.89	-1.46	4.27
Cyprus	.76	.73	.20	2.11	1.35	.51	.23	7.91	-.36	-.34	-.35	-10.2
Finland	.14	.04	.06	.45	.39	.12	.16	1.21	2.05	.63	.84	6.31
France	-.27	-.06	-.14	1.84	.73	.17	.36	-4.9	.34	.08	.17	-2.28
Greece	-1.1	.29	.11	-10.	-1.1	.29	.11	-10.	-1.1	.30	.12	-10.7
Hungry	-2.3	-.18	-.53	4.42	.13	.01	.03	-.25	-6.5	.71	3.05	6.00
Iceland	.29	-.07	.24	-.57	.74	-.18	.60	-1.4	4.05	-.97	3.26	-7.79
Ireland	.20	.14	.19	1.43	.49	.35	.46	3.52	-.31	-.22	-.29	-2.21
Israel	.83	.29	2.89	-2.4	.91	.33	3.2	-2.6	.05	.02	.16	-.13
Italy	.28	.11	.10	1.38	.54	.21	.19	2.65	.31	.12	.11	1.53
Malta	.40	.23	-.57	2.5	.66	.38	-.95	2.61	-.82	-.47	1.17	-5.2
Netherlands	.06	.04	.03	-.39	.35	.21	.15	-2.1	-.45	-.27	-.2	2.70
Norway	-.46	-.09	-.49	2.1	.61	.11	.64	-2.8	1.16	.21	1.22	-5.25
Poland	-6.4	-.14	.23	-.76	3.54	.08	-.13	.43	6.92	.36	-.51	10.38
Portugal	.78	.60	-.28	15.9	.56	.43	-.20	11.4	-.27	-.21	.10	-5.54
Spain	.37	.19	.23	2.61	.64	.34	.40	4.54	.11	.06	.07	.78
Sweden	-1.4	-.16	-.25	-3.2	.88	.10	.16	2.13	4.23	.49	.79	10.2
Switzerland	-.05	-.02	-.03	.14	.48	.21	.25	-1.3	2.61	1.12	1.35	-7.07
Turkey	.37	.23	.31	1.57	.47	.30	.4	2.04	-.51	-.32	-.42	-2.17
United Kingdom	-.04	-.02	-.01	-1.5	.40	.23	.01	14.3	-.44	-.26	-.01	-15.9
Desirable Sign	(-)	(-)	(-)	(-)	(+)	(+)	(+)	(+)	(-)	(-)	(-)	(-)

$ZE_{Yi/Xj,t1-t2} = (E_{Yi/Xj,t1-t2} - ME_{Yi/Xj,t1-t2}) / SE_{Yi/Xj,t1-t2}$ for i = 1,2,3 , j = 1,2,3,4 (2)

Where $ZE_{Yi/Xj,t1-t2}$ is the Z score of the $E_{Yi/Xj,t1-t2}$, $ME_{Yi/Xj,t1-t2}$ is the mean of $E_{Yi/Xj,t1-t2}$, $SE_{Yi/Xj,t1-t2}$, is the standard deviation of $E_{Yi/Xj,t1-t2}$, for i=1 to 3, and j=1 to 4. Secondly, the composite index for elasticities of Yi's with respect to Xj's was computed by the following equation:

$CEI_{t1-t2} = (\Sigma\ k\ .\ ZE_{Yi/Xj,t1-t2}) / 12$ (3)

Table 5: TAXONOMY OF COUNTRIES WITH RESPECT TO 3 SUSTAINABILITY DIMENSIONS

Desirable Elasticity Sign	Environmental Sustainability	Economical Sustainability	Social Sustainability
100%	Sweden, United Kingdom	Cyprus, Finland, Ireland, Italy, Spain, Sweden, Turkey, United Kingdom	Cyprus, Ireland, Spain, Sweden, Turkey, United Kingdom
75%	Bulgaria, France, Hungry, Norway, Switzerland	Austria, Belgium, France, Hungry, Israel, Malta, Netherlands, Norway, Poland, Portugal, Switzerland	Austria, Belgium, Malta, Netherlands, Portugal
50%	Greece, Iceland, Poland	Greece, Iceland	Bulgaria, Greece, Iceland
25%	Austria, Belgium, Israel, Malta, Netherlands, Portugal	Bulgaria	France, Hungry, Norway, Poland, Switzerland
0%	Cyprus, Finland, Ireland, Italy, Spain, Turkey		Finland, Israel, Italy

Where $CI_{t1\text{-}t2}$ is the composite elasticity index for the period t1-t2, and k is a factor that equals +1 for those elasticities with desirable positive sign, or -1 for those elasticities with desirable negative sign. If unequal weighting for elasticities are desirable, equation 3 should be modified accordingly. Table 6 shows the Z scores of CEI sustainability with respect to globalization for the period of 1985-1995. Countries in ascending order of CEI Z score are Finland, Iceland, Switzerland, Austria, Sweden, Hungary, Portugal, Poland, Italy, Norway, Belgium, Cyprus, Bulgaria, Israel, France, Spain, Greece, Netherlands, Malta, Turkey, Ireland, and United Kingdom.

Conclusion

The study addresses globalization and sustainable development issues and interrelationships for 22 European countries, for the period of 1985 to 1995. The selected national indicators were neither standard nor unique; nevertheless they reflected the basic dimensions of sustainable development and globalization. The univariate and multivariate statistical analyses of the indicators showed interesting results and relations between globalization and sustainable development. Elasticities of sustainable development indicators with respect to globalization indicators were studied. For some countries, the elasticity appraisal showed globalization parallel and in harmony with sustainable development. For others, the evaluation did not indicate a promising period. The study confirmed the significance of the globalization and sustainable development balancing challenges. Although the study findings are based on the selected indicators and cover limited database time and geographic scopes, the methodology can be applied to other indicator sets and/or other scopes for determination of the involved issues. The study thus is of more methodological value than quantitative results.

Table 6: RANKING OF COUNTRIES

Country	**Z score of composite elasticity index**
	1985-1995
Finland	-4.52
Iceland	-4.40
Switzerland	-3.90
Austria	-2.39
Sweden	-2.36
Hungary	-1.34
Portugal	-1.20
Poland	-1.17
Italy	-0.45
Norway	-0.26
Belgium	-0.10
Cyprus	-0.03
Bulgaria	0.07
Israel	0.36
France	0.64
Spain	0.66
Greece	0.70
Netherlands	1.18
Malta	1.59
Turkey	1.94
Ireland	2.78
United Kingdom	5.66

References

[1] World Commission on Environment and Development. (1987). Our Common Future, Oxford: Oxford University Press.

[2] Clarke, R. (Ed.) (1999). Global Environment Outlook 2000. UN Environment Programme, New York: UN Publications.

[3] Harris, R.G. (1993). Globalization, Trade, and Income. Canadian Journal of Economics 26, 755-776.

[4] Ohmae, K. (1995). The End of the Nation State. New York: Free Press.

[5] Wallerstein, I. (1994). The Rise and Future Demise of the World-Capitalist System: Concepts for Comparative Analysis. Comparative Studies in Society and History16, 387-415.

[6] Vaziri, M., and Rassafi, A.A. (2001). An Appraisal of Forest Sustainability in the Asian and Pacific Region. In Proceedings of the 3rd International Conference on Ecosystem & Sustainable Development (pp. 616-621). Wessex, UK: Wessex Institute of Technology Press.

[7] Vaziri, M. and Rassafi, A.A. (2001). An Appraisal of Road Transport Sustainable Development in the Asian and Pacific Region. In Proceedings of the International Seminar on Sustainable Development on Road Transport (pp III.39-III.46). New Delhi, India.

[8] OECD. (1999). OECD in Figures: 1999 Edition, OECD Publications.

[9] United Nations. (1997). Statistical Yearbook 1997, 42nd Edition, New York: UN Publications.

[10] World Bank. (1998). World Development Indicators 1998, Washington: World Bank Publications.

Globalization and Trade between Trading Blocs-A Study of SAARC and EU With special reference to India

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Abstract

India's trade liberalization policies of 1991 in particular and liberalization efforts of the other SAARC countries have opened up an increasing scope for trade cooperation with the rest of the World, particularly with Europe. Development cooperation between the EU and the countries of SAARC is a precondition for transitional economies like India and EU for their trade expansions. But, with the declining intra-trade among SAARC countries and the rising one with the developed, it is viewed necessary to deal extensively the trade composition of SAARC with that of EU. Hence, an attempt has been made in this paper to study the trade synchronization between the two blocs in the framework of Globalization. More clearly, the paper analyses India's trade with SAARC as a trade bloc and with EU bloc, in addition to the trade synchronization and direction between the two blocs. It is observed that SAARC countries have been exporting mainly to EU countries in comparison to other industrialized countries like USA and Japan. In 1991 Nepal exported 58% out of her total exports to industrialized countries followed by Bangladesh, Maldives, Pakistan, India and Sri Lanka. In the immediate reform period the exports increased but there is a slight decline in recent years. Though SAARC countries are taking advantage with the EU's offer of the special preferences and increasing their market access to EU countries, the region as a composite unit could not be benefited due to unstable trade policies. However, the possibility of trade integration between SAARC and EU could be identified due to transitivity i.e., the intra-trade relations leading to inter-trade thereby establishing a trade synchronization with a maximum canonical correlation. It appears that the liberalization policies of SAARC countries could not result in a better trade synchronization but WTO and EU formation may be expected to bring strong trade integration between SAARC and EU in future.

Introduction

Regional economic integration has been adopted as a policy in different regions to respond to the challenge of globalisation brought about by WTO. The emergence of regional trade blocs like EC, NAFTA, SAARC etc has resulted in the strengthening and enhancement of economic and trade relations between the countries in particular and World at large. It has been viewed that by strengthening the regional cooperation the nations would benefit from increased access to markets with contemplated liberalization under the Uruguay Round. Hence, many smaller nations are heading towards forming into groups. South Asian nations are the new entrants in the international trade scenario trying to form into a full-fledged region. The decade of 1990s, thus proved to be a turning point for a number of south Asian nations. It was marked by the adoption of economic reforms as a part of which a significant emphasis was laid on the process of liberalization in the trade and investment regimes to intensify their integration with the World economy. Since inception, SAARC intra-trade remained low of mere 3% and it still remains small. The reason being the existence of high nominal tariffs on a variety of non-tariff barriers such as quantitative restrictions, fiscal charges and discriminatory practices and outright ban on imports. It has been viewed that SAARC must deal with the Worlds major trading blocks as a composite unit in order to maximize the gains of trade for both sides. Although the intra trade is not impressive, the South Asian nations have been maintaining strong links with the outside world in particular with the advanced countries. The trade integration of these nations with the World is increasing at a faster rate. They have been mainly trading with the World's five major regions; North America, the European Union, Australia, East Asia and the Middle East. Europe is the South Asian countries most important trading partner and a major export market. Development cooperation between the EU and the countries of SAARC covers financial and technical aid as well as economic cooperation. With the declining intra trade and the rising trade with the developed world the present study deals extensively the trade composition of SAARC with that of EU to identify the possible benefits that accrue when the trading continues with EU which is a complete union. In particular the trade integration with the European Union has been considered here to study because of the growing competence of the region and increasing relations with the south Asian nations in recent times. Since the EC community signifying a completely unified common market among the member countries provides new opportunities and challenges for most of the developing countries, also the South Asian nations have long standing trade relations with the community, the trade flows between the two blocs is proposed to be studied. In light of this the present paper explores the potential of enhancing trade between SAARC and EU with special emphasis on trade between India –SAARC and EU. The paper has been divided into four parts. Section I looks at the India's trade with SAARC as a trade block, Section II deals with India's trade with EU countries, Section III focuses on the direction of trade between the two blocs and finally the section IV aims to study the trade synchronization between SAARC and EU and concludes there on.

Indo-SAARC Trade Relations

In the SAARC region, many attempts have been made to encourage regional trade under the regulation of SAARC and the SAPTA. Despite constant attempts, it still could not take an effective shape as a regional trade body because of political problems between Pakistan and India that hamper the regional interests. Despite official declarations to transform the SAPTA into a FTA in this region by 2001, the idea seems to be unrealistic. India has had problems with RTAs since her neighbors don't want free trade with a giant neighbour they don't trust or like. Hence multilateralism will remain India's only choice. (Sarita,A & Tanvi,P 2000). During the ten year pre –SAARC (1975-1985) Period, India's exports increased from US$ 160 million in 1975 to US $ 315 million in 1984 registering a compound growth rate of 7.8%. Compared to it, during the ten years post-SAARC period, India's exports increased from US $ 277 million in 1986 to US $ 1532 million in 1995 i.e., from 8% the exports increased to 30% constituting an additional growth of 22%. This reveals the fact that the formation of the SAARC as a bloc has encouraged India's exports to SAARC countries. Since 1991 the liberalization impact also has a positive impact giving rise to further increase in India's exports to SAARC countries. From US $ 622 million in 1991, the exports have touched a peak level of US $ 2005 million in the year 2000 thus indicating an additional of 9% decadal growth in comparison to the pre liberalization period (1980-90) of 5%. Similarly, the India's exports to the World during the pre and post liberalization periods have witnessed an upward trend. On the other hand India's imports from the SAARC countries are quite low. It was just US $ 56 million in 1975 and rose to only US $ 105 million during 1984 and further to only US $ 182 in 1995. In fact the immediate reform period has shown a decline in India's imports from SAARC registering a low level of US $ 96 in the year 1993 and later picked up only to the extent of US $ 363 million in 2000. They have grown at a constant rate of 7% through out the pre liberalization and post liberalization periods. This shows that India is not a good importer for its neighboring countries. While in 1985 the total turnover of India's trade with SAARC was US $ 382 million, it increased to US $ 1714 million in 1995 and further to US $ 2368 million in 2000. The trend exhibits that there is a spectacular rise in India's trade with SAARC as compared to the increase in the India's global trade, which increased from US $ 24594 million in 1985 to only US $ 94018 million in 2000.

Table 1: INDIA'S LINEAR GROWTH RATE OF EXPORTS, IMPORTS AND VOLUME OF TRADE WITH SAARC COUNTRIES.

(In per cent)

Item	**Bangladesh**	**Maldives**	**Nepal**	**Pakistan**	**Srilanka**	**Total SAARC Bloc**
Exports:						
(1980-1990) (1991-2000)	16.3 10.67	8.37 18.86	4.79 21.13	24.97 14.49	1.85 10.63	8.61 12.43
Imports:						

(1980-1990) (1991-2000)	-2.0 14.72	0 0	-1.6 27.58	-7.05 3.82	-12.03 15.46	-5.51 15.11
Trade volume						
(1980-1990) (1991-2000)	13.55 10.89	8.37 18.86	2.96 22.96	1.38 9.91	-0.91 11.03	4.49 12.81

Source: Linear growth rate computed from the data taken from Direction of trade statistics Year Book (IMF) (Various Issues).

From the above table, it is shown that during the pre liberalization period India exported mostly to Pakistan followed by Bangladesh and Maldives. But after the liberalization the direction of exports changed and Nepal and Maldives became the major exporting destinations. In fact the growth rate of exports to Pakistan has fallen down considerably. The tremendous decline may be attributed to the political disturbances with the two nations. But its export growth to the entire bloc as such has increased from 8.61% in pre-liberalization period to 12.43% in the post-liberalization period. An additional rate of 3.82% is noticed in the later period over the previous one. On the import front, the growth rate of India's imports from all the SAARC nations has shown negative during the pre liberalization period and positive in the later period. Nepal is the major exporter of India indicating a high growth rate of about 27.5% followed by Sri Lanka (15.4%) and Bangladesh (14.7%). The total volume of trade with the bloc although has increased, still India does not have good trading patterns with in the bloc. Except Nepal, all other nations have registered a very low growth rate. Overall the growth of India's exports and imports clearly reveal the growing trade imbalance between India and its neighboring South Asian countries.

Table 2 presents the coefficients of variation indicating the stability of export and import relations of India with SAARC region. The variation in terms of exports is high in the case of Pakistan, Bangladesh and Maldives and it has been reversed in the post liberalization period except in the case of Maldives and Nepal. The low coefficients with respect to entire SAARC bloc obviously makes out that India's export relations is quite high. On the other side there is no constant import trade. Although India's export relation is quite impressive, the overall trade is not stable since it does not rely on her neighbors for its imports thus contributing to a low intra trade with in the SAARC region.

Table 2: TRADE STABILITY BETWEEN INDIA AND SAARC COUNTRIES EXPORTS, IMPORTS AND TRADE VOLUME DURING PRE-LIBERALIZATION AND POST-LIBERALIZATION PERIOD.

(in per cent)

Item	**Bangladesh**	**Maldives**	**Nepal**	**Pakistan**	**Sri Lanka**	**SAARC**
Exports:						
(1980-1990) (1991-2000)	85.19 38.84	84.4 79.67	45.5 70.36	92.69 51.49	21.49 33.37	40.29 39.37
Imports:						
(1980-1990) (1991-2000)	53.36 60.91	0 0	48.85 92.35	43.19 78.58	66.49 48.64	28.61 57.20
Trade volume:						
(1980-90) (1991-00)	71.89 39.96	84.4 79.67	32.45 76.46	34.62 44.69	20.41 34.40	24.53 40.77

Source: Direction of trade statistics Year book (various issues)

Indo-EU Trade Relations

The EU is an economic giant and an important partner in World trade. Its share in World exports was 17.5 per cent in 1984 and increased to 19.4 per cent in 1994. Similarly its World imports increased marginally from 18.5 per cent to 18.8 per cent over the corresponding years. The significance of the EU in World trade, though slightly lower in the early 1990s has been growing in recent times. The progress towards economic integration in the EU and the outcome of the Uruguay round has a great influence for the developing countries, particularly in South Asia.

The unification programme 1992 of European market has widespread and far reaching implications both for the developed and developing countries. The EU has been an important trade partner for India ever since its very inception. Indian exports during the pre-liberalization period have risen very slowly. Although the exports have picked up from 1975 million dollars in 1980 have fallen down again in 1983. Later they picked up to 5070 million dollars in 1991. The EU provided a market to as much as 26% of Indian exports in 1993-94 against 17.7% in 1985-86. (Sarma, A., Faber,G & Mehta, P.K 1997). The post-liberalization period also witnessed similar trend with a fall in the year 1997 due to the EU's sluggish growth performance, but recovered in the later years. Where as the imports from EU have shown a fluctuating trend. The imports which have reached a level of 7835 million dollars slightly declined to 6776 million dollars by 1994 and from then on once again picked up to a level of 9481 million us dollars in 2000. There is a significant decline from 9% in the pre-liberalization period to 5% in the post-liberalization period. It has been observed that although India could not capture fully the EU's imports its market share in the EU imports from the extra-EU sources has grown in the liberalized regime. According to Sarma et al that India has performed better compared to its competitors from the extra-EU World under the liberalized regime. EU has been enjoying a favourable balance of trade with India since 1990. Although the gap at times has reduced, the trend in 1995 and 1996 was markedly in favour of EU at over 2149 million us dollars and 1647 m US dollars respectively. Again the gap has considerably reduced to 957 m dollars. In 1998, India-EU trade for the first time was in favor of India. The balance in India's favour was 315 million dollars. This was partly due to the South East Asian financial crisis favouring a shift in EU focus on countries such as India. Again in 1999 as the EU's economy picked up its overall trade improved and the balance of trade remained in favour of EU. This can be traced by even looking at the growth rate of India's total trade volume with EU. The growth rate which was about 10% in the pre-liberalization period has considerably fallen down to 4.5% in the post-liberalization period. A country wise analysis reveals very interesting results. From the table (3) it shows that the growth rate of India's exports to EU countries has markedly declined. Earlier the growth of exports was high towards Austria, Belgium-Luxembourg, Finland, Germany, Greece, Italy, Portugal Sweden and UK. In the recent times the growth rates have fallen for all these nations and the exports went in to the markets of Denmark, France & Ireland. In contrast the growth rate in terms of imports has shown a significant rise for quite a few countries in the post-liberalization period except Belgium-Luxembourg and Denmark. In fact imports from Finland, Greece, Ireland, Italy, Spain and UK have risen sharply thus contributing to an unfavourable balance of trade for India.

Table 3: INDIA'S LINEAR GROWTH RATE OF EXPORTS, IMPORTS AND TRADE VOLUME WITH EU.

(in per cent)

Countries	**Exports**		**Imports**		**Trade Volume**	
	(80-90)	**(91-00)**	**(80-90)**	**(91-00)**	**(80-90)**	**(91-00)**
Austria	17.98	3.81	18.25	8.22	18.15	6.11
Bel-lux	15.68	10.41	14.75	0.49	14.97	4.00
Denmark	5.48	8.89	8.93	6.86	7.11	7.87
Finland	22.5	3.93	8.12	16.65	10.96	13.54
France	6.40	10.73	7.97	8.01	7.41	9.32
Germany	13.38	5.09	8.59	3.66	10.2	4.30
Greece	12.97	10.56	-18.07	12.09	-2.93	10.94
Ireland	7.40	17.40	1.34	24.74	5.05	20.56
Italy	12.78	9.63	8.13	9.42	10.16	9.53
Netherlands	4.61	7.55	7.21	6.47	6.31	7.11
Portugal	20.78	9.02	17.47	10.99	18.58	9.30
Spain	9.81	4.78	1.94	10.16	5.14	3.62
Sweden	12.4	6.59	14.3	6.30	13.79	6.40
UK	9.69	7.69	7.15	10.90	8.00	1.38
Total EU	11.11	5.31	9.29	3.95	9.89	4.59

Source: Estimated with the data taken from Direction of Trade Statistics Year book (Various Issues).

Another notable feature of the Indo-EU trade is that though India could play only a marginal role in the EU in respect of both its exports and imports there is a high stability in trade in the post-liberalization period as the coefficients of variation are low. The fluctuations in trade are quite low signifying the fact that the process of trade liberalization and the EU becoming a single largest entity must be responsible for an enhancement in the trade between India and EU. (Table 4)

Table 4: TRADE STABILITY BETWEEN INDIA AND EU.

(in per cent)

Country	1980-90	1991-00
Austria	66.86	22.74
Belux	53.04	12.36
Denmark	28.70	33.29
Finland	40.06	45.95
France	36.89	29.87
Germany	35.92	16.92
Greece	64.37	36.64
Ireland	23.91	66.52
Italy	37.81	30.84
Netherlands	25.36	24.46
Portugal	58.63	30.38
Spain	31.94	22.45
Sweden	79.98	23.97
UK	29.34	28.98
Total EU	34.39	16.63

Source: Computed from Direction of trade year book, IMF (Various Issues)

Direction of Trade Between SAARC and EU

Trading of the South Asian nations with the developed economies is prehistoric although they have not integrated themselves into a full-fledged regional trade bloc. They have been maintaining bilateral and multilateral trade relations with the outside World. These nations have viewed the growing interest in regional trade arrangements on par with developed countries and hence are making several attempts to form into a bloc of one form or the other. In recent times, these nations have embarked on a wide variety of liberalization programs, characterized by removing much of the quantitative restrictions on exports and imports, reducing tariff on agricultural products, phasing out of the subsidies on domestic production and exports and introducing export incentive schemes. This trade liberalization process in SAARC region has paved way to integrate with World economy more intensively, as is clear from the rising trade-to-GDP ratios. Table (5) shows that the trade-orientation ratio for most of the countries has increased. The trade-GDP ratios have increased substantially between the mid-1980s and 1990s for Bangladesh (from 16 per cent to 28 per cent), India (from 12 per cent to 21 per cent), Nepal (23 per cent to 43 per cent), and Sri Lanka (54 per cent to 72 per cent). Pakistan is the only exception to this pattern where the trade-to-GDP ratio has actually declined from 38.5 per cent in the early 1990s to 33.7 per cent in the late 1990s.

Table 5: PROPORTION OF TRADE IN GDP OF SOUTH ASIAN ECONOMIES

(in per cent)

Countries	**1985-87**	**1990-92**	**1996-98**
Bangladesh	15.81	17.22	28.44
India	11.80	16.13	20.92
Nepal	23.34	29.82	42.90
Pakistan	32.75	38.53	33.73
Sri Lanka	54.22	58.94	71.74

Source: South Asia Development and Cooperation Report 2001-2002.

SAARC integration has taking place mainly with the European Union in comparison with the other developed and developing countries. Among the industrialized countries SAARC direction of trade is concentrated only in EU. (Table 6).

Table 6: DIRECTION OF TRADE OF SOUTH ASIAN COUNTRIES

(in per cent)

Countries	Industrialized countries		USA		EU		Japan	
Exports:	1991	1999	1991	1999	1991	1999	1991	1999
Bangladesh	75.8	75.6	26.6	31.2	41.3	40.3	3.1	1.6
India	57.7	56.6	16.3	22.2	28.3	25.1	9.3	5.2
Maldives	63.0	76.5	22.2	17.0	37.0	36.6	3.7	1.3
Nepal	88.3	59.8	23.7	30.8	58.0	24.6	0.8	0.9
Pakistan	56.0	60.3	11.4	22.9	32.4	29.2	8.0	3.6
Sri Lanka	65.5	76.4	28.1	39.9	28.4	29.3	5.1	3.6
Imports:								
Bangladesh	36.5	27.5	5.1	5.3	14.3	10.1	9.0	6.7
India	52.1	45.8	9.7	9.0	29.9	26.6	7.0	5.9
Maldives	16.0	56.2	0.6	1.1	9.9	51.1	4.3	1.3
Nepal	44.0	10.6	1.4	1.6	12.2	5.1	21.6	1.9
Pakistan	58.4	40.0	11.2	6.4	27.0	17.3	14.8	7.7
Sri Lanka	36.9	36.6	5.7	2.8	15.7	21.9	11.7	7.2

Source: South Asia Development and Cooperation Report 2001-02.

Europe is the South Asian countries most important trading partner and a major export market. Since SAARC was working towards free trade, it could benefit from the EU experience especially in respect of how economic asymmetries between states could be balanced out in the formation of trade bloc. With respect to the EU's offer of GSP (Generalised system of preferences), the SAARC is presently engaged in completing the domestic steps required for this process (Sunday Observer, 26th September, 1999)

EU trade policies could have a strong bearing on the trade liberalization policies of SAARC nations. For instance, the EU's emphasis on tariff reductions and removal of controls attracted the South Asian nations. As a result these economies have slowly phasing out many tariffs and non-tariffs. It has been opined that these small nations effectively benefit from the community's preferential treatment of products originating in the form of GSP schemes.

Many developing countries have taken advantage of the EU's liberal trade policies and its measures to promote imports from the Third World, particularly its generalized system of preference, to increase their export earnings. Although the SAARC trade with EU is significant it is quite low when compared to entire Asia. The trade between EU and the entire Asia is the most dynamic feature of their relationship. For instance, imports from

ASEAN rose by some 80% over the five years from 1990 to 1994. But EU exports have shown a similar dynamism, rising by 73% between 1990 and 1994. In contrast, the SAARC countries have shown insignificant trade with EU from 1984 to 1994 mainly because of less liberal trade policies. Since the mid 1990s, the sweeping liberal trade policies of SAARC and the revised GSP schemes of EU have been leading the SAARC countries to incline towards EU markets. Under the EU's generalized system of preferences (GSP), the exports of developing countries in Asia and Latin America have been entering the European market either duty-free or at a preferential (i.e. reduced rates) since 1971. Asian countries accounted for some 80% of all EU imports that received GSP treatment in 1993. While the ASEAN countries accounted for some 30% of the total, SAARC accounted for 12%. In 1995 the EU revised its GSP scheme for manufactured products, in an attempt to spread its benefits more widely.

Trade synchronization Between SAARC and EU

The trade synchronization between SAARC nations and EU is based on adherence to the most-favoured nation clause and under the Generalised system of preferences, they were granted favorable access to the European Market. In the light of this the last section aims to measure the trade integration between SAARC and EU. In order to analyze the trade integration between the two blocs a multivariate technique known as "Canonical Correlation Technique" has been adopted. To observe the relationship across the blocs and to identify the intensity of trade, export figures have been taken for each individual country of each bloc towards its respective partners in the other bloc. A canonical correlation explains the trade relationship between the two groups of countries by finding a small number of linear combinations from each group. It is the linear combination of the variables of the first group as is a linear combination of the variables of the second group. Of the finite number of possible linear combinations for each set, coefficients are chosen such that the resultant linear combination of the first group variables is maximally correlated with the linear combinations of the second group variables, leading to trade integration or synchronization between two blocs.

The model is defined as follows:

$$X = \sum_{i=1}^{14} a_i x_i$$

$$Y = \sum_{j=1}^{6} b_j x_j$$

where X = European Union (EU) and Y = SAARC.

Canonical correlation analysis selects those values for the $a_{i's}$ and $b_{j's}$ such that r_{xy} is the maximum possible value.

X_i = sum of the exports of the ith country to its partners of opposite bloc. In the first group (X) the EU (14) countries exports are taken as 14 variables. The countries are Austria, Belgium-Luxembourg, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Portugal, Spain, Sweden and UK.

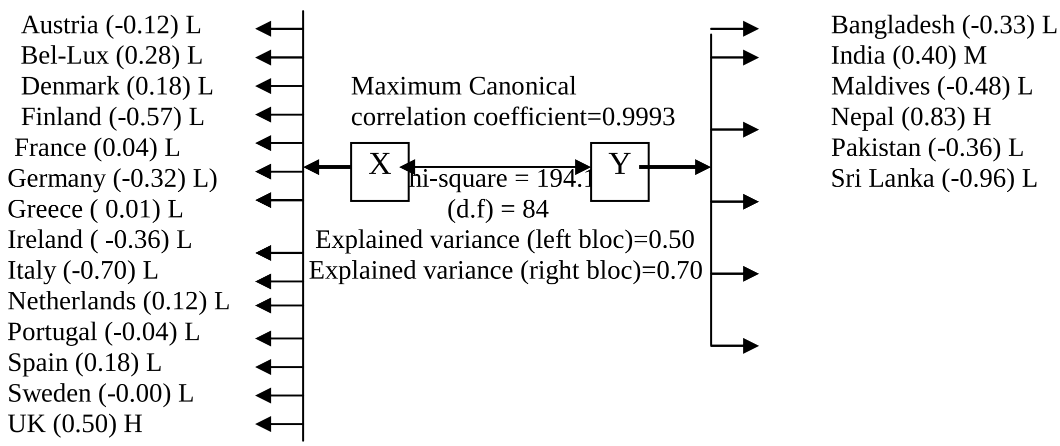
X_j = sum of the exports of the jth country to its partners in the opposite bloc. In the second group (Y) the SAARC (6) countries exports are taken as 6 variables. The SAARC countries include Bangladesh, India, Maldives, Nepal, Pakistan and Sri Lanka. Bhutan has been excluded in our analysis due to non- availability of data.

The data have been collected from the Direction of trade statistics year book (various issues) and the time period is selected from 1979 to 2000.

The results show that the maximum values for the a_i's and b_j's are (0.50 & 0.70) which has shown a high canonical correlation r of value 0.99. The high correlation shows that there is strong trade integration between the two blocs. The canonical variates tell us which country has a high trade with its partners. From the estimates, below 0.3 are taken as very low trade, above 0.3 as moderate trade and finally 0.5 and above are considered as indicators for highest trade.

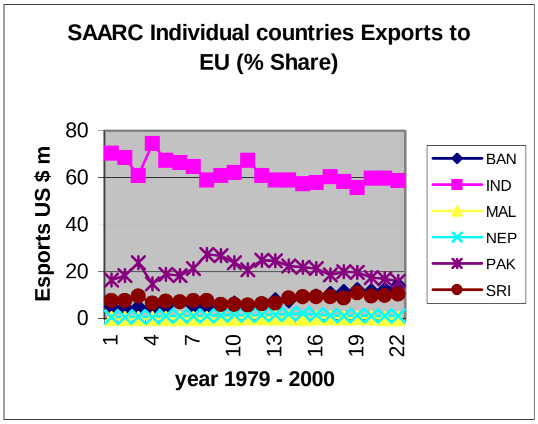
The pattern of trade synchronization between SAARC and EU has been highlighted by adopting those canonical variates which give the maximum canonical correlation between SAARC and EU (Chart1). From the chart it is noticed that from SAARC group, India and Nepal are found to have a strong integration with EU. Similarly on the other group only UK could synchronize trade with SAARC. While examining the graphs it is noticed that although there is an increasing share of exports in total exports to EU for countries like Bangladesh & Sri Lanka their exports are relatively lower indicating between 2% to 12%. Hence, only India, Nepal and UK could bring trade synchronization between SAARC & EU thereby maximizing the canonical correlation coefficient. Nonetheless Nepal has been maintaining constant trade with EU. This could be one reason for its major contribution towards trade between the two blocs. The strong trade synchronization is established between SAARC and EU due to trade transitivity, i.e., the intra-trade relations leading to inter-trade thereby maximizing the canonical correlation coefficient. For instance, though Pakistan could not have high canonical variate, its trade with India and Nepal has high correlation in the SAARC group ($P_RI=0.94$ & $P_RN=0.94$). Similarly is the case with Bangladesh and Sri Lanka. This high correlation is reflected upon Nepal's trade with UK and thereby could establish trade between UK & Pakistan, UK & Sri Lanka and UK and Bangladesh. Hence, trade synchronization establishes with a maximum canonical correlation. The results for the successive roots are given in the appendix.

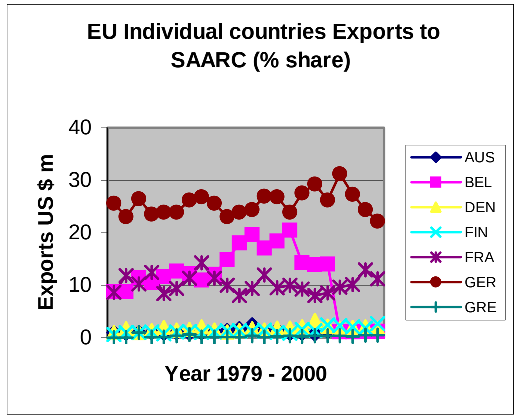
Chart 1: ESTIMATES OF CANONICAL VARIATES

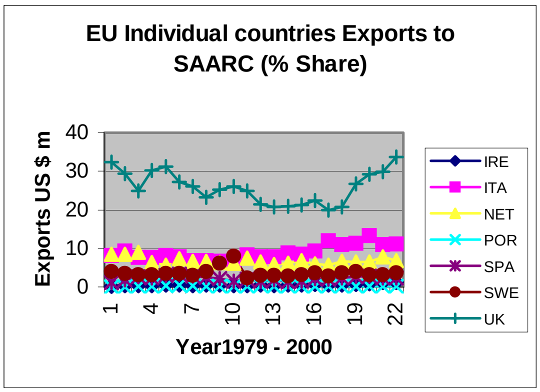


Note: 1. Figures in brackets refer to Canonical variates

2. L = Low value (<0.03), M = Moderate value (>0.3 & < 0.5) and H = High value (0.5 and above)







Conclusion

The Recent policy changes in the South Asian nations in compliance with EU are intended to create a trading environment for enhancing trade with EU. Each of the SAARC countries although taking advantage with the EU's offer of the special preferences and increasing their market access to EU countries, the region as a composite unit could not be benefited due to unstable trade policies. However, the possibility of trade between SAARC and EU could be identified due to transitivity, i.e., the intra-trade relations leading to inter-trade thereby establishing trade synchronization between the blocs. As a result the contribution of each country's trade of the SAARC group with that of EU has not been reflected upon. In particular, despite India's major role with EU, the trade relation between the two has not been clearly noticed in the model as its variate is found to be moderate. The shares of the SAARC countries like India, Pakistan in the EU trade is dominating and significant but declining during the post-liberalization period. Nepal, Bangladesh and Sri Lanka exhibit an increasing share in the EU trade, but relatively between 2% to 12%. Surprisingly, it is identified that Nepal and India could exhibit a reasonably good canonical correlates along with UK in the other bloc, thereby could maximize canonical correlation between the two blocs. Hence liberalization policies of SAARC countries could not result in a better trade synchronization but WTO and EU formation may be expected to bring strong trade integration between SAARC and EU in future.

References

[1] Charan D.Wadhwa, “Regional Blocs: Trade Opportunities For SAARC,” In SAARC: Regional Cooperation and Development perspectives Problems. Policies (ed) by Debendra kumar Das (1993) (Deep and Deep publications, New Delhi)

[2] Debendra Kumar Das (1993), SAARC: Regional Co-operation and Development (Deep and Deep Publications, New Delhi)

[3] Gerhard pohl, Piritta Sorsa (1992), “European Integration and Trade with the Developing World,” The World Bank Policy and Research Series No.21.

[4] Hughes Hallett, A.J. (1994). “The Impact of EC-92 on Trade in Developing Countries,” The World Bank Research Observer, January, p:128-32.

[5] Jayatilleke S.Bandara and Wusheng Yu, “ How Desirable is the South Asian Free Trade Area? A Quantitative Economic Assessment SJFI-Working paper No.16/2001.

[6] Miria Pigato, Caroline Farah, Ken Itakera Kwang Jun, Will Martin, Kim Murrell and T.G.Srinivasan,” South Asia’s Integration into the World Economy,” The World Bank (1997).

[7] Nader Majd (1995), “The Uruguay Round and South Asia: An Overview of the Impact and Opportunities,” The World Bank Policy Research Working Paper No.1484.

[8] Panchamukhi, V.R.,Rao, V.L., et.al,(1990) “Economic Cooperation In the SAARC Region: Potential, Constraints and Policies,” in the Research and Information System For The Non-aligned and Other Developing Countries. Interest Publications 19A, Ansari Road, New Delhi.

[9] Ranjit Singh Ghuman and Davinder Kumar Madaan (1999), “ Indo-SAARC Trade Scenario: Emerging Trends and Trade-Off,” Indian Economic Journal, vol.47 No.3.

[10] Raju, K.V. “India and European Economic Community: 1992-Some Implications in Trends in World Economy-1 Glimpses of the World Economy (ed)by Devendra Thakur (Deep and Deep publications, New Delhi).

[11] “Regional Trade Integration: Modest Progress,” South Asia Monitor, No.9 (May 1999)

[12] Sada Shankar Saxena and V.K.Pande, “ EC 1992-A Fact or Fiction? Implications for India,” Foreign trade Review vol.23, No.4 (1989).

[13] Sarita Aiyar and Tanvi Popal (April 2001) “WTO and Regional Trade Agreements,” WTO Monthly Digest.

[14] Sarma, A.G.Faber, and P.K.Mehta, 1995. Meeting the Challenges of the European Union: The Prospects of Indian Exports (New Delhi, Sage Publishers)

[15] Sarma, A and P.K Mehta (1997), “Indian Exports to the European Union in the Emerging Economic Environment,” Asia-Pacific Development Journal, Vol.4, No.1.

[16] Sheila Page (1992), "Some Implications of Europe 1992 for Developing Countries," OECD Technical Papers, p: 13-57.

[17] South Asia Development and Cooperation Report 20001/02. Research and Information System for the Non-Aligned and other Developing Countries (2002).

[18] Sunday Observer-Features (September 1999), "SAARC holds Consultations with the EU and ASEAN.

[19] Swapan K.Bhattacharya, "European Union's Trade with Asia and India: Prospects in the New Millennium," paper presented at the International Seminar on "The European Union in a Changing World,' JNU, New Delhi, 6-7 September 2001.

[20] Trade and Economic Integration in South Asian Economic Development Transformation, Opportunities and Challenges.(ed)by Moazzem Hossain, Iyanatul Islam and Reza Kibria (1999). London and New York.

[21] The European Union and the Asia, http://europa.eu.int.

[22] Venables J.A (2000). "International Trade; Regional Economic Integration," paper prepared for the "International encyclopedia of Social and Behavioral Sciences".

Appendix I

		Root 2		**Root 3**		**Root 4**		**Root 5**		**Root 6**	
S.No	EU/SAARC Countries	E V	S V	EV	SV	EV	SV	EV	SV	EV	SV
1	Austria/Bangladesh	-.07	1.05	.67	-4.8	.26	2.3	-.81	8.6	.11	-.96
2	Bel-lux/India	-.98	-.22	-.88	-1.7	-.5	-2.2	.48	-3.1	.12	4.8
3	Denmark/Maldives	1.34	-.33	.32	1.9	.36	-.62	-2.9	2.5	.39	.57
4	Finland/Nepal	0.46	-.81	-.11	-2.4	1.64	-1.8	1.8	2.0	.54	-.79
5	France/Pakistan	-.10	-.59	-.51	0.8	.89	4.5	.84	-3.0	-.17	-1.5
6	Germany/SriLanka	-1.2	.44	1.52	5.91	-.96	-2.3	-.74	-6.8	-2.0	-2.3
7	Greece	0.20		-.08		-.36		-.07		-1.1	
8	Ireland	-.90		-.77		-.05		1.1		-.64	
9	Italy	-1.0		-.87		-.11		4.9		1.9	
10	Netherlands	.53		.13		.32		-1.8		.73	
11	Portugal	.00		-.33		.58		1.2		.71	
12	Spain	.08		.52		-.13		-1.4		-.32	
13	Sweden	.05		-.36		.87		.75		-.24	
14	UK	.59		-.47		-2.5		-2.9		-.02	
	Explained variance	.10	.22	.06	.03	.05	.01	.03	.01	.02	.01

	Root 2	**Root 3**	**Root 4**	**Root 5**	**Root 6**
Canonical correlation	0.99	0.95	0.91	0.89	0.76
Chi-square	124.5	71.1	45.5	26.2	9.11
(d.f)	65	48	33	20	9

Globalization, Regional Economic Integration and New Challenges for the United Nations and its Specialized Agencies

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Abstract

The paper deals with some aspects of mutual relations between the ongoing processes of the globalization and regional integration on the one hand and the not always fully utilized potential, means and tools being available to the United Nations and its specialized agencies as potentially truly global forces on the other hand. In this context, the paper tries to identify mutual relations between seemingly unmanageable processes of globalization mostly believed to be controlled only by the transnational corporations, on some misunderstandings around the regional integration as potentially one the last attempts of governments to protect their countries against the most negative aspects of globalization and the challenges for the new role of the UN in all these processes.

Some Background Information on the Ongoing Globalization and Regional Integration

It is an undisputed fact that the end of the cold war and the collapse of the socialism and thus also the end of the bipolar and severely antagonistically divided world has, among various other phenomena and processes, brought into living also the concept of globalization as a very powerful and uncontrolled process of various positive but also negative aspects of the contemporary development wherever in the world.

As far as the positive aspects of the globalization are concerned, on the one hand there are various processes which really could be considered as processes which are helping and supporting an overall progress and development in whatever distant and/or previously isolated or underdeveloped part of the world. Among these positive aspects of the globalization are most frequently mentioned such factors of globalization as internationalization of production and services, international division of labor, global world trade, transfer of know how but also intercontinental transport and especially communications represented mainly by the latest information and communication technologies. In this latest case it is mainly their most visible representatives – Internet, world wide web, e-mail but also still more and more widespread e-commerce, -trade, -banking, -finance, -education, etc. In this sense, the contemporary world is really becoming more interrelated, integrated in to one entity often called also as “a global village”. All these mostly positively perceived aspects of globalization are in general directly or indirectly contributing to the acceleration of the overall socio-economic development on the global scale.

On the other hand, however, about the same factors and processes of globalization are very often blamed also for all the negatives, shortcomings and “evils” of the contemporary globalized world. It is so especially due to the further widening of the gaps between the rich and poor nations or countries, between the so-called rich and still more dominating North and the poor and still more subordinated South. In this connection it is therefore widely believed that as a consequence of all these negatives it is not at all true that the globalization has been linking the world more closely together. On the contrary, it has been understood and heavily criticized fact, that the globalization has just been further deepening the division between the most developed and the least developed countries. While the former ones become just still more rich and developed, the latter ones just become much more poor, more dependent and generally more underdeveloped. In this connection it is then also widely perceived that also various negatives of the contemporary world are directly or indirectly just consequences of the globalization. In this connection especially international crime, deepening of poverty, spreading of the HIV/AIDS and various other diseases, drugs, famine, malnutrition, degradation of environment, exploitation of child labor, civil and social unrest, wars, etc. All of them are again believed to be direct or indirect consequences of the injustice and disparities of globalization as they are much more negatively effecting developing and least developed countries than their luckier and much richer and developed countries. It is then no surprise, that also the current international terrorism is considered just to be a consequence of all these injustices and disparities of the ongoing globalization when those rich become just more rich and those poor just more poorer.

In view of all these negative effects, it is then globalization often perceived as a synonym of a modern neocolonialism conducted not as in the past directly by the governments of colonial powers and their imperial armies but much more discretely by their TNC – transnational corporations, multinationals and their various international organizations, associations, etc. More discretely also in that sense that sometimes it is often very difficult or almost impossible in case of e.g. the TNCs to identify their real "nationality" and so to find out and punish their real owners, masters, etc. i.e. those who are in fact responsible for their misdeeds as they often happen e.g. in various developing countries regarding hazardous productions, environmental disasters (a Bhopal case), exploitation of local labor including children, etc.

In view of all these various negatives often related directly or indirectly to globalization it is then often in very negative terms perceived also the ongoing regional integration which is also often seen as nothing else than just as an another tool how to subordinate small and not so rich countries to their much more powerful partners in order the latter could better achieve their hegemonism, domination and modern imperial ambitions. In this context it is then often overlooked also an undisputed fact that the regional economic integration could serve also as an important tool especially for small and not so rich countries to unite their forces and thus to be more efficient in their joint effort to minimize negatives of the ongoing globalization, etc.

In view of all the above (often absolutely incorrect) various misconceptions regarding the negatives of the globalization and regional economic integration it is then no surprise that there are quite highly developed and globally very well organized and coordinated various antiglobalistic movements, groups, NGOs, initiatives which very openly demonstrate, campaign and often by street violence directly fight against official policies and events organized by the governments of the so-called rich countries but also by various international organizations including those organized by the UN and its specialized agencies, etc. Among the targets most widely attacked by the antiglobalists belong first of all various „summits" and other „global" events, congresses organized especially by the WTO, EU, WB, IMF, but also by the G7 or by various other UN agencies etc. In general all of them are perceived by these antiglobalists as the most typical representatives of globalization and thus also initiators of all misdeeds of the contemporary world. As a consequence of this firm stance of antiglobalists we are witnesses of a very sorrow fact that during the last several years, hardly any of such events could have been organized without really heavy street fights between security forces of the particular host country and antiglobalists.

It is clear that this kind of protests against the globalization, regional economic integration, TNC, etc. is very often just total misunderstanding of the real situation in the contemporary world and its current rather complex development. The reality is that the whole concept and processes of globalization are not at all so unmanageable as it is generally believed and they are not at all only in the hands of seemingly uncontrollable TNCs.

In the next parts of this paper we will try to respond to some of these misconceptions and will try to show how they could be solved just by proper utilization of what has already been existing and/or been available in this respect and not only now but already for decades and thus much longer than the modern concept of globalization itself, but….

How to Solve the Issues of Globalization and Regional Integration Through the Proper Utilization of the United Nations

Although in general it is perceived that the globalization and regional integration are processes somehow forcibly imposed on the contemporary world by some rich countries and their TNC in order to utilize them for their own selfish interests, it is not at all quite so. As we have already documented above, the globalization and regional integration are to some extent just logical consequences of the overall socio-economic and technological development.

All of them i.e. globalization, regional integration and also TNCs are not as powerful and uncontrollable as it has been sometimes almost fatally believed and thus creating a general opinion that there could be nothing done against them but fierce protests and violence as one of the last resorts. It is absolutely not true. There has been existing – and even long before both concepts i.e. of globalization and regional integration became so widely used as in presence – a global system that has been gradually created already since the 2nd World War. And in case of some of its specialized agencies it has started even long before that already before the 1st World War as in case of such currently global agencies of the United Nations as the UPU – Universal Postal Union established in 1874, ILO – International Labor Organization in 1919, etc. That system has been the system of the United Nations and its specialized agencies – often called also as a United Nations family – which has in its hands all necessary prerequisites to fully serve as an efficient coordinator and controller of the overall sustainable development in the world and on truly global scale including ongoing and so often and so much criticized processes of globalization and regional integration and their most visible representatives i.e. the TNCs, etc.

For these purposes the UN has some really and truly unique features and thus also opportunities to be an efficient global player especially due to its:

- global scope as it is currently uniting (almost) all countries in the world but two
- clear, well defined and generally fully respected global mission of the UN within its Charter
- for long-years built and developing institutional structure
- wide network of coordinating regional centers and specialized agencies for almost all various problem areas of the contemporary world
- internationally biding legislation in the form of the international laws being absolutely superior over any domestic legislation
- qualified workforce hired on the global scale, drawn from all member states and with the highly recognized status of international civil servants
- all necessary technical and infrastructure prerequisites needed for the global and/or regional, trans-regional, sub regional and national activities
- network of its own global, regional, sub regional, country development programs and projects
- some kind of its own training and research capacity for global issues and/or problems
- enforcement capability (institutions, courts, armed forces, etc.)
- own financial resources and thus also a relative financial independence.

If in spite of all these very good preconditions for its global mission, the role of the United Nations on the global scale is often not seen as efficient as it could be in view of all the above unique prerequisites, then the logical question is what is the reason? Perhaps, one of the most adequate responses and explanations to this crucial question has been given by one of its previous Secretary Generals Mr. Javier Perez de Cuellar who in reaction to the often criticism of the UN for its inefficiency has responded: „ The UN is only as good and/or as bad as its member states are or as they want to have it i.e. their UN“.

It seems very often that for various reasons, the governments of some member states want to have the UN exactly only as it is i.e. not so much strong and fully utilizing all its preconditions in order they could have somebody to be blamed for their own shortcomings, mistakes or misdeeds on the global scale. Of course, this is not so say that also the UN itself does not have some of its own shortcomings, that it is not doing some mistakes, etc. But in many cases it is just a consequence of its own global structure and democratic rules, its composition of 186 sovereign and independent nations in many cases „united“ only by their own national interests. Moreover, we have to take into account that the UN was established almost 60 years ago in the time shortly after the most devastating war in the world history and at that time the world was completely different than the one we have been living in now. In many cases it would just require some adjustments, modifications, innovations of the UN to the contemporary globalized world. But as we will show in many cases it is more in the hands of the member states than in the hands of the UN itself..

If now we return again to the above specified natural prerequisites of the UN to be really an efficient global player we could find out that the whole process of globalization and regional economic integration could be much better manageable if the member states would be more cooperative in relations to the UN and would always sincerely support its global mission, its modernization and necessary development and in particular they meet their own obligations as the members of the UN family.

Global scope of the United Nations, but…

If we omit some almost negligible remains of the not-yet decolonized and therefore still dependent territories, then the UN is really an uniquely global organization and only the IOC, FIFA, IAEF, FIBA and some other similar sport organizations have more members as they membership is not linked to the necessary sovereignty and independence of its members as it is in case of the UN. But… In this connection, one of the biggest paradoxes of the UN not being fully global organization in this sense is the fact that outside of the UN is still also one of the main hosts of the UN institutions viz. Switzerland. And even a bigger paradox is that this still not yet „united“ nation and thus an outsider to the UN is hosting (and doing thus a good business) more specialized UN agencies than any other nation in the world. An another paradox is that most of the territories still being on the UN List of Territories to be decolonized and thus becoming eligible for becoming new members of the UN are mostly territories being administered and under „preparation“ for decolonization by some member states – permanent members of the UN Security Council. i.e. those having an unique and utmost position in the system of the UN as guarantors of peaceful and secure development of the world. It is just to add, that the UN Charter adopted yet in 1945 requires self-determination of all people already since then in at least three of its articles viz. XI, XII, XIII. Some other not yet independent members of the UN are those overseas territories which have, in the meantime, become a part of their metropolitan states as their overseas departments, regions, etc. not always with the full consent of their own ingenious people.

Global mission of the United Nations as enshrined in its Charter

The UN has a clear, well-defined and generally fully respected global mission as being enshrined within its Charter. Since the very outset of its existence, the UN in difference to e.g. the EU and other international communities, organizations, etc. has had very clearly defined all main duties and responsibilities in its constitution i.e. the Charter of the UN with the famous opening phrase: “We the Peoples of the UN determined…“ i.e. not as the UN, not as its member states, countries but as its people all over the world. In its Preamble as well as in all its 111 articles then these all people clearly state basic principles of International Law regarding tolerance, international peace and security, equal rights, self-determination, sovereignty but also the promotion of the economic and social development of ALL PEOPLE all over the world. For this purpose was also by the same Charter established a special Economic and Social Council coordinating all activities for achieving the above development which in the current terminology should grant for all the people in the world „the sustainable development on the global scale“. But unfortunately, again it have always been the UN member states themselves who in the whole history of the UN were violating the above determination also of its own people and due to that, the world is still neither safe, nor equal, not fairly developed. But again as in case of still incomplete membership in the UN also in this case it is not the fault of the UN or its united people but mainly of their national governments that even now in the 21st century the world is not as their member states have voluntarily enshrined it in their global constitution i.e. the UN Charter.

The United Nations and its institutional structure

Since its very inception in 1945, the UN has, by itself – according to its above Constitution/Charter – been developing the unique structure of its, mostly on democratic principles established, own principal institutions for all its basic global functions as stipulated in the Charter i.e. a General Assembly (a kind of a world parliament), a Security Council, an Economic and Social Council, a Trustship Council, an International Court of Justice and a Secretariat. The only problem again is that the world has been permanently changing and developing and in this contemporary world of ongoing globalization some of these principal UN institutions would need already a kind of more or less substantial revisions vis-à-vis the current needs of the globalized world. As the best example for these changes could serve the Security Council as the institution being fully responsible for the creating basic preconditions for the peaceful and secure environment for the sustainable socio-economic development on the global scale. At the time of its origin, the UN had altogether 51 founding member states. Most of the rest of the states up to the current number of 186 were at that time dependent territories and/or colonies of several colonial powers mostly of the UK and France. Hence, at that time also for this reason it has fully been justified that they have become two of five permanent members of the Security Council of the UN as together with their colonies each of them represented hundreds of millions of peoples on all continents. However, especially due to the decolonization process coordinated by the UN itself with the pick in 1960s their empires up to now have shrunk to only few and small territories, very often represented only by isolated islands, etc. So, nowadays, as still permanent members of the UN instead of previous hundreds of millions peoples they represent only peoples of their own countries of less than 60 million peoples each, out of about 6 billion of the current world population. It means their „weight“ is less than 1% of the world population but still having a power of a veto to any decisions of all other 185 member states of the UN and their combined population of 6 billion people. In this context the most illustrative example is a case of India. Previously, as a part of the British Empire with its at that time about 500 million people it has also been, at least indirectly and nominally, protected by the above veto power of the UK. However, now after more than 50 years of its sovereignty and independence with more than 1 billion people of independent and sovereign Republic of India they have not such a veto power and in the UN deliberations they have the same „weight“ as micro states of Pacific islands with several thousand citizens. And by another paradox India's „weight“ of over 1 billion of its people could be in the UN anytime overused by their former colonial master with less than 60 million „weight“. And the same case is with other big nations as Brazil, Indonesia, Pakistan, etc. which not only in number of citizens but also in various other indicators are on the global scale much more powerful states than former European colonial powers. It is not necessary to mention that also in the context of the united Europe i.e. within the EU itself, are both permanent members of the Security Council of the UN in many indicators just behind Germany, which of course in the time of the post-war UN was originally together with Japan not even admitted to the family of the UN. But in the context of the current globalized world all these post-war arrangements need just simply new rearrangements. But again it is not the UN itself but it is up to its member states who should take the first step in these necessary adjustments. After all, if the EU has its common citizenship, common foreign and security policy, etc. there is really no justification that in the UN these common policies are represented by two members with veto powers, not to mention an another paradox that very often in the UN Security Council they veto each other due to their different national foreign policy priorities and interests.

The UN and its regional centers and specialized agencies for sustainable development on the global scale

One of the most important features of the UN as a global player and coordinator of the sustainable development on the global as well as regional and sub regional levels have been its geographic and subject matter oriented structures. As far as the geographic structure is concerned, in addition to its Headquarters in New York the UN has really a global structure created by its regional centers (Economic and (Social) Commissions) in all major regions i.e. the ECE in Geneva for Europe, the ECLA in Santiago de Chile for the Latin America, the ECA in Addis Ababa for Africa, the ECWA in Amman for the Western Asia, the ESCAP in Bangkok for the South-East Asia and Pacific. All of them are, as UN regional centers, responsible for the coordination of the processes of sustainable development in their particular regions. As far as the more subject matter oriented side of the sustainable development is concerned, it has been in the hands of the so-called specialized agencies of the UN and/or Intergovernmental Agencies related to the UN. Out of them, the most famous are the UNDP, UNESCO, UNICEF, ILO, IAEA, FAO, WHO, WB, IMF, ITU, UNIDO, etc. but also less frequently medialized and less known as e.g. ICAO – International Civil Aviation Organization in Montreal, UPU – Universal Postal Union in Bern, UNU – United Nations University in Tokyo, UNV – United Nations Volunteers in Bonn, etc. Their number has been permanently growing. Currently, their total number together with the above regional commissions and some other specialized institutions of the UN has reached number of 60 located in various places of the world, mostly in three major UN hubs i.e. New York, Vienna and mainly Geneva but also in Paris, London, The Hague, Nairobi, Tokyo, Montreal, Santo Domingo, Port-au-Prince, etc. The major problem with all that ever growing number of various specialized agencies and institutions and their regional, sub regional and country missions and offices has been the problem of their global coordination as most of the UN agencies are rather autonomous in their overall policies, programs, budgets, etc. So there has been a truly danger of some overlappings, redundancies in their activities on the global scale, etc. Moreover, to these geographic and subject-matter structure we have to add the network of over 70 Regional/Sub regional UN Information Centers, over hundred UNDP regional and sub regional and country offices, etc. In principle we could say that currently almost every country in the world has had one or other form of the UN related institution, center, office, project on its territory, so an efficient coordination of all them has been permanently on the agenda of the UN in order they all would really serve to their main purpose i.e. actively contribute to the sustainable development all over the world.

The United Nations and its internationally binding legislation

Another of the most important characteristics of the UN as a global player has been that all its activities, operations and programs, etc. have been from the very beginning based not on some voluntary, charity like work and/or a good will of its institutions and member states. From the very beginning it has been based on the wide and comprehensive system of the International Law. In addition to its, already mentioned Charter as a kind of the Constitution, the UN has had in its hands and has been guarantor for the whole system of the International Law created especially by hundreds of the UN Conventions as the most important and generally fully binding international laws. But also Declarations as generally fully respected international customary laws and Resolutions and other forms of the international law have represented a strong and enforceable legal structure for the world development. Hence, the UN has very strong instruments to really coordinate and oversee all various basic aspects of the sustainable development in the world. Various acts of this most general international law have fully biding effect not only on all member states but as stated in the Charter also all non-members wherever in the world are expected to respect them and be cooperative in their implementation.. Hence if an act of international law as e.g. in the case of the UN Convention on the Rights of Child is stating that the basic education has to be free, the child labor is forbidden, any child has right to adequate health care, etc. than every state, government and their subjects including the TNCs breaching this particular international law are fully liable and punishable for any wrongdoings in this respect. On the basis of the general principle that the international law and especially that of the UN has been superseding national laws than any its non-observation is punishable by any national and/or any other court so it is not necessarily to have any special UN or international courts, etc. Hence, if there is a general feeling that in the context of the ongoing globalization, everything is in the hands of uncontrollable TNCs and they do whatever they like it is just insufficient knowledge of these principles of the UN and its international law. Otherwise, any local prosecutor could sue any whatever strong TNC and any district judge could sentence them according to the particular acts of the UN International law e.g. according to the above UN Convention on the Rights of Child. If it is not so then it is again the problem of the particular national governments, parliaments, etc. Hence, anti-globalists should first turn their campaigns against those who have that almost responsibility in their own respective countries and their institutions for not respecting their international obligations towards the UN as its full-fledged members.

The United Nations and its workforce hired on the global scale

One of the most important potential prerequisites of the UN for its role as the most important global player has been its unique opportunity to draw its staff on the global scale i.e. hiring its staff members, experts, advisors, officers, etc. from all its member states so nominally to hire the best specialists in their professions. However, the reality is not that positive and also for the UN it is sometimes really difficult to hire the best potential candidates. The main reasons for that are:

- to work for the UN is not in all countries equally attractive so especially from the most developed countries it is sometimes difficult to attract the most desired specialists who rather prefer to work in their own countries, for their TNCs, well established universities, super equipped research laboratories, rich private companies and institutions which often offer them much better and more lucrative working conditions than the UN
- on the other hand the working for the UN is especially very attractive for the citizens from the developing countries for whom not only in terms of salaries such a job means enormous multiplication of opportunities in their respective home countries.

Then together with the natural fact that the number of the developing and less developed countries several times overcomes the number of the developed countries among the members of the UN, all in all it means that to the large extent the staff of the UN is coming mostly from the developing countries who for their professional growth and practice not always had the same favorable conditions as their otherwise equally educated colleagues from the developed countries.

If in this connection we take into consideration also the fact that the UN in its worldwide hiring process states in addition to purely qualifications requirements also some of its own priorities as e.g. women and specially those from the developing countries, so-called regional distribution and/or so-called under-representation of some member states, etc. then it is quite logical that there are some potential problems in this respect. All these criteria, together with some other non-specified criteria as e.g. country lobbying, etc., mean that the UN staff is not always composed of the best available specialists on the global scale but according to some gender or regional or country or other preferences, historical remnants, etc. Generally we could say that for example the representation of the specialists from the former socialist countries (due to their former „voluntary“ isolation from the international relations and cooperation with the UN) has been much smaller than from some comparative developing countries mainly due to their above historical and cultural ties with some of the most developed countries. All in all this situation has some adverse effects on the efficiency of the UN which is very often criticized for its inefficiency, slowness, lack of dynamism, red tape, etc. But in general we could state that again the UN is only also in this respect as successful or not as is its staff drawn from all its 186 mostly developing countries. As the most realistic solution to this problem would be to adopt a kind of rotation system i.e. that UN staff could work for the UN only for a certain period of time and then return back to its country or any other country and work there for a certain period before being eligible again to apply for the job at the UN family. Also the member states again should be more cooperative with the UN and responsible in case of their nominees for the posts in the UN. They should fully respect just professional criteria and totally refrain from various other criteria, favoritism, cronyism, etc. what unfortunately is also quite often the case for their staff nominations or on the other hand they do not like to send their well qualified nationals to work for the UN, etc. In summary, the human resources management (HRM) of the UN and its special agencies is alone by itself probably one of the most challenging tasks for the UN if it wants to succeed in its role as the coordinator of the ongoing globalization and regional integration. Unless, the UN will succeed in modernizing, innovating and adjusting its HRM to the challenges of the ongoing globalization then very soon it could happen that it will not just have the necessary human capacities to secure for the UN its due role in all these very complex processes of the current and future sustainable development on the global scale. As an example could serve the TNCs themselves, which in their HRM policies apply strict liberalization being free of any gender, age, regional, national and other preferences but an absolute professional competence and managerial skills.

The United Nations has all technical and informational prerequisites for its global role

In spite of its rather permanent financial problems (we will deal with them later separately), the UN has relatively well built modern information and communication system with every agency having currently already its own web site with all necessary information, programs, vacancies for the above world-wide hiring process, etc. what to some extent is also liberalizing and opening the hiring process of the UN. But in addition to the above invaluable information functions it would be desirable if the UN as a whole would better utilized all these technical and organizational and communication capacities also for its world wide global operations, programs, projects, etc. In theses respect most desirable and beneficial would be to utilize them for the harmonization and coordination of their global, regional and countrywide operations and projects between all various UN agencies. They by themselves operate hundreds of projects all over the world so without the full utilization of the latest information and communication technologies it is really difficult to prevent any redundancies, overlapping among and between the projects of different agencies devoted to the same problem area of development in the same region and/or the same countries.

As we have already mentioned above, all UN agencies have already been having their own and often very attractive and efficient web site including above mentioned on-line hiring opportunities and other ways of communications, etc. But on the other hand it is sometimes difficult to find out on the same web site more information about the particular programs, projects and various other development activities.

In view of this, not only for the UN as such but also for its government counterparts, contractors, users, etc. it would be very beneficial if the agencies web sites would contain also more information on the projects being in progress, under preparation, already completed, implemented, etc. Definitely, for the role of the UN as a coordinator of the sustainable development on the global scale it would be very important change in comparison with the present situation.

The United Nations global, regional and country development programs

One of the most important features of the United Nations as a global player and coordinator of the processes of the sustainable development all over the world has also been its just mentioned structure of the development programs and projects. According to the range of their operations they could be distinguished on several levels of the project hierarchy viz.: global, regional, sub regional and country ones. As a rule most of them are formulated, prepared, implemented and operated in the developing countries in order to help them to cope with all the challenges of the sustainable development and thus to help them in finding their better place also in the ongoing processes of the globalization and regional integration.

In this connection it is worth and important to mention at least the main and most important features of these projects especially those for the developing and least developed countries. All the UN development projects for all countries, which qualify for them, are on the full scale provided and delivered by the UN and its corresponding special agency and/or agencies. In all these cases such a project is provided for the receiving and/or host country for free as a grant from the UN. As a rule it is mostly fully funded by the UNDP – United Nations Development Program as a special arm of the UN for the coordination and funding of the development programs and projects. In addition to the UNDP, as funding institutions serve also some other UN or non-UN institutions as e.g. the World Bank, IMF, the EU, etc. but also by agencies of some developed states as e.g. the USA, Japan, the UK but also Sweden, the Netherlands, etc. On the basis of this funding then the particular UN specialized agency is providing all the technical as well as experts assistance to the recipient country. The particular host country is as a rule responsible mostly in the form of so-called in-kind contributions to prepare the project site, operation and implementation conditions and also the national staff which will be trained by and working together with the foreign experts hired for them by the UN and after the end of the UN contributions to the particular project these national experts are responsible for the post-project operation and utilization.

As we have already mentioned in spite of its invaluable contribution to the development of even the least developed countries which otherwise could not afford by themselves that kind of projects especially those with various kinds of latest technologies, etc. there are still existing also some continuing problems. One of the main is very often that the government of a host country is not yet ready to properly define its needs for the particular projects. Very often then the projects are not well defined and/or there are overlappings between different projects from different UN agencies for the same kind of technical assistance. As a typical example we could give an example with the computerization where in many cases different agencies bring under the different projects also different types of mutually incompatible computers, software, etc.

Hence in order to prevent these kind of problems with the development projects it would be highly desirable to pay more attention to preparation of receiving governments for their roles as the hosts of the projects and also from the UN to better coordinate its development projects delivered by different UN agencies. And also to the selection of the most competent experts. Then only all these projects on the global, regional, sub regional and country levels will bring full benefits for their recipients and truly helping them in seeking their better place in the contemporary globalizing world.

The United Nations and its research and training institutions and programs on global issues

In addition to its various other structures as we have dealt with them above, the UN has, for its global role, had also its own – although, unfortunately, rather not so well known - structure of training and research institutions. Many of them being directly devoted to the research of most important issues of the contemporary globalized world. The core of this research capacity has been represented by the United Nations University (UNU) being established in Tokyo in 1973 with the main aim to promote scholarly international and scientific co-operation to help solve urgent global problems of the contemporary globalized world. Although its name would indicate it is a university, it is not the case, as it has not been performing any higher education. There are no professors, classes or lectures and students, etc. as at any „classical“ university. The UNU is a research institution which has been focused and dealing with various research tasks on global issues. According the available information also on Internet and the UNU web site sometimes it is not so clear who are the direct users, who is responsible for the implementation of the achieved research results and what are the practical benefits of such research tasks.

On the other hand it is clear that exactly this kind of institution is of utmost importance for the current and future challenges of the UN as the key player and coordinator of the processes of sustainable development on the global scale. In this sense it would be very desirable for the benefits of the UN and its specialized agencies on the one hand and for the UN as such if such a research institution could get all necessary support and opportunities to meet in full all its basic goals and unique mission. In this respect it would be most desirable if the UNU would be an integral part of the global network of institutions which are in one or other ways dealing with similar issues of globalization, as it is more than clear that the complexities of the ongoing globalizations, all its negatives and positives as some of them we have outlined them at the beginning of this paper, just simply cannot be dealt with successfully by an individual whatever well established institution even in case if it belongs to the UN itself. Moreover, if it has successfully to deal with such a wide range of research tasks of the contemporary world as are human values and global responsibility, new directions in the world economy, sustainable global development, advances in science and technology, population dynamics and human welfare. For some of these different tasks the UNU has established originally three its centers in Finland, Cote d´Ivore and in the Netherlands. Currently, there are similar specialized centers also in Macao/China, Ghana, Venezuela, Canada, Jordan, Belgium, Iceland, and the Northern Ireland/ UK.

In addition to the UNU as the main hub of the UN research, there are also some other specialized research institutions as the UN Institute for Training and Research, UN Institute for Disarmament Research, UN Research Institute for Social Development, International Research and Training Institute for the Advancement of Women, etc. Various other special research institutions are operated by individual UN agencies as e.g. by the ILO its International Institute for Labor Studies in Geneva and the International Center for Advanced Technical and Vocational Training in Torino in Italy. Again as in various other similar aspects of the UN the biggest challenges for all these research and training capacities is their practical implementation orientation and overall coordination and cooperation without agencies boundaries and a kind of competition and mainly equal opportunities for specialists from all over the world, etc. The global problems of the contemporary world cannot be successfully dealt with without truly global cooperation also among research institutions, researchers, etc.

Enforcement capacities of the United Nations

The UN is not as unenforceable in implementation and in required compliance with its laws, decisions and global and regional interests as it has been sometimes presented by media especially vis-à-vis various violations of the UN acts of international laws either by its own member states or their subjects including TNCs, etc.. In addition to an indirect but primary enforcement through the particular institutions of the member states as we have already mentioned that above, there are also other ways and means in the hands of the UN to enforce full and unconditional compliance with its laws. For this purpose, the UN has several possible options how to enforce the particular compliance with its laws on its member states. After all every act of international law drafted by the UN International Law Commission contains also the whole range of penalties for non-compliance. However, according to the main principle of the UN in the settlement of international disputes in general i.e. through peaceful means i.e. negotiations, discussions, etc. then sometimes it looks like that the UN is not strict enough in the enforcement of its own international laws although in its disposal it has also potentially such a strong and powerful institution as is the International Court of Justice as the principal judicial organ of the UN established directly by the UN Charter at The Haag in the Netherlands. But the problem is that although the jurisdiction of the Court is over all member states of the UN but first their have to bind themselves for that jurisdiction for every special legal case. That makes the procedures before the Court rather complicated, slow and very time consuming. In addition, again the verdict of the court has to be implemented by the consensus of both parties involved. So then it is no surprise that the implementation of the verdict can take several years even in such cases when the verdict is quite clear as in the case between Slovakia and Hungary regarding the Gabcikovo-Nagymaros dams system on Danube River. Although, the Court decided that the original treaty is valid, the implementation of this verdict is even after several years just an object of ongoing consultations of experts of both countries. Similarly it is also in the case of implementation and enforcement resolutions of the Security Council, etc. where again due to the veto rights of its permanent members sometimes it is very difficult to adopt such a resolution which could somehow negatively effect interests of individual permanent members. Although, otherwise, the UN has in its hands the whole range of graduated steps against violators of international laws including such as embargos, suspension of UN programs and projects of financial and technical assistance from the UN up to the military intervention by the UN troops, the results are often not correspondingly efficient. So it could then happen that the killing in the UN safe area in Srebrenica in the former Yugoslavija has occurred directly with the passive presence of the UN troops as their mission was not properly defined by the particular resolutions. About the same very recently happened in the East Timor which was severely damaged with a lot of killings just before becoming independent as there were no UN troops to prevent such tragic events, etc. And more and more similar examples could be given on the insufficient enforcement of the UN laws not because the UN would not like to enforce them but very often just because interests of its member states prevent it from adopting the most suitable and efficient resolution and/or they do not contribute to its full and unconditional implementation. And it is also the case with the violation of the international laws by the TNC regarding e.g. very often medialized cases of the violation of the child rights through child labor, etc. what is often officially criticized by particular UN agencies as e.g. the UNICEF or ILO but they usually do not take the firm stance to punish the particular country for violation of the particular UN Convention as an act of international law for example by suspending the UN technical or development assistance and/or bringing the particular country, company before the court, etc. For the role of the UN as a global player it would be very beneficial if it would follow an example of the EU and its European Court of Justice and enforce similarly its own laws as the EU is doing in cases of violation of its own communitary legislation and against any subject. Without an efficient system of enforcement of its international laws, the UN role as an efficient global player will still be just unnecessarily questioned and weakened. But again it is mainly up to its member states to be more responsible and cooperative and less selfish in their own narrow interests.

The United Nations and its finance system

One of the most problematic issues of the UN and its role as a global player is also the issue of its financial situation, which often is quite a critical one and to the large extend it is limiting also the efficiency of the UN operations worldwide. Unfortunately, again as in many previous cases it is also in this particular one that those who should be mostly blamed and criticized for these permanent shortcoming is not the UN itself (although in some cases it could handle its finances more efficiently and rather for its field operations than for its rather large administration, etc.) but again its member states. Although it has been adopted by the General Assembly that every member states according to its overall economic power represented approximately by the volume of the GDP will contribute to the budget of the UN by some fixed per cent, the member states do not fulfill this their membership obligation in full and definitely not in time. Some because are so poor that even the minimum per cent of about 0.04 or so is too high for their very poor countries. The others because they are of opinion that their contributions up to 30% are not properly handled by the UN. That was also the reason that some members quit their membership in some agencies in the past. Due to that reason also the highest contribution by a single member states has been gradually lowered from maximum of 31.91% to 30% and currently to only 25% what definitely is not in line with the ongoing processes of globalization and thus also growing global role but also financial needs of the UN.

Although, in addition to above assessed country contributions, the UN has also some other sources of finances for its operations as e.g. from individual member states or other subjects but in most such cases their utilization is limited to some predefined specific purposes and thus given the UN only rather limited disposition rights over such "own“ finances.

In view of these rather unfavorable and permanent financial problems of the UN it would be desirable also for the UN to adopt new stance on this issue. First of all, it should be more strict against their members to meet their above „membership“ fees in full and in time and otherwise to punish them by suspension of their membership rights e.g. for voting, etc. Secondly, it would be beneficial to modernize and innovate their financial policy by increasing its own financial resources e.g. in the same way as one of its own UN family members i.e. the UNICEF through its own business and commercial activities what in the era of globalization could substantially improve its financial situation. Through its own research, development, advisory and other kinds of assistance, etc. the UN could become financially as healthy as are some other international organization as e.g. the IOC – International Olympic Committee which just quite recently has been on the verge of financial collapse and nowadays it is able to assist directly its own member states by substantial financial contributions, etc.

Conclusion

In previous parts of the paper we have tried to show that the processes of the ongoing globalization and regional integration are not at all as unmanageable and uncontrollable as it is sometimes quite widely believed. Especially in the UN, the world has an institution and system, which could handle these processes efficiently and truly for the benefits of all the people of the United Nations. But as we have also demonstrated it above, almost in all cases it is mainly up to the member states of the UN to decide what kind of the UN they want for the era of the ongoing globalization, regional integration and their own intentions regarding a sustainable development for all the people of the United Nations and not only their own country, region, etc.

References

[1] Basic Facts about the United Nations, United Nations Publications, United Nations, New York, 1989

[2] The Charter of the United Nations, United Nations Publications, United Nations, New York, 2000

[3] Soltes, Dusan: Globalization, Regional Economic Integration and FDI, IN: The 7th International Conference on Global Business and Economic Development Proceedings, Bratislava 2001

[4] Soltes, Dusan: International Economic Integration and Critics of the Current Enlargement of the EU, SINEAL Bratislava 1998

[5] The United Nations Web Site: at http://www.un.org.

Impact of Training on Economic Transition in the Mekong Sub-region: The Cambodian Experience

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Abstract

Since the end of 1980's Cambodia has chosen a market economy to create the conditions that foster its business and sustainable economic development. With its limited human resource capacity, the Royal Government of Cambodia has very much relied on the support and cooperation of the international community, including the Asian Development Bank, the International Monetary Fund, and the World Bank, in training and guidance for its transition to a market economy. Cambodians have learnt from the West, but the effects and impacts of the training, including the ability of individuals and organisations to perform and effect economic change, are yet to be fully investigated. In this context, the author reviews the literature to date and highlights the impacts and issues of training for Cambodia in economic transition towards a market economy.

Training demand in the GMS region

There has been ongoing debate about whether economic reform and the growth in national income in countries in the Mekong sub- region can lead to poverty reduction and therefore increase the standard of living of the region's citizens. Many Southeast Asian economies in the 1980s experienced a significant reduction in poverty as a result of the rapid economic growth which began in the late 1970s. Elsewhere, for instance, in some countries of South Asia, Latin America and in the Philippines, the relationship between economic growth and poverty reduction has not been evident (S.Acharya 2001). Keeping these experiences in mind, this article considers the training of officials of countries in the Mekong sub-region in market economies and then reflects upon its impacts on economic changes and performance improvement of the organisations. This article also comments on the current and proposed economic reform training programmes that could effect economic changes and poverty reduction, based on the Cambodian experience.

In the context of economic change, it has been proposed that the structure and quality of the labour force plays an important role in affecting economic changes, for example, by moving workers away from low productivity activities towards high productivity activities, and hence reducing poverty (see World Bank 2001). However, this approach assumes that the labour force is skilled, mobile and adaptable to different work environments and can therefore be gainfully deployed in high productivities. In contrast, an unskilled, inflexible and immobile labour force may not be in much demand in modern, growth-oriented industries, and so training programmes must be instigated to facilitate economic growth and changes. Again, what assumptions does one make about the training programmes and skills required to effect the economic changes intended? In other words, how can one assume that effective upskilling of a country's labour force with economic training programmes will act as a panacea or cure for its economic defects or deficiencies?

Overview of HRD requirements in the GMS

The Great Mekong sub-region (GMS) Program was initiated by Asian Development Bank (ADB) in 1992, when trade and other forms of cooperation among the six participating countries (Cambodia, Lao PDR, Myanmar, Thailand, Vietnam, and Yunnan Province of the People's Republic of China) that share the Mekong River, were still limited.

The population of these participating countries has been estimated to be 250 million, with an overall GDP of about US$190 billion. The sub-region income per capita is still low, with Cambodia, Laos and Myanmar being among the world's poorest countries. There has been economic growth over the past decade, however, reflecting the growing interest of international investors and the success of economic reforms. But, the Asian economic crisis has caused setbacks. Given an industrious workforce and abundant natural resources, the long-term prospects are bright.

The Asian economic crisis showed that the GMS economies are closely linked. Countries in the GMS continue to work together to enhance the competitiveness of the region by improving the skills and productivity of the labour force, improving living standards, providing social services and economic opportunities, and broadening the base of participation through empowerment of grassroots communities and the private sector.

Despite the above efforts, the sub-region is marked by serious discrepancies in economic development. For example, on the one hand, Thailand has a relatively well developed market economy - essentially a capitalist economic system. On the other hand, the economy of Myanmar is theoretically socialist but is more realistically described as militarist. Its economy is still centrally planned and fragile. Vietnam, Cambodia and Laos are trying to move rapidly from centralised economies towards more liberal market one. Human Resource Training and Development still has a long way to go, especially in Cambodia, Laos and Myanmar.

Since 1992, ADB overall investment in the GMS program has reached $1 billion, with about $38 million in technical assistance. Under the Working Group on Human Resource Development (WGHRD), the ADB has supported a number of projects, including those relating to the prevention and control of HIV/AIDS, employment promotion and training, and addressing the health and education needs of ethnic minorities. It also planned to address other areas, including skills training, to meet market demand, and training in environmental conservation and management. The ADB has emphasised the importance of continuing partnerships with many organisations, including non governmental organisations (NGOs) and private sector. These partnerships have contributed to the success of the GMS Program through co-financing and other forms of contribution.

Poverty reduction is the overarching objective of the ADB, and human resources development (HRD) and regional cooperation are identified as two strategic areas. In the context of the on-going economic crisis in Asia, there is an urgent need to improve social protection systems and to address the issue of poverty reduction in the sub-region. The activities identified by the WGHRD, namely education, training, labour market management, and health services, are largely country-based operations. However, within these broad areas, there are sub-regional dimensions that could generate economies of scale. These include information exchanges on HIV/AIDS issues, drug control, labour migration, vaccine procurement, specialised education and training, networking among institutes of higher education and training, resource mobilisation and inter-agency coordination.

At the meeting in Mukdahan, Thailand in 1999, to discuss the East-West Transport Corridor Project, HRD and skills training were seen as critical elements in the ultimate success of the economic corridor. There is now greater awareness that, while infrastructure projects are important and necessary, their contribution to poverty reduction will be limited if the region's "software"- its people and institutions - are not equipped with appropriate and relevant skills to rise to the new challenges. The "software" components of the GMS development and integration are yet to receive adequate attention. This was affirmed at the Tenth GMS Ministerial Conference sponsored by ADB and the Third Ministerial Meeting on ASEAN-Mekong Basin Development Cooperation in 2001.

It is of some concern that, in light of such needs, the existing course offerings by many training providers are seen as not fully relevant to the needs of the people in the GMS. There are no procedures at these institutions to identify the need for HRD in the region, and there appears to be no structure in place to proactively identify the needs for training and to design programs to satisfy those needs. It is by no means clear that courses have evolved to meet the changing needs and circumstances of the sub-region. The courses are not seen as reflecting the differing needs of the GMS countries, which face different stages and levels of economic development. The courses are generic, rather than specifically tailored to the individual needs of the participant countries.

Given the different levels of social and economic development among countries in the GMS, it is important that each provider to look for a common thread to establish training that meets everyone's requirements. For example, during the 2001 Coordinating Agencies (CA) workshop hosted by The Mekong Institute (MI), it was established that each country has different training needs. It is also important to note that the CA's views on HRD priorities are different among the GMS countries, which partially explains the difficulty in providing a common course that will meet each country's needs.

In recent years, and currently with the United Nations International Conference on Financing for Development, at Monterrey, Mexico in March 2002, donor focus has placed greater emphasis on poverty elimination. One of the strategies that they encourage is good governance that deals with anti-corruption, transparency of administration, accountability for allocation of scarce resources, and legislative reforms that would encourage good management practices. This, in turn, will encourage private investment, economic growth, and thus employment and wealth for the poor. The pro-poor approach needs to be shown and fostered and clearly reflected in the courses offered by training providers. Training providers need to be responsive to donor demand for courses or other revenue-earning activities that they can supply, in order to attract a wider basis of support.

In summary, there is a clear demand for Human Resource Development training in the countries of the GMS. In the cases of Cambodia, Laos, and Myanmar (CLM), any sort of training for government officials is in great demand. There is clear demand for basic management training skills, with great appreciation of opportunities for out-of-country training that enables participants to improve their English as well as learning relevant training content. HRD training and development has a long way to go yet, especially for Cambodia, Laos and Myanmar. Issues of human rights abuse, corruption, lack of transparency and poor governance are largely still unresolved. If poverty reduction relies on a foundation of civil and social order, good governance, and institutional rules that lead to the creation of an effective market economy, then the three countries (CLM) have still a long way to go. To this end, governance training is a common concern for the three countries, but it could also be extended or applied to the rest of the GMS countries.

The Cambodian Development Experience and reform outlook

Since the end of the 1980s Cambodia has opted for a transition to a market economy. Most of the reforms made during those periods lacked a comprehensive overall strategy (A. S. Ghanty 2001). However, since the beginning of 1993, the Royal Government took steps to formulate a series of comprehensive macroeconomic and structural reforms. This was made possible with the support and cooperation of the international community, including the Asian Development Bank, the International Monetary Fund, and the World Bank. Some significant successes have been reported. Further effort is required to increase its human resource capacity if it is to maximize its output and compete for scarce financial resources and respond to the challenges imposed on Cambodia by the regional and global community. In recent years efforts in the field of training and education have enhanced and brightened its human resource capacity far better than the past 30 years of tragedy and history.

The Cambodian economy grew at 5-6 percent per annum between 1993 and 1997. During this period, the garment sector, which is labour-intensive, grew at the rapid pace of over 30 percent each year. At the same time, the country's tourism sector also began to grow. Construction activities were also buoyant. However, despite this growth, poverty was reduced by only 3-4 percent over the whole period, or less than 1 percent per year (RGC 1999). Between 1997 and 1999, when the Cambodian national income hardly grew, it appears as if the proportion of people below the poverty line remained unchanged or even rose (RGC 1999; RGC 2000a). Government estimates indicate that up to 90 percent of the poor in Cambodia are concentrated in rural areas, and engaged in agriculture as their principal economic activity (RGC 1999), and these people have not been benefited much from economic growth. Furthermore, the poor have very limited access to agricultural land. They have few, if any, other assets (animals, tools etc), they are poorly educated, and have no access to opportunities for enhancing their education and skills. There is little developed infrastructure in areas where they live, they suffer acutely from health problems and incur unaffordably-high health care costs. Unless the poor are empowered and integrated into the relatively high productivity activities of the economy, poverty is unlikely to diminish (Ministry of Planning 2001). Labour productivity in agriculture – where most of the poor work- is eight times lower than in industry (wages are five times lower). Even worse, wages of the poorest, including those in the agricultural sector, have declined in recent years (ADB 2000b). Data on functional literacy shows that it is as low as 37 percent in the adult population (RGC 1999). Even those who are literate are not qualified to meet modern industrial demand. It is not uncommon to see foreign labour employed in skilled jobs (So 2001). Furthermore, the infrastructure in Cambodia is still weak. Neither transportation nor communications meet the standards required of a modern economy and a modern commerce. Many still assert, however, that if aggregate growth is achieved at 7 percent per annum for the next five years, the proportion of the poor will reduce to less than 20 percent. (Ministry of Planning workshop note, January 23, 2001).

Cambodia remains among the world's poorest countries. It ranks 140th out of 174 on UNDP's human development index for 1998, and nearly 40 percent of Cambodians live below the poverty line. By 2020, Cambodia's population could nearly double, reaching 19 million from the present 10.5 million, far outstripping the country's ability to support the people, according to the UN Population Fund. It has a much smaller population than its immediate big neighbours, Thailand (62.7 million estimated) and Vietnam (82.1 million estimated). Both neighbours have a strong domestic market that appeals to foreign investors who would set up local production plants to cater for it. When compared to these neighbours, Cambodia is more vulnerable, its domestic market is considerably smaller, and its lacks the critical pool of skilled manpower as a result of the Pol Pot era. Most educated people were either murdered or died of hunger and sickness or migrated overseas during the years of brutal Khmer Rouge rule. Consequently, generations of people were denied proper education and the country's intellectual capacity has fallen well below that of its neighhbours. Cambodia's literacy rate is now among the lowest in the circle of ASEAN members. For example, Singapore's literacy rate is 93%, Thailand is 93.8%, Vietnam is 91.9%, and Cambodia is a mere 37.8% (D Van, 2001). Thus Cambodia does have a big handicap compared to her neighbours in the educated mass area.

The outlook for economic growth ultimately rests on the government's ability to implement reforms. The Royal Government of Cambodia in recent years emphasised the administration's reformist credentials, making concrete plans to clamp down on illegal logging, reduce the size of the armed forces and streamline the civil service. Cambodian politics are still fundamentally unstable, but in the short term the economy will reap the benefit of enhanced business confidence. Membership of ASEAN, which Cambodia joined in April 1999, had also buoyed confidence. This has resulted in new domestic and foreign investment since 1999 despite the continued effects of the Asian downturn. The tourism sector is already benefiting from perceptions of greater political stability. Having now been admitted to ASEAN, Cambodia is required to begin lowering tariff barriers in line with the ASEAN Free Trade Area (AFTA). All of these reforms have major fiscal implications. The government's introduction of Value added tax (VAT) in January 1999 was partly in preparation for the anticipated loss of customs revenue as trade tariffs fall. Tightening central control over public finances will be a particular test of the government's strength and reform commitments. Although some are suggesting that Hun Sen may emerge as the authoritarian leader capable of turning the country around, it is too early to say this with any confidence. In the short term, the obstacles to reform will remain substantial (*Oxford Analytical Daily Brief*, Friday, June 4, 1999). According to a recent report, Cambodia is experiencing slow and steady economic growth with almost zero inflation (Lintner, Bertil, 2002). However, mounting foreign debt could place the country in the same league as many debt-ridden countries in Africa. Cambodia's national debt is $3.07 billion. It owes $653 million to multilateral organizations such as the World Bank, the International Monetary fund (IMF) and the Asian Development Bank (ADB). On top of this, it owes at least $1.6 billion in bilateral loans to its allies in the former Soviet Union. Another $500 million is owed to America and at least $210 million to China. It is in serious doubt if Cambodia is able to service these debts. For example, the ADB in its annual Outlook report for 2002 indicated that the growth of garment exports and tourism receipts (the two main foreign-exchange earners) were expected to be the lowest for several years. Cambodia's GDP overall growth for 2002 is 4.5% which is lower than its immediate neighbours, Laos (5.8%) and Vietnam (6.2%). On top of this Cambodian's economic situation is worsened as foreign direct investment continues on a downward trend. A lack of seasonal rains in August 2002 and followed by floods in September also exacerbate food shortage concerns. A food crisis could lead to an ever heavier debt for Cambodia which in turn makes real development almost impossible.

The government's efforts in sustaining economic growth and alleviating poverty are consolidated in the Interim Poverty Reduction Strategy Paper (I-PRSP). It has acknowledged that large sections of the population suffer from a lack of opportunities, vulnerability, low capacity and social exclusion. It proposes to address these problems through macro economic policies (of growth and stability), agricultural development, private sector development, infrastructure development, micro-finance, education, health and social safety nets and good governance. It is suggested that this, if implemented or effectively incorporated in the 2nd Socio-economic Development Plan (SEDP-II), can bring about major transformation in the economy. However, the transformation would require the political will and skilled human resources to see the plan through. Does Cambodia have relevant resources and, in particular, its human capacity to affect the changes intended? To this end it is important to reflect on its human development sphere.

While policies are well-meaning, the educational system needs major improvement at all levels. For example, at the primary and secondary levels problems include: low financial allocations; inadequate geographical spread of schools, under-qualified, poorly paid and unmotivated teachers; fewer instructional hours than prescribed; outdated curricula; insufficient access to text books; and, large student/teacher ratios. This is further compounded by low demand among the general population. For example, the primary enrolment rate is only 80 percent. Part of the reason for low demand is lack of attractive supply. Moreover, poverty has also forced many, particularly girls, to drop out of school at an early age in order to engage in household work, at the expense of schooling (RGC 2000c). Private sector initiatives are expensive and limited to urban areas. There is some effort to introduce and enhance a few components of the educational system with the help of foreign assistance, but the major provision, which can only be provided by the state, has yet to emerge. Similarly in the health sector, there is a shortage of clinics, of trained personnel, of medicines, of diagnosis facilities etc. The situation is worse in the rural areas because of the underdeveloped infrastructure such as water and sanitation facilities. Consequently, the rural poor suffer the most. They often have to sell land, their sole means of livelihood, to meet the high costs of medical treatment (Oxfam 2000).

The above discussion suggests that, while the need to promote economic growth through training and implementation of market economy that would influence poverty has been recognized, training policies and programs have to recognize that there are other variables at play and will need to take these into account in order to assess its effectiveness. These variables will also need addressing before training programs and activities are put in place.

It is evident from the above short description that, to sustain rapid economic growth, the business and policy environments need to alter. In this context, any training assistance given to Cambodia to facilitate its economic progress will need to be targeted and be specific to provide skills required by the individual officials to effect changes. Furthermore, the individuals selected for training must be in a position to, and be willing to, implement the changes required. Otherwise, the training and skills attained will be seen as irrelevant and a waste of time and resources. This will require a solid commitment and firm interest at the highest level from the Royal Government and its senior officials. Without any political will and commitment from top officials, trainees in economic reform won’t be able to put their newly acquired skills into practice, and so training programmes will be seen as valueless.

The Royal Government’s vision for the next two decades includes extensive structural change and rapid economic growth in order to face the challenges of regional and global economic integration. This vision has tasked the government to “generate a number and quality of its human resource that it is capable of effectively absorbing an increasing number of external resources from foreign governments, international institutions, domestic and foreign private sectors” (UNDP, May 1997). In order to absorb these resources, Cambodia must be ready to develop and progress on four interrelated variables (A.S. Ghanty 2001):

1 technical capabilities of different ministries;
2 appropriate organizational structure for managing a market economy
3 efficient administrative reform that can directly and effectively address the issues of over-staffing and inefficiency of the administrative sector;
4 role of higher educational institutions in developing a corps of well trained teachers, students and professionals in specialized areas.

In terms of human resource and capacity development, Cambodia is still yet to produce sufficient numbers of a professional and competent workforce to absorb and sustain itself without relying an external assistance and contribution. Cambodia relies heavily on the two specialized institutions - the Ecole Royal d’Administration (French

Technical assistance) and the Economics and Finance Institute of The Ministry of Economy and Fianance (World Bank Technical assistance ending in mid year 2001) for its public sector training (A.S. Ghanty 2001). Human resource development is said to continuously uncoordinated nationally, and most training institutes operate without any exchange of information and experience sharing among themselves. Consequently, limited resources and knowledge are not fully optimized and utilized. The UNDP report (Main Report, May 1997) recommended the following areas of focus:

- Training in small business and agriculture for rural development
- Basic primary and secondary education and adult literacy training for every Cambodian to improve the quality of the workforce;
- Technical training at the professional, technical and vocational levels;
- Training to boost the international competency and competitiveness of Cambodia as a recent member of ASEAN
- Transfer of knowledge and skills to Cambodian counterparts by foreign experts and consultants through bilateral, multilateral donors and technical assistance projects
- Public sector training for all public servants and senior officials to further progress and enhance its public sector reform.

In addition to the above, formal training is needed in financial areas including international accounting, banking, money market, regulatory and institutional policies and framework and so on. In order words, Cambodia still requires all aspects of training in order to close the skill gaps and improve its overall human resource capacity. It is at times difficult to prioritise the training needs, as all training is useful and critical for the development and continuous re-construction of Cambodia. Its human resource need is still huge. It may take one or two generations for it to build up sufficient human resource capacity to effect economic changes. The skill gaps are so deep and wide and therefore, it is almost too complex to assess the tangible impact of economic training and its filtering down effect on a broader economic changes in Cambodia. One must also be reminded that that any tangible effects are closely linked and related to reform in other areas by the Royal Government. These areas may include: public and private sector reform, its macro/micro economic policy, fiscal policy, social services, governance issues, political landscape and stability and so on. This also implies that any training, be it in economic field or others, is relevant and useful to Cambodia, but its short-term impacts will be difficult to quantify and measure. This does not in any way imply or suggest that training programs should not have clear and measurable outcomes. In fact, it is imperative to establish clear objectives and performance indicators well in advance if training programs are to be relevant and useful for the trainees and their employers. The author suggests competency-based training should be instigated if the training is to be useful and relevant to Cambodia. Many of its citizens lack basic skills such as report writing, running meetings, conducting interviews, negotiation techniques, basic management activities etc. A competency-based model would require explicit analysis of the training needs, identification of skill gaps that require improvement, and clear statements of learning outcomes and performance indicators must be carefully conducted if the training is to be perceived as useful and value for money. Any short cut of the above task, coupled with a lack of commitment from top management or superiors, will surely affect the effectiveness of the training program. For instance, if the superior takes no interest with the skills acquired by his or her employee through the training, the trainees will not be in a position to implement the skills learnt into their tasks and consequently, the training program will be seen as irrelevant and a waste of time.

Regional training provision: case study of the Mekong Institute

One regional response to the demand for economic training is the program offered by the Mekong Institute.
The Mekong Institute (MI) was built in 1996 to foster regional cooperation and development in the Greater Mekong Subregion. It provides training in transitional economics, public sector reform, and management to personnel from

public, and private sector agencies in Cambodia, Lao PDR, Myanmar, Thailand, Vietnam and China's Yunnan Province.

MI Training Courses

The training courses provided by MI with New Zealand Overseas Development Assistance (NZODA) support have been between three and ten weeks in length.

(i) *A* course, of 3-4 weeks in length, is targeted at Senior Managers from the GMS in areas such as trade policy, market economy, public sector reform, banking and financial sector reform.

(ii) *B* course, of 8-10 weeks in length, is targeted at middle level managers with slight variations in the curricula that have provided useful "backgrounders" in some key issues of economic reform and transition. The main theme of this course is "Economics in Transition". It includes modules on markets, trade, public sector reform, and the social and environmental impacts of development.

(iii) Trade Policy course (TP), 3-4 weeks in length, has been offered four times by MI, targeted at Senior Managers in trade policy agencies.

The goal of the program is to help participants from the GMS make the transition from centrally planned economies to more market-oriented economies. The primary focus of the program is the economics of transition, within which gender and environmental issues are recognised and addressed, under NZODA Guidelines. The program aims to help participants to:

- Anticipate change in their country's economy as it becomes more market oriented
- Increase their knowledge and skills in the disciplines of economics, trade, marketing, environmental management, public sector reform, management and related disciplines
- Develop skills to solve complex problems in new situations
- Acquire ongoing learning abilities
- Enhance their English language skills, in particular, their oral presentation skills
- Learn about the economies, culture and customs of their course colleagues from each of the other GMS countries
- Build a spirit of co-operation and a network of contacts amongst these colleagues.

Features of the program have been described as including:

- Customised modules
- Excellence in content and delivery
- Excellent course materials
- Immediate and ongoing value for the participants and their organisations
- Lifelong learning skills, that can be passed on to others in each participant's organisation
- Team building and networking during and after the course.

Course and module outlines

A number of standard modules have been developed and used in the core courses at MI (there has been some variation by presenters, and more management skills have been included recently in response to demand from within the region).

Market and Trade

This module aims to introduce learners to the significant differences between a market-oriented and a centrally planned economy. It explains how markets work and provides detailed economic reform strategies. It also considers the advantages of trade to a country, regional trading activities, regional/international trade agreements and regional/international trade-related organisations that the GMS countries are in or are in the process of joining. The module has a mix of theory and discussion on the benefits of trade and more practical trade-related issues that the GMS countries are facing as they enter WTO or try to conform to AFTA. Practical skills, such as negotiating, chairing meetings, debating, and producing summary reports are included in the module. The focus on international trade develops participants' skills in understanding and dealing with key international trade issues in the GMS.

Economic Development, Environment, Gender and Participatory Methods

This module covers the current paradigm of economic development and discusses how it is so different from the old approaches. It makes a distinction between economic growth and economic development and shows how this difference affects approaches to sustainable environmental management and issues such as food security. The module demonstrates how gender analysis, environmental impact assessments and participatory approaches are key skills for policy makers and managers in the new paradigm. The key objective of this module is to help participants understand that the new approach to economic development takes a broad focus across sectors and makes links between them. A key feature is the focus on skills to ensure that planning for economic growth should not be at the expense of men and women, or the environment.

Principles of Good Management and Managing Change

This module is designed to enhance the management skills of the learners. Excellent management skills are crucial if economic reform and the reorganisation of SOE and government bureaucracies are to succeed. The module aims to provide participants with more knowledge about themselves as managers/potential managers and to discuss ways the participants can gain leadership skills and enhance the performances of their staff and their organisation.

Public Sector Reform and Management

This module considers the need for public sector and State Owned Enterprise (SOE) reform and discusses ways in which the reform may be undertaken. All GMS countries are in the process of trying to make their SOE and government bureaucracies more efficient and more focussed in terms of functions and objectives. This module aims to demonstrate the principles of reform, create a "road map" for successful reforms, and provide solutions to the practical difficulties that arise as reforms are being undertaken.

Crosscutting Issues of Gender and Environment

As a country follows a pathway of economic development, and economies move from being centrally planned to greater market orientation, there are different impacts on men, women and the environment. In each module presented above, crosscutting issues are discussed. For example, participants present and compare their country's gender issues.

Effectiveness of Regional Training for Cambodia's Situation

Many Cambodian trainees who attended regional economic training courses were not been able to put the skills learnt when they returned to their home offices. There has been little interest from their superiors about the learning and the learners and consequently, many of the trainees were not in a position to implement their newly acquired skills and effect any economic changes. One may argue, however, that in the long term, these trainees will have an opportunity to put their skills into practice as their superiors retire or progress through their career ladder. In the meantime, the trainees still gain personal benefit from attending training, as they are able to improve their English language skills, their conceptual economic and financial skills plus networking with other trainees from the neighbouring countries. Moreover, they are able to advance their learning through higher education as a result of scholarships donated by other international educational providers and their governments. In this respect, the training programs are seen to have immediate tangible impacts. However, many would argue that this is contradicting the meaning and definition of training. It is supposed to address and rectify performance gaps of the trainee through skill enhancing and training. Training implies a short-term focus. The training is there to help equip the trainees with new or improved knowhow so that they can improve their performance after successful completion of the program. This would require a detailed understanding of the tasks or job and explicit skills that the trainees need in order to perform their tasks to the required standards. The Cambodian experience in this area requires significant improvement. Trainees selected for the training are often not compatible or even work relevant. It is often a mismatch between the task /skill improvement required and the program. The general view is that, any training will do me as long as I can get additional income and time away from the office. Moreover, it is also complicated by the fact that not many of trainees selected for training have adequate English levels to fully participate and gain the full benefit from regional training programmes. Many have an English IL score of less than 5, which is far below the level 6-6.5 stipulated by many tertiary providers in the Western world for the entry requirements to their training programs. The English language competency for many Cambodian trainees is still deficient even after an intensive 10 weeks outreach course given at their home base. This and other issues described above have led some to hear a common assertion that, for Cambodia, broadly speaking, regional programmes have little relevance for trainees and employers. As long as the trainee can acquire some of the skills, that's all that is required. Because of deficient knowledge of training and practice by top management, the mismatching of the trainees and the programs in many places still continues. So what is the solution?

In summary, effective training requires firm commitment from top executives and policy makers. They must have a good understanding of the training process and outcomes. They must also accept to clear selection criteria and transparent selection process. Lastly, but not least, they must take keen interest in the trainees and their newly acquired skills and provide them with an opportunity to put the learning into practice. All involved should focus on continual learning or learning for life. Furthermore, all should instill in themselves a continuous improvement concept if Cambodia is gain prosperity and a better standard of living for her people.

There are a lot of learning issues to be addressed in Cambodia. A country which was torn apart by 30 years of civil war won't progress or prosper overnight. There is more work to be done in various fields and therefore, short-term economic training won't provide tangible economic impacts or be considered a panacea for poverty elimination or economic ailment or hardship. Furthermore, it is unrealistic to expect a short-term economic training of 4-10 weeks to make any marked differences in Cambodia's economy and its social structure. In other words, no training program can effect the country's economic change overnight. To this end it is important to re-examine the future HRD needs for Cambodia.

Future HRD Needs in Cambodia

The HRD needs in Cambodia are enormous. Many areas can be mentioned. These include, but are not limited to:

- socio-economic development planning
- statistical skills
- poverty reduction, with rural development as one of four foci
- infrastructural development, with Internet Communication Technology (ICT) being singled out
- English language training
- economic/regional integration, with particular mention of issues surrounding the Mekong River (such as flood management) and cross-border issues.

On a local and an individual level, needs are relatively simple. People require improved physical security and improved access to markets. Perhaps the greatest single need identified by many is in the area of governance. This need was acknowledged as being donor-driven, but as having been accepted as necessary by the RCG. Specific issues to be addressed are:

- corruption

- service delivery
- staff performance/retention.

In the final analysis, economic training for Cambodia is still yet to receive tangible impacts and effect broad economic and social change. A country of 12 million people, Cambodia is still one of the poorest in Southeast Asia. At least 36 percent of its people live on less than one dollar a day and nearly half of the country's budget comes from foreign assistance. The country is trapped in a vicious cycle where increasing foreign debts and little revenue create further impediments to economic progress and development. For it to become a single free trade area by 2007, a serious effort must be made to help it to bridge the human development gap by developing local capacity and expertise. As a new ASEAN member it still requires all the help it can get in technical and managerial skills to develop its economy and society.

References

[1] Acharya, Sarthi (2001). Poverty reduction in Cambodia- some reflections. Cambodia Development Review. Volume 5, Issue 2

[2] Asian Development Bank (December 2000). Economic Cooperation in the Greater Mekong Subregion: An Overview

[3] Asian Development Bank (2001). Key governance issues in Cambodia, Lao PDR, Thailand, and Viet Nam. Manila : Asian Development Bank.

[4] Asian Development Bank (2000a). Country economic review- Cambodia. Manila: Asian Development Bank

[5] Asian Development Bank (2000b). Cambodia: country operational strategy- enabling a socioeconomic renaissance. Manila: Asian Development Bank

[6] Asian Development Bank (2002). Asian development outlook 2002- Southeast Asia : economic trends and prospects in developing Asia : Southeast Asia. Manila : Asian Development Bank

[7] AusAID (March 2002). Australian Development Cooperation Activities in Lao PDR

[8] AusAID (nd), Australia's Development Cooperation Program with Cambodia 2000–2001

[9] Baars, Patricia (2001). Legal training to key stakeholders to meet the challenges of globalisation. The Globalisation Conference: Business and law perspective, June 27-28, 2001, Phnom Penh, Cambodia.

[10] Cambodia Development Research Institute (2001). Cambodia Development Resource Institute Annual Report 2000. Phnom Penh : CDRI

[11] Ghanty, A. Sam (2001). Educating a new generation of Cambodian professionals in the areas of financial transactions and security (TBC). The Globalisation Conference: Business and law perspective, June 27-28, 2001, Phnom Penh, Cambodia.

[12] Godfrey M, So Sovannarith, Tep Savary, Claude Katz and Pon Dorina (2000). The Cambodian labour market- particular references to poverty reduction, growth and adjustment to crisis. Paper presented at the Conference, Labour Markets in Transitional Economies and Thailand, Vientianne, December 18-20, 2000.

[13] Lincoln International (February 1997). NZODA: Asia Regional Programme Mekong Institute Project: Project Implementation Document.

[14] Lintner, Bertil (2001).Economic monitor: Cambodia kicking the habit. Far Eastern Economic Review, August 2, 2001. Vol. 164 No 30 p 52

[15] Lintner, Bertil (2002). Economic monitor: Cambodia: a heavy burden. Far Eastern Economic Review, September 26, 2002. Vol. 165 No 38 p 52

[16] Marukatat, Saritdet (2002). Analysis: developing human resources. Bangkok Post, Thurday 22 August.

[17] Mekong Institute (Jan 1997–Dec 2001). Mekong Connection: Newsletter of the Mekong Institute

[18] Ministry of Commerce. Royal Government of Cambodia (2002). Cambodia: integration and competitiveness study: overview: a pilot study prepared under the Integrated Framework for Trade-Related Technical Assistance to Least-Developed Countries (IF). Presented by the Royal Government of Cambodia at the follow-up meeting between the Royal Government of Cambodia and the Donor Community, Phnom Penh, 16 January 2002.

[19] New Zealand Ministry of Foreign Affairs and Trade. Review of English Language Officials (ELTO) Programme 1990–2000. Wellington : New Zealand Ministry of Foreign Affairs and Trade

[20] Ministry of Planning. Royal Government of Cambodia (2001). Participatory poverty assessment. Dissemination Workshop, Phnom Penh, January 23, 2001

[21] Oxfam (2000). Landless: a growing problem. Cambodia Development Review, Volume 4, Issue 3

[24] Royal Government of Cambodia (2000c). Cambodia human development report.
Phnom Penh : Ministry of Planning.

[25] Royal Government of Cambodia (2000b). Report of the assessment of the functional literacy levels of adult population in Cambodia. Phnom Penh : Department of Non-Formal, Ministry of Education, Youth and Sport

[22] Tan, Song Chuan (2001). Educating a new generation of Cambodian professionals in acquiring financing for local enterprises. The Globalisation Conference: Business and law perspective, June 27-28, 2001, Phnom Penh, Cambodia.

[23] Van, David (2001). Globalisation implications on business & legal matters in Cambodia. The Globalisation Conference: Business and law perspective, June 27-28, 2001, Phnom Penh, Cambodia.

[26] World Bank (2001). World Development Report. Washington, D.C. : World Bank

Korea's Globalization: Can Korea Become a Business Hub in Northeast Asia?

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Abstract

Since the announcement (April 2002) of the Korean government's new vision of transforming the nation into a Northeast Asian business hub, Korea's industrial development paradigm is undergoing a new shift in the economic and business spheres, particularly towards a new market-oriented paradigm of economic growth and corporate governance in place of the old model of the developmental state, which ran its course until two decades ago. Despite the growing concern on the new vision among government agencies, media, research centres and academia, the absence of a cohesive and realistic approach to the issue is a relative void in the literature. This paper, which is based on findings from a recently completed study carried out during May 2002, in which 37 face-to-face interviews were conducted with senior executives of foreign companies and various chambers of commerce in Korea, offers qualitative insights into the critical and often invisible issues to be considered for a successful transformation of Korea into a business hub in Northeast Asia. This paper also examines interpretations of the hub concept, barriers to becoming a hub, and competition from other locations.

Background

Korea had entered a new and critical phase in its industrial and technological development based on the liberalisation of the economy and an unprecedented inflow of foreign direct investment (FDI). Managing and exploiting the influx of FDI requires a new approach to incoming foreign investment and some adaptation to foreign multinational business practices within Korea. The highly successful export-driven policies and practices of the past may no longer be a guide to future economic success, at least as far as welcoming, integrating and upgrading foreign business activities within Korea.

Thomas Nieszner, the new Asia-Pacific Chief Executive Officer (CEO) of Danzas AEI Intercontinental, a Swiss-based fright forwarder, emphasized the importance of the Korean market in Danzas' business during his visit to Korea in February 2002. His main contention was that "Asia-Pacific and in particular the Korean market is extremely important for the company. We have talented people who have been successful in the region and I want to build on this momentum, and "I'm convinced that the regional offices will grow further in the future and I am sure of their continued success” (Korea Herald, Feb 21, 2002). A month later (March 2002), the American Chamber of Commerce in Korea (AMCHAM) told the Korean press and the government that Korea could become Asia's regional business center for 20-50 multinational headquarters in the next three years because "geographically Korea is in an ideal location, and has excellent potentials for becoming Northeast Asia's regional hub for multinational firms if it (Korea) makes some changes in its laws," (Korea Herald, March 14, 2002).

Then in early April 2002, the Korean government unveiled its grand ambition to turn the nation into an international business hub of the Northeast Asian region. This master plan includes establishment of the so-called ‘special economic zone’ that consists of 132 sq. kilometers (40 million pyeong) of land encompassing Youngjong Island, Songdo New Town of Incheon and Gimpo to promote international business. This new vision of transforming the nation into a Northeast Asian business (eg. finance, logistics, information technology) center is now an official policy of the Korean government. However, despite the growing concern on the new vision among government agencies, media, research centers and academia, the absence of a cohesive and realistic approach to the issue is a relative void in the literature. The purpose of this paper is to present the results of research into the views and experiences of CEOs and other senior foreign executives in two specific areas: (a) the competitiveness of the Korean business environment; and (b) the potential for Korea to become an Asian business centre or ‘hub’.

The research began by examining recent data on the overall position of foreign business within Korea and, in particular, the recent American Chamber of Commerce survey (AMCHAM, 2002). Then, in order to look ‘beneath the surface’ of the macro and sector level data, the views of actual MNC directors and CEOs were gathered during a series of in-depth interviews with a structured sample of 37 executives from 37 major MNCs and a number of foreign chambers of commerce during May 2002.[i] Interviewees were required to reflect on their experiences in the Korean market compared to their experience in other international markets. They were invited to reveal their perceptions and experiences on the following:

- Despite the popular assumption that Korea is one of the most difficult countries to do business, Korea is cited by most of CEOs from major MNCs in Korea as having great potential and a wealth of opportunity;
- Management issues that should concern those that are steering international businesses with aspirations to reflect Korea in their portfolios;
- The nature of the Korean opportunity including some insights into political, competitive and obstructive factors;
- Any difference of the Korean market between the pre and post-currency crisis and government attitudes and Korean companies’ attitude;

- Korea in comparison with other Asian business hubs such as Singapore, Hong Kong, or Japan;
- Fundamental factors that influence Korea's emergence as a regional business hub such as macro economy, taxation, communication, immigration, labor, quality of life, global perspective among the government, Korean business people, and mid-level Korean bureaucrats; and
- Attractiveness of the Korean market

In particular, the paper focuses on different interpretations of the meaning of the term 'hub' and Korea's current attractiveness and future potential for becoming one kind of hub or another. Key types of hub include FDI hub, regional headquarter hub, financial center, high technology manufacturing hub, and commercial, trading and logistics activities. In each of these areas, firms were asked to give their views on whether Korea could become a hub, how long it might take, and obstacles faced in realising its hub ambitions.

Ambiguity of 'Hub' definition

It seems obvious that Korea needs to establish a regional business center as its survival strategy in this rapidly changing and competitive age of globalization especially given the geographical and technological advantages that Korea possesses. However, on the question of 'hub' there seems to be a variety of opinions. The interviews revealed differing views over the potential for Korea to become a business hub of any kind. Most highlighted the lack of definition of what a business hub actually means to Korea in practice. As a result, they found it difficult to comment on whether the hub goal could be achieved and in what time scale. However, many provided useful comment on individual elements of 'becoming a hub', based on the experience of other successful hubs (e.g. Singapore and Hong Kong).

Overall, most MNC representatives were skeptical of Korea becoming a business hub in any meaningful sense of the term, at least in the short run. Some felt that, given the problems, a time horizon of ten years or so would be realistic for the beginnings of a regional business hub. Most felt that further major reforms and changes in business practices were needed before their companies would consider choosing Korea as a regional hub. In the shorter term, only those firms with large manufacturing facilities would be likely to locate any regional HQ functions in Korea.[ii]

Some experts refer to a logistical hub given Korea's geographical advantage (its close proximity to China and Japan) and its possession of a newly established airport and potential mega-hub ports (Lamers, 2002; Kim, 2002), while others (Seitz, 2002; Raubach, 2002; Rooney, 2002) focus on Korea as a regional financial center given that the nation is blessed with good infrastructure such as modern telecommunication facilities and high-speed internet network. Despite a sound and coherent strategic direction yet to emerge, Korea's new vision has seemingly been designed in an effort to create an image of Korea as a home for regional headquarters (RHQs) as a consequence of Korea's becoming logistical and financial center in the Northeast Asian region.

However, the idea of a 'hub' means very different things to different MNC directors. Few interviewees were clear about which precise objectives Korean policy makers had in mind when they spoke of a business hub or about the strategy required to meet these objectives. Some associated the idea with the opening of the new international airport, Incheon, in September 2001 and with the port at Pusan, suggesting a transportation/logistics focus for the hub. Others believed the hub was more about Korea becoming a financial hub for the region (a major conference on Korea as a financial hub was held in Seoul during May 2002).

The different definitions of the term 'hub' obviously has a strong bearing on Korea's current attractiveness and future potential for becoming a hub, and major implications for the strategy Korea should adopt. The various interpretations of hub identified during the interviews included:

- A hub for foreign direct investment;
- A hub for regional headquarters;
- A financial hub;
- A commercial, trading, transshipment and or logistics hub;
- A high technology manufacturing hub;
- A technical support/R&D hub for foreign MNCs;
- A combination of all or some of the above.

Each of these hub interpretations implies a different strategic focus on the foreign use of an offshore location for regional or headquarter activities, covering finance, technical support, transhipments and manufacturing. For Korea to become a hub in some or all of the above dimensions, a far greater number of foreign businesses would need to select Korea over other competing locations for new hubs, or relocate from existing hub locations. Also, many firms would need to further deepen their technological, manufacturing and financial activities within Korea and integrate their activities more fully within the industrial, technological and financial infrastructure of the economy.

There was also some confusion of the 'region' involved. Was Korea to become an Asia wide business hub, a Northeast Asia business hub, or an Asian-Pacific business hub? Most felt that the Northeast Asian region was most relevant, with Japan, China and Korea all in the 'heavyweight' league for hub positioning in the future. Southeast Asia tended to be regarded as highly competitive for hub location, but very small in terms of market size and future potential and somewhat disconnected from the Chinese market.

How hubs develop

Hubs rarely occur overnight. MNC regional headquarter hubs, for example, tend to develop after many years of conducting successful 'hassle free' business in a particular location, gradually upgrading from an office to a distribution center, to an assembly location. to a fully integrated manufacturing operation with engineering and

R&D activities (as has occurred frequently in Singapore). Only after a great deal of trust has been established, alongside a strong business case, will MNCs decide to establish a new hub or transfer hub activities to a new location.

Many of the MNCs interviewed already had well-established regional hubs in other countries, having made investments over long periods of time. These firms would be reluctant to face the disruption and costs of changing their hub to a new location without an exceptionally strong business case. In addition, many MNCs are still in the early stage of doing business in Korea and could not yet justify the business case necessary.

Furthermore, at least two CEOs with long experience in Korea, thought that the business hub idea should be seen as a concept to bring about change, rather than a practical suggestion or short-term policy objective: "The Korean hub represents a desire to achieve something. But before traveling this route we need to know exactly what is meant by the term hub." The other commented: "The hub is a dream, but in Korea dreams can be made to happen. The Government is using the idea to say people have to change."

Brand Image of Korea

Although general skepticism on the Korea's hub vision prevails among foreign community in Korea, interviewees were overwhelmingly positive about the prospects for their businesses in Korea. The sheer scale of the market opportunity coupled with the ongoing and progressive process of de-regulation combine to create a major upside. Over 70 percent of the interviewees had clearly developed visions for their businesses in Korea. Over 80 percent of those held positive views about the Korean market and were bullish about the position they aimed to develop. The vast majority is seeking aspirational positions. Despite these positive aspects of the market image, there are many fundamental challenges for Korea to overcome in transforming the nation into a home for RHQs.

In March 2002, the American Chamber of Commerce in Korea (AMCHAM) conducted a market environment survey with CEOs (approximately 1,700 individuals) of Fortune 500 in the Asia-Pacific region on eight categories including Korea's macroeconomic and global business environment and perception of the Korean market in comparison with Hong Kong, Singapore, Shanghai, and Tokyo (AMCHAM, 2002). The survey echoes this study that while the CEOs believe the market potential is perceived to be bright, Korea's brand image and global business environment are far less competitive than other major cities of Asia.

A fundamental and obvious implication of this irony is that Korea is a tough market to invest in but the market and its potential overwhelm the obstacles and other issues that hinder their operation in Korea. More than 80 percent of interviewees emphasized the fast growing importance of the Korean market in the global economy.

Korea's Potential as a Business Center: opportunities and advantages

Some interviewed firms elaborated the benefits of becoming a hub, arguing that Korea boasted comparative advantages over other countries. The disadvantages of other countries included the following:

- Japan - stagnation over the past ten years – continuing economic uncertainty;
- Taiwan - continuing difficulties in political relations with China;
- Indonesia - not yet fully recovered from the crisis – also a small market;
- Thailand - recovering from the crisis, but a relatively small market;
- Malaysia - political uncertainty in the medium term;
- Singapore - too far away from the major growth markets of N.E. Asia;
- China - poor infrastructure; no single government authority for MNCs to deal with.

In some respects Korea performed well against these other locations. A vice president of an American discount retailer said: "Overall this is a very dynamic economy which is one of the most attractive in Asia – especially now that I have an increased knowledge of the Korean market. The size of the Korean market in terms of gross domestic product (GDP) is seven times the Association of Southeast Asian Nations (ASEAN) economies combined. Also the infrastructure for high technology manufacturing is very good in Korea – both for the Korea market and potentially for other Asian markets."

One director of a major consultancy company argued that Korea could be the natural center of the Northeast Asian regional market, with 19% of Northeast Asian GDP, forecast to rise to 26% by 2020: "Yes Korea can become a regional hub – it can also be a 'test market' for the region and a global innovation centre. However, a new 'brand image' is needed to present Korea in a more positive light. Korea is a beautiful country with many exciting extremes. Korea could be making high technology products here and exporting to China. However, business attitudes, although improving, are still bad. Local businesses do not want competition and the bureaucrats in Government want to control foreign enterprise. It is hard to work with them."

On the surface, there is no doubt among interviewees that Korea has an enormous potential to be a business hub in the Northeast Asian region since the nation has already achieved internal and external requirements. Internally, Korea, Michael Porter (1990) asserts, possesses a strong competitive advantage in factor conditions both in basic and advanced factors. Over the last four decades, Korea's lack of natural endowments has caused the nation to invest in the creation of advanced factors such as education, infrastructure, and advanced communications systems to make its industries globally competitive. Korea's telecommunication infrastructure (utilization of internet) is already second in Northeast Asia. Korea is also investing very aggressively in the essential infrastructure for a business center such as construction of a high-speed railway between Seoul (capital city) and Busan (second largest city in Korea), upgrading of deep-sea ports in Busan and Gwangyang and the establishment of the new international airport in Incheon. Further, China's entry to the

World Trade Organization (WTO) and the gradual shift of business activity from Southeast to Northeast Asia in accordance with the rapid but strong economic development of the region will accelerate Korea's role in the region. But Korea is still considered among CEOs in general, to be an unattractive place for doing business. Thus, Korea's new vision for becoming Northeast Asia's business hub is nothing but a desk theory. The following discusses some barriers to becoming a business hub, which is followed by an assessment of fundamental but critical prerequisites for Korea to achieve its goal.

Barriers to becoming a business hub

For hubs of any kind to develop they generally need to be supported by two types of infrastructure, hard and soft:

a) hard infrastructure – including information technology (IT), telecommunications and transportation/logistics infrastructure (in Korea the IT infrastructure is seen as top level by foreign businesses);
b) soft infrastructure – including widely spoken English, role of government, social infrastructure, international culture, competitive financing, a strong supply of skilled people, and educational facilities for foreigners' children.

Many barriers to Korea becoming a business hub were identified, mostly in the soft areas. However, there were also significant hard infrastructure problems. These problems mirrored the difficulties faced in doing business in Korea.

Hard infrastructure problems

- Inefficient logistics;
- Traffic congestion and associated air pollution;
- Insufficient educational facilities for children of foreign nationals;
- Lack of leisure facilities for foreign families and insufficient green space within Seoul.

Because of the lack of soft infrastructure, it is easier for MNCs to persuade their employees to locate to Singapore and Hong Kong rather than Korea. As one CEO put it: "People like what is familiar – language, life style, legal rules, regulatory factors – these are all very different here and this presents the biggest hurdle to becoming a hub."

An expert on logistics had mixed feelings: "Yes, Korea can become a logistics hub – this is a good vision and the location is good – lots of transshipment is already going on – much is already taking place. Competencies, resources and IT infrastructure are in place. On the negative side though, a high percentage of

GDP is absorbed by logistics (16% in Korea *vs* Japan 10-11% and much less in the United States). The logistics supply market is currently fragmented and there is little focus on logistics. Korean traffic is congested, especially in the Seoul area. Although IT is taking off there are too many small-and-medium-sized enterprises (SMEs) involved and logistics are currently fragmented (e.g. there a huge numbers of warehouses) and this would all need to be rationalized for Korea to become a hub."

According to three or four executives, another barrier to becoming a hub, was the 'mindset' or interpretation of globalization in Korea: "All the top people in Korea think two way globalization – imports and exports, inbound FDI and outward bound FDI. This is their mindset. However, administrators and many others do not think like this. They believe Korea is for Koreans and the rest of the world is an export market – this 'one way globalization' is a barrier to future hub activities."

Soft infrastructure problems

- Unfair government support for local companies, depending on the sector;
- Labor unions, labor laws and perceptions of union power in Korea;
- Lack of transparency (e.g. in obtaining licenses and dealing with authorities);
- High costs of labor;
- Taxation issues;
- Senior management preferences for other locations;
- Red tape, bureaucracy and regulations;
- Hierarchical organization and relationship selling;
- Market protection (unofficial, e.g. in the case of cars around 1.2 million cars are exported every year against only 1,300 imports).

Government Red Tape: Still a real barrier?

More than 90% of interviewees put a heavy weight on the importance of networking in doing business in Korea. But the importance of relationships exists in all countries although it differs to some degrees. It is a generally accepted view that in every country one finds bureaucrats are strict, conservative and uncooperative. The Korean regulatory environment, difficult even for Korean firms, poses a particular challenge to the foreign investors (OIO, 2001). And it is one of the most urgently needed areas to be corrected for Korea to become a regional business hub.

Laws and regulations are often generally framed. In particular, government's current policy of frequent working-level post rotation (1 to 2 years) decreases the degree of expertise. The meaning of the law in practice thus depends on discretionary interpretations by working-level officials, thus increasing the opportunities for inconsistent application, discrimination and corruption. Working-level officials, particularly in divisions like Immigration and Taxation departments, often rely on unpublished internal ministerial guidelines and unwritten administrative guidance in interpreting and administering the law. But one thing that differentiates Korea from the rest of the world is that the personal relationships are a little bit more effective in Korea. This is because relationships are much more formal in Korea. Over 60 percent of interviewees cited the exceptional nature and importance of networks that distinguish Korean business culture from other Asian countries. Those with experience of other major markets thought that the importance and intensity of networking exceeds both that of Japan, Hong Kong and other Asian countries. These networks incorporate school friends (secondary and tertiary) going back 40 to 50 years, the region from which people originate, particular universities and of course army friends.

Xenophobic attitude as a hurdle?

Korea successfully hosted the 1988 Seoul Olympic and 2002 FIFA World Cup and currently ranks as the world's 12th largest trading nation. Since the 1989 law which allowed people over age of 30 to get passports (and now even younger people are eligible), an increasing number of Korean tourists can be found travelling around the world. All these recent phenomena might lead one to presume that Koreans have a strongly international outlook. However, it is a sheer illusion as one considers the following questions. How many foreign residents does Seoul have among its population of 12 million? Have you ever considered why there is no foreign community not even a Chinatown in Seoul or to the entire Korean peninsular?

In broader terms, in Korea, even though a predominantly agricultural society transformed very rapidly into an industrial one and even shifting its industrial paradigm from quantitative to qualitative growth, a corresponding change in people's consciousness and perception among bureaucrats and businesspeople failed to materialise according to interviewees. This gap exists partly because the same changes that took place among the advanced European countries over nearly a century occurred in Korea in just one generation. In addition, although Koreans are living in a very modern society, the people's generally negative mind-set towards foreigners is still prevalent. This un-globalized mindset of Koreans creates a negative brand image of the Korean market. Koreans still tend to value human relationship based on kinship, affinity and geographic proximity more than rationality, and patriotism more than negotiation. While Korea depends on world markets for 60% of its economic activity, people behave as if they were living in a closed society. Koreans' xenophobic attitude also stems from the people's unwillingness to communicate with the so-called 'outsiders' due to their weak English-language skill. This communication barrier arguably is one of the major attributes that make Korea as an unattractive place to set up a RHQ. Almost every interviewee responded negatively to the question of communication barrier. Other major cities like Shanghai and Tokyo are also probably weak in English but when one considers these markets they offer better conditions such as the size of market, potential, and living conditions. There are of course many ways to enhance the English–language abilities of Koreans such as education and English-language infrastructure (e.g., international schools, foreign media, more foreign teachers at primary to tertiary institutions). But most importantly, consensus among every part of Korean society should be drawn that English-language proficiency is an essential international business tool and a must-learn intangible skill in this globalization era. Prompt but detailed measures and strategies (regular workshops, professional training (onshore and offshore), etc), in enhancing the people's global perspective and strategic mind that will play as a key success factor in creating global corporate culture and a better business environment, should be prioritized in places like government, government agencies, tertiary institutions, and small-and-medium sized firms as well as *chaebol*. This would certainly enhance the brand image of Korea and its market among potential and existing.

Social infrastructure: a major barrier?

If one takes a close look at AMCHAM's recommendation on five areas in regards to prerequisites for Korea to become a Northeast Asian business hub, he/she can easily see the recommendations to the Korean government were intentionally made in order of priority. These are 1) tax rates 2) foreign exchange controls 3) labor flexibility 4) English language and 5) country image (http://www.amchamkorea.org/main/main.htm). This is because the Chamber's primary function is to "protect the interests of member companies (2,200 individuals and 1000 member companies) operating in Korea". The first priority, which regards corporate and income tax rate imposed on foreign companies in Korea, was also one of the hot issues during the our fieldtrip (May, 2002) to interview a number of foreign companies in Korea. Surprisingly enough, a majority of the interviewees responded not unfavorably, meaning that while they are not satisfied with the current tax rates, these are not major business deterrents in Korea. Instead they (interviewees) cited that Korea should put more efforts on offering an image that Korean business and society is fair and transparent. They had many experiences of being discriminated and treated unfairly. Korean tax rates in comparison with other major Asian countries are not higher in real terms (AMCHAM, 2002) but the process and often-arbitrary interpretation of laws and regulations on taxation created a wrong image of Korea (OIO, 2001). More importantly, their experiences go mouth-to-mouth among expatriates in Seoul and their head offices in various regions. This is why the Korean government should establish a control tower that checks and encourages a fair and open competition among local and foreign businesses rather than reacting too sensitively to recommendations offered by foreign chambers of commerce in Korea, especially AMCHAM in Korea.

An equally important issue that emerged from the fieldtrip is the question of whether Korea is a place that foreign people want to visit and stay and come back or whether Seoul is truly an international city. Contrary to AMCHAM's finding that expatriates living in Seoul view Korea favorably, the answer was NO to both issues. In particular, foreign CEOs who have been living in Korea less than three years responded negatively. A crucial implication of this is that those responding unfavorably will bring a negative image of Korea to their home companies. And this has been repeated for a long period of time. This is because perception and image made by their predecessors last relatively long. Given that normal tenure for a foreign assignment among MNCs is 3 to 4 years, which is the normal period for expatriates to get accustomed to a very homogeneous culture like Korea, many expatriates leave the market with their previous perception or even bias. Why has Korea been regarded among foreign expatriates as an unpleasant place to visit or live, especially when it is compared with cities like Singapore, Hong Kong, Shanghai and Tokyo?

Favorable FDI policies and laws (tax and labor) coupled with appropriate infrastructure for various hubs such as finance, logistics and other businesses may attract and eventually their RHQs. But issues of socio-political and business cultures should not be underestimated. In other words, human issues are as important as business matters. Paradoxically, international businesses are all about humans and their families. Many of the interviewed CEOs' families in Korea are apart from each other. Many immediate family members of foreign CEOs returned home earlier because of the cultural and domestic environmental barriers that are prevalent in Korea. According to some interviewees, for a Korea post, some companies prefer candidates who have no family obligations. Since Korea is heavily Seoul-oriented, every thing must be resolved within the capital, including children's education, visas, accommodation, cultural activities and etc. Despite much publicized propaganda (establishing a residential complex for foreigners in the special economic zone) on on-going improvements in relation to the quality of life in Seoul, the reality is that none of the above meets global standards. Importantly, most interviewees put a high priority on their children's education, weekends, food, convenience, double-standard renting system, and cost of living in Seoul as much as business concerns. If Korea has less to offer to potential foreign residents, it is hard to attract foreign companies as well. Although there has been a special economic zone designated where foreigners can find more favorable business and living environments such as taxation, schools, hospitals, accommodations etc, the government should also need to offer a credible reason that there will be no disadvantage in terms of convenience for existing foreign companies to shift their business operations to outskirts of Seoul. Further, in order for Korea remain as a Northeast Asian business hub candidate, more transparent measures should be taken to improve the regulatory framework and supervisory process in implementing plans and initiatives. In other words, even the 'special economic zone' concept is not persuasive yet, rather it only serves as a symbolic gesture.

Hub competition from China

Several MNCs raised the issue of competition from China as a hub, given China's very large future market potential. One noted the imperative that: "you have to be in China to do business in China." Some stressed the relative ease of doing business in China, while other pointed to the development of impressive special purpose facilities for foreign nationals and their families in cities such as Beijing and Shanghai: "In Beijing you now have big houses for foreign nationals – rather like American suburbia." Some big name US companies are now pulling out of Korea to go to China – especially the ones which are hitting brick walls. Senior people move out and the junior ones move in – all this erodes Korean prospects of becoming any sort of hub."

While Shanghai was seen as especially enlightened with respect to MNC activities, others disputed the 'rosy' view of China, pointing to difficulties and irritations, including the lack of transparency over business dealings and the need for visas to enter the country. One leading design engineering firm, said: "China is less developed and even more difficult to do businesses in – except for Shanghai, Shenzen and Guangjou. In general, Korea is much more open for business. Although China is Korea's biggest threat in every sense, China's political regimes are dispersed and diverse. There is no one national Government system – Korea is very efficient from this point of view."

One global retailer said that in his business: "China is too convoluted a marketplace for our company – the challenges of dealing with Government are many time worse than dealing with Korea. We would consider having a regional HQ here [in Korea] if things improved, but it's not ready yet. To be a regional HQ hub, business activities must be transparent, auditable and consistent with international standards. There also has to be minimum interference from Government. Here, for example, we are obliged to accept all credit cards, but there are no controls over fees, so the companies supplying credit cards can charge what ever they like (one charges us 2.5 times as much as our previous card provider). These things would not happen in the UK, Singapore or the US and it makes our business much more difficult and unpredictable."

Hub competition from Hong Kong and other countries

According to Kim, 50 MNCs have major operations in the Asia-Pacific region. However, almost all of the regional headquarters of these MNCs are based in Hong Kong and Singapore (with 24 and 20 regional centers respectively) (Kim, 2001). One firm with a regional HQ in Hong Kong said that it was easier to travel to and from Hong Kong from most other parts of the world. However, in the past his firm needed to be in Hong Kong to sell to China: 'Now you can live comfortably in Shanghai or Beijing – ex-pats find it difficult here [in Korea] – traveling here is pretty difficult."

Some interviewees, however, saw the Hong Kong location in decline. One commented: "In the past, finance, FDI security, access to China were all to be found in Hong Kong – but now all these factors are shifting to Shanghai. The future is really in China. Hong Kong is becoming isolated as production has shifted out. Most major MNCs now have a 'greater China' philosophy. Hong Kong is not getting worse its just that China is getting better."

By contrast, some saw no reason to move out of Hong Kong without a much stronger business case. One firms said: "Our regional HQ is in Hong Kong. It is central and from it you can easily manage all the other countries. It has the facilities to attract talent and provide a good quality of life - and its not too expensive. By contrast Korea is expensive. Most companies won't come to Korea due to tax, labor and currency laws."

Regarding other countries, most interviewees viewed Singapore as the leading S.E. Asian hub with Kuala Lumpur gradually improving in terms of facilities, tax incentives, clearer financial regulations and spoken English.

Conclusion

The most dynamic feature of the Korean economy since the late 20th century is the emergence of the country as a major destination for foreign investors. Since the early 1990s, more than 1,000 foreign companies have established operations in fields ranging from consumer products to high-tech industries.

As such, the Korean government's recently initiated vision to transform the country into a world-class business and financial center in the Northeast Asian region sounds somewhat timely and achievable. However, this study shows that while the foreign business community in Korea unanimously is in favor of Korea's great potential to be a business hub of Northeast Asia, they see the new vision as unrealistic unless there is a stark change in the current form of Korea's internal and external business environment.

Apart from some well-known issues regarding doing business in Korea among the foreign community such as tax rates, labor flexibility, and lifestyle, Korea still is seen as, and remains, one of the most difficult markets across Asia to invest in and export to. Therefore, unless the image of Korea as a difficult market to crack is improved, the new concept of 'business and financial hub of Asia' is unrealistic. Some foreign investment related policies still remain structured primarily to encourage technology transfer and optimize the use of imports for export industries while discouraging unnecessary imports. This paper confirms that there is no firm ground to define Korean business practice. This is because what is normally considered universal business common sense is construed differently in the Korean context, specific examples being the concept of a contract or the absence of the notion of win-win situations. Other difficulties stem from:

- The government's pragmatic but still nationalistic attitude towards foreign investment;

- A strong Confucian influence, especially linked to the relationships across government, business and financial institutions;
- A long history of homogeneous culture;
- Union attitudes;
- The complexity of Korean company structure involving seniority and the *ho bong* system;
- Internal conflict rooted in language communication difficulties, unsuitable partner relationships and lack of understanding of the demands of joint venture business;
- Short-term orientation and frequent changes in policies and laws without prior notice;
- Lack of transparency in the financial market, its infrastructure and across society;
- Frequent rotation of posts within the government and its related branches;
- A wide gulf between the top and working-level people from English-language proficiency to expertise;
- Lack of expertise and professionalism among bureaucrats and government officials; and
- Lack of global perspective and pro-business mindset among bureaucrats and government officials

The implication of the above is clear: we must admit that Korea's challenges are not within tax/labor laws, FDI policies, or financial infrastructure, but within Korea's deep rooted un-globalized culture in almost every part of Korean society. Thus, we must be open to criticisms and establish a realistic and comprehensive strategy, which should aim at transforming the country into a more open, transparent, competitive, globalized and culturally dynamic society. This is a formidable challenge to a country like Korea but it is also true that achieving the ambition to be a regional business and financial hub is not an impossible task. Once Korean government and businesses and Koreans themselves, start moving towards the society, the realization of the vision will occur naturally.

In relation to Korea becoming a business hub, in addition to the general problems in the business environment for MNCs (which would need to be overcome for most MNCs to choose Korea as a hub), there is also a lack of clarity over the concept of hub, the parameters of the region targeted, and the timetable for achieving hub status. In discussions with MNC directors we identified at least six different kinds of hub: a hub for foreign direct investment; a hub for regional headquarters; a financial hub; a commercial, trading/transhipment/logistics hub; a manufacturing hub; and a technical support/R&D hub for foreign MNCs. Each of these dimensions requires a different kind of policy focus and it may well be that Korea could benefit from aiming for multiple hub objectives.

Further research would be very useful to illustrate what each of the hub dimensions require in terms of host country infrastructure. More clarity on the policy toward Korea as a business hub could be gained from policy makers and communicated widely to MNs and others concerned with achieving hub status. In addition, continually updated strategic data on how the Korean business environment compares with other potential hub competitors (e.g. within China), both in terms of current status and future developments would be useful for proposing a hub strategy to prospective MNCs.

References

[1] American Chamber of Commerce in Korea (2002). *AMCHAM Korea Business Environment Survey*, AMCHAM, Seoul.

[2] Anonymous. (2002). "Asia-Pacific CEO of Danzas stresses importance of Korean market". *Korea Herald*, February 21.

[3] Kim, Eun Mee. (1999). "Crisis of the Developmental State in South Korea", *Asian Perspective*, Vol.23, No.2, pp.35-55.

[4] Kim, Jae-chul. (2002). "Korea's potential as logistics center of Northeast Asia", *Korea Herald*, June 18.

[5] Kim, Mi-hui. (2002). "Eased regulations needed to be business hub: AmCham ", *Korea Herald*, March 14.

[6] Kim, Wan-soon. (2001). 'Transfer Pricing Rules: an Obstacle to FDI Attraction?', *The Korea Times*, October 25.

[7] Lamers, Jeroen. (2002). "Leaving the 'hermit kingdom': Korea's ambitions as Asian hub", *Korea Herald*, June 30.

[8] Office of the Investment Ombudsman (OIO) (2001). *2001 Report on Foreign Investor Grievances and Resolutions in Korea*, Seoul.

[9] Porter, M. (1990). *The competitive Advantage of Nations*, Macmillan, London.

[10] Raubach, Christian. (2002). "Building financial hub-necessity and opportunity for Korea", *Korea Herald*, June 10.

[11] Rooney, James. (2002). "Solid financial infrastructure key to attaining Korea's hub vision", *Korea Herald*, June 2.

[12] Seitz, Walter L. (2002). "Well-developed private banking business important for regional financial hub

goal", *Korea Herald*, June 16.

End Notes

[i] Macquaire Corporate Finance Advisory Group, Alcan Daehan Aluminum, Deloitte Consulting, Shisheido, Phamacia Korea, Costco, Pfizer Pharmaceuticals Group, Siberhegner, Meat & Livestock Australia, BHP Billiton, Allianz Insurance, Ford Motor, Syngenta Korea, Partekcagoteh, Australian Embassy, Australia-Newzealand Bank, Industrial and Commercial Bank of China, Maersk Logistics, European Union Chamber of Commerce, JETRO, American Chamber of Commerce in Korea, Hanmi Parsons, IRC Limited, IT Management Services, Moody International, Master Foods Korea, German Chamber of Commerce, Grand Hyatt, Bank One, Motorola, Mitsui & Co., Ltd., Kim & Chang Law firm, Australia-Newzealnd Chamber of Commerce in Korea, Taylor Lelson Sofres, Australian Trade Commission, AAB Korea, AIG General Insurance.

[ii] Apparently Volvo is one such example (note that Volvo was not interviewed for this study).

Managing the Phenomenon of Street Children in an African Developing Country

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Abstract

A lack of understanding of the phenomenon of street children restricts the government of Namibia in their attempts to integrate street children into a programme that will lead to sustainable improvement in their lives. This research study intends to describe the general characteristics, behavioural patterns and the causes of the phenomenon in order to enable the government to prevent, manage and provide an efficient service to the street children of Namibia and the different role players involved.

Introduction

With the current strong momentum for social and economic progress in the Southern African region, the vision of a healthy and prosperous region is not unrealistic. Public policies are put in place to ensure that urgent developmental needs could be addressed effectively. In this, there is a strong focus on the needs of the 50 million children of the member states of the Southern African Development Communities (SADC). The survival, protection, education and empowerment of the children are high on the agenda of the struggle against poverty and underdevelopment.

Nearly half (48,2%) of the population of Namibia is under the age of 18 – claiming the fundamental right of children to be part of a family and having access to homes, safe and supportive neighbourhoods and healthy surroundings (SADC: 2001). The United Nations (1990) has estimated the size of the population of street children worldwide to be 150 million – the number rising daily. Although it is not possible to accurately estimate the number of street children in any country, Namibia, and the other member states of the SADC alike, are faced with the fact that the problem of street children is threatening to get out of hand.

The rising numbers of street children, in spite of measures being taken to empower its children, has forced the Namibian Ministry of Women Affairs and Child Welfare to make addressing the phenomenon of street children one of its highest priorities.

Addressing this problem is, however, no easy task. The phenomenon of street children is one of high complexity and variability. These children are found in the street at any hour of the day – not only in the urban areas of Namibia, but also in the most rural towns – exposed to violence, criminality, drug abuse and delinquency.

The Ministry of Women Affairs and Child Welfare believes that, in order to introduce an intervention programme or strategy that will lead to an improvement in the lives of the street children of Namibia, a clear understanding of the problem within the Namibian context has to be obtained. Furthermore, recommendations regarding such a strategy should take the realities of the problem at grass roots level into account. Consequently, the Ministry embarked upon an extensive research project into the phenomenon of street children in Namibia.

Problem statement

A lack of understanding of the phenomenon of street children in Namibia restricts the Ministry of Women Affairs and Child Welfare in their attempts to integrate street children into a programme that will lead to sustainable improvement in their lives.

Research objectives

Upon agreement of its need, the following objectives were formulated for the street children research project:

* to determine and describe the general characteristics of street children in Namibia

* to determine and describe behavioural patterns of street children in Namibia

* to determine and describe causes of the phenomenon of street children in Namibia

* to determine and describe the perceptions of members of the community, volunteer workers as well as social workers and other professionals involved with street children, with regard to:

  - The characteristics and behavioural patterns of street children;
  - The causes of the phenomenon;
  - The current and future management of the street children problem within the Namibian context; as well as
  - Their perceptions on the scope, nature and effectiveness of current measures being taken in an attempt to intervene or improve the lives of Namibian street children.

Literature review

It is a well-known fact that many children, all over the world, turn to the streets in an attempt to resolve problems that arise out of the social structures and situations they find themselves in. These children share one common factor – "working the streets" to make a living. There is, however, a world of difference between the "runaways" or homeless youth found in first world countries, and the "street children" found in third world countries.

In contrast to "runaways", who mostly turn to the streets in search of adventure, excitement, or independence, the "street children" of the Third World turn to the street as a result of neglect or abandonment (Richter, 1990). These children use the street in different ways and researchers on the phenomenon of street children differentiate between:

* children **on** the street, and
* children **of** the street.

Children **on** the street constitute the largest group (approximately 75%). These children have homes and usually find themselves on the street to contribute towards the financial support of their families. According to Makombe (1992), as much as 85% of the street children of Zimbabwe have homes.

Children **of** the street (approximately 25%), on the other hand, usually have little or no contact with their families, and are on the street to survive (Schurdink, 1993 and Richter, 1990).

According to a report of the United Nations Children Fund (UNICEF, 1987), the following situations characterise, or are an integral part of the life of a street child:

* **survival** by means of begging, prostitution, drug abuse and drug trafficking
* **subjection** to abuse – social, physical, sexual and emotional
* **advanced maturity** and the development of a apathetic or aggressive attitude
* **replacement of the family** with a social group or gang.

Literature research further reveals that the following are key factors in contributing towards the phenomenon of street children:

* ***Factors at macro (community) level*** – referring to factors such as politics, economy, housing, health & welfare services, unemployment, and rapid urbanisation

* ***Factors at meso (family) level*** **–** the breakdown or disintegration of the family structure, single parent families, remarriage, desertion, poverty, child abuse, child neglect, family violence, lack of bonding and lack of parental discipline, etc.
* ***Factors at micro (individual) level*** **–** e.g. escape from an intolerable situation (hunger, abuse, shame, etc), failure at school, lack of money or feeling unwanted and a burden to the family

For many families in third world countries, a complex interaction and combination of these factors has made reliance on the economic contribution of their children an essential part of survival (United Nations, 1990). The phenomenon of street children is therefore common in third world countries and the numbers of children on the street in these countries are constantly increasing.

Although street children are reportedly a widespread phenomenon in most African countries**, reliable statistics in this regard are lacking** (Schurdink, 1993). With regard to Namibia, Tacon (1991) did however report the number of street children to be as high as 2 300, with 700-800 of these children in Windhoek alone.

Although street children are never a uniform group, research findings on African street children seem to indicate that their ages range from 2 to 18 and although they are mostly boys, street children are from both genders.

According to Richter (1991), the social situations of African street children are often similar and they are most commonly described as destitute, harassed, rejected, and underprivileged. However, they do turn to the streets for different reasons:

* to **support** their families, or
* because they are **neglected** by poverty-stricken parents, or
* because they are **orphans or deserted** by both parents, or
* they decide **to leave** their homes due to factors such as overcrowding, alcohol abuse by parents, parental abuse or peer pressure (Richter, 1991).

Nonetheless, regardless of the reasons why, or how they come to be on the street, once they are on the street, these children need help and protection to prevent them to come to further harm. There are various programmes designed for addressing the street children phenomenon in African countries. Most of these are initiated and run by voluntary and non-governmental organisations (NGO's) and, according to Schurdink (1993), they mostly have one or more of the following objectives:

* to **provide assistance –** both material and other, including legal advice, counselling, rehabilitation, education and shelter for destitute children
* to establish a **contact centre** which provides daily meals, informal education, health care, counselling, sanitation and recreation facilities
* to provide children with the opportunity to be **re-integrated** into formal schooling or tertiary education in order to increase their employment abilities
* to improve the **quality of life** of street children and their families
* to **re-unite and rehabilitate** children and their families
* to look for foster parents or community based **foster homes**
* to **improve housing conditions**
* to **assess the needs** of street children and arrange for appropriate care, an appropriate school or payment of school fees, and other day centre activities such as skills training, literacy and numeracy training
* to encourage the community to initiate **self-help projects**
* to **change the attitude** of the community to an attitude of understanding, compassion and active involvement
* to rehabilitate the children and **provide support for their families**
* to **realise the potential** of identified individual children through education, remediation and job skills training in accordance with the interests and abilities of the child.

In spite of all the efforts and programmes aimed at addressing the phenomenon of street children, the needs of these children simply are not met and the numbers of these children are ever increasing. Schurdink (1993) concludes that the problems encountered with these programmes in South Africa do not stem from a lack of initiative, but rather from a lack of sufficient resources such as funding and trained staff, as well as a lack of proper planning and government policies. This is most likely true for similar programmes implemented throughout Africa. Although these programmes play, and will continue to play, an important role in the lives of African street children, they lack long term sustainment and accountability. Schurdink (1993) is of the opinion that those programmes most likely to succeed are those with government support.

Drake (1989) concludes that many of these programmes fail because they do not meet the needs of the children involved. In fact, they actually contribute towards a sense of failure of addressing the street children problem, because they expect model-behaviour and self-disclosure from the children in return for services rendered. Most important is to realise that no programme will succeed unless it is based on a scientific assessment of the situation the children find themselves in, as well as the real needs of the children.

Nzimande (1996) defines the family as a support system. In terms of this definition, the family is the ideal support system for any child's needs to be met. Ideally, the family (or parents) provides for the physical needs of the child. It provides information that the child is loved and cared for, information that the child is valued and esteemed and that the child belongs to a network of mutual obligation. When a child is deprived of this support system, the child may be tempted to find fulfilment external to the family unit. Many of the street children are an example of this process – disintegration of the family through employment away from home, death, etc. deprives the children of their support systems, and as a result, they turn to the streets.

As a result of a growing concern with regard to the children of the world, the United Nations published the Declaration of the Rights of the Child in 1959. This declaration was designed to serve as guidelines and recommendations to countries to protect its children from negative effects. It was, however, not sufficient to mobilise countries to implement radical measures. Therefore, in 1989, the Declaration was complemented by the Convention of the Rights of the Child. Those governments that accepted the Convention are obliged to amend their legislation to accommodate the provisions of the Convention and to commit themselves to the implementation of the Convention in their country.

Some relevant parts of the articles included in the Convention of the Rights of the Child could be summarised as follows:

Article 1
"For the purpose of the present Convention a child means every human being below the age of eighteen years unless, under the law applicable to the child, majority is attained earlier …

Article 2
State parties shall respect and ensure the rights set forth in the present Convention to each child within their jurisdiction without discrimination of any kind …

Article 20
A child temporarily or permanently deprived of his or her environment, or in whose own best interest cannot be allowed to remain in that environment, shall be entitled to special protection and assistance provided by the state …

Article 28
State parties recognise the right of the child to education, and with a view to achieving this right progressively and on the basis of equal opportunity, they shall in particular:

* make primary education compulsory, available, and free to all;

* encourage the development of different forms of secondary education, including general and vocational education, make them available and accessible to every child, and take appropriate measures such as the introduction of free education and offering financial assistance in case of need
* make higher education accessible to all on the basis of capacity by every appropriate means
* take measures to encourage regular attendance of schools and the reduction of dropouts ….

Article 39
… that all children who have been neglected, abused or exploited should be assisted in their recovery and re-integration into society and that this should take place in an environment which fosters health, self-respect and dignity …"

The child is dependent on others for material support and protection. The Convention of the Rights of the Child sets universal standards for the protection of the child against neglect, abuse, and exploitation and guarantees their basic human rights including survival, development and participation in activities necessary for their development into mature and responsible adults. The Convention also recognises the rights of children to express their opinions and feelings and the fact that these feelings and opinions should be taken into account when decisions about their lives are made.

In a sense, the Convention of the Rights of the Child demands a meaningful response by every country to the phenomenon of street children. However, McPherson (1989) rightfully questions the feasibility of the Convention when taking into account the realities faced by Third World countries. In some of these countries the resources are so scarce and the conditions so poor that attempts to enforce the rights of the child may be doomed before it started.

Research methodology

In order to obtain a clear understanding of the phenomenon of street children, street children from both the urban as well as the rural environments of Namibia had to be studied. In order to determine and describe the general characteristics, behavioural patterns and the causes of the phenomenon of street children in Namibia, both qualitative and quantitative methods of data collection were utilised.

Structured interviews were used as a means of collection of data from street children. A research team comprising two researchers and seven social workers conducted the interviews. Children were interviewed either on the street or at shelters and official places of safety. These interviews were aimed at obtaining information about the general characteristics of the children, their home backgrounds, their current behaviour as well as their current needs.

A sample of 243 street children was reached. Of these children, 208 were interviewed. The remaining 35 comprised a group of children ranging between the ages of 2 and 6, and whom the research team came across in a temporary tent shelter in Gobabis. As these children were too young to be subjected to an interview situation, they were merely observed within the shelter situation as well as when leaving the shelter to roam the streets of Gobabis.

Interviews with Members of the Community, Volunteer Workers, as well as Social Workers and Other Professionals involved with Street Children were conducted to enable the determination and description of the perceptions of adults involved with street children, with regard to:

* The **characteristics and behavioural patterns** of street children in Namibia;
* The **causes** of the phenomenon; as well as
* The **scope, nature, effectiveness and management of current measures** of intervention.

A group of 102 very diverse individuals were interviewed by the research team. The group included personnel from the Ministry of Women Affairs and Child Welfare working within the regions, persons attached to service rendering organisations, principals and teachers from schools that are involved with street children, pastors from different church denominations, politicians, parents of street children as well as concerned members of the community.

It was a matter of great concern to the research team to ensure the validity and credibility of the data. Addressing a complex phenomenon such as street children, it was the view of the team that the field research team comprises individuals well equipped to communicate with, and relate to the children and their circumstances. The field research team therefore consisted of psychologists and social workers.

Research findings

As an introduction to the interview with professionals involved with street children, interviewees were requested to define the concept of a street child. A summary of the key words used in these definitions resulted in the following:

A street child in Namibia is:

- A minor (i.e. a child under the age of 18);
- Who depends on him/herself for his/her own survival by working the street; and
- Who has either left home because of his/her home circumstances, or
  who has been driven to the streets by his/her parents either permanently or on a daily basis in order to earn money to support the family, and
- Who is therefore without parental care or adult supervision or guidance.

Research findings indicate the street child in Namibia to be in the age category 6-18 years with the average age being between 12 and 13 years and the majority of street children being between the ages of 10 and 15 years (table 3, p18). All the street children interviewed were of African origin and, as elsewhere in the world, street children in Namibia are predominantly male – 78,8% of the children interviewed were boys.

In the present study, the girls were slightly younger than the boys – the girls were in the age group 7-14 years with an average age of between 10 and 11 years; the boys were in the age group 6-18 years with the average age between 13 and 14 years. Although this varies between the 13 administrative regions of Namibia, the most prominent language group amongst street children in Namibia is the Nama-Damara group (54,6%).

The **education level** of the interviewees ranged between children who have had no schooling to children who have passed Grade 8 – illustrating that the children who have attended school have mostly achieved only primary level grades. More than 50% of the children have only reached grade 4 and 13,5% have never attended school. If the ages of children are taken into account, the low level of education of street children is clearly illustrated by the group of 16 years and older. Under normal circumstances these children should be getting ready to complete their secondary grades – grades 10 to 12. The reality however is that a mere 8,3% of the street children in this age group have reached grades beyond that of primary schooling.

Research findings support findings with regard to the Third World phenomenon that most of the street children are actually children **on** the street rather than children **of** the street – 80,2% of the children interviewed indicated that they return home at night, and therefore have regular contact with their families. Of those children included in the study who could be characterised as being **of** the street, most indicated that they have left home permanently. These children also indicated that they have little or no contact with their families. Although it was expected by the professionals involved with street children that most of these children return home at night, they did not expect the proportion to be as high as 80% but rather to be closer to 60%.

Migration of street children between towns or settlements is not a factor contributing towards complicating the management of these children in Namibia. Although migration might be common amongst street children elsewhere, migration in Namibia is most likely restricted by the remoteness of towns and the vast areas of deserted, harsh, and barren land between towns – providing no means of survival for those with no effective means of transportation.

More than 80% of the Namibian street children **operate in groups** which seem to indicate that, once on the street, these children develop systems or **networks of support** which effectively substitute the family support system that was left behind or that has disintegrated. In general, the children organise themselves in small groups, pool, and share resources, and take care of one another as well as of those who are not able to do so. (The latter was clearly demonstrated when the research team came across a little girl and her friends taking care of her disabled brother who has taken to the streets with her). In response to the means by which they obtain **food**, more than half (table 25, p31) of the children indicated that they beg for either food, or money to buy food. Apart from begging, most of the children obtain money by means of either selling something (mostly empty bottles or plastic bags that they collect on the street) or by assisting the public by pushing supermarket trolleys, carrying shopping bags, washing cars or minding parked cars. Although a mere 1,7% indicated that they do sometimes resort to shoplifting or theft of either food, or goods to sell, in order to obtain money to buy food, it could be expected that this is a "soft" statistic as these children do not want to be stereotyped as thieves. Results indicate that this is in fact the perception of the professionals; these interviewees indicating that they suspect more than 20% of the children actually resorting to measures such as theft and robbery to obtain food. **Access to hygiene facilities** seems to pose a real problem for street children in Namibia. Those children who find shelter at official places of safety and voluntary shelters have access to hygiene facilities at these in institutions (table 27, p32) where they are also provided with luxuries such as soap. However, more than 50% of the children who return home at night indicated that such facilities are not available at their homes. These children mostly make use of water from open sources such as lakes, rivers, and canals for hygiene purposes. The reasons why the children took to street can, at best, be described as a complex interaction between **factors external to the family** situation, and **factors that relate to the family situation** or the home circumstances within which the child finds him/herself. Factors external to the family situation that contribute towards the poor and unsupportive environment the child is subjected to, are mainly socio-economic in nature. For the Namibian family, these factors (table 32, p35) are perceived to be:

* The current high rate of unemployment in Namibia;
* The regional economic sectors of Namibia that are unable to absorb or accommodate the potential economic active regional workforce;
* The current educational system which is expensive as well as unsupportive and insensitive to the specific needs of children from a deprived background;
* The impact of HIV/AIDS on the disintegration of the core family structure;
* The high prevalence of uneducated, illiterate parents;
* The current housing shortage in Namibia; and
* An overall cultural degeneration of Namibian communities.

Interactively, these factors result in a degenerated family situation of which the following are the most prominent characteristics:

* **Poverty** – 86,4% of the children in the study indicated that there is not enough money at home to take care of the family. The basic needs of these children are not met, and the child not only has to contend with insufficient food, clothes, shelter and basic amenities such as hygiene facilities, but also with inadequate access to health services and education.
* **Parental substance abuse –** within the Namibian context, substance abuse mainly refers to alcohol abuse. More than 60% of the children interviewed reported excessive parental alcohol abuse.
* **Disintegration of the core family** – death, divorce, remarriage and parental absence from the home (either as a result of employment obligations, being in jail, having deserted the family, etc) result in single parent families (as was the case with regard to 42,2% of the children interviewed), step parent families (5% of the children), or the child being orphaned or deserted by both parents (18,6% of the children) and having to stay with family or friends.

* **Child abuse and child neglect –** more than half of the children included in the study have been subjected to some form of ill-treatment which includes physical, sexual, and emotional abuse as well neglect. The emotional needs of the child are not met and the child does not feel loved, cared for, or valued, and consequently suffers from low self-esteem.
* **Family violence** – problematic interpersonal relations within the family are often resolved with family violence that further aggravates the circumstances within which the child finds him/herself.

Given these deprived home circumstances of the child, it is not surprising to find that the child looks for fulfilment of his/her needs external to the family unit.

Recommendations

Based on the understanding obtained, the research team was able to make broad, holistic recommendations:

As a first step, the Ministry of Women Affairs and Child Welfare should initiate the process of **formulating appropriate legislation, national and regional policies, as well as national and regional guidelines** to address the street children problem.

The Ministry of Women Affairs and Child Welfare should facilitate the **formulation of national and regional strategies** that are comprehensive and holistic in nature. The aim with national and regional strategies should be to serve as frameworks for the formulation of secondary pro-active strategies, and should therefore facilitate:

1. The formulation of secondary strategies at grass roots level with the aim of preventing children from turning to the street, preventing those who have turned to the street from making the street their permanent home, and rehabilitating and counselling those who have turned to the street.
2. The establishment of co-ordination, support, and communication networks between all relevant role players.
3. The co-operation, joint efforts, and partnerships amongst role players at the different levels.

The Ministry of Women Affairs and Child Welfare should **support and guide regional governments to facilitate the formulation of secondary strategies within communities**. The aim of community strategies should be to:

1. Identify “at risk” families;
2. Prevent children from “at risk” families to turn to the street;
3. Prevent children who have turned to the street from making the street their permanent home; and
4. Provide appropriate assistance to those who have turned to the street with the ultimate aim of re-establishing a stable family.

Community outreach programmes – the aim of outreach strategies would be to have field workers from both social services and the Namibian Police Child Protection Units to go into the streets of the community and to befriend the street children. If the authoritarian approach of both these services could be replaced with a more friendly approach – advice, protection, and assistance to these children might be more readily accepted by them.

Conclusion

Ultimately, the research team firmly believes that the answer for the street children phenomenon in Namibia lies in the economic empowerment of communities through the reduction of the high prevalence of unemployment. In conclusion, it is therefore emphasised that further research should be directly orientated towards the solving the unemployment problem of Namibian communities.

References

[1] Drake, E. (1989). Workshop on street children in Botswana. <u>The Child Care Worker</u>, 7(4): 14-15.

[2] Makombe, K. (1992). Desperate and on the Street. www.pangaea.org/street_children/africa/lagos.htm (Visited: 11/12/2001)

[3] McPherson, S. (1987) <u>Five hundred million children: Poverty and child welfare in the Third World</u>. Sussex: Wheatshif Books.

[4] Nzimande, S.V. (1996). Family structure and support systems in black communities. in Marriage & family life in South Africa: Research priorities. Theme 1. <u>Family structures and support systems</u>. Pretoria: HSRC

[5] Pringle, M.K. (1974). <u>The needs of children</u>. London. Hutchinson.

[6] Richter, L.M. (1990). <u>The street child in South Africa</u>. Pretoria: Institute for Behavioural Sciences, UNISA.

[7] Richter, L.M. (1991). Street children in South Africa. <u>The Child Care Worker</u>, 6(9):5-7

[8] Schurdink, W. (1993). <u>Street children</u>. An investigation into the causes and incidence of the problem in the RSA with the aim to develop a model for treatment, rehabilitation and prevention programmes. Pretoria: Human Sciences Research Council.

[9] Tacon, P. (1991). Survey on street children in three urban centres of Namibia. Windhoek: The Ministry of Local Government and Housing of the Republic of Namibia.

[10] UNICEF. (1987). <u>New alternatives of care for children in and on the streets of Mexico</u>. Botota: Editorial Gente Nueva.

[11] United Nations. (1990). Children and development in the 1990s: <u>A UNICEF sourcebook on the occasion of the World Summit for Children</u>. New York: United Nations.

Network Size, Linkage Speed, and Multiple Equilibria in Locational Pattern

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Abstract

This paper focuses on generalizing the interactive relationship between regional network size and linkage speed and its influence on locational pattern including regional development and discrepancies, and eventually examining whether multiple equilibria exist. We found basically from the model a trade-off relationship of the network size with the network linkage speed in that the smaller network size a small region has the faster its linkage speed to a large region should be, which means the closer it should be located to the large region, to attract more firms and consumer than the large region. In contrast, the farther the small region is away from the large region the larger network size it should have. It was also found that multiple equilibria exist in locational pattern depending upon the relative importance of regional network and convergence effects, which implies some policy alternatives on balanced regional development.

Introduction

A remarkable development in information technology and expansion in physical & non-physical network scope thereafter have enormously increased economic efficiency as a whole. On the other side, however, the rapid growth of information technology creates so-called the digital divide phenomenon that indicates increasing information discrepancies among social groups and regions. Recently, it is reported that Korea has experienced an increasing gap between central (Seoul metropolitan area) and local regions since the economic crisis of 1997. Although lots of factors are behind this phenomenon, the recent information technology development, network expansion, and their properties are primarily concerned.

It is witnessed recently in Korea that the net population growth of Seoul metropolitan area that has a huge network size surpasses that of other local cities that have small network size. The more interesting facts are that the closer the cities locate to Seoul metropolitan area the larger net population growth they have. However, the cities that are even far away from Seoul metropolitan area but have relatively larger network size show higher net population growth. From these findings, we suspect that regional network size has something to do with network linkage speed(or distance) in locational pattern of industry.

This paper focuses on generalizing the interactive relationship between regional network size and linkage speed and its influence on locational pattern including regional development and discrepancies, and eventually finding whether multiple equilibria exist. We classify regions into a large region and a small region. By and large, the growth of the large region is affected by its own network growth, whereas the growth of the small region is affected by not only its network growth but also the spillover effect from networking with the large region. When we call the growth effects from the region's own network growth "network effects" and the growth effects from the spillover effects from networking with other regions "convergence effects", both network and convergence effects dominate at the growth of small region while only network effects at the large region. Also the network effects have something to do with an increasing returns world but the convergence effects with a decreasing returns world.

In the following sections, we mention how the scholars have studied on the network and convergence effects in locational pattern in the literature. Next, we set up the model in which the network size interacts with the network linkage speed in formulating locational pattern, and interpret the results. Finally, we conclude with some policy implications.

Network Effects and Convergence Effects in Locational Pattern

In the literature of regional or spatial economics, the network effects and convergence effects in locational pattern has been mainly discussed separately. Regional convergence has been developed in the standpoint of geographical decentralization with product life cycle of industries. The geographical decentralization of industry with its product life cycle is largely associated the relative importance of production-labor and transportation cost among others. Some empirical evidence on the geographical decentralization were found in textile, computer, and U.S. manufacturing industries, focusing that labor costs are more important as products and technologies matured, therefore industry is decentralized to the areas where labor costs are lower [8] [9] [10]. It had been previously argued that the relative importance of transportation costs out of total production costs decreases so that labor costs rather than transportation costs became more critical factor in choosing location [7] [15]. With this, more recently, it was proved that as the national economy matured the locational growth converged across areas and the gap between low and highly developed areas became smaller and smaller [5] [6].

Network effects(or agglomeration effects) in locational pattern was studied by Arthur and Krugman. Arthur relied on more 'chance effects' than 'necessity effects' in determining location by arguing that once an industry is established by chance in a particular location, establishments then are subsequently centered in that location to take advantage of increasing returns to scale, pooling market and demand externalities, etc. [1] [2] [3] [4]. In contrast, Krugman incorporated explicitly agglomeration and convergence effects into the deterministic model. Krugman compared the relative importance of economies of scale dominating agglomeration effects and transportation costs dominating convergence effects, and applied it in determining production location. It concluded that weak economies of scale and high transportation costs induced supplies of goods and services to locate very close to their markets and the opposite case provided the firms an incentive to gather at one place [11] [12]. His other studies showed the possibility of multiple eqilibria over time through the interaction of history and expectation in the locational pattern of industry [13] [14].

This paper more focuses on comparing divergence and convergence effects between large and small regions by incorporating more broad network externalities concept in the general model including consumer utility and production technology. Network externalities here reflects not only increasing returns to scale in production technology, but also the externalities from the regional network size involving colleges, institutes, firms, government agencies, and so on. Convergence effects are represented by the network linkage speed between the large and small regions, which is in the inverse direction to the network distance between regions.

The Model

We are concerned about how regional network and convergence effects affect locational pattern by studying the interaction of network size with linkage speed. For this we set up a two region-one product model. Two regions consist of a large region denoted by region A and a small region denoted by region B. Region A has a large network and region B has a relatively small network so that the former has larger network externalities than the latter. This effect represents a divergent force between region A and B because this force moves in an increasing returns manner. On the other hand, a convergent force moving in a decreasing returns manner is also associated with two regions and usually the smaller region tends to close to the larger one than the opposite direction. In this model, accordingly, one-way convergent effect from region B to A is assumed. Considering all these factors, a new entrant firm finally would choose the region A or B by comparing net profits from production at two regions.

Monopoly market is assumed at each region. Each monopoly produces and sells q, which is also actual number of consumers since each consumer buys one unit of the products. Monopoly charges price, P, on each product. The utility function of each consumer at region A and B is defined as (1)

$$\begin{cases} U_A = \eta - p + \alpha q \\ U_B = \eta - p + \beta q + \gamma q \end{cases} \tag{1}$$

where η is the basic utility each consumer enjoys from using the product. The parameter α and β represent the degree of network externalities at region A and B. α and β have some positive relationship with the network size of each region and here we assume $\alpha > \beta > 1$. The parameter γ measures the degree of convergence effect between region A and B and is assumed as $0 < \gamma < 1$

Regarding technology, each cost function reflects one's own production technology. The parameters α, β, and γ are incorporated into specific cost functions. By duality theorem, the cost function of each region shows the opposite technological feature: a large decreasing returns to scale cost function at region A and a small decreasing returns to scale cost function combined with an increasing returns to scale cost function at region B.

$$\begin{cases} TC_A = q^{1/\alpha} \\ TC_A = q^{1/\beta} + q^{1/\gamma} \end{cases} \tag{2}$$

To solve the problem facing the entrant firm, we assume a perfect foresight of consumers in which at the time of purchase they can correctly anticipate how many consumers will be buying each product from region A and B. And then the entrant firm selects a price and maximizes its profit at each region based on the consumers' purchasing decision. Then finally the entrant firm decides which region it should establish its business post at by comparing the profits level at region A and B.

First, (1) implies that consumers will buy the products if U_A and U_B are positive, which means if $p \le \eta + \alpha q$ and $p \le \eta + \beta q + \gamma q$ are satisfied.

$$q = \begin{cases} q & p \le \eta + \alpha q \\ 0 & p > \eta + \alpha q \end{cases} \tag{3}$$

$$q = \begin{cases} q & p \le \eta + \beta q + \gamma q \\ 0 & p > \eta + \beta q + \gamma q \end{cases} \tag{4}$$

Second, the monopoly firm selects a profit-maximizing price subject to the demand functions, (3) and (4). If the entrant firm establish at region A, then (3) applies and the profit-maximizing price is $p = \eta + \alpha q$. Similarly, if at region B, then (4) applies and the profit-maximizing price is $p = \eta + \beta q + \gamma q$.

Third, the entrant firm compares each profit, π_A and π_B. π_A and π_B are defined as (5) and the profit-maximization is accomplished respectively when $p = \eta + \alpha q$ and $p = \eta + \beta q + \gamma q$.

$$\begin{cases} \Pi_A = pq - q^{1/\alpha} \\ \Pi_A = pq - q^{1/\beta} - q^{1/\gamma} \end{cases} \tag{5}$$

$$\begin{cases} \Pi_A = (\eta + \alpha q)q - q^{1/\alpha} \\ \Pi_A = (\eta + \beta q + \gamma q)q - q^{1/\beta} - q^{1/\gamma} \end{cases} \tag{6}$$

The entrant firm would enter at region A if $\pi_A \geq \pi_B$ and enter at region B otherwise.

$$\Pi_A = (\eta + \alpha q)q - q^{1/\alpha} \geq (\eta + \beta q + \gamma q)q - q^{1/\beta} - q^{1/\gamma} = \Pi_B \tag{7}$$

$$\Pi_A - \Pi_B = (\alpha - \beta - \gamma)q^2 - (q^{1/\alpha} - q^{1/\beta} - q^{1/\gamma}) \geq 0 \tag{8}$$

What we expect to know in this model is how the relative importance of network effects to the convergence effects changes the equilibrium in locational choice of firms and whether multiple equilibria exist. Therefore we are interested in finding some conditions on the parameters, α, β, and γ to satisfy (7) and (8). For this, we apply the simulation method with numerical examples to (7). After repeating many numerical examples, we found three cases. If $\alpha \geq \beta + \gamma$ is satisfied, then Π_A is greater than Π_B. However, if $\alpha < \beta + \gamma$ is satisfied, there are two cases: (i) if $\alpha + \Delta \leq \beta + \gamma$, Π_A is less than Π_B (ii) $\alpha < \beta + \gamma < \alpha + \Delta$, Π_A is greater than Π_B at the beginning and later Π_A is less than Π_B. Δ is approximately estimated as 0.5~0.6 from the simulation experiments.

$$\begin{cases} \Pi_A > \Pi_B & \text{if} \quad \alpha \geq \beta + \gamma \\ \Pi_A < \Pi_B & \text{if} \quad \alpha + \Delta \leq \beta + \gamma \\ \Pi_A \geq \Pi_B \rightarrow \Pi_A \leq \Pi_B & \text{if} \quad \alpha < \beta + \gamma < \alpha + \Delta \end{cases} \tag{9}$$

(i) $\alpha \geq \beta + \gamma$

If $\alpha \geq \beta + \gamma$ is satisfied, then Π_A is always greater than Π_B from (8). In this case, α representing the degree of increasing returns to scale dominates β plus γ which respectively represent the degree of increasing returns to scale and decreasing returns to scale. For a numerical example, we substitute (6) with $\alpha = 3$, $\beta = 2$, $\gamma = \frac{1}{2}$, $\eta = 4$ and have (10).

$$\begin{cases} \Pi_A = 3q^2 + 4q - q^{1/3} \\ \Pi_B = \frac{5}{2}q^2 + 4q - q^{1/2} - q^2 \end{cases} \tag{10}$$

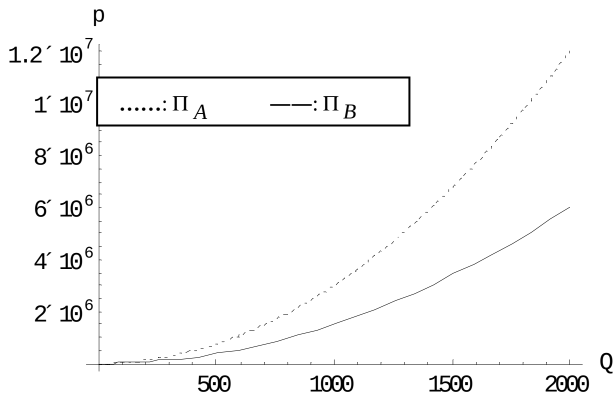

Fig 1: COMPARISON OF Π_A AND Π_B IN THE CASE OF $\alpha \geq \beta + \gamma$

The large network effect at the large region such as a metropolitan area increases the gap between Π_A and Π_B as the firms produce more and more (increase in q). Once the growth of large region dominates that of small region, the growth gap becomes too large for the small region to catch up with the large region.

(ii) $\alpha + \Delta \leq \beta + \gamma$

This is the opposite case of (i). If $\beta + \gamma$ is sufficiently larger than α, then Π_B is greater than Π_A. Substituting (6) with $\alpha = 3$, $\beta = \frac{14}{5}$, $\gamma = \frac{9}{10}$, $\eta = 4$ ($\beta + \gamma = 3.7$) gives us (11).

$$\begin{cases} \Pi_A = 3q^2 + 4q - q^{1/3} \\ \Pi_B = \frac{37}{10}q^2 + 4q - q^{5/14} - q^{10/9} \end{cases} \tag{11}$$

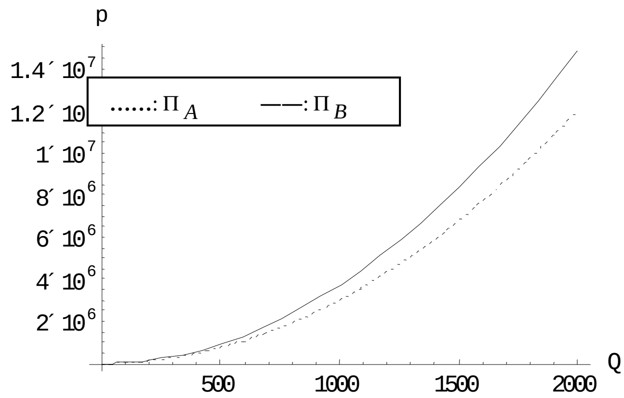

Fig 2: COMPARISON OF Π_A AND Π_B IN THE CASE OF $\alpha + \Delta \leq \beta + \gamma$

In order for the small region's growth to dominate the large region's, the network growth speed of the small region should be high, which means its network size should be relatively large beyond a critical mess, and the geographical distance from the region B to region A also should be short relatively. Thus combination of the network effect and the convergence effect at the small region is able to surpass the network effect at the large region.

(iii) $\alpha < \beta + \gamma < \alpha + \Delta$

If $\beta + \gamma$ is greater than α and smaller than $\alpha + \Delta$, then Π_A intersects Π_B which means Π_A is greater than Π_B up to a certain q level and Π_A is less than Π_B after the *q* level.

a. $\alpha = 3$, $\beta + \gamma = 3.2$

Substituting (6) with $\alpha = 3$, $\beta = \frac{13}{5}$, $\gamma = \frac{3}{5}$, $\eta = 4$ gives us the following Π_A and Π_B.

$$\begin{cases} \Pi_A = 3q^2 + 4q - q^{1/3} \\ \Pi_B = \dfrac{16}{5}q^2 + 4q - q^{5/13} - q^{5/3} \end{cases} \tag{12}$$

As shown in Fig. 3, Π_A intersects Π_B at around q = 125. This indicates that the new entrant firm should produce at least q = 125 to establish its production facility at region B rather than A. This also implies in the context of spatial economics that the existing network size should be at least 125 to attract more firms and consumers at region B than A.

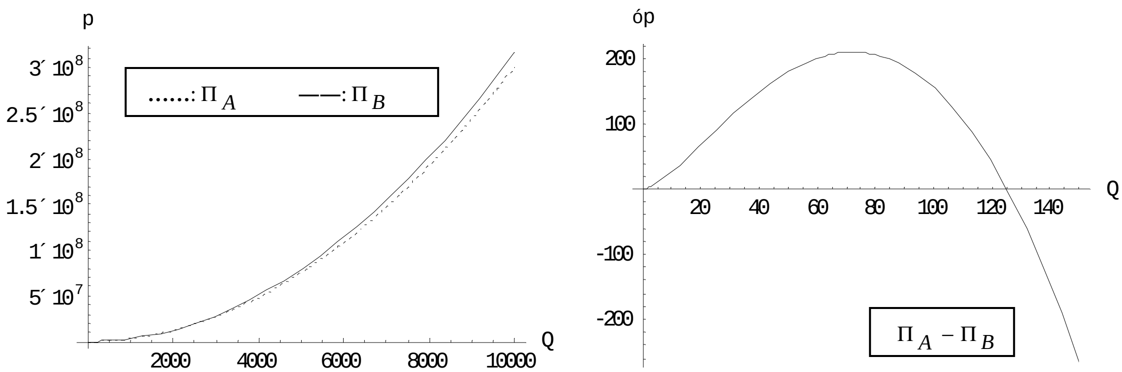

Fig 3: COMPARISON OF Π_A AND Π_B WHEN $\alpha = 3$, $\beta + \gamma = 3.2$

b. $\alpha = 3$, $\beta + \gamma = 3.3$

Substituting (6) with $\alpha = 3$, $\beta = \frac{13}{5}$, $\gamma = \frac{7}{10}$, $\eta = 4$ gives the following Π_A and Π_B.

$$\begin{cases} \Pi_A = 3q^2 + 4q - q^{1/3} \\ \Pi_B = \frac{33}{10}q^2 + 4q - q^{5/13} - q^{10/7} \end{cases} \tag{13}$$

Intersecting of Π_A with Π_B occurs at around $q = 8.5$. Similarly, the new entrant firm should produce at least $q = 8.5$ to establish its production facility at region B rather than A, which also implies that the existing network size should be at least 8.5 to attract more firms and consumers at region B than A.

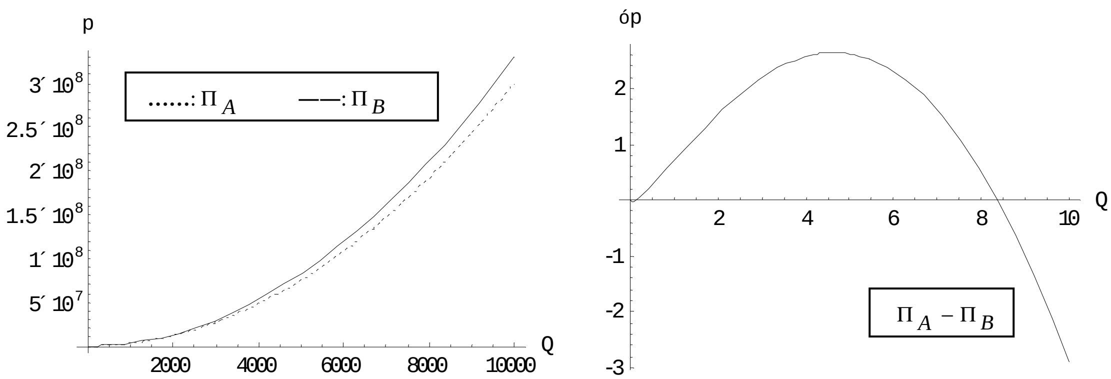

Fig 4: COMPARISON OF Π_A AND Π_B WHEN $\alpha = 3$, $\beta + \gamma = 3.3$

c. $\alpha = 3$, $\beta + \gamma = 3.4$

Substituting (6) with $\alpha = 3$, $\beta = \frac{13}{5}$, $\gamma = \frac{9}{10}$, $\eta = 4$ gives the following Π_A and Π_B.

$$\begin{cases} \Pi_A = 3q^2 + 4q - q^{1/3} \\ \Pi_B = \frac{35}{10} q^2 + 4q - q^{5/13} - q^{10/9} \end{cases} \tag{14}$$

Π_A and Π_B intersects at around $q = 2.2$. The critical production size (or network size) for region B to be more attractive is much smaller than before.

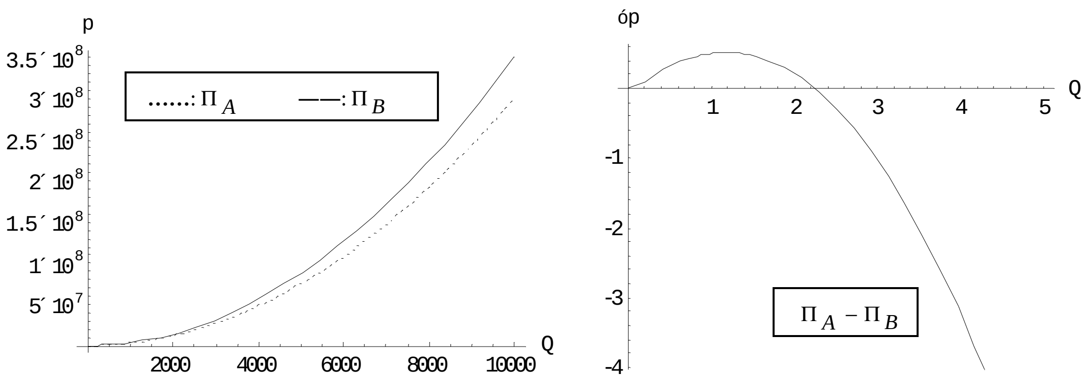

Fig 5: COMPARISON OF Π_A AND Π_B WHEN $\alpha = 3$, $\beta + \gamma = 3.4$

From the three cases, it follows that given β is constant, the critical production scale of q reduces as γ increase, say, the geographical distance from region A to B is shorter. This finding provides a crucial hint on the relationship between network size and geographical distance in locational pattern of industries or firms. The small region must have the larger network size to attract more firms and consumers as its location is far away from the large region. On the other hand, the small region needs a relatively smaller network size, which is production scale and in turn market size, as its location is more close to the large region.

In summary, first, if $\alpha \geq \beta + \gamma$ is satisfied, the larger region's profit growth dominate that of the small region over the whole production capacity, and the gap would enlarge as q increase. Second, if $\alpha < \beta + \gamma$ is satisfied, the situation is not so simple. Some critical network size or distance will be necessary for the region B's profit to surpass the region A's. From the examples, we found the inverse relationship exists between critical network size and distance. Third, even if $\alpha < \beta + \gamma$ occurs, we could classify two cases: $\alpha + \Delta \leq \beta + \gamma$ and $\alpha < \beta + \gamma < \alpha + \Delta$. The existence of Δ tells that $\beta + \gamma$ has to be sufficiently large for the combination of 'small network effect' and 'convergence effect' at the region B to overcome 'large network effect' at the region A. In other way, this reflects how difficult the small region (the follower) catches up with the large region (the leader). Fourth, multiple equilibria exist in this model since the equilibrium changes as the relationship among the parameters, α, β, and γ changes

Conclusion

By far, we were aware that there exist multiple equilibria in locational pattern depending upon the relative importance of regional network effect and convergence effect. In particular, from the relationship among parameters (α, β, and γ), we noticed that the small region has difficulties to catch up with the large region and has to meet some level of critical mass to do so. In other words, there are critical network size and linkage speed between the large region and the small region for the latter to catch up with the former. The degree of the critical levels depends on what levels they are at. The smaller network size the small region has, the faster its linkage speed to the large region should be, which means the closer it should be located to the large region, to attract more firms and consumer than the large region. In contrast, the farther the small region is away from the large region, the larger network size it should have. Trade-off relationship is applied to the critical network size and critical linkage speed.

Korea's experience of regional discrepancy after the economic crisis in 1997 is not irrelevant to the results of this paper. Seoul metropolitan's network size is too large for other cities to catch up with. Its huge network size creates large amount of new networks, so that other small and medium sized cities' own network growth combining convergence effects to Seoul is behind that of Seoul. In the model, $\alpha \geq \beta + \gamma$ is the case in which the growth gap between two regions is inclined to increase as the firms produce more and more.

Balanced regional development in Korea will emerge as an urgent issue in that the regional discrepancy is too serious to recover the balance and will be an obstacle for Korea's sustainable growth. In that sense, central and local government's policy intervention will play a critical role. From the results of this paper, the following two policy approaches will be suggested. First, the government should enhance the network effects of local small and medium-sized cities, which is to increase network size of those cities. For this, the government is able to implement incentive policies to induce firms, government agents, institutes, universities, and other agents to locate at the local cities, This will be able to create an eventual increase in population and market size of the cities. Second, the government should also enhance the convergence effects between the large and small cities, which are also related with enhancing the network effects. Actually this will be achieved by improving the access to the local cities through developing infrastructures such as expressway, high-speed railway, airport, and so on.

However, these policies will take time to reveal their outcome. Even though it does not reveal prompt results, consistent policies and their implementation are much more important to change locational pattern in particular.

References

[1] Arthur, W. B.(1986), “Industry Location Patterns and Importance of History”, *Center for Economic Policy Research Paper 84*, Stanford University

[2] Arthur, W. B.(1987), “Self-Reinforcing Mechanisms in Economics”, P. W. Anderson and K. J. Arrow eds. *The Economy as an Evolving Complex System*. Addison-Wesley, New York

[3] Arthur, W. B.(1988), “Urban Systems and Historical Path Dependence”, J. H. Ausubel and R. Herman eds. *Cities and their Vital Systems*, National Academy Press. 85-97. Washington D. C.

[4] Arthur, W. B.(1990), “Positive Feedback in the Economy”, *Scientific American, Feb*. 92-99

[5] Barro, R. J. and X. Sala-I-Martin(1991), “Convergence across States and Regions”, *Brookings Papers on Economic Activity 1*

[6] Blanchard, O. J. and L. F. Katz(1992), “Regional evolutions”, *Brookings papers on Economic Activity 1*

[7] Caesar, A. A. L.(1964), “Planning and Geography of Great Britain”, *Advancement of Science 21*. 230-240

[8] Hekman, J. S.(1980), “The Product Life Cycle and New England Textiles”, *Quarterly Journal of Economics 94*, 697-717

[9] Hekman, J. S.(1985), “Branch Plant Location and the Product Cycle in Computer Manufacturing”, *Journal of Economics and Business 103*, 1067-1090

[10] Norton R. D. and J. Rees(1979), “The Product Cycle and Spatial Decentralization of American Manufacturing”, *Regional Studies 13*, 141-151

[11] Krugman, P. R.(1991a), *Geography and Trade*, Cambridge, MA: The MIT Press.

[12] Krugman, P. R.(1991b), “Increasing Returns and Economic Geography”, *Journal of Political Economy 99*, 483-499

[13] Krugman, P. R.(1992), *A Dynamic Spatial Model*, NBER Working Paper No. 4219

[14] Krugman, P. R.(1995), *The Seamless World: A Spatial Model of International Specialization*, NBER Working Paper No. 5220

[15] Pred, A. R.(1965), “The Concentration of High Value-Added Manufacturing”, *Economic Geography 41*, 108-132

Project Synergy: International Education without Borders

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Abstract

Project Synergy is a program developed to respond to the increasing demands of the international business environment along the California/Baja California border. It is an integrated, long term, multicultural, multi-lingual, educational program, instituted by a partnership between the Centro de Enseñanza Técnica y Superior (CETYS Universidad), in the state of Baja California, México; Southwestern Community College District (SCCD), Chula Vista, CA; San Diego State University (SDSU), San Diego, CA., and Sweetwater Union High School District (SWUHSD), Chula Vista, CA.. Globalization, immigration, diversity and, NAFTA (North American Free Trade Agreement) have increased the interdependence of the United States and Mexico. The proliferation of manufacturing plants and associated infrastructure in the Baja California region has created an unbalanced border population that is critically short of skilled and educated workers. The primary goal of Project Synergy is to produce highly trained, educated workers and managers who are capable of responding to the growing needs of modern plants, local business and government. A second and concurrent goal is an innovative, community-based teacher education program that emphasizes the bilingual/bicultural aspects of the students in the region, beginning at the secondary level and continues to provide opportunities for education through the graduate level.

Introduction

Globalization is having a major impact on the California/Baja California border region. The North American Free Trade Agreement (NAFTA) greatly accelerated the industrial growth of the Tijuana/San Diego border region, creating a critical shortage of educated and skilled workers. The dramatic increase in population on both sides of the border has brought about a more dramatic increase in failure of the infrastructure to support that growth. Globalization has increased interdependence between the United States and Mexico, especially in business/industry, education and health care. The influx of uneducated and unskilled workers has created a need for education and training beyond the capacity of the local schools and training companies. Students need international knowledge and experience to be competitive in the regional job market, and to enable them to assimilate into the multicultural, bi-national, California-Baja California trans-border region.

Since the introduction of the Maquiladora Program (assemble in Mexico) the San Diego/Tijuana region has become one of the most active import/export borders in the world. Tijuana, Baja California, México is home to the largest number of assembly plants in the world. The city of Tijuana has been dubbed the "Television Capital of the World." Corporations such as, SONY, HITACHI, SANYO, SAMSUNG, MITSUBISHI, PANASONIC, etc., jointly produce more than a million television sets every year. Manufacturing plants are operating 24 hours a day to satisfy the global demand for electronic appliances.

The expansion of the border economy in recent years has created large numbers of new jobs. Most of the new jobs created in the border zone in Mexico over the past decade, and particularly after NAFTA, have been in the maquiladora industry (Ganster, Pg 10). This border region has become one of the most active commercial regions in the world. It has been identified as a region with unique characteristics. After decades of endeavoring to create a closed, self-sustaining economy, Mexico went from one of the most closed economies in the world to one of the most open economies (Global Paradox.1994, John Naisbet p.232). NAFTA has accelerated this economic growth.

In the last thirty years, the Tijuana/San Diego border has experienced a boom in the social, economic, immigration, and religious aspect. From October 1995 to the year 2020, the forecast for the San Diego region states that the local community is rebounding and restructuring. The changes that are happening and will happen, predict one million more people in the area (from 2,669,300 to 3,853,300), over 400,000 new homes (from 996,500 to

1,494,100), more than 500,000 new civilian jobs (from 1,084,900 to 1,627,9000), home prices rising faster than incomes, and an aging and more ethnically diverse population. The old reliance on aerospace and defense industries is being replaced with an increasing number of jobs in the emerging industries such as software, communications, and biotech. This has led the community to take immediate action for the purpose of offering as many opportunities as possible, for those that are prepared to play an important role in the development of the region. The greatest area that has attracted interest on both sides of the border, has been the development of businesses. Various academic programs dealing with business will be developed in the region. In addition, the involvement of other international interests and their impact on the region will be explored. The programs developed jointly by San Diego State University, Southwestern College, Sweetwater Union High School District and CETYS Universidad, focus their strengths in helping to develop the region through specialized courses.

The school-to-career connection with the institutions involved, ensures that practical articulation agreements will be long-standing. This concept provides an increase in internship opportunities as new industries move to the Otay Mesa, north and east of the Mexican border. This region has been known for many years for its opportunities for business establishment near the US/Mexico border. The opportunity to continue one's professional or managerial education will come with San Diego State University and CETYS Universidad Business degrees. The partnership offers practical, community-based, small business development expertise to the community through state and U.S. federally funded programs.

The solution to the problems confronting the region is to provide education and training to an existing unskilled, uneducated and untrained labor base. The short-range emphasis and overall strategy of Project Synergy, is to relieve the shortage by instituting dual degrees (SDSU, SWC and CETYS offers a degree, through its MEXUS program, to students who are majoring in International Business, and have participated in both of their respective fields) programs with CETYS and the American institutions in the partnership. The long-term goal and end result will be to put students into the pipeline at the high school or junior high school level. Students will achieve a level of qualification at the completion of high school, with the option to leave the program and enter the work force or to continue through the BA/BS (Bachelor of Arts/Science) level. Students may opt for a work-study program that will allow them to enter the work force while pursuing their degrees.

As early as 1981, William Ouchi recognized the vast differences between Japanese and American companies. He laid out a model of the Japanese organization and described the ways in which the parts fit together to form a working system. (p.58)

Nancy Adler (1997, v.) begins her thesis with the statement: "The world of organizations is no longer defined by national boundaries", and then proceeds to break down the conceptual, theoretical, and practical boundaries limiting our ability to understand and work with people in countries around the world. CETYS, supported by the Project Synergy partners has focused on the aspects of culture in order to satisfy the demands of cross-cultural understanding as a key part of the program.

John Naisbitt, in 1985, recognized the problems of globalization. In his book *Reinventing the Corporation*, he stated that we are living in one of those rare times in history when divergent forces come together and make radical change possible. Business and industry have been slow to incorporate change. The development of Industry/Education councils and the prescription for change has been slow or non-existent. Project synergy is coordinating the business community, manufacturers, educational institutions and local government in a program that will contribute to the resolution of these problems.

In 1993, Stephen H. Rhinesmith laid out Six Keys to success in a changing world. One of these keys is to make necessary changes in management thinking and education. Shortly thereafter, the Wharton School of business made a $2 million overhaul of their business curriculum to include the following characteristics: (p 3) placing greater emphasis on people skills, adding a more global perspective, fostering creativity and innovation, promoting real world problem solving, and examining business issues from the viewpoint of several disciplines. Project Synergy has included these dimensions, tailored to the demands of the San Diego/Tijuana trans-border region.

The slogan, "Think Globally, Act Locally," is apropos for the mission of Project Synergy. The project is geared to making changes on a local level while being guided by global imperatives.

Objective

The objective of Project Synergy is to provide a new paradigm of information delivery systems that will contribute to closing the educational, business and health-care gap in border communities. Once this program is in place, it is expected that Project Synergy will become a model for other communities that share common borders. This proposal sets forth a national model for cooperative, relevant education that teaches students an international perspective and provides border industries with the bilingual, talent they so desperately need. The model adopted by Project Synergy has been developed to respond to the internal economic and social demands of the border region. And, by doing so, will contribute to the development of a more stable economic and social dynamic along the United States/Mexico International border.

Project Synergy has identified several areas and activities that will be incorporated into the program. Student/faculty exchanges, dual degree programs, joint research opportunities, and linkages/internships with businesses are in place. CETYS Universidad, a leader in the Baja California (Tijuana, Mexicali, and Ensenada) region in the area of education, has already instituted these kinds of projects. The efforts by other institutions like Southwestern College, San Diego State University, Sweetwater High School District and CETYS Universidad, have led to the solution of some of the problems stated before. These efforts have developed into clear and concise actions that are driven by demands for workers in the following areas: computer science, telecommunications, engineering, finance and accounting, and business logistics. The deficiency in these areas cannot presently be met by institutions of higher learning, on either side of the border. This shortage is compounded by the high cost of living in the San Diego area that precludes many graduates of institutions from other parts of the country from moving to this area. The efforts directed towards education, will then achieve sustainable economic growth on the border, improve environmental conditions, strengthen local capacity, raise the standard of living, improve education, and recognize the diversity of people to protect cultural heritage. The alliance and cross communication between Mexican and American institutions will strengthen the joint industry/education programs on both sides of the border.

The Project

Project Synergy as a partnership, is designed to provide an organized response to the training and educational needs of the region (business and industry). The increase in manufacturing and the shortage of skilled workers and management has brought about an increased awareness of trans-border activities and the deficiencies in the educational system. Project Synergy has a unique capability to contribute to regional educational development, not only for students, but for staff and faculty as well.

The synergy created by the partnership of these educational institutions, coupled with the support of government, business and industry, will enable Project Synergy to become the leader in solving border development issues and has the resources to become the best program situated on any international border of the world. This program also responds to the international (San Diego and Tijuana) need to train more engineers who are knowledgeable in contemporary manufacturing. The emphasis of the manufacturing program is to provide hands-on experience with contemporary, computer-integrated manufacturing methods and processes.

The high school program offered by SWUHSD and CETYS Universidad is composed of a sequence of courses that begin with an introduction to technology, a laboratory program that enables students to experience structured activities in pre-engineering topics. Most students will also complete a four-year mathematics program that includes a full range of classes such as algebra, geometry, trigonometry, statistics, and pre-calculus. It is anticipated that students from the high school program of both institutions, will transition easily to the Southwestern College Engineering Program, with the intent of transferring to a similar (but higher level) program of study at SDSU. This will also occur at CETYS Universidad. CETYS' high school students will go through a similar process, but can transfer directly to CETYS undergraduate level. They may also have the option to elect, through a joint agreement of student exchange, and attend either Southwestern College or San Diego State University. The goal is to produce highly trained workers capable of responding to the needs of modern, up-to-date manufacturing plants.

These professionals will be able to design manufacturing programs, install and operate complete automated machines, and work with computer-generated information systems. The maquiladora (or assembly plants) established in the Mexico/US border, are constantly in need of such specialized persons.

Vital to the success of Project Synergy is the recognition by local leaders that this trans-border region is the gateway to Mexico, South America, and to the Pacific Rim. An investment in the region will provide avenues of opportunities for learners who are presently underrepresented in the areas of technical and professional careers. It is the goal of Project Synergy to assist the institutions involved to develop programs that will help solve the deficiencies and provide adequate trained and educated graduates. New areas of development have emerged along the border. Areas of opportunities have presented themselves without any warning. People from both sides of the border have changed their ways of living, habits, and even communication. Globalization has enhanced interdependence with Mexico. To be effective, individuals in the California-Baja California trans-border region need bicultural knowledge, skills, and experience in order to communicate between themselves, do business, and exchange ideas.

Project Environment

The unique multi-cultural environment of the San Diego/Tijuana border region provides Project Synergy students and faculty the experience required to deal with the various international and global issues currently faced by business and industry. This border region has several demographic dimensions particularly suited to the global perspective. Demographic forces are more extreme along the border than in the non-border areas, and demographic interaction between Mexico and the U.S. in the San Diego/Tijuana border region is particularly intense in the context of cultural, political, social, and economic trans-border interdependence. These demographic forces include the fifteen million border crossings per year, the multicultural environment, and the rapidly growing economy.

Structure of the program

The characteristics listed above became the foundation for the structure of Project Synergy. The program will modify existing courses to include inputs from guest lectures and exchange classes in both Mexico and the United States. All international corporations located within the region have been invited to participate in an industry/education council where political, business and scientific scenarios, will be explored. Industry representatives will have the opportunity to provide inputs to curriculum development in order to satisfy existing and projected needs and in order to ensure the highest level of qualifications among graduates. The influence that these international companies have in the region will benefit both students and faculty from both sides of the border. The program is designed to provide students an international experience without having to travel to other countries to experience a different culture. Project synergy is a living laboratory.

High School Involvement

Sweetwater Union High School District and CETYS Universidad have developed an integrated high school curriculum in life sciences and technology coupled with an internship program with firms on both sides of the border. This program provides courses that are designed to prepare students for college and university courses in the fields demanded by industry in the local area. The curriculum is designed to feed students into CETYS, Southwestern College or San Diego State. Provisions have been made for those students who choose to not matriculate to enter the work-force and still be eligible to re-enter the academic program at one of the partnering universities.

The Community College/University partnership

Southwestern College presently offers an award-winning, lower-division program in the field of biotechnology. A grant from the National Science Foundation has equipped labs with the most advanced equipment available for analysis knowledge in the fields of molecular biology, biochemistry, and genetics. Southwestern's collaborative work with San Diego State University's is a first in this type program and is designed to ensure its national recognition.

Private Sector Involvement

The program will include internships for students in private research facilities, medical schools, teaching hospitals, biotechnology firms, pharmaceutical companies, and university settings. Southwestern College will offer programs that promote further study in these fields, including Spanish for Native Speakers, which seeks to improve literacy for native Spanish speakers. Tagalog and Portuguese will also be offered.

CETYS Universidad is in the process of beginning courses in Japanese, French and Italian, besides the already implemented courses in English in order to support the transnational-operated Maquiladora industry. This will enable students to perfect their foreign language skills, deepen their knowledge of language and the humanities, and acquaint themselves with the culture and the traditions of others.

Inter-institutional agreements

Several inter-institutional agreements already exist between various universities. They include, cooperative programs such as the MEXUS (Mexico-US) program, that links SDSU, SWC, Universidad Autonoma de Baja California (UABC), and CETYS Universidad; student and faculty exchange programs; and grants and contracts in areas such as the Tijuana River Watershed National Community Demonstration Project. (MEXUS is a program that began in 1994, between SWC, SDSU, UABC and CETYS Universidad, by signing an agreement for the purpose of exchanging students between these institutions in the area of International Business only. This program leads to the obtaining students what is called a "Double Diploma", which is the Bachelor's Degree granted by the Mexican and American institution).

A program such as Project Synergy, focused on international programs with emphasis on the U.S./Mexico border, will promote global education, internationalization of the curriculum, and faculty development. These areas represent the major issues that are of concern for U.S. and Mexico, especially in this region. They have been dormant for many years, but today, they represent key factors and opportunities for development. We cannot put them aside. We need to pay attention and incorporate them in our strategic plans, which will be the means for solving many problems confronted.

Curriculum

The curriculum for this program includes a range of classes from introductory levels to advanced levels. The core curriculum and pedagogy reflect the current global perspective in a multicultural setting in general, but it concentrates specifically on the problems and circumstances of the San Diego/Tijuana border region. San Diego State University has initiated teacher-training programs that range from kindergarten through community college. Southwestern College will offer teaching internship opportunities to students in the upper division and graduate level courses. Models similar to this program exist at other community colleges in California.

CETYS Universidad will offer internship opportunities to students from the partnering universities that will enable students from north of the border to experience the "flavor" of the international setting, as well as English programs for its non-English speaking students. Through the MEXUS program, CETYS will facilitate visiting students from SDSU and SWC to receive credit for classes taken on either side of the border, by offering regular courses in English.

Liberal Studies

The creation of a trans-border university will foster the development of innovative community-based teacher education programs that emphasize the bilingual/bicultural aspects of the students in the region. It will be a priority to initiate a Liberal Studies program in the partnering universities that will offer students courses needed to become international teachers. One of the main objectives of Project Synergy is to initiate as many teacher education programs as possible in order to ensure success in the areas most affected by the demands of bi-lingual education. This area requires immediate action in order to be in place early in the program. Programs of this type can contribute to the development of professionals in future generations of “bilingual-bicultural” individuals.

Language

English and Spanish are the dominant languages in the San Diego/Tijuana region, however the influx of the Filipino, Vietnamese and other Southeast Asian population has compounded the “language barrier” problem. Different languages and cultures (Japanese, Korean, Chinese, Spanish, Norwegian, and others) associated with these manufacturers have been the basis for CETYS Universidad taking the lead in the implementation of courses that complement those at Southwester College and San Diego State University.

Language and cross-cultural studies will be included in the high school curriculum and will be continued in the community college and university curriculum. CETYS Universidad offers advanced English studies and will teach a number of classes in English as a method of preparing students for the continuous turbulent environment that they will face in this region.

Healthcare and Emergency Services

The importance of these fields to a growing community with health needs cannot be overstated. It is well known that the South Bay area is considered priority for the field of health. CETYS Universidad will offer assistance to these programs, through its school of Psychology. This department has made a breakthrough in the field of health, implementing a specialized program for its students to concentrate through laboratory studies, specifically on children.

Research Opportunities

Project Synergy provides research opportunities to students at the graduate level. This part of the program is coordinated in the extended studies program and is geared to the development of teacher education and the professional growth of teachers. Courses involve innovative teaching and learning, policy development, social issues in education, computer-based learning research, and an exploration of ways to implement the complex matters involved in teaching in a bilingual setting.

These studies are needed on both sides of the border. The needs stem from the rapid growth of the region and the diversity in its population. Even though this area experiences both similarities and differences, there is a need for the development of these opportunities.

Foreign Languages

Students will perfect their foreign language skills, deepen their knowledge in the humanities, and acquaint themselves with the culture and the traditions of others. CETYS Universidad offers competitive advantages that no other border university or institution of higher education in Mexico has, partnerships with U.S. institutions, Latin America and Europe; provides specific courses that fit the growing maquiladora industry and has an outreach program to the community in the area of social service. SDSU and SWC, through their joint agreements with CETYS, have set up programs so that exchange students become prepared to deal with the turbulent environment that is a characteristic of this border region.

Other important areas

Additional emphasis will be given to those areas of business that are suited for the region. International business issues, maquiladora management, entrepreneurship, and start-up costs for small businesses, will be addressed. The bi-national region has a mandate to control the flow of illegal substances and undocumented persons. This is an area that calls for innovative research programs. Additionally, access to the US Border Patrol and the Otay Mesa Prison provide internship opportunities for students from both sides of the border. In the last decade, more industries, both in the U.S. and Mexico, have turned to biotechnology to solve problems and improve products that has stimulated a growing job market. The goal of the biotechnology program is to develop students' general background in biological science, with a focus on fundamental concepts and basic principles of genetics, molecular biology, and cell biology.

Facilities

The Sweetwater Union High School District, located in the border region, has signed articulation agreements that provide for the matriculation of students to Southwestern College, San Diego State University and to CETYS Universidad

Southwestern College

Southwestern College will provide facilities for the initial phase of this project at either the main campus in Chula Vista, or the Education Center at San Ysidro, and will then relocate to the Otay Mesa campus when it is completed. This campus is located within one-half mile of the United States international border is the first major satellite facility of Southwestern College and is designed to support an enrollment of 10,000 students.

Otay Mesa

A new facility is under construction at Otay Mesa, which will provide easy access to students from both sides of the border. Research laboratories will be outfitted with the latest and most sophisticated equipment. The laboratories will be equipped and the curriculum will be developed in consort with industry representatives to ensure that the student will receive hands-on training and be schooled in the theoretical concepts needed in partnering firms. This new facility is ideally located to provide quality education programs, as well as community-oriented function to a broader geographic region. The site is surrounded by emerging developments such as industry, research and development centers, and commercial complexes. These new developments represent major opportunities for Project Synergy, to provide them with the necessary means, human and material, that will help the growth of the region. In its first phase, the Otay Mesa Campus, which will also be located in close proximity to the new San Ysidro High School, will consist of approximately 35,000 square feet of instructional space; 10,000 square feet for student services; and 5,000 square feet in support space. It will eventually grow to a larger complex that will house 10,000 students and more programs to suit the needs of this specific area.

San Diego State University

The main campus of San Diego State University, is located in San Diego California, USA. It has a full-time student body of over 30,000 students. Maintains satellite campuses throughout San Diego County and one independent campus in Imperial Valley (Calexico, CA). SDSU is a pioneer in extended learning programs and will contribute greatly to Project Synergy extended learning courses.

CETYS Universidad

CETYS Universidad is a college system based in the state of Baja California. The system is composed of three campuses located in the cities of Mexicali (the state capital), Tijuana and Ensenada. These three cities present a very unique and particular aspect in the areas of marketing, tourism, international business, maquiladoras, fisheries, agriculture, and other related areas. The richness and diversity in education that CETYS will provide to the project, constitutes a major contribution to the attainment of the projected goals. CETYS will definitely play an important role in Project Synergy. CETYS main responsibility will be to provide resources and directions to the other three institutions participating in the project. These resources will mainly consist of professors and students, who will participate in the development of programs. CETYS has developed programs that have aided local industry in its projected growth. They are based on the experience found in the local area, the input from the Mexican worker, and individual, professional, and local corporations. These existing programs can be adapted to satisfy the requirements of the Mexican/American community with very little modification. The programs that are currently offered are, Engineering (industrial, mechanical, electrical, computer), Psychology, International Business, International Marketing, International Finance, Import/Export, Customs, Accounting, Business Administration, Marketing, and Law. Coordinated efforts through Project Synergy, will involve teacher and student exchanges within partnering institutions, On-going cross-cultural seminars will be held at each of the partners. English, Spanish and other language courses will be integrated into the program as the student load demands, and will include seminars, practicum work, conferences, etc.

Community Involvement

Project Synergy will be actively involved in community projects on both sides of the border. The project will interact with the local population and existing community entities in the following areas: assisting in the development of a consolidated infrastructure for new industrial developments; providing guidance for low cost housing developments; participating in US/Mexican bi-national committees for the purpose of solving common problems; providing a cadre of well prepared students that will be able to contribute to the needs of the community; increasing the number of bilingual/bicultural individuals among the border population; providing a significant number of professionals that are sensitive to the needs of the community; instituting a “trans-border” educational center; ensuring a common understanding of cultural differences and diversity in the border region; qualifying students for better jobs therefore increasing the standard of living and quality of life; establishing and facilitate a means of communication; and providing a better education that is feasible with the new challenges.

Growth

The border region has experienced unprecedented growth during the last thirty years. This uncontrolled growth has had a significant impact on the ecology of the area. Project Synergy is sensitive to the environmental problems created as a result of the growth and has made provisions for inclusion of inputs from bi-national studies being conducted to protect the area for future generations. Currently the border environment is at risk. The situation will deteriorate significantly in the future if population and economic growth continue at present rates without significant changes in the regional development. By 2020, business as usual will increase traffic congestion, cause poorer air quality, create water shortages, and increase the already existing infrastructure shortfall.

Culture

Although San Diego and Tijuana are neighboring cities many significant differences in culture exist between them. Either side of the border lends itself to being a great laboratory to explore differences in culture. Areas such as women's studies, values and ethics, children's rights, immigration and language, will be the primary focus of development. There are others that may require Project Synergy partner involvement. Community growth will produce new challenges that will require Project Synergy to plan for the future. It will need to develop and implement new strategies in order to cope with the new turbulent environment created by the rapid growth in technology and manufacturing in this trans-border area. It is a welcome challenge.

Implementation Considerations

In order to effectively implement this program certain issues must be addressed: The development of Internet alternatives that will improve communication between cultures that do not share a common language; the innovative use of the Web; the development of a "trans-border" concept of higher education; and the creation of "alternative" teaching/research methods, such as small-scale experimental programs, collaboration with industries/businesses, and new technologies. The organizing principals guiding the development of Project Synergy, are one of collaboration of programs and resources to maximize the strengths of each institution to create a new higher education opportunity for the students, citizens, and businesses in San Diego/Tijuana region.

Project Monitoring

An oversight committee will be established as soon as the project begins for the purposes of monitoring the interaction of the project with the border community. Members of the committee will be selected from the faculty and staff of SDSU, SWC SWHSUD and CETYS. Close oversight will be maintained throughout the initial stages of project development. The primary objective of the oversight committee will be to monitor the implementation to ensure that any deviations from the plan will be immediately corrected through a strategic planning process that will be adapted to the project. The process provides for inputs from each of the members. The uniqueness of Project Synergy, with members from business, industry and education, will enable the project to perpetuate for many years. The partnership's dedication to the development of a progressive community will ensure that it will be an example for other trans-border regions around the world.

Conclusion

The impact of globalization on the California/Baja California border region has resulted in a dramatic increase in population on both sides of the border with an increasing failure of the infrastructure to support that growth. There has been an increased interdependence between the United States and Mexico. Project Synergy will respond to the increasing demands of the international business environment along the border between these two states. This integrated, long term, multicultural, multi-lingual, educational program, bonded by a partnership between business, industry and local governments will produce highly trained, educated workers and managers who are capable of responding to the growing needs of the region. The community-based teacher education program will provide opportunities for education through the graduate level. The school-to-career connection with the cooperation of members from business, industry and education, will enable the project to perpetuate throughout the future. The partnership's dedication to the development of a progressive community will ensure that it will be an example for other trans-border regions around the world.

References

[1] Adler, Nancy J. (1997) International Dimensions of Organizational Behavior. Cincinnati, OH: South-Western Publishing, Co.

[2] DANDAG/Source Point, September 1995, No. 5

[3] Ganster, Paul, "Affordable Housing in San Diego and Tijuana and Transborder Linkages", unpublished manuscript, 1993

[4] Ganster, Paul, David Pijawka, Paul Rasmussen and Rick Van Schoik. (2000). The U.S.- Mexican Border Environment; San Diego State University, Ed

[5] Ibid. (1994). The Global Paradox. New York: William Morrow and Company, Inc.

[6] Naisbitt, John (1985) Reinventing the Corporation. Warner Books.

[7] Ouchi, William (1981) Theory Z. Menlo Park, CA: Addison-Wesley.

[8] Rhinesmith, Stephen H. (1993). A Managers Guide to Globalization, Alexandria, VA: American Society of Training and Development

Reach for Regional Strategies for Global Competitive Advantage

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Abstract

Regionalization of the world economy is now pervasive and controversial, given its implications for global trade. This paper examines how regionalization is shaping the global strategies and organizational transformations of Multinational Enterprises (MNEs). It makes a case for regional strategy, by examining the implicit assumptions of the popular frameworks in international business. The paper argues that regional strategies have some important benefits and bring a pragmatic angle to the global-local debate. In particular, the paper suggests that regionalization offers a better way to think about dichotomous choices of integration and responsiveness. The regional choice also enhances the ability of the MNE to leverage its diversity by increasing the power, influence and capabilities of its foreign subsidiaries. Finally, the regional experience can be a valuable learning platform for the MNE in its pursuit of global integration.

Introduction

The globalization debate has been framed in terms of going either global in search of scale economies or remaining local in search of differentiation. The assumption has been that multi-national enterprises (MNEs) face a dichotomous choice between global integration and local responsiveness. How far have these assumptions guided MNEs' strategies and organizations in the last decade?

This paper argues that such assumptions are misplaced as pragmatic companies have included a regional orientation to their international strategies. Coke's return to local strategies and Ford's return to regional car models and organization are just some of the recent examples. However, regional, integrated organizations are not simply a mini-globalization. Pursuing regional strategies allows firms to achieve the adaptability for local responsiveness and the cost efficiency of global operations, but there is more at stake. The paper examines the motivation and the benefits of such strategies to the firm's world-wide competitive advantage.

The Macro-economic versus Firm-level Debate

The issue of regionalization is traditionally seen from a macro-economic and political economic perspective. Regional trading blocks, such as those of the EU, NAFTA, ASEAN, Mercusor have been the subject of extensive debate and research. This is not surprising given the broad economic and social impact such changes involve.

The essential component in this process are the policies pursued by sovereign nations to remove barriers (trade and non-tariff barriers) in order to create an economic space where by firms can compete 'more' freely across borders. While this remains the key aim of such multilateral projects, in practice the policies lead to very different levels of integration- from the single currency in the EU to a free-trade agreement pursued by Mercusor countries.

Both pervasive and controversial, regionalization has some economists optimistic about the opportunities it creates and others fearful that it may corrupt fragile efforts to encourage global free trade. On one hand, globalization has opened more countries for foreign investment. In 2000, more than 50 countries had a foreign capital stock of $ 10 billion compared to just 7 in 1985.[1] There are several well-known factors that have contributed to the increased number of countries becoming more integrated in the global economy: the general liberalization of markets, both capital and product for foreign investment, the saturation of markets in developed countries, the end of the cold-war and the creation of new countries in Central and Eastern Europe, and the developments in communication technologies.

On the other hand, regional trading blocks have become more common as countries offer preferential access to their markets for firms from countries that constitute the bloc. This presents an inherent tension to the opening of markets for all countries (specifically to firms from countries not belonging to the trade bloc), that is sought by WTO and other multilateral organizations such as the IMF.[2]

Three of the regional blocks dominate the global economy – NAFTA, EU and the ASEAN group, along with Japan. Approximately, 85% of the world's Foreign Direct Investment is directed towards these countries.[3] In essence, a global strategy involves being able to compete in these three blocs. If the basis of competition in the different blocs tends to be different across blocs, but similar within blocs, then a global strategy may resemble a set of regional strategies.

In contrast to the wide exposure of globalization in MNEs in academic and managerial circles, the phenomenon of regionalization within MNEs has been largely neglected. Despite a number of strategic initiatives in regionalization by companies such as Procter & Gamble, Ford, Toyota, 3M, Samsung, among a number of US and Asian multinationals, most research in regional integration seems to focus on macro-economic issues. MNEs face the challenge of adapting to both the challenges of globalization and regionalization. In fact, many MNEs have responded by setting up regional head quarters. For instance, in 2000, some 200 firms created regional headquarters for Asia in Singapore and 855 firms in Hong Kong.[4] Schutte [1998] studied regional headquarters and concluded that regional organizations are increasingly becoming more powerful within a multi-national structure. Others such as Birkenshaw [1998] have implicitly included regional organizations in their study of subsidiary initiatives. In another recent paper, Schlie and Yip [2000] provide evidence of regionalization in the automobile industry.

In earlier research, Welch and Luostarinen [1988] argued that companies should evolve from national subsidiaries to strong regional organizations before achieving truly global network organizations. Morrison, Ricks and Roth [1991] concluded that regionalization is becoming more important for MNEs across different industries, and they viewed it as the alternative to 'full-blown' globalization. Yet despite this awareness of regionalization, writers such as Prahalad and Oosterveld [2000] continue to discuss the initiatives coming from corporate or subsidiaries - not regions. In our own research, we have seen more and more MNEs are taking a regional approach, often beginning by integrating subsidiaries within Europe or parts of Latin America. When Procter & Gamble had ambitions of becoming 'truly global', they achieved it through by building their organization on the basis of regional hubs.

The Case for Regional Strategies and Organizations

Two frameworks dominate the discussion on globalization at the firm level. The first one, the integration-responsiveness framework [Prahalad and Doz, 1987], views international strategy in terms of two opposite challenges: high levels of integration may offer the firm scale efficiencies, but may mean low levels of responsiveness to national market conditions. In other words, as most often portrayed in literature, the key challenge for MNE managers is to manage the tensions between achieving global scale economies and national differentiation. The second framework [Bartlett and Ghoshal, 1989] should be seen as an extension of the first, but with an additional element of learning.[5] Learning brings a dynamic element to the basic IR model, as the levels of integration and responsiveness can vary over time.

The case for regional organizations rests on some of the implicit assumptions of these two models. In the IR model [Prahalad and Doz, 1987], international strategy is viewed essentially as managing the challenge between *global* integration and *national* responsiveness. The integration-responsiveness challenge is to respond to distinct sets of customers while still achieving maximum economies of scale and scope. A second assumption relates to the argument that successful transnational organizations optimize scale, network and learning advantages by integrating the perspectives and leveraging the capabilities of subsidiaries into a global organization. The assumption behind such a goal should be attained by integrating the perspectives and the competencies of all, if not most of the MNEs' subsidiaries. A further related assumption is that for the MNE to be truly global (or transnational), the national subsidiaries should be able to compete with the headquarters of the MNE for influence. Lastly, the frameworks remain silent on how the global organizations should be developed – should they move in one single step from a dispersed country-by-country operation to world-wide integration or through several smaller steps.

In the next sections, we argue that regional strategies and organizations refine the two frameworks. Regionalization provides a more reasonable view of how firms handle the twin challenges of integration and responsiveness, how subsidiaries can win credibility and influence within the MNC and how MNEs can evolve their global organizations.

Achieving Efficiency and Adaptability Through Regional Integration

One critical issue for any MNE is achieving the right levels of global integration and local responsiveness in the various activities and functions [Prahalad and Doz, 1987]. The problem is that many companies have responded to the attractions of global economies without due consideration for responsiveness to markets, and later find themselves retracting from their global structure after a few years of struggles. The recent troubles faced by Coke and Gillette have certainly caused many to review global options.

Management faces a continuous dilemma of not only finding the mix of global integration and local responsiveness right, but also dealing with a changing strategic context. The answer today should include national, global *and* regional organizations. For example, many auto manufacturers recently have announced the end to their global structures and strategies, in favor of a stronger focus on regional markets. By adding this third level in the analysis, we can improve the debate of maximizing both integration and responsiveness.

Two related factors suggest that regionalization may be an optimal solution to achieve a balance between integration and responsiveness. First, the minimum scale to achieve efficiency may exist at the regional level, implying that the costs of integrating globally may not be covered by further efficiencies. At the same time, the network of countries involved in the regions could still be responsive to customers. Second, the network of regional hubs may be more flexible, making 'right-sizing' in response to changing environmental conditions easier.

In some markets, such as automobiles [Schlie and Yip, 2000], the convergence of customers' needs is far from global, and yet no longer specific to a single nation either. The economics of a particular industry may favor a loose federation of regional organizations, each one able to derive greater economies of scale and scope than national organizations, while remaining responsive to the market. In fact, by the time regional integration is achieved, management may realize that the potential benefit of further integration on the global level is non-existent. In the case of Procter & Gamble (P&G), consumer tastes were addressed in the laundry detergents market to a large extent at the regional level and this drives some multinationals to pursue distinct regional strategies.[6] Baden-Fuller and Stopford [1991] noted that in the washing machine industry, some of the major competitors in Europe are the regional and not global players.

Secondly, a multinational that is highly integrated along global lines, when its industry is constantly facing pressures for different combinations of integration and responsiveness, lacks the practical dynamism and flexibility that is present in the regional networks. P&G's activities in detergents, paper goods (e.g. Pampers), and health & beauty products had a mixture of structures for integration and responsiveness, with some subsidiaries having global mandates, while others regional and national. If the environment facing the particular global business is in a state of rapid change, rearranging roles at the regional level is less demanding than global restructuring. Roles can be changed both within regions and between regions. In other words, readjusting from a regional orientation to either a more global or local emphasis should be a less formidable problem than moving from a global to local level or back again. Achieving an intermediate position by building strong regional hubs, allows the organization to adjust as demands vary over time on the need to integrate or decentralize.

Regional integration may enable flexibility in the international strategy while achieving competitive scale and scope economies. Regional organizations can provide sufficient scale to achieve significant economies while remaining close enough to the distinct markets to be responsive. As a result, such integration can achieve efficiency without sacrificing responsiveness. Under this scenario, efficiency is also responsive and flexible.

Creating a Balance of Power through Regional Integration

A key question that arises when examining the precepts of the networked transnational structures [Bartlett and Ghoshal, 1989] is the challenge of integrating the multiple and diverse perspectives of the MNEs subsidiaries. The value of benefiting from the subsidiaries' knowledge, competence and skills is unquestioned. What is perhaps more difficult in practice is the sheer impracticality of integrating perspectives across a global network., i.e. how can that value be realized in a structure which tries to integrate 30 or more countries into a global network? One response has been to limit the number of subsidiaries who are involved in specific projects, for example identifying centers of excellence. Other ways are to propose typologies of the roles of subsidiaries in global MNEs, for example based on the relative contribution on subsidiaries. The challenge is to give a fair hearing to the country managers, and yet, with 30 or 40 subsidiaries large and small, inevitably the managers' perspectives are not treated equally.

In fact, most country subsidiaries are relatively small, because their market is small. With few exceptions, the challenge of maximizing profits of a wide product range in small markets absorbs management time and subsidiary resources. Such subsidiaries tend to have little direct influence on the MNE's global strategy. Strategy still tends to be driven by the MNE's headquarters, more often located in its home country. Home country operations may still contribute to a significant part of the MNE's top line and bottom line. Even for the most international of the MNEs, as measured by the percentages of their assets, sales and employees outside their home country, domestic operations play a big role. The question is, how can small and far flung subsidiaries compete with the domestic unit for attention, influence and hence resources.

A regional strategy and structure is an important antidote. It enlarges the size of the potential market, providing the customer tastes are homogenous enough to gain some scale economies (with the eventual adaptation). An agglomeration of regional subsidiaries may have better be able to gain the tom management attention and bring in the diversity of views that may be relevant for the competitive advantage of the MNE.

Building and Leveraging Local Resources through Regional Integration

Influence is a source of not only the size of the market that the subsidiary serves, but also the capabilities that the subsidiary can develop and the relevance of such capabilities to the MNEs global competitive advantage. One reason that global networks captivated our imagination, is that they promised to capitalize on the diverse competencies and knowledge across the entire multinational organization. Most people agree that the strategic agenda of the MNE as a whole should not be dictated by the perspective of the home country. Competitive advantage in today's business needs multiple perspectives in strategy making at the global level. Most descriptions of global networks in MNEs argue that transnationals should be built around a core network of powerful and strategically important subsidiaries. Each of these subsidiaries contribute to the MNE's competitive advantage in distinct ways. In order to create a balance of strategic influence within the global network, at least some subsidiaries must make a significant contribution to the company as a whole. This implies a network that is not dominated by the home country subsidiary, and in which different centers of distributed power have developed outside the home country.

The question returns to the issue of creating a balanced network of interdependent subsidiaries, each one contributing to and benefiting from the network. Unless many subsidiaries can become sustained contributors to the global MNE, the home country or headquarters of the MNE will continue to dominate the perspectives and strategies of the organization. This need to create a ‘balance of power’ can be problematic.

Few country subsidiaries have the market size necessary to build an organization with sufficient size and depth to balance the home country. Unique competitive advantage, and thus power within the MNE global network, is arguably related to the relative market size and character, and innovative capabilities within the subsidiary. The reality is that the smaller markets of most countries usually inhibit the development of subsidiaries.

This challenge is particularly critical for MNEs based in large markets like the USA or Japan. Malnight [1996] argued that MNEs must first go through a process of investing in country subsidiaries, so that they are strong enough to participate as equal partners in a global network, before moving to a global structure. High initial investments in national subsidiaries are needed to build competitive strength locally, before global networks are attempted. Similarly, Birkenshaw [1999] found that subsidiaries gain credibility and increased influence, if they initiate a new way to use or expand the MNEs’ resource base.

Unless some power balance between the center and the subsidiaries is created, the argument implicitly goes, the mass of resources and traditions of the home country organization will inevitably result in an ethnocentric strategy process and organization. Top management mission statements are not enough to create an effective global network. The question arises, however, whether such centers of relative power will emerge among the subsidiaries, with or without heavy investments. And without strategic balance, the capacity to leverage the diversity within the MNE is clearly diminished.

An alternative approach would be to build the network around strong regional organizations instead of country subsidiaries. First, building regional organizations can be an efficient and cost-effective way to build major competitive strengths outside of the home country organization. Second, and more significant, the integrated regions can integrate the diverse perspectives, knowledge and competencies of the local subsidiaries. Rather than trying to coordinate 30 or more subsidiaries and inevitably ignoring many, a regional hub works with more manageable numbers. Regional cross-border organizations are situated in much larger markets, and thus can build the depth of specialization and critical mass of skills and knowledge necessary to create sustainable competitive advantages. Rather than trying to elevate a few selected subsidiaries, integrated regional hubs form the basis of the global network.

P&G Europe, for example, used its regional resources to create major innovations in laundry detergents (liquid and compact). The creation of Ariel Ultra involved development, product supply and marketing expertise drawn from throughout Europe. The diverse participants represented nearly every nationality in western Europe, and management worked hard together to integrate the packaging and scientific expertise, the manufacturing system, regulatory differences and market concerns. Not all decisions satisfied everyone, but a broad-based debate provided the basis of a high quality product and commitment to implementation.

P&G’s European organization, as opposed to a single national subsidiary, was instrumental in building competitive strengths in product innovation, manufacturing efficiency, and other critical functions. With a market size and skills set comparable to the U. S., management was able to concentrate internal resources and gain critical expertise, in a way that was simply not feasible for the national subsidiaries. The new competitive advantages clearly became the basis for gaining market share and gaining strategic influence within the P&G as a whole. P&G benefited through stronger financial results, and market initiatives with global potential, after decades of dominance by American leadership.

Rather than costly investments in building up subsidiary competence, a regional approach can pay its own way. P&G’s European approach coincided with and was aided by changes in industry forces. One factor was the apparent movement towards convergence of customer tastes in the laundry market. Also, centralization of purchasing obviously had scale benefits arising out of changes in bargaining power vis-à-vis suppliers. Yet another reason to integrate was to improve the speed of reaction to competitors on a pan-European basis. These external factors can lead to significant cost savings for an integrated operation, before considering the other strategic advantages.

In building regional hubs, management at some companies reacted to external pressure from converging customer needs, supply markets or regulation. For instance, in the cases of Eli Lilly and Citibank, moves toward European operations were more reactive, awaiting changes in industry structure and new opportunities. At some other companies, they were driven by internal reasons to create a critical mass of management and skilled employees in anticipation of the structural changes in their industries. Whether taking ‘fit with the environment’ approach, or P&G’s active ‘intent to shape the environment approach’, the creation of a strong regional cross-border organization strengthened the whole organization.

Dynamic Learning in Interdependent Markets

The process of creating an effective regional hub can have significance for companies that intend to achieve globally integrated organizations. The creation of an effective global network organization implies changes in structures and processes, and the emergence of a global mind set among managers. The emergence of a global mindset need not be automatic as companies go on the globalization path. Quelch and Bloom [1996] observed that companies that followed the transnational model and cut back on their country management lost some of their key idea resources.

In fact, motivation and coordination of subsidiary management is improved within a regional versus global integration process. Country based managers find it easier to contribute to and identify with a broader region in which they belong, than to some distant global dream. A major reason why some country managers quit after globalization was that they could no longer identify with the company, represented by a distant headquarters which seemed to have little knowledge and scant feeling for the country manager's local market conditions. Roure, Alvarez, Garcia-Pont and Nueno [1993] observed that in many companies, internationalization has extended their local managers' influence from national to regional markets, not global markets.

Regional hubs that integrate the operations and perspectives of many subsidiaries are more than new structures in a hierarchy. They function as dynamic learning platforms, which allow knowledge to be created and shared across borders. The creation of regional hubs implies learning how to think transnational, and learning new ways of working. This knowledge is gained partly through career paths that cross borders, but is also gained as people work together on projects that have regional tasks or goals. The process of creating the new mindset implies a new way of working with others. Country management has the opportunity to share their knowledge with neighboring country managers, develop a transnational mind set and knowledge base. The impact of the regional processes often reaches down to middle and lower management, creating a large pool of people who think and act in a broad context beyond their own country.

At P&G, with a new and strong regional level built on the original European Technical Center (ETC), motivational problems seemed to decrease over time with respect to many talented country managers. ETC gave them more visible center to which they could relate, and they were actively involved in many European initiatives, from building consistent brand identity, to harmonizing package designs, to creating new products. Regional responsibilities also became a career goal for many of the country management: moving to a post at ETC and taking on Europe-wide responsibilities for functions or product categories became a promotion and reward for good country-level performance. Such a position also entailed considerable learning opportunities for the person, and thereby increasing his or her own market value in the integrating European market and later in P&G’s emerging global network.

The new competencies required of people working regionally are different from the skills needed to excel in the context of a single country at a time. Managers can learn to work “horizontally”, creating new products and programs through debate and respect which brings together diverse perspectives and knowledge. At P&G, these skills were learned through various types of Euro Teams, teams whose mandate, decision making power and resources increased over time. Management faces a challenge to create those new competencies, without jeopardizing ongoing activities.

When strong regional organizations have been achieved, the new managerial skills and knowledge learned can be appropriated by the organization for future options. If the integration process is managed well, and not simply presented as another restructuring project, the company can prepare for life in a global network. Regionalization entails many of the cultural complications of coordination and maintaining responsiveness as globalization, but on a smaller scale in terms of geography, time zones and staff numbers and composition.

Without the phase of regional integration, pushing national subsidiaries into a global networked organization may require changes far too dramatic for the organization to digest. By looking at the regional organization holistically, management can reflect both on lessons for the process of integration, as well as structural issues of large scale cross border co-ordination.

In some cases, management may decide to stop at regional integration rather than go on to global integration, temporarily or for a longer term. Reasons for stopping at regional could be internal (e.g. lack of skills) or external (e.g. not enough market convergence). Both these cases are legitimate rationales for preferring a collection of regional organizations to a global network.

The Multi-Regional Company

The multi-regional company (MRC) is a network of regional hubs, with each hub linking national management and activities to create stronger products and profits within the local region. The “distance” between the hub and local markets is minimized, allowing decisions to be largely decentralized without losing the benefits of scale in functions as diverse as manufacturing, research, marketing, logistics and finance. The MRC requires a new way of working and thinking, one that relies less on hierarchical control and more on processes that effectively integrate talent and knowledge wherever they are located.

The regional hubs of the MRC are not re-named international divisions. Often, we have observed that a multinational has, as its goal, the creation of no more than 4 or 5 regions covering the whole world. Each regional headquarter faces the challenge of trying to achieve integration of their activities across the national subsidiaries that falls within its geographic region. A regional network of national subsidiaries across Europe and the Middle East defeats the purpose of integrating diverse perspectives. The sheer number of country managers participating and the dissimilarity between their markets makes debate and consensus difficult, if not impossible. Realistically, only cost efficiencies can be achieved in trying to integrate such a broad mix of consumers and markets.

The logic of regional hubs in the multi-regional should be interdependent markets. Interdependence may or may not mean that neighboring countries shared regulatory environments. The regional hubs should definitely reflect shared customer preferences and market dynamics. In other words, the shape of regional hubs should not be driven solely by trade pacts or the desire to achieve ever increasing efficiencies. The hubs could even be single countries, such as India or China, where the sheer diversity and scale of those countries is more than enough to go on. In Latin America and Asia, observers continue to doubt that the degree of market convergence observed across in Western Europe will emerge in the next generation - and doubts are also rising in Western Europe. Convergence of tastes is not inevitable, as consumers in various parts of Europe still prefer different perfumes in their laundry detergent, different flavorings in their food, and different purity in their chocolate.

Regional networks can create effective processes in which transnational managers participate in the debate to create policies. The networks can create a learning platform for leveraging local knowledge, resulting in a transnational mind set and effective coordination. But they can only achieve these goals when they are a realistic size for humane processes. It is market and managerial realities, not trade treaties or efficiency accounting calculations, which should drive the creation and processes of regional networks.

If the size and shape of the regional networks are driven by military and political agendas of nation states, without consideration for the actual interdependence of the markets and convergence of consumer tastes, the concept of regionalization is defeated. The result will be no more than a small-scale globalization - effective for cost reductions and for serving the global consumer, but unresponsive to a large segment of potential customers.

References

[1] Baden-Fuller, C. W. & Stopford, J. (1991). Globalization frustrated: The case of white goods. Strategic Management Journal, 12, 493-507.

[2] Bartlett, C. & Ghoshal, S. (1989). Managing Across Borders: The Transnational Solution. Boston, MA: Harvard Business School Press.

[3] Bartlett, C. (1983). Procter & Gamble Europe: Vizir Launch. Harvard Business School case no. 9-384-139 Boston: Harvard Business School.

[4] Bartlett, C. De Koning A. & Verdin, P. (1999). Procter and Gamble Europe: Ariel Ultra's Eurobrand Strategy. INSEAD-HBS Case Study. Fontainebleau, France: INSEAD.

[5] Birkenshaw, J. (1999). The determinants and consequences of subsidiary initiative in multinational corporations. Entrepreneurship Theory and Practice, 24, 9-36.

[6] Birkenshaw, J. (1998). Foreign-owned subsidiaries and regional development: The case of Sweden. In J. Birkinshaw and N. Hood (Eds.), Multinational Corporate Evolution and Subsidiary Development. Basingstoke: Macmillan.

[7] Frankel, J.A. (1997). Regional Trading Blocs in the World Economic System. Washington, DC: Institute for International Economics.

[8] De Koning, A., Verdin, P. & Williamson, P. (1997). So you want to integrate Europe: How do you manage the process?. European Management Journal, 15, 252-265.

[9] Malnight, T. (1995). Globalization of an ethnocentric firm: An evolutionary perspective. Strategic Management Journal, 16, 119-142.

[10] Malnight, T. (1996). The transition from decentralized to network-based MNC structures: An evolutionary perspective. Journal of International Business Studies, 27, 43-66.

[11] Morrison, A., Ricks, D. & Roth, K. (1991). Globalization versus regionalization: Which way for the multinational?, Organizational Dynamics, 19, 17-29.

[12] Perlmutter, H. (1969). The tortuous evolution of the multinational corporation. Columbia Journal of World Business, 4, 9-18.

[13] Prahalad, C. K. & Doz, Y. (1987). The Multinational Mission: Balancing Local Demands and Global Vision. New York: The Free Press.

[14] Prahalad, C. K. & Oosterveld, J. (2000). Transforming internal governance: The Challenge for multinationals. Sloan Management Review, 42, 31-40.

[15] Quelch, J. & Bloom, H. (1996). The return of the country manager. McKinsey Quarterly, 2, 30-43.

[16] Roure, J., Alvarez, J., Garcia-Pont C. & Nueno, J. (1993). Managing internationally: International dimensions of the managerial task. European Management Journal, 11, 485-492.

[17] Schlie, E. & Yip. G. (2000). Regional follows global: Strategy mixes in the world automotive industry. European Management Journal, 18, 342-354.

[18] Schutte, H. (1998). Between headquarters and subsidiaries: The RHQ solution. In J. Birkinshaw and N. Hood (Eds.), Multinational Corporate Evolution and Subsidiary Development (pp. 268-298). Basingstoke: Macmillan.

[19] Verdin, P. & Van Heck, N. (2001). From Local Champions to Global Masters. London: Palgrave.

[20] Welch, L. & R. Luostarinen, R. (1988). Internationalization: Evolution of a concept. Journal of General Management, 1, 34-54.

[21] Yip, G. (1989). Global strategy… In a world of nations?. Sloan Management Review, 31, 29-38.

End Notes

1. World Investment Report 2001, UNCTAD
2. See Frankel (1997) for an economic perspective.
3. World Investment Report 2001, UNCTAD
4. World Investment Report 2001, UNCTAD
5. Verdin and Van Heck (2001) view this challenge as one of achieving cost, network and learning advantages.
6. See Bartlett, De Koning and Verdin (1999) for regional process at Procter and Gamble.

Regional Integration Agreement And Foreign Direct Investment: Ceec's And Maghreb Cases

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Abstract

In this paper we will discuss how regional investment agreements may affect the inward and outward flows of foreign direct investment in the Maghreb and Eastern European Countries. After describing the different investment agreements signed by both regions with the European union, we provide a conceptual framework for analysis as well as a study of Tunisia case.

We show that the response to an integration agreement will depend on the local advantage of the country, the competitiveness of local firms in the integrating region, and the motives for foreign direct investment in and by both regions in question.

The Maghreb countries were for a long time the privileged trading partners of the European union, benefiting from generalized preference agreements. Indeed, Tunisia signed partnership agreements with the EU in July 1995 and one of the key aspects of these euro-Mediterranean agreements is the development of an economic and financial cooperation.

Tunisia to confront CEEC's competition on FDI, has to use fiscal incentives, investment insurance, financing, and bilateral investment treaties designed to increase the return or reduce the risk of these investments.

Introduction

Recent evidence suggests that regional economic integration provides an important stimulus not only to trade, but also to FDI. Integration Agreements could have strong implications on the growth, some of them have been motivated by political consideration, it is clear that economics is generally the driving force and also the geographical proximity. In the short run, integration is expected to stimulate intra-regional trade and investment; in the longer run, it is hoped that the combination of larger markets, tougher competition, more efficient resource allocation, and various positive externalities will raise the growth rates of the participating economies.

This paper focuses on the investment effects of integration agreements signed by both Maghreb and CEECs with EU, and discusses how such arrangements may affect inward and outward foreign direct investment (FDI) flows in the integrating region.

The paper is organised as follows. The next section discusses, how regional integration can potentially affect investment patterns among countries. Section 3 reviews Tunisia experience.

Regional Integration Agreements and FDI: Some Theoretical Considerations

To identify and assess some theoretical linkages between Regional Integration Agreements and incentives to undertake FDI, it is convenient to structure the discussion according to the motives for FDI. The reason is that conclusions regarding effects of regional integration are likely to differ significantly depending on why firms invest abroad. Hence, we begin by discussing the situation where FDI is mainly a response to trade barriers, and go on to consider cases where FDI is primarily motivated by the need to internalise firm-specific intangible assets that cannot be traded efficiently in arm's- length markets.

It should be noted that the first category is characteristic of European investment on CEEC's.

Foreign Investment in Central and Eastern Europe

Brenton (1996), found that the EU Single Market programme led to significant increase in investment by EU firms in other EU countries in the late 1980s. However, the available theory on FDI has yet to provide clear and empirically testable propositions on the effects of both trade and investment liberalisation. Indeed, with different types of multinational firms, vertical and horizontal, the impact of preferential trade liberalisation and preferential investment liberalisation is difficult to deduce theoretically due to the high degree of dimensionality that is required.

It should be confirm that the stock of FDI in Central and Eastern Europe Countries (CEEC) has grown rapidly since the beginning of systemic transformation in the early 1990s, particularly in the more advanced Central European transition economies. Nevertheless, Sinn and Weichenrieder (1997) assert in their article that the stock of FDI in the CEECs is still far lower than it should be, compared with countries a similar level of income. Analyses of FDI flows (Brenton and Di Mauro, 1998) suggests that overseas investment in the more advanced CEECs, and particularly from Germany, is in fact high relative to other countries, after taking into account the main determinants of FDI flows.

The Euro-Maghreb Partnership Agreement

So far, the preferential access of Maghreb manufactured products to the EU market has only produced weak results. The relatively small gains in the market shares of Maghreb countries can be explained by the composition of their exports which are insufficiently adapted to the changing pattern of the world, and notably of European, demand.

The structure of Maghreb's exports to the European Union is neither close to the "supply" of North African products to the rest of the world, nor to the European "demand" satisfied by other countries. The preferential, non-reciprocal trade regime, from which the North African countries benefited in their traditional European market, has not favoured the evolution of their export structures to become adapted to the European demand.

Economic Development in Tunisia

Enhancing competitiveness and establishing a knowledge – based economy

Tunisia has managed during the previous years to achieve several economic and social gains thanks to its peace and stability and to the fundamental, diverse, comprehensive and coordinated reforms which have been introduced in order to set up a modern, open and environment – integrated society and to lay the bases of a liberal competitive economy within a social-economic balance that characterizes the Tunisian development experience.

Tunisia succeeded indeed during the Ixth Plan period (1997-2001) in accelerating the pace of growth to reach and average of 5.3% per annum compared to 4.6% during the VIIIth Plan period and 4.2% during the VIIth Plan. Per capita income has been improved by 4% per annum while preserving and reinforcing the internal and external financial balances. Theses results consolidated Tunisia's position among emerging countries as confirmed by specialized international organizations.

During the Xth Plan period (2002-2006), Tunisia strives to consolidate these achievements, reach higher socio-economic development and approach the developed countries levels.

The development strategy for the period (2002-2006) encompasses ambitious objectives which have been set in the light of successive wide consultations involving all the national stakeholders including political parties, professional and national organizations, as well as the country regions. These objectives take into consideration the international developments and future perspectives in view of the increasing openness of the economy.

The aforementioned strategy determines priorities and challenges to be met at the national level given the progress in establishing free trade with the EU and other Arab and Mediterranean countries.

At the external level, the situation has been characterized in the previous period by severe disturbances followed by a significant slowdown of the global economic growth which did not exceed 2.4% in 2001 versus 4.7% in 2000. These disturbances had a negative impact on international trade flows which increased by 2%

only last year compared to 13% in 2000, as well as on the movement of capital flows since FDI decreased by 40% between the two years.

Within its international cooperation policy, Tunisia strives to reinforce solidarity and coordination with all the countries to overcome this crisis and consolidate the positive results achieved by the Doha WTO conference in late 2001 which gave a new impetus to the multilateral trade negotiations, allowing for more cooperation and economic openness and a continued establishment of globalization on solid bases respecting the interests of different stakeholders.

Tunisia's willingness to contribute to the overcoming of the current international difficulties was clearly demonstrated through its participation in the international conference on financing for development held in Mexico in March 2002. The conference was marked by developed countries commitment to review they development aid policies and to increase their budget so as to offer new opportunities and broader possibilities for developing countries.

At the national level, Tunisia continues to implement its commitments related to the gradual establishment of a free trade area with the EU which enters during 2002-2006 its final and crucial phase. Likewise, Tunisia is implementing its commitments with Arab countries and within the WTO.

As far as the conclusion of the association Agreement with EU in considered to be a national strategic choice to express Tunisia's willingness to actively integrate the global economy, the main priorities for the coming years include the overcoming of transitional challenges related to its implementation and particularly to the decrease of budget resources inherent to tariff-dismantling on European products and the increased competition faced by national companies in the local market.

To meet such a challenge, it is necessary to give a new impetus to the upgrading of the economy, entrance its competitiveness and improve its performance. Moreover, it is necessary to increase investment in productive sectors, modernize infrastructure and promote human resources.

The next period also represents an important phase to emphasize conciliation of social and economic aspects of the development process. Development imperatives have to be conciliated with the employment challenge, which is the utmost priority and the mark of the period 2002-2006. The creation of job opportunities is the most important challenge facing the national community and a key factor for social stability, peace and welfare, it implies the reinforcement of knowledge-based economy and the adequate exploitation of opportunities offered by the new economy by providing the requisite infrastructure, generalizing computer courses, promoting scientific and technological research and creating suitable technopoles and cyberpaks.

In this respect, the development scheme for the period 2002-2006 fixed ambitious plans to increase the investment ratio from 25.5% of GPD during the Xth the Ixth plan to 26.5% during the Xth Plan. Thus, the investment volume would rise from approximately US$ 25 billion during the Ixth Plan to US$ 32 billion during the Ixth Plan. This requires an improvement of the national savings, which should provide 92% of funds needed to undertake these investments.

Tunisia relies primarily on its national potential to finance the economy and enhance its development. Besides, it takes advantage of external resources deemed to complement the national effort.

The total financing requirements for the Xth Plan are estimated at US$ 41 billion, whereas external requirements are estimated at 11.6 billion, i.e 28% of the total requirements.

These requirements are expected to be met the through grants as well as the attraction of more FDI thanks to the investment-friendly environment offering a skilled workforce, adapted legislation, simplified procedures and easy access to the European and Arab markets within the concluded free trade agreements.

These external financial resources also comprise public long-term loans to provide funding for development projects in various fields including infrastructure (roads, seaports and airports), environment, agriculture and water resources mobilization, energy, industrial areas development and creation of technoparks.

Social projects related to training education, health and culture should also profit from these funds. Similarly, reform programs and the enhancement of economic competitiveness should receive financial backup through external resources.

The external financing plan retained for the next period also includes the mobilization of some commercial loans.

Tunisia has always fulfilled its commitments and is proud of its positive image in the opinion of its partners and the encouraging ratings granted by specialized international agencies.

Building upon this, Tunisia is committed to boost this confidence and improve its position among international financial and business communities.

The question of how much more FDI the CEECs can expect to receive as a result of their continuing transformation and future EU membership is important for both host and source countries. From the host countries perspective, the economic effects of FDI are usually regarded as unambiguously beneficial.

FDI finances a substantial share of domestic investment in some CEECs and is probably less volatile than other international capital flows because of the essentially long-term orientation of investors. Furthermore, FDI represents an important source of managerial and technological knowledge, which is particularly welcome in transition as in developing economies.

By contrast, from EU point of view, the immediate effect of growing FDI outflows is either to replace exports to the partner country by local production (horizontal FDI), or to enable firms in the source country to take advantage of lower labour costs abroad leading to the import of goods that were previously produced at home (vertical FDI). In either case, some structural change in the source country with the attending adjustment costs is likely to result.

In contrast to this pessimistic scenario, however, nearly all-empirical studies of the trade effects of FDI find that source country exports tend to increase along with FDI (Graham, 1996 for a review of this literature).

Recent evidence suggests that the most advanced transition economies are increasingly hosting not only horizontal FDI aimed at their own domestic markets, but also vertical FDI that integrates local production into European production networks (Lankes and Venables, 1996).

The ongoing accession to the EU of this group of countries may well have inspired international investors with sufficient confidence to rely on production in the CEE first countries for their multinational sourcing. Furthermore, it is plausible that Central and East European transition economies are attractive locations for product sourcing mainly for European, rather than US or Japanese multinationals.

Brenton and Di Mauro (1999) found that the stock of FDI in Central and Eastern Europe has largely adjusted to the level that would be expected among market economy host countries. So the assertion by Sinn and Weichenrieder (1997) that FDI in Central and Eastern is tiny, compared with developing countries, appears to be exaggerated when judged against this background.

Does economic integration between two countries or regions affect the amount of FDI being invested in third countries? The experiences of Spain and Portugal, upon joining the EU, suggest that joining a regional economic integration scheme can provide an impetus to inward FDI. This raises the question of whether these increases in incoming FDI affected the flows of direct investment going to other potential host countries that did not offer the advantage of belonging to the regional integration scheme concerned.

The question of whether discriminatory liberalisation between two countries affects investment in other countries suggests a possible parallel with the impact of regional integration on trade between partners and non-partners. Here, customs union theory has a long history and is relatively well developed. Free trade agreements are the archetypal example of the theory of second best, whereby the removal of one economic distortion (trade restrictions against future partners) in the presence of other distortions (trade restrictions against other countries) may actually reduce economic welfare. The standard Vinerian approach to such regional trade agreements identifies the welfare-enhancing increase in trade between the partners to the trade agreement (trade creation) against which must be considered trade diversion, the potential decline in trade with non-members (if they are more efficient producers), which is detrimental to welfare. More recently, this body of theory has been extended to allow for imperfect competition and the presence of scale economies.

One key result is that regional integration can lead to agglomeration whereby economic activity becomes increasingly concentrated in countries or areas which contain, or are close to, the main pockets of demand.

The analysis of the effects of economic integration on FDI flows is much less developed. It is clear, however, that simple analogies with the literature on trade and, in particular, the terminology of creation and diversion, are not possible.

References

[1] *Bensidoun I. &A Chevallier* 1998, « Regional Integration in the World economy”, paper for an OCDE conference on Migrations and North-South regional integration, Lisbonne, Portugal, October.

[2] *CEPII* 1997, “Trade Patterns inside the Single Market”, The Single Market Review, Subseries IV, Vol. 2, Kogan Page.

[3] *Graham, E.M* 1996, “On the Relationship Among Foreign Direct Investment and International Trade in Manufacturing Sector: Empirical results for the United States and Japan”, WTO Staff Working Paper RD-96-008.

[4] *Henriot A and Inotai A* 1997 "Quel avenir pour l’intégration entre l’Union européenne et les PECO ?(What future for the integration between the European union and the CEEC?), Internationale economy, n°70, 2éme trimestre,55-76.

[5] *Milgram J. and Castilho M* 1999", Impact of the adherence of the CEEC on the exports of confection of Morocco and Tunisia" International symposium: Impact on the countries South Mediterranean of the widening of the union European to the countries of Europe Central and Oriental to Tunis p3-P10

[6] *Mouchart C* 1999", The consequences of the integration of the countries of Europe Centrale on the countries of the South of the Mediterranean: the case of the textile-clothing" sector International Symposium: Impact on the countries South Mediterranean of the widening of the union European to the countries of Europe Central and Oriental to Tunis

[7] *Mahjoub A* 1995", The economic and financial relations between Tunisia and Europe: present and perspective realities of future" in Ayubi N.N Distant Neighbours, the political Economy of relations between Europe and the Middle East/North Africa, Garenet Publishing Ltd, UK., p 153-p198

[8] *Maurel M* 1999", economic Convergence toward the EU: Comparison between the CEEC and the PSM International Symposium: Impact on the countries South Mediterranean of the widening of the union European to the countries of Europe Central and Oriental to Tunis.

[9] *Richet X* 1994", Country in tr ansition Therapy of shock in Poland" economic Chronicles. P245

[10] *Sachs J*. 1994", industrial Restructurings in the CEEC between the state and the market" economic Chronicles. p203-p213

[11] Saucier P. and Desthieux N. 1999", Creation and diversion of traffic in a process of integration between the areas unequally developed" International Symposium: Impact on the countries South Mediterranean of the widening of the union European to the countries of Europe Central and Oriental to Tunis. p2-p4

[12] *Shang-Jin Wei* 1996", Intra-National versus international trade,: how stubborn are nations in global integration? "Working paper 5531 National office of research.

[13] *Temprano-Arroyo H. and Feldman R.Van Brabant J*. 1996", the transition Economics at stake" p6-p21.

[14] *Weidenfeld W.* 1995", Central and Eastern Europe one its way into the European Union ", p2-p6

Stabiltiy in Diversity: Educational, Economic and Political Potential in Cambodia Leading upto and following the 1998 CPP-Funcinpec Alliance

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Abstract

After almost thirty years of civil war and unrest, the two major political forces in Cambodia formed an alliance to govern the nation in 1998. With the Royalist Funcinpec faction led by HRH Prince Norodom Ranariddh on one side and the dominant Cambodian Peoples' Party lead by prime minister, HE Samdech Hun Sen on the other, the country has embarked on sector reform particularly in health, education, infrastructure and the public service. Efforts to re-establish an economic climate capable of attracting foreign direct investment, have largely been based upon various forms of international aid. Recently at the Tokyo Donors' Summit, a further $US650 million was pledged. The general philosophy behind re-building this emergent nation, has centered on the nature and scope of Cambodia's status as an ASEAN partner.

Despite five years of relative stability and massive international aid, Cambodia remains one of Asia's poorest countries, and its people are the subject of manifold social inequity, political suppression, mis-management of the civil service and ineffectual economic reform. None of this allows for sustainability in either the private or public sector. With the words: "We shall recommit ourselves to allowing all of our citizens to participate freely in the life of our political process while giving precedence to national unity, peace and the stability of the country as well as the region," the ruling junta in Burma recently released Aung San Suu Kyi. The ruling alliance next door in Cambodia have many times spoken of "social justice," a "civil society" and "improved living standards" for all Khmer people. Yet the cadre system of maintaining power and wealth in the hands of few, inevitably prevents the development of a middle-class, a strong central banking system, a productive private sector and efficient public sector.

For the less developed nations of ASEAN, the challenge is clearly to combine social and economic development with political diversity, and in so doing, broaden the base from which to solve national problems. In this paper, the track to potential maturity in democratisation and the indicators of transitional status as a market economy, are examined in Cambodia. It is argued that Cambodia is an excellent test-case for a post 11/9 world dealing not only with the re-building of countries like Afghanistan, but in coming to grips with world poverty against a background of single superpower orientation in international diplomacy where the divide between rich and poor is being strenuously argued as the major reason behind unresolved crisis in the Middle East, Sub-Saharan Africa, the Balkans and Indian sub-continent.

Introduction

On a quiet, hot, Sunday morning in the park outside Wat Botum opposite the ornate buildings of Cambodia's National Assembly, a group of several thousand people gathered in mid-July this year to mark the fifth anniversary of the 1997 uprising which saw the last of the nation's street fighting and the end of more than thirty years of terrible war, civil unrest, mandated governance by the United Nations and a decline to the poorest country in Asia in the wake of the Khmer Rouge regime. Today, in Cambodia, people have mixed feelings about Year Zero, Brother Number One, Maoist extremism, the Khmer experiment in cultural revolution to restore the purity of rice farming as the means to provide sustainability for all people. And indeed, there would be some (see Vickery, 1984: 253ff) who contend that the basis of sustainability in the Mekong delta is exactly that – rice growing, and nothing to do with managerialism, capitalisation or the inputs of industrial agency, and in principle, the immutability of an agrarian economy will forever be the hallmark of Cambodia. What gives substance to sustainability in Cambodia it can be argued, is not incremental capitalism, but instead an ancient and theocratic people realising a vibrant and equally ancient culture, Hindu in origin, Khmer in practice. Pol Pot (Brother Number One in the Khmer rouge) was a product of French intellectualism of the Parisian fifties and sixties, itself a profound dispensation of all establishment configurations, yet replaceable only by those existentially provided for by cadres of concentrated, absolutist power (as progenitors of the greatest good for the greatest number – a very pure from of socialism). In such a meagre-minded philosophy, there could never have been anything approaching a wider view of nationhood, nor of international community. Yet it was certainly true to say that what was returned to Phnom Penh from the coffee houses of Paris saw revolution as virtually anything that could essentially begin at any stage of transition and therefore be characterised by any form of implementation. The French were already a spent force, there being relatively few in numbers ever actually in residence in colonial Cambodia, despite an overwhelming cultural hegemony and economic imperialism. In contrast, Francophile expatriate Khmers became at once the idealists of an agrarian egalitarianism and brothers in a violent dis-establishment. The kind of feudal fascism of the Khmer Rouge is not so mysterious as is may seem to the outside world in retrospect, given the complete lack of clash in fundamentalisms thirty years ago which so very much characterise wars on terror and insurgency today. For the Khmer Rouge, there was no ready-made international label such as "terrorism" generated from an outraged superpower around which dissidents, self-perceived defiled theocrats or passionate simple-minded idealists of the world could conveniently unite. They were on their own, except for massive material support, armaments and covert alliance from China, which the declaration of Year Zero consequently permitted outrage of cross-border bombings ordered by the Nixon administration lending ambivalence to the ethnicity of Khmer civilization with neighbouring Vietnam. And so, standing in solemn remembrance on that July morning earlier this year, the silent, saffron monks and the old folk bent over with their own thoughts gathered with the long line of supplicants pausing to receive rice from Cambodia's leader of the opposition party, gave clarity to the moment five years ago when those killed in this same place ended one era and began another.

Antecedents of the road to stability

What emerged in 1998 was an electorate-driven alliance following the July 1997 coup which comprised the largely Francophile faction (Funcinpec) under Prince Norodom Ranariddh (King Sihanouk's son and former first prime minister prime minister) who were effectively prevented from governing by the strong support afforded the Cambodian Peoples' Party led by Hun Sen, a former officer in the Khmer Rouge army and in 1997, Cambodia's co-joint second prime minister. The threat of further civil war convinced the King that the Royal Government of Cambodia would best achieve a measure of stability by an alliance of both parties in a government of shared ministries. Thus, for the last five years, some ministries have been controlled by Funcinpec, others by CPP. The result is an uneasy stability of constantly negotiated deals both within the government itself and with outside bodies such as potential foreign direct investors, the UN, NGO's and international concessional loan or donor partners within IMF orbit.

The scope for things to go wrong under such an arrangement, is obviously apparent, but like so much in recent Cambodian history, has underlying topicality only fully understood against the day-to-day working processes of long-standing factional loyalties and equally long antipathies. The notion of *shared understanding* has special significance in Khmer culture where creative tension actually leads to a coalition of the willing as distinct from dysfunctional tension resulting in destructive conflict as we would know it in the West. Cambodia is in many ways a quintessential Asian nation of uncommon beauty in human spirit, the ordinary people being greatly let down by a complex combination of factors influencing the nation's leaders. Politics means both everything and nothing in Cambodia; there is no political science, as such, guiding instrumentalities of government. Nor is there ideology because people are too frightened to have any strong political beliefs in the wake of Pol Pot. The ten-year zone of indifference in terms of free-flowing international aid since the Paris Peace Accord of 1991 has recently passed, and conditionality, a concept hitherto virtually unknown in Cambodia, is suddenly being applied - and resented - in the aftermath of the Monterrey Summit in Mexico. Faith exists largely only in the private sector, the government national budget being composed of at least fifty-percent item lines accounted directly against foreign aid. The truth lies somewhere between inherent shared understanding of the ways things are and should be done, and intense curiosity about what could be done if the know-how was there. To gain the know-how is not so simple as it sounds because of royal family inter-connectedness, business struck on the basis of personal access to positional power, and inverted pyramid corruption generally recognised by all as the pernicious undermining influence to progress, yet also recognised as incurable given the present political alliance (see Innes-Brown, 2001).

Like so much in Cambodia, there is history and explanation even in this. Cambodia is due to take over the Chair of ASEAN next year, a vote of obvious confidence by neighbouring countries that the government, people and economy of Cambodia are at last in position to move beyond relative stability to achieve actual sustainability. What generated this confidence is in some quarters a bit of a mystery, especially in the light of government non-compliance with donor demands, the suspicions of the opposition party that the February communal elections were rigged (at least 20 Sam Rainsy Opposition Party candidates – many of them women – were killed in the months leading up the election), and the all-party recognition that official corruption is holding back sectoral reform. There remains between thirty and forty percent of the nation's adult population who are functionally illiterate despite massive international aid programs in education. Infrastructure holding together the country's roads, railway, electricity grid, irrigation and flood control, barely exist outside the major towns. The fight against panendemic malaria, TB, hepatitis, malnutrition and HIV-infection in the health sector are all undermined by corruption. The country's judiciary has not been able to establish a level of independence sufficiently strong to bring a single member of the Khmer Rouge cadres to trial. Both local Khmer people and foreigners living in Cambodia are hesitant to speak out about corruption for fear of intimidation or expulsion. This applies especially to UN agencies and NGO's dependent upon government favour coming their way in order to be able to continue operating in Cambodia (Cambodian Development Corporation, 2002:15).

Yet, in a very real way, the progress of any nation in an early stage of transition following major upheaval depends precisely upon rigorous adherence to systems of clean government, clean elections and clean politics. At heart, is the good of the people. Without that heart, there is no nation. The king, the party alliance, the international presence: all could give momentum to pumping resources to the extremities where they matter, and in so doing consolidate a nation of remarkable talent, latent growth and potential expansion in Sino-Khmer economic development, trade and FDI. So far, for unclear motives, the major sectoral growth in Cambodia has been US-backed garment factories, unclear because the US government remains officially a non-donor nation to Cambodia, and fiscal returns measured in Cambodian GDP are impossible to assess against wage disparity subsidies originating in Cambodia at the point of retail price in the United States (World Bank, 2000a).

The Paris Peace Accord of 1991 left Cambodia under the mandate of a UN tactical administration (UNTAC) which popular opinion in Phnom Penh sees as having achieved little except the setting-up of an elaborate protocol-ridden bureaucracy adding preponderance to the already existing French colonial remnant, the building of commodious dwellings in protected Phnom Penh suburbs, the establishment of an exclusive beach resort on the Cambodian coast of the Gulf of Thailand, and the introduction of HIV-positive infection among local people now fully developed as national AIDS epidemiology. All are sore points of contention with Hun Sen who constantly reminds members of UN agencies, NGO's and foreign embassies instigating squabbles with the prime minister over issues of political relevatism concerning things like ethnic Montnagard jurisdiction, illegal logging of old-growth forest, the human rights of trafficked Khmer, Thai and Vietnamese and women and children into what amounts to widespread open prostitution and barely disguised paedophilia, all these things prevalent in Cambodia because of general, country-wide lawlessness, rampant corruption and a hopelessly weak judiciary. The alternative non-cynical view is that 1991 led to Cambodia's first plebiscite as a nation-state giving a lie to the quixotic and ultimately awful aberration of "Democratic Kampuchea" (DK) under the KR 1975-79 regime. And at least everybody agrees on that.

From 1979 until 1989, Cambodia was governed under Vietnamese occupation following DK incursion into lands of the Lower Mekong delta regarded by Khmers of the region to be part of a traditional homeland. The defection of Hun Sen and other leaders of KR cadres did not dispel with any confidence the long-time natural alignment of Sihanouk with Beijing (indeed, even to this day, the king divides his time between the royal palace in Phnom Penh and residence in the Chinese capital), raising concern that KR incursion across the border could have constituted conspiracy of elaborate proportions for one communist regime to settle the affairs of another on grounds other than ideological differences. The Pol Pot regime was always seen by the Vietnamese as more than merely unsettling (especially in the wake of US cross-border bombing) and were never keen on an uncompromising Maoist authority in power on its western frontier as well as China itself to the east. The Marxist-Leninist connections between Vietnam and the Soviet bloc had been considerably stronger than agrarian Puritanism espoused out of nowhere by KR pathogenic extremists torn by personal emotional immaturity, political isolationism and no definitive counter-revolutionary stance against capitalist imperialism. The conspiracy theory that Hun Sen orchestrated a KR incursion into Vietnam territory in the Lower Mekong in order to provoke Hanoi's counter invasion of Cambodia (and therefore overthrow the KR), remains somewhere in the hidden basement of Indochina's history. What can be said is that quite specifically, the Vietnamese having invaded Cambodia wanted something more substantial than genocidal solutions. They wanted recognition that an entirely non-capitalist approach in Cambodian re-alignment within contemporary world order was unrealistic, and that the monocultural notion of an agrarian society prospering through only the input of labour, killed opportunity for any sort of creative commercial enterprise. Hun Sen has always been ardent in re-living his role in bringing Vietnam to the rescue, but not without continually also re-living the Chinese underline. Even as recently as last year, the highest Chinese delegations short of a presidential visit have come and gone with much publicised regularity in an out of Phnom Penh's Potchentong Airport, although without quite the same disclosure of what was discussed or agreed. Clearly, Cambodia regards China, and not the West, as its major potential trading partner and political ally, although is open to greater assumption of status as an emergent ASEAN nation encouraging Singaporean, Malaysian, Indonesian, Filipino, and especially Thai foreign direct investment, and will continue proportionally to receive the largest aid packages from Japan.

Some facts and figures

Mention has already been made that about fifty percent of Cambodia's national budget is made up of foreign aid. In other words, there is little evidence to suggest that the last ten years of re-building has focussed successfully on sustainable development. Two factors seem to mitigate against Cambodia breaking through what is in effect a continuing low level of transitional status: economically, socially and politically. These two factors are poverty and corruption (PRSP Report, 2001; Council for Administrative Reform, 2002). In an *Aide Memoire* put out by the Consultative Group Meeting of the Council for Administrative Reform, The Royal Government of Cambodia announced: "The needs are clear – peace, economic growth, integration into the world and the rule of law are the foundation for poverty reduction and social development. The means are also clear they include a transformed public administration, closer to the people, more effective, accountable and transparent" (CAR, 2002:2). As such, the draft plan of the Second socio-economic development Plan (SEDPII for 2001-2005, has been tabled for adoption by the Royal Government of Cambodia with the primary purpose of development being to reduce poverty. By any measurement (for example as used by World Bank country reports), Cambodia is one of the world's poorest nations. According to the United Nations Development Program (UNDP) Human Development Report in 2002, Cambodia ranks 136th on a list of 174 countries on the UN's world Human Development Index (HDI) (PRSP Status Report, 2002:3).

Poverty is very visible in Cambodia and a very persuasive presence upon which to base any national development program. The UN estimates that 36 % of Cambodians live below the poverty line, with the rate being 42% in rural areas compared to 11% in Phnom Penh (ibid:3). What is interesting is that this level of poverty has remained static over the last ten years of massive international aid (the volume of aid pledged last year for example, at the Tokyo donors meeting was $US650 million over the next three years). Other raw statistics give social and economic planners something to go on. The recent country reports of the World Bank, for instance, using its usual indicators, throws up figures such as average life expectancy being 54 years, while population growth is 2.6% annually. War and genocide still skew the country's demography, with women vastly out-numbering men, especially in the countryside, and therefore women shoulder the greatest burden of poverty and illiteracy. It is not uncommon for young girls over the age of eight to be taken out of school to work in the rice fields, with less than 9% of students entering higher education being female (World Bank mission draft, higher education legal framework, 2001). In some regions of Cambodia more than half the households are headed by women, with nowhere in the nation being less than 20% (WB, 2000: 4). Maternal mortality is 900 per 100,000 births, infant morality is 115 per 1,000 live births, and half the children under five years of age suffer malnutrition. Only 32% of the population have access to clean water and 16% to sanitation resulting in a high incidence of diarrheal disease.

Tuberculosis and malaria are the main causes of death. HIV/AIDS is endemic, the actual number of HIV-positive Cambodians unknown, with some estimates showing 5% of the general adult population and as high as 57% in categories such as women working or trafficked into the sex industry and garment factory workers. Some 35% of the population is illiterate, less than 10% are engaged in skilled occupations, one-third of the population aged five and above has no education and only 20% have completed schooling beyond primary level, with just 4% completed lower secondary (ibid: 4-5). At the time of the KR, (1975-79) Cambodia had a population of between 6 and 7 million, with an unknown number (estimates vary from 1.5 to 3 million persons) victims of genocide. Today, like many of the less developed nations, Cambodia's demographic profile shows more than 50% of its population to be aged 20 years or under. There are now about 11 million inhabitants, but what perhaps is the most startling statistic in Cambodian national life is that against a population of 11 million there remains an estimated 6 million unexploded mines (UXD's) with more than an average of 100 persons being killed (many of whom are children) every month and countless others severely injured. The problem of de-mining is a major effort of international aid programs, the problem complicated by monsoonal flooding which results in any predetermined mapping of mine location virtually impossible. It is likely to be another thirty years before the country is free of this threat, important in daily life as paddy fields cannot be guaranteed in any way to be safe.

Economic indicators

At independence in 1953, Cambodia was as it is today, an agricultural economy. In 1963, Sihanouk introduced a command economy resulting over the next ten years in increasingly strident calls for greater diversification. By the time the KR took over in 1975, Cambodia was self-sufficient in food production and was a net exporter of rice creating an adequate foreign exchange reserve and had a well-established light industrial sector (World Bank, 2001). The KR regime destroyed almost all the social and economic infrastructure that had been built up, returning the country to a single basket economy with no potential for capital wealth generation and the basis of all productive effort lying entirely within collectivised, but arbitrary, application of rural labour. The city of Phnom Penh, with over one million inhabitants, was reduced to a population of less than 10,000 within two weeks of the KR takeover, a quite stunning event in modern world history.

Following the retreat of the KR armies in 1979, the Vietnamese-backed government introduced liberalisation in the form of relaxed price controls, limited private commerce, and allowed joint ventures into the country. This trend was greatly accelerated after the Vietnamese left ten years later in 1989, and by the late 1980's many broad-based reforms had been introduced. These included: initiating privatisation and increasing autonomy for remaining state-owned enterprises; privatising agriculture and decontrolling output prices; enacting a new foreign investment law; unifying the multiple official exchange rates (in 1990) into a single official rate which was subsequently linked to the parallel market price (World Bank, Annex Data, 1996 onwards).

In fact, Cambodia achieved a growth rate of 7-8% of GDP in the early nineties, increasing its balance of payments by attracting creditable sources of foreign direct investment. The economic situation could have continued to improve except for several quite severe impediments, largely relating to the sort of issues facing most post-Soviet aligned nations in the early nineties. The sudden, and quite massive, fall in concessional market supply and demand associated with the break-up of the Soviet Union caused considerable direct fiscal imbalance in Cambodia's economy which had the kick-on effect of pronouncing the drop in domestic tax ratio, especially in the light of continued very high proportional government expenditure remaining within the military budget (over 30%). The government compensated by increasing a policy of monetary growth which of course in turn led to heightened inflation (peaking at 177% in 1992) and marked depreciation in currency exchange rates.

The challenge for the new government coalition in 1993 was to introduce fiscal discipline, regain shortfalls in revenue and account for the blowout in military spending. The fragile political situation meant that considerable reluctance to cut back on the inordinately large armed forces sector, has in fact remained in place until 2001 when, with Chinese assistance, the current Hun Sen led government began a phased de-militarisation, but only at the cogent insistence of donor bodies. The transference of revenue to bolster public sector salaries and welfare payments has yet to follow through in real terms, as the economy remains essentially in recovery mode, the emphasis being on reducing donor dependence and increasing domestic market supply, adding value to the service sector and targeting regional niche exporting via new-found entrepreneurship. In the event, also like many post-Soviet transitional nations, Cambodia made spectacular inroads upon reducing inflation from an average of 140% in 1990-92 to a low of 3.5 % in 1995. GDP grew at an average of annual rate of about 6% (3.4 per capita) during 1991-96; construction industry expanded and manufacturing took off at about 8% per annum; and exports expanded by four-fold (although remaining a relative small base). (See World Bank, 2000: 5ff).

The way forward

By 1998, despite what seemed like remarkable progress, the underlying combination of economic and political factors inherent in the fundamental imbalances, surfaced. Economic growth was not broadly based but sustained mostly by heavy injections of foreign aid. Politically, the promised reforms in the public sector, especially in adopting new measures for a commercial code and guidelines for investment, were not enacted. Divisions on party lines between the CPP and Funcinpec became acute, erupting into street fighting in July. The result of this was the current tenuous alliance in 1998 between the two parties, with Hun Sen taking over sole premiership from the previous dual arrangement with Prince Ranariddh. Several members of the royal family, including Prince Sirivuth, (the king's brother and Secretary-General of Funcinpec) were forced into exile. All plans to continue reduction in the massive military account in the national budget were put on hold, and hopes for increasing expenditure in the public sector broadly were dismissed. Maintaining service delivery in areas such as health and education continued to be shouldered by the international community, with the government itself barely able to support basic provision such as salaries (teachers salaries, for example, are often not paid at all in rural areas, the teachers surviving by receiving food and goods in kind from their pupils' parents. The same is true for doctors and other civil servants).

Since the street fighting of July 1997 and the ousting of first prime minister Prince Ranariddh, economic performance deteriorated, and particularly, in1998 tourism suffered, although there has been a resurgence based on the world-listed cultural heritage sites at Seim Reap and elsewhere over the last two or three years. Sustained economic growth of course depends in no small measure upon government ability to raise (and equally importantly, collect) taxation revenue and organise its own financial management via a strong central banking system. Corporate collapse of a number of key financial institutions in 2000 rebounded to cause considerable public loss of confidence in Cambodia's banking system to the point that less than 10% of money liquidity in the country is held in bank accounts. Moreover, the distribution of wealth is estimated to rest in a highly unequal ratio of concentrated reserves controlled by an elitist few, often with oligarchic connections to government ownership of corporate shareholdings. It is actually difficult to obtain accurate information on this as ministerial accounting procedures are far from orthodox and tend not to follow normal patterns of reconciliation. The Cambodia Country Assistance Evaluation of the World Bank in 2000 concluded that: "Weak governance and corruption are the major reasons for poor revenue performance" also noting that in comparison to expenditure in other public sectors, "defence expenditure comprised 48% of government revenue" (2000:6). Against this background, in 2001, on the date of his 50th birthday, without reference to any source of public opinion, Hun Sen announced in the local media: "I am going to be prime minister for the next ten years". Clearly, the relationship between a massive military commitment in the national budget and hanging on to political power may not be seen as necessarily conducive to economic performance, and therefore unreasonable to assume that relative stability under the current regime necessarily will hold good. The stability - such as it exists - we have seen can in fact be traced to the pre-1997 coup and the 1998 alliance precedence in reducing inflation, increasing foreign reserves and lodging currency values in order with international standards. This has been the key element of stability rather than a burdensome military presence held as a hedge against further civil war (which more than anything the ordinary people of Cambodia will do anything to avoid).

The Educational Imperative

While the economic, social and political indicators point to a nation in trouble, the Royal Government of Cambodia has made education a platform for reform in social development, poverty reduction, improved health, public sector management and infrastructure. At the present time, the focus is obviously upon literacy in an attempt to reduce the 35% level of functional illiteracy in the nation. This is being done with the assistance of an $US85 million Asian Development Bank and World Bank package with other input from the governments of Sweden, the Netherlands, Britain, Japan and Australia. Various targeted projects have gone forward. For example, over the last six years, AusAID has supported a Cambodian and Australian National Examinations Project (CANEP) which has successfully established a process of K-12 examinations which can be trusted to give an accurate year-level entry point to tertiary education. What cannot yet be trusted is the actual process of examination administration, with the practice of paying bribes or students intimidating teachers to gain grade levels. Entry into public universities is dominated by rampant corruption, as is year-level progression in degree courses. This of course undermines the very fabric of education as well as queers the pitch for the *cluster schools program* which the Ministry of Education, Youth and Sport (MoEYS) is implementing with ADB assistance under the "Education for All" banner agreed by the United Nations. The UNESCO office in Phnom Penh is seen by the government, the opposition party and NGO's as not particularly effective in negotiating conditionality in efforts to come to grips with the level of corruption destroying even its own attempts to implement capacity-building projects in higher education (Innes-Brown, 2001). An incredibly interesting statistic emerging from the 2001 World Bank mission to develop a legal framework for higher education centered upon the raw demographic data which will impact HE in the near future. For example, in the school year 1993/94, there were just 751 students who completed upper secondary school in Cambodia (and therefore potential entrants to any higher education on offer). By 2000/1, there were 28,200 students who completed upper secondary, with just over 25,000 students actually enrolled in higher education institutes (HEI's). By 2005, the projection is that Cambodia will need provision for at least 60,000 places in higher education (WB source: EMIS in MoEYS and CANEP).

Understandably, the integration of primary, secondary and tertiary education will depend on an over-haul of the mechanism of delivery. Considerable thought, energy and concentrated effort has gone into this (see Duggan, 1996; Clayton, 1998 and Ayres, 1999). Meanwhile there is no shortage of conversation, discussion and advice pouring in from all directions (see Innes-Brown, 2001b) about a directional philosophy of education consistent with the transitional status of Cambodian national development. It is a measure of the absence of sustainability in educational productivity that these discussions are on-going inconsequentially. The private sector is much more advanced in grass-roots provision, including having established quality control, management decision-making and client accountability which puts them in the league of realistically aiming for international parity.

Conclusion

Walking away from the *sotto voce* of the muffled ancient Buddhist incantations that quiet, solemn Sunday morning, the outline of Wat Botum stood clear in the dense pall of Phnom Penh's notoriously dusty, heavy atmosphere, made light on this occasion by the vivid sentiments of the crowd of young and old. It was impossible not to recall other ASEAN nations who had started thirty years ago on the path Cambodia has now stepped out upon. Many in Cambodia draw a parallel with Singapore, Malaysia and Thailand, less so than with the emotionally-charged associations with Vietnam, even though there are far more ethnic Vietnamese living in Cambodia than Singaporeans, Malaysians or Thais. The people of Burma and Laos have a kind of brotherhood with Khmers, although politics scar the tissue of the more natural sobriquency between them. It is an interesting thought to remember that Singapore has only been independent since 1966. Cambodia gained its independence much earlier in 1953, although because of the strong arguments abounding about the relativities of genuine independence, many would point out that Cambodia has only been truly independent since 1998. Nevertheless, the parallels are there. Especially, the argument can be put that Singapore's development has been the result of dominant one-party rule - a point not lost on Hun Sen - with democracy kept at a fairly immature level for the sake of stability, again, a point not lost on the present Cambodian prime minister. These arguments have obvious merit, and indeed, the present government in the Kingdom of Cambodia is virtually a re-structured KR cadre system, sanctioned by the king, but maintaining functionality on the basis of a social justice platform rather than sclerotic imposition of Maoist ideology and genocide. Yet the toughness is still very much there; the authoritarianism is still very much there; democracy is legitimised by electoral process, but the process is far from free, issues-based, or informed by pubic opinion. The guided democracy of Singapore's PPP has never deviated from the absolutism of the common good, and on that basis secured mandate after mandate. Can the same be said of Cambodia's CPP-Funcinpec alliance? Is the parallel really there? Will the ordinary people of Cambodia ever really find themselves at the top of the political agenda?

In turning away from the clear outline of Wat Botum to gaze in the opposite direction at the astoundingly beautiful Khmer architecture of the National Assembly buildings on the other side of the park, the words of Singapore's president in April this year at the opening of the 10th parliament since independence, came to mind as a completely unpotted, simple and non-circumspect message for all ASEAN nations, especially for the less developed nations of SE Asia. In many ways it was a benchmark speech not only for Singaporeans but for governments concerned to cope with the unfamiliar by moving into a more diversified acceptance of political opinion and economic expertise in order to deal with the greater complexity inherent in contemporary social, economic and political problems. For Singapore, this means dealing with the unfamiliar spectrum of economic downturn, the worst since the 1970's. For Cambodia, it is perhaps the great need for the nation to find, and understand, its identity. When Cambodia does discover its national identity, it will have overcome the worst that can ever befall any country, and find in itself an incredibly beautiful people with unparalleled cultural richness, and the potential to improve the living standards of all beyond the present blighted myopia of corruption and mis-management. They will see, instead, the clear vision of maximising the relative advantages so very much apparent in this fertile, luxuriant, and intensely anthropomorphic, country.

In standing back and looking at the less developed nations struggling with the non-neutral competitiveness of globalisation, the vision goes well beyond Cambodia and in essence means a shift in thinking and action as a harbinger leading away from the present model of assertiveness between East and West fundamentalisms. The passage of neo-Marxist formulae in the developing world and post-capitalist dispersion of over supply in the developed world, any hint that both act as progenitors of human development (poverty reduction) social justice (in human rights terms) and equity (before the law), has to come under scrutiny. From either pan-politico perspective, all are the standard fare of generic democratic belief systems lying at the core of international aid flowing as by-product of globalisation over the last ten years. Yet the raw fact remains: poverty in the developing world has not budged an inch. In 1972, the UN reported 1.1 billion people on the planet living in both relative and absolute poverty. In 2002, that figure is 2.2 billion, with the world's population now approaching 6 billion. That is the raw, defining fact of today's world. If you look for the origins of terrorism, the origins of ethnic war, the origins of refugees seeking sanctuary, the problem is not in "globalisation" - either its decline or its continuance - the problem lies fairly and squarely in the great rift between the world's rich and the world's poor. Cambodia is so very interesting in this regard, because it has now had over ten years of all sorts of international aid and domestic trials and tribulations to set things straight, and if social justice, equity and human rights can be achieved in Cambodia, then we know at least something better (without generalising too much, but at least establishing the principles) about what to do in sub-Saharan Africa, Afghanistan, the Balkans, the Middle East. Clearly, the answer lies in addressing the origins of world poverty, an issue which could well only be faced by hard-edged reality of reducing over-consumption dominated by Western nations within the origins and contexts of globalisation.

References

[1] Asian Development Bank (2001): *Participatory Poverty Assessment in Cambodia*, Manila.

[2] Ayres, D (1998): "From hope to despair: Education, development and the state in Cambodia since UNTAC", *Working Papers*, Monash University Centre of Southeast Asian Studies, Number 105. Monash University, Melbourne.

[3] Ayres, D (2000): *Anatomy of a Crisis: Education, Development and the State in Cambodia,* 1953-1998, Honolulu, University of Hawaii Press.

[4] Cambodian Development Corporation, Royal Government of Cambodia (2002): "Socio-economic development priorities and the official development assistant needs" *Consultative Group Meeting*, Phnom Penh.

[5] Center for Social Development (1998): National Survey on Public Attitudes Towards Corruption, Phnom Penh.

[6] Chandler, D (1993): *A History of Cambodia,* Colorado, Allen and Unwin.

[7] Clayton, T (1998): Building the new Cambodia: Education, destruction and construction under the Khmer rouge, 1975-79, *History of Education Quarterly*, 38, 1, pp2-16.

[8] Clayton, T (2000): Education and the politics of language: Hegemony and pragmatism in Cambodia, *CERC Studies in Comparative Education*, University of Hong Kong, Oxford University Press.

[9] Clayton, T (2000a): Education and the politics of language: Hegemony and pragmatism in Cambodia, *CERC Studies in Comparative Education,* University of Hong Kong, Oxford University Press.

[10] Clayton, T (2001): Intervention and change in Cambodia: Towards democracy? *Journal of Asian Studies,* 60, 4, pp573ff

[11] Duggan, SJ, (1996): "Education, teacher training and prospects for economic recovery in Cambodia". *Comparative Education*, 32, 3 pp361-375

[12] Innes-Brown, M (2001): *Charting Change*. UNESCO, Phnom Penh.

[13] Innes-Brown, M (2001a): "What would you do with $500,000 per year." *Phnom Penh Post,* January, p13

[14] Innes-Brown, M (2001b): "Higher education reform for against criteria for HEI's in Cambodia" *International Conference on Culture and Literacy for Developing Nations*, IDP-Australia, Phnom Penh.

[15] Innes-Brown, M (2002): "Re-thinking Cambodia's aid agenda." *Phnom Penh Post,* May, p8

[16] Ministry of Commerce, Royal Government of Cambodia (2002): *Cambodia: Integration and Competitiveness Study*, A pilot study prepared under the integrated framework for trade-related technical assistance to least developed countries (WTO, WB, UNDP,UNCTAD), Phnom Penh.

[17] Royal Government of Cambodia, (2001): *Poverty Reduction Strategy Paper* (PRSP) Ministry of Planning, Phnom Penh.

[18] Royal Government of Cambodia (2002): “Governance and administrative reform” *Council for Administrative Reform Consultative Group Meeting*, Phnom Penh.

[19] Tilak, JBG (1994): “Financing of Education in Cambodia”, *Asian Development Bank*, Phnom Penh.

[20] UNESCO (1994): Programme of Assistance and support to Cambodia, 1994-96, Tokyo, *Second International Committee on the Reconstruction of Cambodia.*

[21] Vickery, M (2001): *Cambodia: 1975-1982* (Second Edition), Boston, South End Press.

[22] World Bank (2000): “Cambodia Country Assistance Evaluation”. Washington, DC

[23] World Bank (2000a): “Memorandum of the President of the International Development association and the International finance Corporation to the Executive Directors on a Country Assistance Strategy of the World Bank for the Kingdom of Cambodia”, *Southeast Asia and Mongolia County Unit, East Asia and Pacific Regional Office,* Washington, DC

[24] World Bank (2001): “Draft legislation for a legal framework in higher education for Cambodia” (Mission Chair, J Dawkins) Royal *Government of Cambodia, Ministry of Education ,Youth and Sport,* Phnom Penh.

Sustainable Global and Regional Business: Managing the Heterogeneous Dialogue and Asymmetrical Relations –A Professional Service TNC Indonesia Case Study

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Abstract

Global and regional business is essentially multicultural producing heterogenous dialogue and asymmetrical relationships. This presents multifaceted management challenges. The global/national/local nexus presents management with universal and particular paradoxes mediated through diverse contextual micro communication practices, and behaviours. The quality of interactions between individuals and organizations lies at the heart of corporate business performance and governance concerns. Communication technology and the international business role for English suggest that the integrating communication reality is simplifying. Experience indicates it is not. This paper discusses doctoral research derived from a request for help from a professional service TNC [environmental engineering] to improve the performance in its Jakarta-based Indonesia operations. The link between sustainability, this company product, the multicultural nature of its management, staff, clients and wider stakeholders, and its developing nation context indicates the need for more comprehensive communications management strategies. The findings have implications for international business performance and higher education.

Sustainable global and regional business: New and multifaceted management challenges

Since the collapse of the Soviet Union and free-market capitalism became *the* monolithic global economic model, dramatic economic, political, socio-cultural and environmental local and regional events indicate the need for a more integrated global society to apply more sustainable management strategies. Government, industry and civil society organizations diversely interpret the nature of more sustainable approaches to development and poverty reduction. Sustainable development seeks to address the inter-related issues of maintaining and building environmental, economic, social, and institutional capital while avoiding risk. Sustainable development presents government, business, and community institutions with complex management challenges. A more interconnected global community calls for the incorporation of multidisciplinary and multicultural perspectives to build the holistic logic guiding more sustainable management strategies. The integration of the diverse perspectives required for more holistic and process–oriented management breaks with the conventional reductive and fragmentary rationale derived from the privileged and objective assumptions of traditional Western scientific discourse. This paper argues why global and regional business leaders must be persuaded to apply more complex and reflective communication management strategies to address more sustainable and risk adverse corporate and societal goals.

Recognizing the heterogeneous nature of dialogue

Culture and communication play a key role in the management task of integrating diverse economic, environmental and socio-cultural perspectives. The development of holistic understanding involves the collection, analysis and synthesis of a range of academic perspectives from diverse, and evolving disciplines. In addition, diverse national, local, public, private, corporate, community and individual stakeholder points of view must be addressed. The outcome of this consultative process is 'heterogeneous dialogue' [12]. Heterogeneous dialogue is complex and multicultural. Embedded within heterogeneous dialogue are diverse, competing and often contradictory points of view, linguistic and cultural styles of interaction, self-interests, values and expectations. However, powerful economic voices dominate 'global babble' [41]. The mono-cultural economic logic framing the reductive goals of global business ignores many multicultural perspectives. In an integrating global context, to do so is to increase corporate risk. A more sustainable approach calls for reflective, participatory and process-oriented strategies to manage the complex information and values exchange, documentation, mediation and consensus building that can maximize business and stakeholder satisfaction. Achieving clarity of understanding between diverse managers, professionals and stakeholders become pivotal. A deeper understanding of the impact of culture and communications is required in order to begin to achieve any clarity of understanding.

The business implications of heterogeneous dialogue and the asymmetrical nature of relationships

The heterogeneous nature of dialogue raises both macro and micro management concerns. The multicultural nature of this dialogue highlights concerns for the quality and effectiveness of numerous face-to-face interactions across intra- and inter-organizational human resources and wider stakeholders communities in the task of building multidimensional knowledge, real understanding, trust and quality relationships. Heterogeneous dialogue also refers to the complex flow of interpersonal and institutional meanings, interactions and intensions implicit in numerous texts, reports, memos, emails, faxes, visual and other digital forms of communication [5]. Within the heterogeneous dialogue individuals and groups apply their preferred and conventionalized communicative and interpretive practices. The cultural assumptions of specific communities and institutions, are embedded within the various conventionalized cultural and linguistic generic forms of communication. These generic forms serve specific socio-cultural and institutionalized communication functions. Appropriate cultural and linguistic literacy is required for both the production and interpretation of the various discursive community forms. Sustainability indicates that multicultural literacy is required to begin to make sense of the diverse perspectives included in heterogeneous dialogue [5].

Individuals and groups interpret communications through their socio-cultural, linguistic and technological resources. Resources may serve them well in one context, but not in another. These resources may facilitate or limit participatory access to global and regional economic activities. This variability of participatory access highlights the asymmetrical nature of power links to specific socio-cultural and linguistic communication resources. The asymmetrical nature of power will have further repercussions in shaping the quality of interactions and between the representatives of institutions and communities [10]. Thus, the interconnected concepts of heterogeneous dialogue and asymmetrical relationships provide a useful framework for heightening awareness of the multicultural nature of all global business communications.

A environmental engineering professional service TNC Indonesian operational case study

The following discussion derives from doctoral research [42] that resulted from a request for help by the senior management of the Jakarta, Indonesia branch office of a professional service (environmental engineering) transnational corporation (TNC) in addressing specific communication and performance concerns. The company has some 160 offices around the world. This company's business product links to core sustainability performance and governance concerns. Stated simply, senior management was concerned to improve the local Indonesian professional staffs' bi-lingual report writing skills. The company provides professional environmental engineering advice to other multinational corporations (MNCs) engaged in diverse investment and development projects in regional Indonesia. The service provided by this prestigious USA-based company involves the production of high quality reports to international clients. The company's business performance and reputation depends on the quality of these reports. Quality-assured report production requires high-level generic English language and cultural literacy skills. This places high-level communication skills at the center of professional performance criteria. Environmental engineering services involve the integration of multidisciplinary professional, technical and wider stakeholder perspectives. This company represents the new knowledge industries of 'the information age' [43], its professional staff 'knowledge workers' [9] and its business product the marketing of specialist knowledge.

In addition to English language reports, the company produces reports in *Bahasa* Indonesia for submission for compliance approval to the appropriate Indonesian Government Department, such as BAPEDAL (*Badan Pengendalian Dampak Lingkungan* -The Environmental Impact Management Agency). Late in 1996 a senior government official sent the company a letter stating the department would no longer accept forms of environmental compliance and management reports that were a literal translation into Indonesian from the English version. The implication was that these reports do not make local sense to the public servants. A company spokesperson described the frustration that expatriate staff experienced in interpreting draft report material written in Indonesian and translated by the professional Indonesian staff into English. Other communication difficulties arose when professional Indonesian staff with specific project responsibilities stated all was progressing well, confirmed tasks could be completed by due dates and then, only as due dates approached, it became apparent that much less had been achieved than had been indicated in assurances given. This type of professional work, multicultural workplace and developing nation context suggested this office's everyday micro communication issues linked to wider macro societal and critical concerns for the development of more sustainable regional and global business performance and management strategies. This interpretation required an interdisciplinary approach.

Managing the new world order: Converging universal frameworks

The expansion of the global economy, the new communication technology revolution, and increased international consumption of Western material and cultural products suggest that Western market capitalism has become the universal economic development model - a universal basis for 'a new world order' [45]. The economic wealth and reach of MNCs promote the idea of an emerging universal or global culture. The convergence of economic, technological and cultural systems strengthens universal logic. These converging global flow processes suggest that nation states are less important [28]. The nineteenth century model of the powerful and bounded nation state is re-conceptualized as borderless and permeable to a continuous flow of people, products and emerging 'third' or global sphere of culture [11]. A utilitarian need to integrate diverse operations frames the rationale for standardizing business management strategies. The growing volume of international national business mediated through English [26] indicates acceptance of the utilitarian value of the international role for English [8]. An assumed neutral cultural logic frames the universalist rationale thus naturalizing support for this utilitarian role. Historical developments such as the rapid growth of the global market economy, the spread of the new communications technology, and the international role for English naturalize the application of universal western management systems, considered to be culturally neutral. This new world order seems to give veracity to McLuhan's [22] prediction of a cozy global village.

Managing the new world order: Critical and divergent frameworks

Networking multidisciplinary perspectives confirms the critical role of worldview in shaping thinking, values and practice. International management researchers [15] [16] [18] conceive nations as having homogeneous but discrete worldviews that shape the particularized values and behaviors of their management and human resources. This work gives important cultural explanations for the ways this impacted on international business performance. However, national cultural diversity is often presented as being alien and problematic. Recent perspectives promote a more particularized notion of the diverse successful cultural models driving forces within capitalism: the Western individualist; the communitarian European; the Japanese Kieretsu; Korean Chaebol and Chinese family models [44] [33]. Cope and Kalantzis [7] promote the value of an emerging 'productive diversity' management model that emphasizes the value-adding potential of addressing both the internal and external issues of managing cultural diversity. Productive diversity focuses on the inter-cultural and negotiated nature of all communication functions, management and human resource strategies and wider stakeholder relationships.

Across the globe divisive and often violent inter-ethnic conflict have 'balkanized' many national communities along sub-cultural community lines. At the heart of these national conflicts are concerns for differential community access to economic, cultural and linguistic power and resources. These traumatic events reinvigorate critical concern for the maintenance of cultural and linguistic diversity under the converging influences of the global economy [34] [31] [29]. The power of western-based companies, their application of universal business and management practices and the pervasive spread of their material culture are linked to the imperialist concept of 'soft power' [27] [38]. The cultural dominance of western science raises epistemological concerns for the maintenance of diverse and indigenous people's knowledge systems [32]. The rapid rate at which particular local linguistic and cultural systems are threatened and forever lost is emphasized [8]. This cultural and linguistic depletion links to critical debate on the costs associated with the loss of ecological diversity.

Furthermore, linguists note that despite acceptance of the international role for standardized English, pluralistic 'Englishes' were emerging [17]. English is being modified in response to local particularist cultural and linguistic logic. Similarly, media theory reveals the ways that national and local cultures frame interpretations of western media texts [1] [24] [20]. These particularizing interpretive phenomena link with cultural and linguistic relativists perspectives on the particularized and dynamic ways that local meaning is shared and produced [14]. Confirming the strength of particular linguistic and socio-cultural systems and their relationship to thinking, cognitive and learner theory emphasize the particularized shared and idiosyncratic ways in which the neurological architecture of the brain is modified through the systematic ordering of experience [30] [4]. Thinking, memory and learning are the result of information ordering processes derived the development and modification of cognitive schematic patternment enabling meaning to be derived from experience [37]. The shared and idiosyncratic patterns of schemata derive from the shared and idiosyncratic nature of individual contextualized experiences. These explanations underpin the conceptual basis for the relativized way socio-cultural and linguistic systems frame collective and individual sense making, and explain the strength of formative experience shaping worldviews and multifaceted identity.

The more complex, interconnected and dynamic process of global systemic change

These ideas indicate that the processes of globalization result in both universal and particular changes across economic, political and cultural spheres. Both convergent and divergent processes occur at both macro and micro systems levels. They give a deeper explanation for the pivotal role of communication in the context of globalization. These ideas can be summarized in the overarching conceptual framework: the universalization of particularism and the particularization of universalism [34] suggesting the paradoxical and interdependent nature of change that the global capitalist market system is having on both global, national and local economic, political, cultural and linguistic systems. Emphasis of one over the other will result in a distorted view. The implication is that more sustainable management frameworks must address these complex, paradoxical and interconnected aspects. Global connectivity highlights the chaotic and interdependent nature of these complex systems. Nowhere is this more apparent that in the chaos of economic financial markets. Theoretical explanations for the nature of systemic change in complex biological systems highlight the disproportionate impact of micro change in macro systems [19] [23] [36]. Understanding complex natural planetary systems requires the integration of multidisciplinary knowledge. It is imperative that multidisciplinary-based understanding is applied to the management of human socio-cultural systems.

These ideas shaped the interpretation of the specific corporate communication and performance concern indicating that mapping the participant worldviews would give multifaceted explanation for diverse values, interpretations and behavior. The company's English language reports link to universalist interpretations of environmental regulatory and management guidelines and the Bahasa Indonesia reports links to particularized Indonesian cultural interpretations. It was apparent that complex local, national and international issues would be embedded in the heterogeneous dialogue in this corporate setting.

The impact of the South East Asian economic crisis

After the economic collapse of many S.E Asian 'tiger' nations the international media shifted from celebrating the Asian cultural 'family values' as underscoring economic success to condemning their characteristic cultural practices of 'corruption, nepotism and collusion' [21]. The region experienced various levels of political instability, ethnic violence and significant social and environmental costs. Nowhere was the impact more dramatic and traumatic than in Indonesia. While most international companies and local and international investors fled Indonesia, the case study company maintained a reduced branch office in Jakarta. The local expatriate management was concerned that a corporate presence be maintained to hold onto and support key local professional staff, to maintain a responsible local reputation, and important local networks.

The case study: A multifaceted qualitative approach

The qualitative case study research includes the methods of ethnographic-oriented interview, participant observation and to a lesser extent the collection of documents. The purpose was to identify the worldviews of the Indonesian professional staff, the senior management and Head Quarters (HQ) and thus, gain a deeper understanding of the ways in which these affected the values, and behavior of individuals and groups. The impact of various staff, client and stakeholder interactions and relationships on a business project underway in the office was also assessed. This project was of interest because it included international, national and local participants and wider stakeholders, and the client tasks involved environmental impact assessment and socio-economic impact assessment reports linking the project to sustainability goals. The rich ethnographic material was organized and analyzed in the following categories: names, age, gender, marital status, ethnic background, religion, regional origins, education, families, languages, career, international experience, professional functions. Together these various categories indicate the multi-layered local, national and international nature of the identity of the individuals. The data reveals the ways the private and public experiences of individuals interweave with, and are shaped by, macro historical cultural, political and economic circumstances.

The Indonesian professional participants: Shared collective-oriented national worldviews

All the Indonesians had a strong sense of national identity, which relates to the collective influence of the national government's institutionalized strategic policies designed to bind the disparate peoples of the archipelago as implemented by the regimes of Sukarno and Suharto. One participant had childhood memories of Dutch rule and the Japanese occupation. He came from an aristocratic, educated Javanese family, and had additional high ascriptive status derived from a successful career as a senior public servant. This privileged background meant he had significant international experiences with industry and academia. In the office he fulfills the traditional cultural role of the Bapak or father figure, the most hierarchical position in Indonesian business and public sector management. His high status societal and management position traces back to the historical educational and societal privileges given by the Dutch colonial administration in co-opting the power of the Javanese aristocracy to administer society and maintain civil order [2].

The collective national values of *Pancasilla*, as laid down by Sukarno, played an important foundational part of the national identity of all the participants. The cultural, ethnic religious and linguistic pluralism of the peoples of the Indonesian Archipelago framed Sukarno's pluralistic rationale for the five values included in Pancasilla: Faith in God; humanity; nationalism; representative government; and social justice [13]. Sukarno's pluralistic cultural concept for national discourse is best summarized in the national motto 'unity in diversity'. An overarching belief in God frames a tolerant national multi-ethnic and religious policy, which acknowledged the five world religions: Islam, Hinduism, Protestantism and Catholicism and Buddhism. As well, Pancasilla included a humanitarian belief in improving living conditions of the largely agricultural peoples. The Javanese cultural concepts of *musywarah dan mukafat* (mutual consultation and collective decision making) and *gotong royong* (mutual obligation) derive from the traditional Javanese village notions of the social order extended to a build a collective, consensual and participatory concept for the administration of the nation [25]. Bahasa Indonesia was chosen as the official nation-binding language for the multilingual peoples. The majority of the informants spoke a local language, and Javanese, as well as Indonesian.

Most had known only Suharto as their national leader. His leadership style, characteristically Javanese, was of a hierarchical and authoritarian father figure who knows what is best for his children, with the Indonesian peoples conceived as being the family of the nation. He forcefully inserted the collective and conformist Javanese notions of *masyawarah dan mukafat* and *gotong royong* into notions of individual and moral responsibility for maintenance of the hierarchical social order [25]. These cultural notions were embedded into the institutionalized Pancasilla values education program, which was compulsory at all levels of the education curriculum. Strategically the authority of the military regime linked with the power of the traditional Javanese aristocracy and community village elder administrative system [39]. The authoritarian, coercive and political nature of the military regime reinforced the importance of collective and conformist values. Standardized Indonesian served as the institutionalized language for education, official and public discourse. These ideas framed Indonesian national discourse, and importantly, the institutionalized cultural experiences of the informants. The research reveals how these national cultural values were embedded in the worldviews and, more particularly the professional behavior of the Indonesians. Similarly, it became apparent that national cultural values, conventions and notions of professional etiquette were embedded in regulatory logic and performance concepts included in generic characteristics of Indonesian professional and government reports.

In order to build modernist and development values into national discourse Suharto gave strong policy commitment to raising literacy levels, and the promotion of science education was incorporated in the national education curriculum at all levels [39]. This strategy was conceived improve the nation's technical human resource capability, and promote national development. The participants were a product of this science education strategy. The research suggests that the hierarchical, collective and consensual values of national discourse were also embedded in the ways science was taught at all levels of education. This cultural framing had significant implications for Indonesian notions of scientific rationale, professional practice, performance and preferred style of communication. In addition, significant investment in a satellite-based television communications system aimed to unify the disparate islands, promote a unified national cultural policy and compete with other regional cultural influences. This investment also presented the nation as modern. Programming was strictly administered by a centralist and institutionalized authority. Thus, the authoritarian cultural values of the military regime were institutionally embedded in both the hierarchical flow of information and institutional context for interpretation [40]. These ideas indicate the way authority was embedded in senior public service positions and government regulatory guidelines.

This indicates the way national discourse has shaped the shared national identity of the Indonesian informants. National identity has important implications for collective and hierarchical notions of business etiquette, work place culture, relationships, interactions, decision-making, performance, management, and communication functions and strategies. This reveals why, for Indonesians, the individualistic western worldviews, competitive, assertive and informal behavior and direct communications style of the expatriates were alien, intimidating, loud, rude, greedy, and simply did not make sense. The expatriates were described as being egocentric, materialistic and workaholics. It explains why the hierarchical, more formal and collective behavior, and indirect interactions of many of the Indonesians were interpreted by the expatriates as being unpredictable, indecisive, formal, aloof, secretive, indirect, and therefore, considered to be less productive and even untrustworthy. These perspectives have significant implications for contrasting notions of professional individual and team performance and bi-lingual report writing.

The indirect, circumlocutory, formal, consensus-oriented and prescriptive cultural style of Indonesian communications mean that Indonesian environmental report writing depends on strict adherence to the format in standardized regulatory guidelines. This cultural style of report writing gives explanation for an expatriate comment that non-appropriate technical material was sometimes found in the English translation of Indonesian reports. For example, details of cool temperate ecological explanations from a European context were included in an Indonesian report subsection dealing with tropical rainforests. The implication was that technical material must be included to support all report headings even if the contents were not relevant sometimes headings do not relate to a particular project. It was clear that significant historic, political and cultural national values were embedded in the Indonesian scientific and technical forms of environmental assessment and report writing.

The professional Indonesian participants: Multilayered, particularized local and global worldviews

The research reveals the more particularized and individualized aspects of the participants' sub-cultural identities. Individual backgrounds include diverse and individualized formational and sub-cultural community experiences resulting in multicultural or polycentric sub-cultural worldviews that additionally shaped interpretations and guide behavior. The variability of the individual ethnic, religious, educational and international background and experiences mean that they share to some extent a greater awareness of some of the western cultural assumptions of the expatriates of English, Australian and German staff. For example, those of Chinese, Batak and/or Christian religious backgrounds have developed more individualistic western cultural values and more direct western styles of communication giving them some capacity to switch their operational behavior to accommodate the diverse performance expectations of Western and Indonesian cultures. This individualism did, however, contribute to tensions between the Indonesian staff. However, there was general consensus that they would like to learn to be able to 'argue' like the expatriates both in their oral interactions and written work. Several had Masters level qualifications from England, Australia and Germany. All recognized that they needed to live, study or work extensively outside Indonesia to develop western analytical and argumentative cultural literacy. Since the economic collapse, without the support their opportunities were limited. Global media played a role in acquiring more colloquial and conversational skills in English. In the latter years of the New Order Regime the restrictive and authoritarian media policies were liberalized and audiences experienced an inward flow of western cultural products [40]. One young participant commented that her husband had much better English conversation skills than her because he regularly listened to English football commentary. However, in line with her Islamic sensibilities she was alarmed to learn about Western values through the dramatic narratives of Hollywood blockbuster-style movies.

This research indicates the ways that national, local and international history, politics, economics and socio-cultural factors interweave into the multifaceted collective and idiosyncratic worldviews of the Indonesian participants. The coercive and institutionalized formation of their collective behavior explains the strength of their collective cultural values and collective behavior. Particularized sub-cultural local formational experiences explain individual differences in values and practices. This gives a deeper explanation for the contrasting expectations, conflicts and misunderstandings between the professional Indonesians and their various western colleagues. The solution is not just more English language learning. Many years had already been spent learning English grammar, but with little opportunity to learn from native speakers. More particularly, the need to heighten both expatriate and Indonesian awareness of the ways cultural pluralism impacts on expectations for business performance and professional human resource management was apparent.

The research indicates that the writing of specialist professional and scientific reports is anything but universal and culturally neutral. The cultural specificities of the two worldviews are embedded in the particularities of the diverse writing forms of English and Indonesian. Understood in this way, the process of writing and the way that texts are produced can be seen as a site of struggle and change where diverse cultures meet [5]. From a critical perspective, professional and business writing is understood to have a critical role in mobilizing social action [3]. These views indicate the relatedness of writing to other social activities and its power to shape human society. A more complex picture of the multifaceted nature of Indonesian identity has implications for the role of communications management in improving the expatriate and local management and professional performances in this multicultural organizational business context.

These Indonesians had made significant investment in attaining high levels of education and are an important national human resource for both development and national engagement with the global and regional business and for the future capability development of the country. Further investment in their professional development is valuable to global and regional business, the nation, their employers, and society. Their diverse local and sub-cultural identities give them, more local cultural capital to negotiate local and regional community concerns, which will become increasingly important in a more democratic and decentralized Indonesia. They are also important human resource assets for the specific international consulting environmental service company. Their emergent international worldviews and developing internationalizing capabilities enable them to intermediate between the international sector, local and national business, government, and community stakeholders.

International professional service project consultation: The heterogeneous nature of participant dialogue.

A second stage of the research focused on the analysis of the impact of cultural and linguistic diversity on the interactions, behavior, and relationships underpinning the performance of the participants involved in a regional-based mine development project. This project included representatives of international finance agencies [USA-based and Japanese], an Indonesian National Government proponent developer, BAPEDAL, the local communities, indigenous peoples communities, their elders, sub-contractors and members of the consulting staff of the case study company. This project was of interest because these participants and stakeholder communities represented the international, national and local societal public and private sectors.

International perspectives: leveraging universal sustainability agendas?

The consulting team was required to undertake an environmental and socio-economic impact (EIA, SIA) assessment of a mine development and its surrounds. A US-based international finance organization was the client, but the project involved working closely with all participants and wider stakeholders. The contracting of both an EIA and an SIA indicated that the US-based international finance organization was pursuing more sustainable development strategies, with their completion a condition prior to the release of finance to the national proponent developer. The project team learnt that in order to address the multifaceted requirements of the US investor the following industry sector investment guidelines were to be addressed: Environmental impact assessment (EIA); Environmental management strategy (EMS); Resettlement action plan (RAP); Public consultation and disclosure plan (PCDP); Community and indigenous peoples development plan (CIPDP); and a Community development resources guide for companies.

Underpinning these impact assessment guidelines were the assumption of '*pareto optimality*' [the do no harm principle] with regard to the developmental impact on local and indigenous peoples communities. These guidelines mobilize a global governance strategy to coercively apply a universal development framework conceived to implement the appropriate environmental, socio-cultural, participatory and transparency standards required to safeguard local peoples' interests while enabling the mine and processing facilities to proceed and return a profit to the various investors. Thus, a strong political and economic agenda frames the multidimensional procedural and assessment strategies designed to facilitate additional local micro economic opportunities and community development. Thus, embedded within these guidelines is a strong global/local strategic alliance agenda. This strategy links with the investment agency's goal to alleviate poverty, promote more sustainable development and address the critical concern of NGOs and the civil society sector.

These guidelines identify the methodological standards to be applied, along with guidelines for standardized generic reporting frameworks to be used by consultants. In line with the institutional transparency goals, the final reports were to be placed on the agency's website for public comment. Embedded within these universal guidelines are assumptions that the contents are 'culture-free', transferable, and thus, provide a development framework for worldwide application. Their English reporting highlights the asymmetrical nature of access to global development funding processes and indicates that consultants must have high levels of English literacy. In reality, the content of the guidelines would be imbued with the ethnocentric, political, economic and cultural logic of their producers, and thus, subject to diverse interpretations. In practice the application of these guidelines involves complex processes of interaction, mediation and negotiation of meanings and interpretations.

The case study management and consultants acknowledged that significant challenges and learning were implicated in undertaking this project work. Strategies were set in place to document this process for the participants in future work. Management was aware that the client's project timeline and budget allocation were unrealistic in a complex context like Indonesia. However, working with such a prestigious client had important marketing implications, as well as presenting the opportunity to strengthen the company's 'soft science' professional consulting capabilities.

The other major investor was a Japanese investment agency. The following corporate principles, as promoted on their web site, guide the Japanese company's goals "to strive to enrich the society within which it operates: conduct fair and open business activities; develop a globally connected company; create new value through business vision; respect and encourage individuality and originality; promote corporate governance; safeguard ecological and cultural diversity"(2001). Superficially, these Japanese corporate principles align with the locally responsive, sustainable and transparent corporate goals of the US-based investment agency. In light of the contrasting individualist and collective characteristics that frame the respective American and Japanese national cultural values, it is likely that Japanese representatives of this investment agency would apply diverse strategies to implement these principles. The Indonesian and expatriate consultants had to keep the Japanese informed on project progress. When the issue of increased funding and timelines arose due to the need for extending the EIA process and to address difficulties in obtaining reliable field data, the Japanese indicated that they did not believe in 'paying' international consultants for this type of work. This suggested deep disagreements beneath the surface of the international stakeholder interactions. In this case, the US-based financial agency was the more powerful of the international investors. Thus, interactions with the Japanese investors were limited and marked by significant silences.

National perspectives

Working with a proponent developer (PT Company) with strong Indonesian Government affiliations in this type of international consulting project was unusual. This contributed additional complexity. During Suharto's New Order development agenda this PT Company enjoyed favor, prestige and privilege. In line with the historical and cultural dominance of the public service by privileged Javanese, the senior staff held high ascriptive socio-political status positions. This ethnic-based status links with the preferred hierarchical cultural forms of etiquette. This placed the Indonesian consultants in a difficult professional intermediary negotiating position. The leveraging of the conditional governance compliance strategies by the international (US) funding agency was culturally alien to the usually powerful national PT Company. From the PT Company view the proposal had achieved formal Indonesian EIA approval. Under the centralist approach and development agenda of the Suharto regime there would have been little transparent local consultation. National development agendas overruled local community concerns. However, *Reformasi* and *transformasi* politics called for the introduction of decentralized and more transparent political and economic administration. The economic recession meant that the nation was desperate to gain international development funds so the PT Company project team had to 'play the game'. But observing the participants and development of the project suggested that there was little understanding or consensus about the 'rules of the game'. This diverse international and national economic, political and cultural framework contributed to significant confusion, mistrust, misunderstandings and, therefore, delays and inevitable increased costs.

Local perspectives

Local fieldwork presented additional complications. The region surrounding the mine site was experiencing riots and violent inter-ethnic clashes. An expatriate consultant noted empty villages along the route due to, it was confirmed, recent and widespread ethnic cleansing. The Indonesian team members were concerned that no journey should take place at night. An Australian anthropologist with excellent local culture and linguistic knowledge was engaged to undertake socio-cultural fieldwork. The high standard of his professional expertise was evident, however, his direct, assertive and confrontational advocacy for the indigenous community interests offended the Indonesian PT company project team members and some of the consultants. His rhetoric included Australian football metaphors, beer drinking references, and swearing. To the expatriates this insensitive behavior seemed ironic for an anthropologist. The Indonesian professionals were greatly offended. Importantly, however, he gained the cooperation and respect of the various local *kepada desun* or indigenous community elders. As a result of their sensitive participation in the introductory ritual with the village elders, the consultants were given free access to several Dayak villages.

There were significant problems in obtaining the appropriate and reliable socio-economic data. A local university academic with economic expertise was sub-contracted. The Indonesian consultant assigned to work with him reported he also had local familial-based community knowledge. It is common practice to engage university academics as sub-consultants. The Pt Company recommended him. They indicated concern that too much explicit investigation in the region could stimulate speculative interest with people positioning themselves for compensation as a result. Their wish for circumspection contravened the client's transparency needs. Despite extensive liaison with him by several of the Indonesian consultants, and extension of the timelines, the field data report failed to materialize. When finally it did, it was virtually useless. The senior *Bapak* later confirmed that the sub-consultant would fear for his and his family's lives if the local landowners were not given significantly inflated property values. Another Indonesian consultant later undertook the work and produced a valuable field report.

Project team perspectives

These international, national and local perspectives and the discussion indicate the kinds of challenges faced by the expatriate and Indonesian team members in grappling with the various diverse participant and stakeholder expectations and notions of performance. There were high personal costs for both the Indonesian and expatriate consultants that impacted further on in the project team relationships. Some of the Indonesians and younger expatriates experienced a crisis of professional confidence. One Indonesian became increasingly withdrawn in response to the stress derived from the diverse cultural expectations, languages and values. She prioritized other project work. Timelines were extended on several occasions. An expatriate noted that her focused and outcome-oriented western approach to work impacted on her relationships with Indonesian colleagues. There were significant movements by the consultant team backward and forward between the international client and national proponent in an effort to confirm details and try to build shared understanding of the terms of reference, but with limited success. After limited interaction between the PT Company and the Japanese investment agency, in the later stages the Japanese became more actively involved, albeit limited by communications in English.

Finally, the senior manager concluded that the project had been successful from an overall business perspective. The quality of the reports submitted for review was good, thereby building reputation and leveraging opportunities for future contracts. From the inception it was apparent that it would be a difficult project and the consultants had argued the need for a new environmental impact assessment report independent of the Indonesian version. The client did not agree. The lack of funds had a significant impact on project management. However, the trend towards the inclusion of socio-economic impact assessment of development projects presented expanding business opportunities. Participation had significantly improved the company's expertise and capability in this area. The high level of learning justified the business challenge.

Conclusion

This research has important implications for both global and regional business, and the higher education sector. It directs the following range of macro-oriented conclusions relevant to improving the performance of sustainable global and regional business:

- Sustainable global and regional business goals are essentially multicultural in nature and thus, involve complex heterogeneous dialogue;
- Complex heterogeneous dialogue and asymmetrical relationships frame the nature of interpretations, the quality of interactions, and subsequently, the relationships between participants and diverse stakeholders;
- Worldview and identity play a significant role in shaping the cultural values, expectations and behavior of individuals and groups, and thus, variously frame the cultural nature of the diverse interpretation processes of individuals and communities;
- Worldview and identity is framed by idiosyncratic and collective political, cultural and economic experience variously derived from local, national and international societal spheres. This further reinforces their diversity and complexity;
- A more multifaceted notion for worldview and identity highlight the paradoxical and dynamic relationship between universal and particular characteristics of individuals, communities and nations;
- The paradoxical and interdependent universal and particular nature of socio-cultural and linguistics systems place a cautionary caveat on the utilitarian value of universalist conceived international management frameworks;
- A multifaceted notion of worldview, identity and the resultant heterogeneous nature of dialogue indicates the pivotal role of learning for individuals, communities and organizations in assessing the economic, environmental and socio-cultural issues implicit in sustainable global and regional business projects;
- These notions contribute to a deeper understanding of the nature of heterogeneous dialogue and indicate the need for the incorporation of a more elevated concept of communication management to be included in the strategic and development activities of global and regional business in order to improve stakeholder relationships, business outcomes and minimize corporate risk;
- These perspectives call for a stronger strategic relationship to be built between global and regional business and the higher education sector, in order for more complex multidisciplinary capabilities (e.g. informational road maps) to be developed to achieve the multifaceted and value-adding goals of sustainable business development and activities;
- These perspective also emphasize the need for improving the multi-literacy capabilities of all sectors of management and human resources in the context of more sustainable global and regional business; and, finally
- The multifaceted issues addressed in this research indicate the more complex nature of the challenges management faces in a more integrated global society and the deeper knowledge required by managers to pursue more sustainable global and regional business activities.

References

[1] Ang, K. (1985}. Watching Dallas. London: Routledge

[2] Antlov, H. and Cedderoth, S. (1994) Leadership on Java. Surrey, UK: Curzon Press

[3] Bargiela-Chiappini, F. and Nickerson, C. (1999) Writing business: Genres, media and discourses. London and NY:

[4] Routledge

[5] Calvin, W. (1998) How brains think. London: Phoenix

[6] Candlin, C. and Hyland, K. (1999). Writing, texts, process and practices. London and NY: Longman Cope, B and Kalantzis, M. (eds.) (2000). Multiliteracies: Literacy learning and the design of social futures. South Yarra, Vic: Macmillan

[7] (1997). Productive diversity: A new Australian model for management and work. Annadale, NSW: Pluto Press

[8] Crystal, D. (1997). English as the global language. Cambridge, UK: Cambridge University Press

[9] Drucker, P. (2001). The next society The economist. November 3rd pp. 3-20

[10] Fairclough, N. (1989). Language and power. London and New York: Longman

[11] Featherstone, M. (1995). Undoing culture: Globalization, postmodernity and identity. London: Sage

[12] Garcia Canclini, N. (1992). Culture and power: The state of research. In P. Scannell, P. Schlesinger and C. Sparks (eds.)Culture and power: A Media culture and society reader. London: Sage pp. 17-47

[13] Grant, B. (1996). Indonesia. Calton South, Vic: University of Melbourne Press

[14] Gumperz, J. and Levinson, S. (1996). Rethinking linguistic relativity. Cambridge: Cambridge University Press

[15] Hall, E. (1976). Beyond Culture. New York: Double Day

[16] Hofstede, G. (1980). Culture's consequences: International differences in work-related values. Beverly Hills CA: Sage

[17] Kachru, B. (1992). The other tongue: English across cultures. Urbana and Chicago: University of Illinois Press

[18] Laurent, A. (1983). The cultural diversity of western conceptions of management International studies of management of organization. Vol. 13, No. 1-2, pp. 75-96.

[19] Lovelock, J. (1979). A new look at life on earth. Oxford: Oxford University Press

[20] Lull, J. (1995). Media , communication and culture: A global approach. Cambridge: Polity Press

[21] Mabuhbani, K. (2000). Can Asians think? Singapore: Times Books International

[22] McLuhan, M. (1962). The Guttenberg galaxy: The making of typographic man. Toronto: University of Toronto Press.

[23] Mitchell-Waldrop, M. (1992). Complexity: Emerging science at the edge of order and chaos. London:Viking

[24] Morely, D. (1986). Family and television: Cultural power and domestic leisure. London: Routledge

[25] Mulder, N. (1999) Mysticism of Java: Ideology in Indonesia. Singapore: Peppin Press

[26] Naisbett, J. (1994). Global paradox: The bigger the world economy the more powerful its smallest players. St. Leonards, NSW: Allen and Unwin

[27] Nye, J. (1990). Bound to lead: The changing nature of American power. New York: Basic Books

[28] Ohmae, K. (1990). The borderless world: Power and strategy in the interlinked economy. London: Collins

[29] Pennycook, A. (1994). The cultural politics of English as the international language. London and NY: Longman

[30] Pinker, S (1997). How the mind works. London: Penguin

[31] Phillipson, R. (1992). Linguistic imperialism. Oxford: Oxford University Press

[32] Postman, N. (1993). Technopoly: The surrender of culture to technology. New York: Vintage Books

[33] Redding, G. (1998). The changing business scene in Asia. In F. Macdonald and R. Thorpe (eds). Organizationalstrategies and technological adaption to global change. London: Macmillan Press

[34] Roberston, R (1991) Social theory, cultural relativity and the problem of globality. In A King (ed) Culture, globalizationand the world system: Contemporary conditions for the representation of identity. University of New York at Binghampton: Macmillan, pp. 69-90

[35] Said, E. (1993). Culture and Imperialism. London: Vintage

[36] Sahtouris, E. (1998). The biology of globalization. http//:www.ratical.org/LifeWeb/Articles/globalize.html

[37] Schank, R. and Cleary, C. (1995). Engines for education. Hillsdale, NJ: Lawrence Eribaum

[38] Schiller, H. (1991). Not yet the post-imperialist era. Critical studies in mass communication. No. 8, pp. 13-28

[39] Schwarz, A. (1999). A nation in waiting: Indonesia' search for stability. St. Leonards, NSW: Allen and Unwin

[40] Sen K. and Hill, D. (2000). Media, culture and politics in Indonesia. S. Melbourne, Vic: Oxford University Press

[41] Serberney-Mohammadi, A. (1991). The global in the local in international communications. In J. Curran and M. Gurevitch (eds.) Mass media and society. London: Edward Arnold

[42] Singleton, H. (2002). Frameworks for the management of cross-cultural communication and business performance in theglobalizing economy: A professional service TNC case study in Indonesia. Unpublished Doctoral thesis. Curtin University of Technology

[43] Toffler, A. (1970). Future shock. London: Pan Books

[44] Trompenaars, F. (1997). Riding the waves of culture: Understanding cultural diversity in business. London: Nicholas Beaker

[45] Wallerstein, I. (1991). The national and the universal: Can there be such a thing as world culture? In A King (ed) Culture, globalization and the world system: Contemporary conditions for the representation of identity. University of New York at Binghampton: Macmillan pp. 91-108

Sustainable Globalization - Consequences on Global, Corporate and Individual level

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Abstract

The core of sustainable globalization is the ethical principle of inter- and intragenerational justice. This principle, as the essence of sustainability annuals the mechanistic limitation and the dominance of partial development dimensions. It establishes an innovative, integrative, complete, long-term, multidimensional oriented conception of globalization. If we isolate any of these three dimensions of globalization - economic, social and ecological - i.e. if the globalization is aimed at a single isolated goal, the sustainability would be impossible, because each of these dimensions is indispensable for overcoming the great crisis of mankind caused by the mechanistic obstruction of their organic interaction. This approach is also reflected on a company level. Companies that base their development on the philosophy of sustainability are inviting to create the vision and set the aims of their development within the limits of multidimensional, sustainable natural environment. The strategy of sustainable globalization is both on the corporate and individual level multidimensional oriented, with multiple goals, and is multikriterially valued. The modern conception implies a transition from quantitative to qualitative aspects of global, corporate and individual level of success; that is, a transition to the factors of success which influence the globalization and creating dynamic harmony with the environment.

Introduction: Multidimensionality and Sustainable Development

Today it is possible to identify two possible directions of development of mankind: the first, of one-dimensional orientation, dominantly materialistic and mechanistic, and the second, multidimesionally oriented, holistic. How did man answer to the well known cry for salvation written in the famous letter of the Chief Seatle to the American president in 1854?[i] The cry was uttered at the dawn of the age of transition from the agricultural into the industrial society, from the first into the second Kondratieff cycle. Today in the age of transition from the industrial into the computer society that is from the fifth into the sixth Kondratieff cycle it becomes the cry of the whole mankind.

The first answer can be characterized as «the answer of the deaf»: it is defined by the materialistic, rational-analytical, mechanistic worldview.[ii] It is primarily oriented to a part, and it neglects the connection to environment, it is short-term oriented, solely to its own benefit, and has led to the separation of the cause from the effect, science from religion, man from his essence, man from nature, and finally man from mankind.[iii] This is the foundation of the first developmental answer which has led to substantial exhaustion of ozone in the stratosphere, global change of climate, global overload of nitrogen, change of hydrologic system and accumulation of nuclear waste and thus caused changes in the biological and geographical systems on Earth, reduced the quantity of fresh drinking water, surface as well as underground, has caused intensified soil erosion and reduction of fertile soil, and changed the biological diversity on Earth[iv].

This one-dimensional type of development, on the company level, on a monetary basis dominantly threatens existence:

- nowadays 1,3b people live without fresh drinking water.
- intensified soil erosion and reduction of fertile soil change biological diversity and threatens the existence of many vegetal and animal species[v].
- intensified soil erosion resulted in impoverished soil, the desert area spread, the biological diversity of rivers, lakes, seas and oceans was depleted, the quality of life was lowered and in some areas even life-threatening, resources became limited or even exhausted.
- the process of severe social stratification became obvious, the gap between the rich and the poor got wider; according to the UNPD report, nowadays 20% of the richest controls 82,7% of the world wealth, the

second 20% with 11,7%, the third 20% with 2,3%, the fourth 20% with 1,9%, and the last fifth of the world population with only 1,4%[vi]. This unfair distribution of wealth causes greater tensions, conflicts and wars, along with stronger political repressions and global terrorism.

- the number of unemployed persons is 1,2b and growing; there are 850m illiterate and 830m undernourished persons.
- due to the severe impoverishment the number of children working under slave-like conditions increased; according to estimates, the number of children working to provide existence for themselves and their families is more than 250m.
- family, fundamental to the development of mankind throughout history is more and more threatened.
- the growing importance of national identity or «the search for one's roots" as a reaction to the impersonal, supernational idea of «the global citizen» who has no roots of his own. Such supernational orientation, opposed to interests of the small nations, originated from national economic interests of mutually connected economic forces of the great Triad.

Scientists warned of these phenomena already in the late sixties. They reflect the degree of the immediate threat to the existence and development of certain areas, therefore the threat to humanity itself.

The second answer to the cry is multidimensional, sustainable development, which has the foundation in the permanent ethical principles, which respect the dignity of persons and communities, protecting nature and present and future life. Sustainability is the most frequently used term in the field of economic, ecological and social sciences in the last decade, especially when speaking about a possible, better, «more humane» future of mankind, and is so far the only global strategic alternative to the past development and the unifying tendency of globalization. The concept of sustainable development is more of a challenge to multidisciplinary teams of scientists, experts and politicians on both macro and micro level. The philosophy of sustainability, its vision and operationalization on a global level, as well as national, regional, and personal levels, directs the development of mankind towards a different course, respecting its multidimensionality. The concept of sustainable development marks the beginning of the «struggle for survival».

With this paper we would like to demonstrate the development and application of the concept of sustainability on the community, company and individual level. The sustainability, due to its ethical principles, growing multidimensionality imposes itself as more and more significant for the present and future on the global level. We consider it fundamental for the future of mankind, and therefore for the future of Croatia.

The Conception of Sustainable Development and Sustainable Globalization

The principle definition of sustainable development is given in The Final Report of the World Commission on Environment and Development[vii]. It is defined as follows: [viii] »Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two concepts: the concept of needs, in particular the essential needs of the world's poor, to which overriding priority should be given; and the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs». This conception is mainly considered to be the originating point of the sustainable development approach, which ought to create conditions of long term providing for human needs and permanent improvement of the quality of life. The life span is not defined, the quality of life has to above the existential minimum, the biosphere has to be entirely protected, and its value is not anthropocentric. Thus defined sustainable development includes the processes of social and structural-economic transition by which the economic and social advantages of the present generation are optimized. This transition must not endanger the advantages of the future generations. The concept of sustainable development also includes management of the local community or region within their limits, which means maintaining the natural capital for the future and using the interests of that capital, i.e. development of sustainable communities or regions within their ecological capacity. The most complex approach is by the authors who see sustainable development as a process of integrating and coordinating the economic, social, and ecological systems. The supporters of this approach stress the importance of the limited ecological capacity and its imperative connection to economic and social capacities.

Sustainability includes positive economic changes that do not weaken ecological and social dimensions of the system.

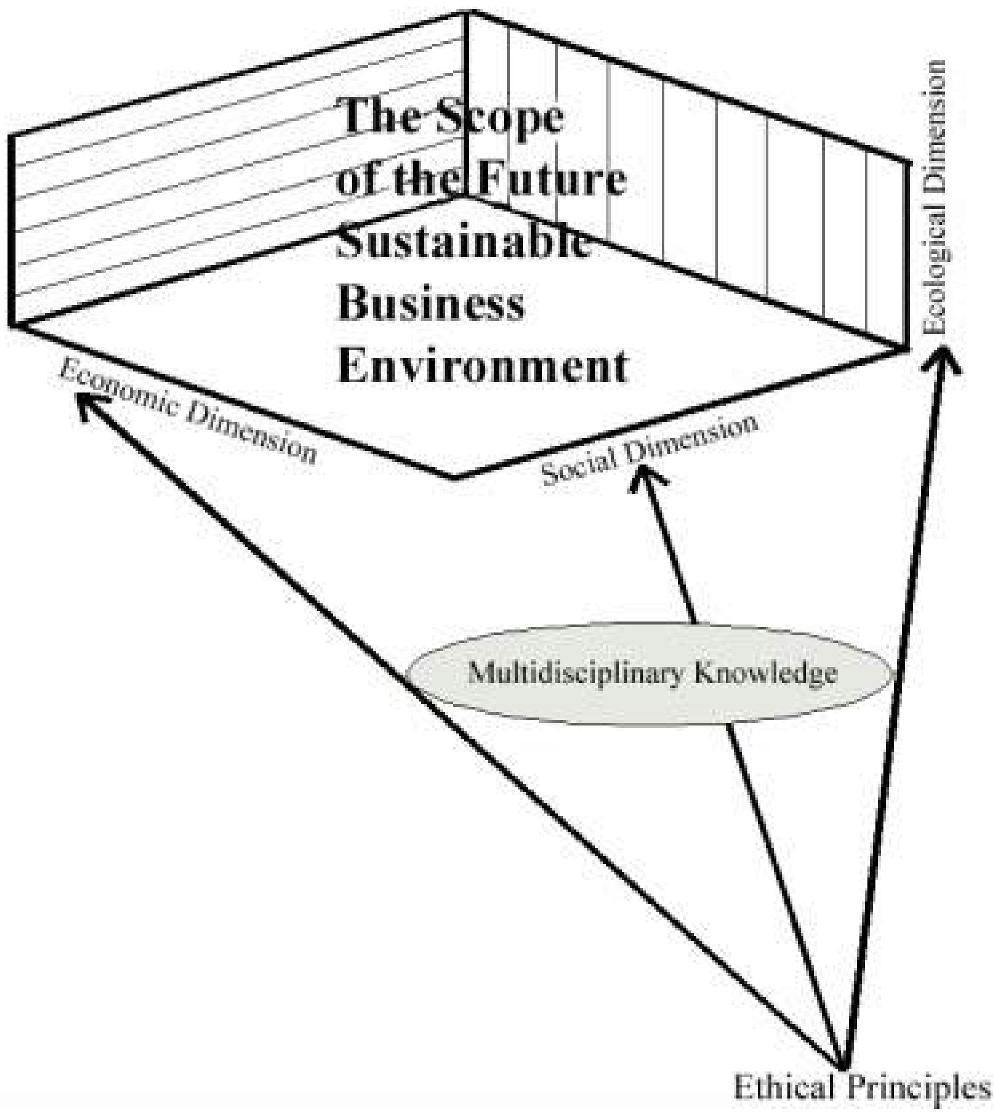
The core of sustainable development is the ethical principle of inter- and intragenerational justice. This principle, as the essence of sustainability annuls the mechanistic limitation and the dominance of partial development dimensions. It establishes an innovative, integrational, complete, long-term, multidimensionally oriented conception of development. If we isolate any of these three dimensions of development – economic, social, and ecological – i.e. if the development is aimed at a single isolated goal, the sustainability would be impossible, because each of these dimensions is indispensable for overcoming the great crisis of mankind caused by the mechanistic obstruction of their organic interaction[ix]. Due to its multidimensionality and its scope sustainability requires multicriterial consensus – reconciliation of the fundamental dimensions and the associated goals of development, that is ecological, economic and social (spiritual and cultural) in the whole «chain of life» of a person-family-locality-region-state-nation-mankind and Earth with everything necessary for life of every living creature, including man. This approach is also reflected on a company and individual level.

Globalization is a very complicated process: it is a technologically dependent process, but at the same time, it is a process of international integration, whose effects are visible in our everyday life, culture, social conditions, scientific research, and in the system of values. Globalization as a process of international integration is not problematic up to the point when the questions about who governs the process, and what are the consequences of it are raised. As long as the process of globalization is governed by transnational corporations (international business leaders), and WTO and IMF as their institutional mechanisms, which are guided by their own narrow interests in money and power, globalization cannot be a desirable and positive process. The consequences of such a globalization are obvious: neglect of human and national rights, growing financial instability and widening of the economic gap, stronger polarization in the world, US space militarization plans, and generation of a new kind of military forces necessary to control situations that are of interest to the rich and privileged minority. This kind of globalization process leads to increased damage to the environment, increased poverty, destabilization of the society, and is a threat to democracy. A billion people, one third of the world's workforce, are unemployed. Developing countries are not treated as partners, but as a dump for the Western industrial surplus, they are turned into a cultural and economic province of the global empire. The mode of life is invention, an object, created solely for the corporate profit. The existing process of globalization takes us back to the era of feudalism, or even to the time of the Roman Empire, when power and wealth were in the hands of the few members of the elite. Such globalization is necessarily destructive. Sustainable globalization is an attempt to balance different interests, an attempt to democratize the process of globalization. But as long as the transnational companies are the biggest sponsors of the globalization process research, sustainable globalization is an unattainable dream of the romantics.

The Consequences for Companies

Companies that base their development on the philosophy of sustainability must create the vision and set the aims of their development within the limits of multidimensional, sustainable natural environment. Business activity with long-term aims of sustainability is developed within the capacity of the specific region. The strategy of sustainable development is both on the company and business level multidimensionally oriented, with multiple goals, and is multicriterially valued (Fig. 1: Conceptual presentation of the sustainable business environment)

Figure 1: Conceptual Presentation of the Sustainable Business Environment



The product, as the result of thus defined conception of sustainability, incorporates and promotes such developmental philosophy. Such a product maintains the achieved economic degree of development both on company and business environment level, creates the potential for further development, protects biological diversity, regenerates and safeguards the ecological system, and helps build, guard and ensures development of the cultural and social integrity of the local and global environment. It is realized primarily with the strategy of qualitative differentiation based on the aforementioned factors. Qualitative differentiation strategy of realizing competitive potential in sustainable development is realized within the scope of ethical principles of sustainability, with the integrative multidisciplinary approach based on multicriterial evaluation of specific ecological, cultural, economic and social features of the local community (including its spiritual and cultural features) or a region. While doing so, it is necessary to establish competitiveness as the fundamental feature of a reliable economic development and gross national product per capita, employment as the core of social development, and decrease resource transformation as precondition for environment sustainability. The target market for such products is a highly aware community in the process of transition from the fifth to the sixth Kondratieff cycle. They are people, not just consumers of the post-industrial society, no longer concerned with material values, but with information, knowledge, and the quest for their cultural and identity. The modern man strives for the return to his original life essence in order to create an innovative relation to the environment, to everything man-made, to historical, cultural and civilizational heritage, and to nature, which he perceives as an integral part of his own life, and life itself. Such a man requires a different product; a product that is the result of developmental strategic internalization of sustainable development is what he is looking for. The product has qualitatively different competitive features, recognizable for their potential of sustainability. The products can be positioned in a wide scope, ranging from very low, low, high, to very high sustainability, which are mutually different in a number of characteristics.

The past expansion of management focus of companies[x] can be perceived as a gradual transition from the one-dimensional monetary goals and criteria of development. The modern conception of a company does not consider business to be only the rational actions aimed at business goals of achieving financial efficiency and maximization of personal benefits. The modern holistic perception of a company involves motivation and personal pleasure, expressing personal and common creativity, efficiency, connecting formal and informal social groups, providing for spiritual, psychological, intellectual, and physical needs. It is regarded as a community of wise and active people striving towards economic, social and ecological, therefore complete harmony of development with its environment. The modern conception of a company implies a transition from quantitative to qualitative aspects of company's success; that is, a transition to the factors of success which influence the development of the company, and creating dynamic harmony with the environment. This shifts the focus from the traditional, fragmentary, one-dimensional concept of a company and its success. The general idea that every increase is for the best neglects the opposite, i.e. decrease and the necessity of a dynamic counterbalance between increase and decrease in a limited environment.

The existing process of liberal globalization does not give a chance to the poorest nor provide a better world for the majority. Social tensions reach the level of an overall increase of the security budget. The existing globalization process is a process of globalization of poverty, suffering, vanity of the minority, violence, and inhumane life conditions beneath human dignity for the majority. It is time to propose a different course towards a peaceful world for all.

Incomprehension and non-governing of the process leads to the domination of negative implications, which already today cause revolt all around the world, which manifests in the antiglobalist movement, and the atmosphere of dependency, poverty, underdevelopment, inequality, and lack of perspective. Sustainable globalization is to change this climate with its facts, arguments and perspective.

The movement for creating a better world is getting stronger across the world, and plans for sustainable development actions, like Agenda 21, answer the question «what» - what is the problem, and which principles we should be guided by. The governments provide the answer to the question «how» - how to introduce necessary changes in the country policy, how to use political and tax initiatives in order to send the right signals to business and industrial sectors, how to offer a wider possibility of choice to consumers and producers, how to create a market and open new work places, how to diminish the tensions regarding limited resources, how to create new possibilities and involve people in the decision-making process regarding their own future. In Croatia, for instance, there are no central dumps for hazardous waste used in production processes, yet they have to be stored somewhere. The Croatian state had clearly decided to be ecologically notable, in spite of the problems in its development, privatization, the cost of war, and the requirements of a new, modern state.

July 2002. will mark the 5th Anniversary of the Croatian BCSD, and there are many reasons to celebrate. In the short time since its creation, the HR BCSD has become an effective interface for cooperation between the private sector, government and civil society in driving forward the sustainable development agenda in Croatia. Croatian Business Council for Sustainable Development (HR BCSD) has actually shown how companies improved their competitiveness through innovate changes in production processes that reduced inefficiencies in the use of natural resources and energy.

But the activities of the HR BCSD go beyond the promotion of eco-efficiency. More recently, the council has become an active promoter of corporate social responsibility, which addresses business' social responsibility, the third pillar of sustainable development.

Nor have the efforts of the HR BCSD stopped at the borders of the country. Two Years ago, the HR BCSD launched the "Regional Business Partnership Sustainable Development", an initiative to promote business leadership throughout Central Europe. This movement is gaining momentum, involving an ever-wider circle of business leaders in the region. This year, the third regional event will take place in Vienna after previously having been held in Zagreb and Budapest. The Croatian BSCSD has been a member of the WBCSD's Regional Network since 1997. The Network currently consists of 40 partner organizations around the globe, representing some 1000 business leaders. The cooperation with the HR BCSD has been synergetic. The World Business Council for Sustainable Development (WBCSD) greatly benefit from the regional perspective the HR BCSD adds to their work through its participation in their various programs. The HR BCSD has also provided an invaluable channel to reach the Croatian business community with their message. At the same time, through the WBCSD, the HR BCSD has been able to keep in touch with the latest thinking and best practice on economic, environmental, and social management in industry, and gained access to key international players and platforms concerned with sustainable development.

We are honored to count two prestigious Croatian companies as member, Pliva d.d. and Podravka d.d. Both are also founding members of the HR BCSD. This further the close ties between the HR BCSD and the WBCSD, and ensures that the Croatian business community is appropriately represented at the international level.

Pliva d.d.:

- social responsibility: care about the employed, their education, health and medical status, care about the safety at work, introducing the system of constant management and improving employee protection, investing in employee training –30% a year on average, reducing the number of accidents at work, reducing occupational diseases, involving a growing number of employees in a medically programmed active vacation and the activities of sports clubs, obtaining the ISTS certificate for Pliva’s company in Krakow for the achievements in this area, for which this company is listed among only four companies in Poland which meet the proscribed high criteria. The aim of the management is to help improve life of every individual by systematic and long-term investments in science, education, culture, sports, environment, and the community in general. For instance, with its “virtual clinic”, Pliva helps the attempt to bring the distant areas, mostly islands, closer to University medical clinics, and enable a better and safer medical treatment for the residents. Pliva became a company with a recognizable policy of social responsibility.
- ecological responsibility: significant results have been achieved in water management and reduced water usage by its recirculating, waste water treatment, and also by reducing the quantity and pollution load of waste water. In power management significant results have also been achieved: the procedure of power cogeneration is used, the combustion in boiler rooms is improved, economic solutions have been introduced into process and energetic systems, as well as optimal ecologic and economic solutions in projecting new plants, by which the emission of hazardous gases has been reduced. Particular care is given to waste, measures are taken to prevent its generation; it is sorted, recycled, composted, internally processed, incinerated, and safely deposited. Pliva received significant awards in the area of environment protection.
- economic efficiency: continuous growth of total revenue, international market revenue, and revenue per share are proofs of economic efficiency. Pliva is the leading pharmaceutical company in Middle and Eastern Europe, and it is present in Germany, Great Britain, France, Spain, Italy, Denmark, and its role is getting more important. The management of Pliva also initiated the founding of the sustainable development committee, a multidisciplinary body which consists of highly ranged managers, and bears responsibility for a systematic care for sustainable development.

  Top-management has complete freedom and general responsibility, that is:

- social responsibility to the local, national, and global population,
- responsibility to successful business and competitiveness: eco-efficiency means creating more (products, higher income, better quality of life) from less (less raw materials, waste, energy, pollution),

- responsibility towards the resources used in every production: it is not only the environment, but all the resources used in production.

Taking care of the environment and producer competitiveness: are these mutually exclusive terms? If they are directed towards the same goal, these terms are complementary; for instance, storage of hazardous waste, improvement of technological processes which use less energy and water, the development of renewable production processes which alter our environment as little as possible, seriously considering possible pollutions due to accidents, and preventive measures for such cases, all denote orientation towards the same goal. Competition in applying useful solutions is the way towards sustainable development and sustainable globalization. Engaged attitude about sustainable development includes corporate reports about the environment and sustainability, eco-efficiency, and social responsibility. Responsibility towards the environment, community, and successful business is no longer a source of expenses, but a vision of a long-term profit. There are numerous examples of companies, which show how economic activity can successfully develop with less pollution and reduced usage of natural resources.

The Consequences for Individuals

Sustainable development and sustainable globalization affect the life and work of individuals. The natural urge of a man to work and a growing rate of unemployment are two opposites. Today there are industrial areas in poor countries in which the working conditions are no better than those in the 19th century, or even those of slavery, while on the other hand, educated work force urges for less work and more quality life. A 14 hour workday in Sri Lanka, 12 hour workday in Indonesia, 16 hour in Southern China, 12 hour in the Philippines (where mostly young women work for contracting parties from Korea or Hong Kong, and orders are placed by companies from the USA, Great Britain, Japan, Germany or Korea) – these are the facts, and a challenge to human dignity. Instead of being a factor of healthy life, work is perceived more and more as a burden and a curse. Corporations actually "develop" economy through layoffs, down-sizing, mergers and acquisition, and outsourcing. Transnational corporations, which control over 33% of total world production capacities, have only 5% of the world's directly employed workers on their payrolls.[xi]

There is no sustainable development without justice, especially in the relations between the developed and the underdeveloped. Today's ways of production and usage are not sustainable. The concept of work should value not only productive work, but also all form of creativity and activity. Work inside the family and voluntary work should also be acknowledged. It is possible to have a production process supporting sustainability which would not lead to reduction of workplaces; ecologic production of food and power is, for instance, labour intensive.

There is more and more polarization in the world: the rich on the one side, utterly poor on the other; the cult of youth vs. a longer life expectancy and the question how to fill the time. A possible balance between these opposites is redefining the term employment, and giving opportunity to every individual to realize themselves as persons in the processes of working and living. Flexible models of work, shorter working hours, working at home, and working at a distance could solve part of the problem. In the USA the number of half-time workers tripled since 1968, and in Canada, the rate of opening of half-time jobs was three times bigger than that of the full-time jobs.[xii] In the last couple of years unemployment became one of the burning issues. Only in 1997, 45 000 textile workers lost their jobs in the USA[xiii]. Multinational companies did much harm to natural environment, food reserves, and resident population; loss of jobs and no opportunities for permanent employment are among the most important factors contributing to the climate of anti-corporate attitude and resistance. We live in a culture of insecure jobs, although man cannot live without working. It is important to find a solution or at least the direction towards it. Sustainable development is the way, quality of life for everybody is the goal. One of the possible ways to reduce unemployment and realization of man's wish for a fulfilling, dignified work is shorter working hours for all and a possibility to find a job in the local area. One of the possibilities is working at home, regardless of the sort of work. Sewing at home, fruit sorting or working at a distance with the help of computer and telecommunication equipment are some models of flexible work. With such jobs it is possible to merge work and family life. It is possible to restore work to the position it once held in the life of man.

Women are in a particularly bad position in the industrial areas – at the age of 25 they are laid off as being too old, and their fingers no longer skilful enough. The majority of the work-force is girls from 17 to 25. Such living conditions destroy human dignity and obstruct starting families; many women, due to bad working conditions, have stillborn babies, and regret leaving their homes, where working conditions at the farms were equally bad, but at least they lived with their families.

Countries in transition and poor countries are exposed to the used up models of exploitation and destruction brought to them by transnational corporations. Foreign investments and globalization in general bring benefits, but also numerous drawbacks, to the local population.

A research conducted in Croatia on a model of 500 women, connected with changing work models, showed that 87% of the questioned women would like to work shorter hours: 55% would like to work for a couple of hours every day, or only a couple of days a week, but not weekends. Such models of work leave more time for children and family, more free time, they enable development of personal interests; in short, they improve the quality of life.

For the new millennium and for survival of all good things, and cessation of destruction of nature, society, and human spirit, the solution would be "less is more". Modesty and voluntary simplicity as opposed to extravagance and depriving the majority the basic living conditions by the rich and vain minority is one of the possible ways. How to achieve that? Perhaps every one of us should start from himself and the role he plays in his immediate, and after that in the wider environment.

Conclusion

The conception and implementation of the strategy of sustainability is a very broad, new scientific field which requires innovative political, social, economic and technological solutions. The philosophy of sustainability globally and ethically intertwines present and future life. Therefore it requires an integrative approach with the perspective of natural and spiritual ecology.

One of the preconditions for the philosophy of sustainability is establishing a strong, long-term vision of sustainability on the state level, and then interactively subordinated long-term visions of regions, local communities, companies, and individuals. The next step is operationalization of the vision. After that it would be possible to gradually form a community living in harmony with the development of their ethical and professional awareness of the present and future significance of the environment, perceived through the lens of economic, ecological, and social dimensions. This would take a change of paradigm on the company level: the excessive rational, automatic, quantified, linear, deterministic, cause-and-effect concept is replaced with a holistic, organic approach and intertwined rational-analytical and transpersonally-intuitive mode of cognition. The concept of the world and business economy, no longer as a machine but as a universal intertwining and dependence of all phenomena originates from understanding and accepting the moral and natural order, and living in harmony with it. Such a change implies creating innovative markers of multicriteria evaluations of the present trend of development and the potential of future sustainability.

The philosophy of sustainability emerged from the awareness of the existential threat to life on Earth caused by the past development, but also from the awareness of the threat to individual originality, originality of the social community and natural environment it is a part of. The knowledge of it and incorporation of the knowledge into business, its normative, strategic, and operative level produces numerous competitive features. At the same time, on the society level, the development ought to be directed by the tools of sustainability and coordinated by mediators on local, regional, national, and global level. Solving economic problems implies an interdisciplinary approach: instead of one-dimensional experts, multidimensional generalists with special knowledges are sought after, which of course calls for a change in educational system, which would produce complete, expert, emotionally, socially and ethically competent people.

References

[1] Atkinson, G. /Dubourg, R./Hamilton, K./Munasunghe, M./Pearce,D./Young, C.(1999): Measurin Sustainable Develomment, EE

[2] Breutel, B. (2000): Agenda 21, Vision: Nachaltige Entwicklung, Campus

[3] Capra, F. (1986): Vrijeme preokreta, Novi svijet, Globus, Zagreb

[4] Callan, S.J./Thomas, J.M. (2000): Envirinmenntal Economics and Management: Theori, Policy and Applications, The Dryden Press

[5] Financial Times (2001): Mastering Strategy, Your Single – Source Guide to Beckoming a Master of Strategy, Financial Times Mastering, Financial Times

[6] Fučkan, Đ. / Martinko, V. (2001): Uske i široke staze razvoja, u: Mirić, D./ Vlahović, D. i suradnici (2001) : Suvremeni život i srce

[7] Fučkan, Đ./ Martinko, V(2001): Održivost i lokalni turistički razvoj, Međunarodna konferencija «Novi turizam», Rijeka

[8] Gladwin, T.N. (2001): A call for sustainable developement, u: Financial Times: Mastering Strategy

[9] Graute, U. (1998): Sustainable Development for Central and Eastern Europe, Springer

[10] Klein, N. (2002): No Logo, VBZ, Zagreb

[11] Meadows, D.L. (1972): The Limits to Growth, Report for the Club of Rome Project on the Predicament of Mankind, New York : Universe Books

[12] Meadows, H.D/ Meadows, D.L./Randers, J./Behrens III/W.W (1974.): Granice rasta, Stvarnost, Zagreb;

[13] Mirić, D. /Vlahović, D. i suradnici (2001): Suvremeni život i srce, Hrvatsko kardiološko društvo - ogranak Split i Turistička zajednica Županije splitsko-dalmatinske, Split 2001

[14] Mishan, E.J. (1967): The Cost of Economic Growth, Staples Press

[15] Munasinghe, M. /Sunkel, O./Miguel,C.(2001): The Sustainability of Long-term Growth, EE

[16] Osmanagić Bedenik, N. (1993): Potencijali poduzeća, Alinea, Zagreb

[17] Robertson, D. /Kellow, A.(2001): Globalization and the Environment, Risk Assessment and the WTO, EE

[18] Ring, I. /Klauer, B./Watzold, F./Mansson, B.A.(1999): Regional Sustainability, Applied Ecological Economics Bridging the Gap Between Natural and Social Sciences, Physica Verlag

[19] Selke, E.(1998) Sustainable Development in Europe - A Challenge for Transnational Spatial Planning Policies, U Graute,U.

[20] Ritzer, G. (1996); The McDonaldization of Society, Pine Forge Press, USA

End Notes

[i] «How can you buy or sell the sky, the warmth of the land? The idea is strange to us. If we do not own the freshness of the air and the sparkle of the water, how can you buy them? This we know; the earth does not belong to man; man belongs to the earth. This we know. All things are connected like the blood which unites one family. *All things are connected.* That destiny is a mystery to us, for we do not understand when the buffalo are all slaughtered, the wild horses are tamed, the secret corners of the forest heavy with the scent of many men and the view of the ripe hills blotted by talking wires.Where is the thicket? Gone. Where is the eagle? Gone. The end of living and **the beginning of survival**.»

[ii] "One of the more prominent characetristics of the modern economy... is the obsession with growth. Basically, all economists and politicians consider economical and technological growth as necessary, although it should be clear by now that unlimited expansion in the limited environment can lead only to disaster. The belief into the necessity of the constant growth is the result of the excessive emphasis on the yang values - expansion, self-affirmation, competition – and it can also be connected to the Newtonian ideas/notions of absolute, infinite space and time. This is the reflection of linear thinking, wrong belief that if something is good for the individual or the group, then the large quantity of that something good will necessarily lead to improvement... The consequences of this reductionistic misconception is becoming more and more evident today, because the economic forces/powers collide with each other more often, are tearing social structure and destroying natural environment." Capra, F., Vrijeme preokreta, Globus, Zagreb, 1986., p. 243.

[iii] Scheibel, E.J.(1991): Holizam, novo misaono doba (Holism, New Age of Thought), Obnovljeni život, časopis za religioznu kulturu.

[iv] Biological diversity is a necessary precondition for human life.It includes subspecies of vegetable and animal species, their genetic variability and types of ecosystems they belong to. So far 2,5m species have been identified, while most of the estimates range between 5 and 10m.

[v]According to UNEP data, nowadays 5366 animal species are threatened, out of which 533 mammals, 862 birds, 257 reptiles, 133 amphibians, 934 fish and 2647 invertebrates. According to the same source, 26 106 vegetal species are threatened.

[vi] UNPD, 1992

[vii] Known as « Brundtland Commission» after the Norvegian politician Gro Harlem Brundtland

[viii] WCDE, The World Commision on Environment and Development, Our Common Future(1987), Oxford, University Press

[ix] A good illustration of this is Lao Tse's thought in the book of ancient Chinese wisdom Tao, XXXIX: « Indeed, take the cart to pieces and you do not have the cart any more»

[x] We can differentiate: orientation towards industry, orientation towards employees, orientation towards the system, orientation towards the factors of success, and orientation towards quality whic is definitely the widest strategic focus. Osmanagic Bedenik, N. (1993)

[xi] World Development Movement, «Corporate Giants: Their grip on the world economy» Eric Koloder, quoted according to N. Klein: No Logo, Zagreb, 2002, p. 152

[xii] Handbook of U.S.Labor Statistics, Bureau of Labor Statistics, 1997 quoted according to N. Klein p. 177.

[xiii] Charles Kernaghan,»Behind the Label:»Made in China»»,1998 quoted according to N. Klein p.147

The Change of Ownership in Vietnam under Globalization

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Abstract

Globalization has strong impact on all aspects of the world economy, national economy, enterprises and individuals. One of the most important aspects for transitional economy like Vietnam is the change of ownership because it is the foundation of the structure of government, organizations and enterprises as well as the style of behavior among members of the society. In Vietnam, the public ownership is dominant and now it changes over time in direction of globalization. It is necessary to determine the trend of change of ownership to effectively adjust the policy of the state, the business strategy of enterprises and style of behavior of the members in the society.

Concept of globalization

So far, there have been different definitions about globalization. It is a new comprehensive concept with different approaches such as political, economic, legal, security and cultural. Clearly, globalization is a process that makes national borders less and less relevant and creates the need for global governance (Pogany, 2000).

First, globalization has been considered as a process of establishment of a unified global market place. It is called the market globalization. It is the dramatic acceleration and multiplication of economic activity which transcends national and regional markets, leading us towards a single global market (Leon Brittan, 1997). Under this approach, the globalization is only a purely economic process. The international linkages showing the process of globalization is an economic process and the final result is a single global market, again an economic phenomenon. Some economists shape the process of establishment of a global market as the pursuit of removing market fragmentation (Demelo, Panagariya, and Rodrik, 1993). From market globalization, there is globalization in goods and service, finance, labor and capital, etc. The globalization also has its approach from production point of view. It is called the globalization of production. That means it refers to the tendency among firms to source goods and services from locations around the globe to take advantages of national differences in the cost and quality of factors of production (such as labor, energy, land, and capital). (Hill, 2000). By doing in that manner, firms hope to lower their overall cost structure and/or improve the quality or functionality of their product offering, thereby allowing them to compete more effectively. For example, the Boeing Company' jet airliner 777 has 132,000 major component parts that are manufactured by 545 producers around the world. Eight Japanese suppliers produce parts for the fuselage, doors, and wings; a producer in Singapore makes the doors for the nose landing gear; three suppliers in Italy make wing flaps; and so on. The globalization of production of Boeing or its outsourcing has two advantages. On one hand, it exploits the best producer in foreign countries, thereby, improves its performance; on the other hand, it can take the chance that it will win significant orders from clients based on that country. It is the process of gaining the economies of scale.

Second, globalization has been considered not as the static process but a dynamic one. This category of definitions emphasizes on the development and continuity of the globalization. Globalization is the spatial dispersion of economic activity (Sassen, 2000). Globalization is an encompassing term describing the spread of international economic openness and economic liberalism (Hentz and Richardson, 2000). Growing openness means in a certain country, a larger and larger share of national production is offered for export and the producers and consumers look increasingly at all sources (domestic and foreign) when deciding from where to buy the products and services they need. Openness of an economy is often measured as the ratio of the sum of a country's export and import turnover to the Gross Domestic Product (GDP). The process of spreading economic liberalism means increasing willingness of individuals, firms, and governments to participate in the world economy by reducing barriers to import and foreign investment, as well as to be willing to increase exports and invest more abroad. Therefore, the globalization is the development of a single unified global market. The unification of the market in the globe directly links the flow of the production forces. They are new production technologies that need large scale to be profitable, existing production technologies that can be made more profitable by dispersing production in all places in the world, reduction in trade costs such as the costs of transportation and communications, and reduction in border measures (tariff and nontariff barriers).

Third, globalization is a process of political economy. It starts with the economic process (economic globalization by accelerating the exchange in international trade and investment among countries) and it stops by the changing in the political regime of each country toward a single political governance. Argument based on the fact that there is not existing the purely economic process, the economic process always links and implies the political purpose. It is also departed from the linkage between infrastructure and superstructure. For the changes of the material conditions of production, the change of the superstructure will be occurred. From economic and political aspects of globalization, naturally, the globalization also has the social, cultural/educational, psychological and security aspects (Kenichi, 1995 and Dructker, 1993). In Vietnam, in all political official documents, only the economic globalization has been regarded.

Briefly, globalization is a complicated process including different aspects. It involves the development of the economic forces in the world economy and it is an objective phenomenon.

The driving forces for globalization

There are many driving forces for globalization. They interact to each other and establish an integrated impact on globalization.

* Reduction in tariff rate and investment barriers. Through multilateral negotiations within General Agreement on Tariffs and Trade (GATT) and World Trade Organization (WTO), the average tariff rates have fallen significantly since 1950 and it should stand at 3.9% in 2000. In addition to reducing trade barriers, many countries have also been removing restrictions to foreign direct investment. According to United Nations, between 1991 and 1996, more than 100 countries made 599 changes in legislation governing FDI. Some 95% of these changes involved liberalizing a country’s foreign investment regulations to make it easier for foreign companies to enter their markets. By January, 1997, there have been 1,330 treaties relayed to foreign direct investment in the world involving 162 countries, a threefold increase in five years.

* Deregulation of the financial system in association with the trade liberalization. Many countries have made smooth the financial regulations by removing the financial restrictions such as widening the ban of fluctuation of exchange rate and limitation of foreign currencies. Besides, foreign investors have more rights to invest in the financial markets and buy the majority of equity in the enterprises. They also enjoy many preferences in finance. The financial deregulation is a step associated with the trade liberalization.

* The collapse of the former Soviet Union. This fact moves the world from a conflict and confrontation world in ideology to a peaceful world. This condition facilitates the globalization.

* The development of the communication and computer network. The microprocessors and telecommunications accelerate the speed of information transformation among countries in the world. This makes the world smaller and economizes the cost and the time to transmit the information in all transactions. The Internet and World Wide Web shape the wide space for a huge amount of transactions in commerce and investment.

Besides, the development of transportation technology and e-commerce are the forces for lowering costs of shipping goods and services over long distances. In the United States, the cost of shipping freight per ton mile on railroad has fallen from 3 cents in 1985 to 2.4 cents in 1997, largely as result of efficiency gains from widespread use of containers. E-commerce facilitates the trading volume among countries for its favorable conditions.

The Characteristics of Globalization

More free for exchange of goods, services and capital among countries

For reduction of the barriers in trade and investment among countries in the world, the exchange of goods and service becomes stronger than before. This is a good condition for all countries to change their policies to exploit their comparative advantages and to efficiently allocate their resources to minimize their inputs and minimize their outputs. It is also a condition to take the economies of scale for entry to many new markets.

Establish a single global economic structure

All countries merger into a single global economic market and thereby, a single economic structure will be established. The policy adjustment will be unified and many policies related to maintaining the equilibrium of the economy in the region and in the globe will be made. For example, WTO changes its behavior after failure of the Settle round. All policies implemented before by WTO are inappropriate with new phenomenon in some areas.

High competition among global players

They are the multinational corporations (MNCs) and the small and medium enterprises taking part in the global market. To keep their market shares and to make profit, they must compete to each other. For the fact that, the number of firms increases day by day, the competition among them becomes much strong.

Multidimensional approach to the business strategy

The business strategy can be seen in different aspects- national, international and global ones. Therefore, to be successful, the business strategy should take care of all aspects. If one dimension losses, the competitor will go ahead. The failure will be occurred.

Culture as a sharp weapon to win competitor

The global environment consists of intersections of the cultures of different countries. To penetrate into new markets effectively, it is necessary to understand in-depth these cultures. In the condition of similarity of technological base and reputation, the culture can be considered as a sharp weapon to overcome barriers set by competitors. Coca-cola, Mac Donald, etc become winners in competition for their cultural understanding in new markets.

Impacts of globalization on the ownership in Vietnam

Globalization plays a very important role for the development of the world economy. It has the root causes. All countries and economies in the world are merging into this trend. Vietnam has also undertaken the innovation economic policy from a centrally planned economy towards a market one and naturally, it has integrated into the globalization. Like other economies, Vietnamese economy has been effected by the globalization and it has many changes especially the changes of the ownership. The changes of the ownership have many forms.

The diminishing of the pure public ownership

Under the centrally planned economy, only public ownership (with two grades-state and cooperative) is existing. Under Vietnamese Constitution, all major assets like land, natural resources, sea, railway, telecommunication, etc belong to ownership the people. The public ownership has been considered as the fortress of the existence of the Vietnam at that time. However, this regime faced with many difficulties including the asymmetry between pioneered management mechanism and the backward economic situation, low income of the people and isolationism from the rest of the world. The absolute domination of the public ownership over the economy is the root of the beaurocracy and ineffective allocation of the resources. The failures of the economic management happened. Vietnamese economy dropped in the crisis before 1986. If remained the single and unique public ownership over sectors of the whole economy, the question “to be or not to be” of Vietnamese economy in the globalization is always problem of the policymakers and businessmen. When the ownership problem is not solved in appropriate manner, the obstacle of the economic development is existing. After taking the innovation process, Vietnamese economy escaped from the crisis and moved toward a market economy in line with the direction of the development trend of the world economy and region. The transition of economy from centrally planned economy toward a market one, by nature, is the integration into the globalization and region. The success of the economic innovation (doimoi) reflects in the high growth rate (annual rate of 7% from 1990), export-import turnover increased, the standard of living is improved, etc. Besides, Vietnam is a full member of ASEAN, WB, IMF and signed the Bilateral Trading Agreement with the US. One of the causes of these successes is the fragmentation of the public ownership. The state owned sector is narrowed. The dominant role of the state owned sector is carefully considered. This role is not over all sectors and all enterprises of the economy by to given extent, sectors and enterprises. The partial fragmentation of the public ownership is the right direction.

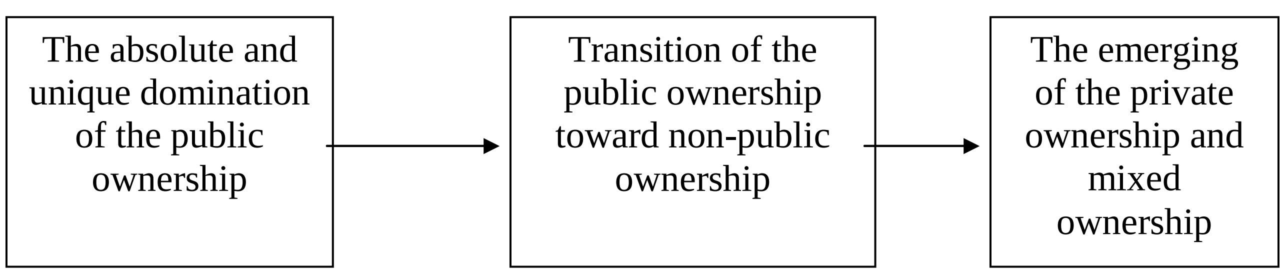
The increasing of the private ownership as the equitization process

The result of the fragmentation of the public ownership is parallel with the establishment and the development of the privatization. In Vietnam, the privatization is called the equitization. It has been explained that in the surface, they have the same meaning but in fact, privatization means the development of the private sectors but the equitization means the development of the state-owned sectors in the new manner. However, the practice proved that they are the same to each other. Many state-owned enterprises have been moved from public ownership to the shareholder’s ownership. The rights and obligations of the members of the enterprises become clear. The performance of the state-owned enterprises has been basically improved. This is a right direction of the management.

The emerging of the mixed ownership

This process is the consequence of both processes above. Although the private sector has enjoyed many preferential treatments (new Vietnamese Corporate Law), it is the sector suffered many discrimination treatments. Therefore, the conflict between private and public ownership by the private enterprises and the public enterprises is still a problem for policymakers and businessmen. The intermediary step is the acceptance of the nixed ownership. That means both types of ownership are existing in Vietnamese economy and in even in the enterprises. For the enterprises called the state-owned enterprises, the share of the state is dominant (more than 30% of the total contribution). For the enterprises called the private-owned enterprises (or non-state owned enterprises), this share of the state is less than 30% of total contribution.

The changes of the ownership of Vietnamese economy can be illustrated in the following flow. This reflects the great change of the awareness of the ideology of the policymakers and the businessmen.



The presence of the foreign ownership

This is the result of the FDI attractiveness from foreign countries into Vietnam. Many enterprises with foreign owned capital (about 3,000) have appeared in Vietnamese economy. Vietnamese policies have to respect to them because they have great contribution to Vietnamese economy. It is these enterprises making the types of ownership in Vietnam diversified and fast changeable.

The changes of the ownership are the changes of the root of the awareness of the policymakers and businessmen. The changes of the management structure of the enterprises and the economy as a whole are the consequences of these changes. That is the reason of the successful changes of Vietnamese economy under globalization.

Conclusion

Globalization is an objective tendency of the world economic development. It has different aspects of impact on the economic and social life. Among of these aspects, the impact on the ownership is a vital one. The change of the ownership means change of the infrastructure, and as the result, it can make change the superstructure under the Marxism point of view.

References

[1] Charles W.L.Hill-*International Business*, McGraw-Hill, 2000

[2] Dr. Do Duc Dinh- *Modern Asian Economy*- University of Toronto- 2000.

[3] Mary Farrell and Peter Pongany- *Globalization and regional economic integration: Problems and prospects*- Ford Foundation- Hanoi Institute for International Relations- 200.

[4] *The globalization: opportunities and challenges*- Intenational Conference in Hanoi-2002.

[5] *Vietnam and the East Asian Crisis*- Edited by Suiwan Leung-1999

[6] Vietnam Communist Party- *Political Report of IX Congress*

The Importance of National Identity in the Thrust for Globalization: A Latin American Case Study

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Abstract

Globalization is regarded as a powerful force in the world today and yet, we see more underlying nationalistic forces present on the political scene. A number of countries face regional devolution within their political borders and many of these have broken out into armed conflict. Some explanation can be seen in the individual's personal involvement in their national system. An individual's attachment and loyalty to the nation state influences support for larger regional groupings.

Past research has shown that if managers have an international responsibility, they are most likely to support their country's entry into large trading arrangements; whereas, if their work responsibility and therefore their economic self interest is local - they will resist any government movement to internationalize their markets and competition. This paper reports our findings in obtaining the opinions of 223 executives in five Latin American countries toward regional and hemispheric free trade and their support for globalization.

Introduction

The *globalization* of markets is forcing borders to become invisible as economic barriers disappear.[1] Through efforts of the World Trade Organization (WTO), countries in Europe and North America have agreed to open markets, and to coordinate macro economic policies. In fact, the Multilateral Agreement on Investment (MAI), which would give countries and foreign investors a *Charter of Rights*, was close to being accepted but a number of nationalists mounted a vigorous campaign to place it on hold.

Individual countries in South America are acting more independently in pushing for larger markets for their goods and services.[2] Several leading politicians have been very outspoken in favor of globalization. One such leader, President Fernando Henrique Cardoso of Brazil, the host of the first summit on free trade between Latin America and the EU, said "What is at stake is fundamental. It's the development of a shared prosperity. It's the construction of a legitimate international order. Globalization has to apply to all. It cannot be a gift for the rich and a hardship for the poor"(*Globe and Mail*, June 30, 1999). However, a trade agreement between Mercosur and EU may be premature if measured by the success of the Summit of 1999.[3] In the interval since President Cardoso's optimistic statement cited above of the benefits of globalization to developing nations, he recently took to task the world's rich countries for squandering the opportunities that have unfolded since the demise of the Cold War. The United States came in for specific attack for refusing to remove barriers to trade, thus thwarting developing countries' trade initiatives while extolling the virtues of free trade. "They talk of integration, and they practice exclusion. Group of Eight summiteers met to validate what a single power has decided. This isn't the world we prepared ourselves for over so many decades. This is a world of unilateralism" (*Globe and Mail*, August 14, 2002). U.S. Nobel laureate economist Joseph E. Stiglitz (2002) presents a convincing argument that to-date globalization has benefited the rich countries at the expense of the poor, lending credence to President Cardoso's concerns.

In order to have a major shift in attitudes and opinions in Latin America toward the globalization of their markets, business managers will have to express a strong mandate on the benefits to the people of individual countries. Latin Americans can be nationalistic and protectionist toward their indigenous industries when there is a threat to their economic well-being.

Business managers have an elite position as opinion makers in affecting public policy. This has been especially true in free trade negotiations as seen in the EU and NAFTA. Opinion makers need to "talk about why open markets are the way to create opportunities to make economies more competitive and to raise standards of living." (Carla Hills, 1999).

Research Questions

Our research questions follow from the major economic issues facing all countries in Latin America - that is, how committed are Latin American business elites to influence the decisions in their communities to move to larger free trade arrangements and globalization?

If Latin American countries join NAFTA, a new trading region would emerge - Free Trade Area of the Americas (FTTA). Several questions focus on the support surrounding this transition:

a) Is there opinion leader support for the enhanced hemispheric economic integration?

Or, on the other hand,

b) Is opinion leader support for a continental South American Free Trade Association (SAFTA) the first, and possibly cautious, step to globalization?

The major player-countries in Latin America have talked considerably about moving toward world trade agreements and globalization. However, *The Economist* (June 26, 1999) reported that Latin America's trading hopes with enlarged markets have increased only slightly over the past several years. Traditional Latin American sensibilities about sovereignty have returned in part because of the detention in Britain of General Augusto Pinochet, Chile's former dictator. Latin America and the United States were optimistic of a strong partnership ten years ago, but now both sides are questioning this move. “Everywhere there were calls for the United States to give things, and very little about what Latin America offers in return”, says Peter Hakim, of Inter-American Dialogue, a Washington think-tank (*The Economist*, March 30, 2002).

Brazil is the dominant economic force and the largest country (population 175 million) in Latin America, and will be key to any Latin American success in a large trading bloc. How Brazil goes - so goes the rest of Latin America toward accepting a major enlargement of their free trading arena.

Background

There are many regional groupings in Latin America; however, Mercosur is the most notable. Whether these current arrangements are sufficient to be globally competitive for the next millennium is of major interest to Latin American leaders and other potential trading partners.

Mercosur

In March 1991, Argentina, Brazil, Paraguay and Uruguay agreed to form a customs union called *Mercado comun del Sur*, or Southern Common Market. The union - commonly called *Mercosur* - created an integrated regional market whose members were committed to liberalizing trade with one another while imposing a common tariff on goods imported from non-members. Most interesting, Mercosur’s trade is dominated by EU countries and not the United.States. Exports to EU count for 31% of total trade versus 19% to the United States. Global trade patterns and size of trade are shown in Fig. 1.

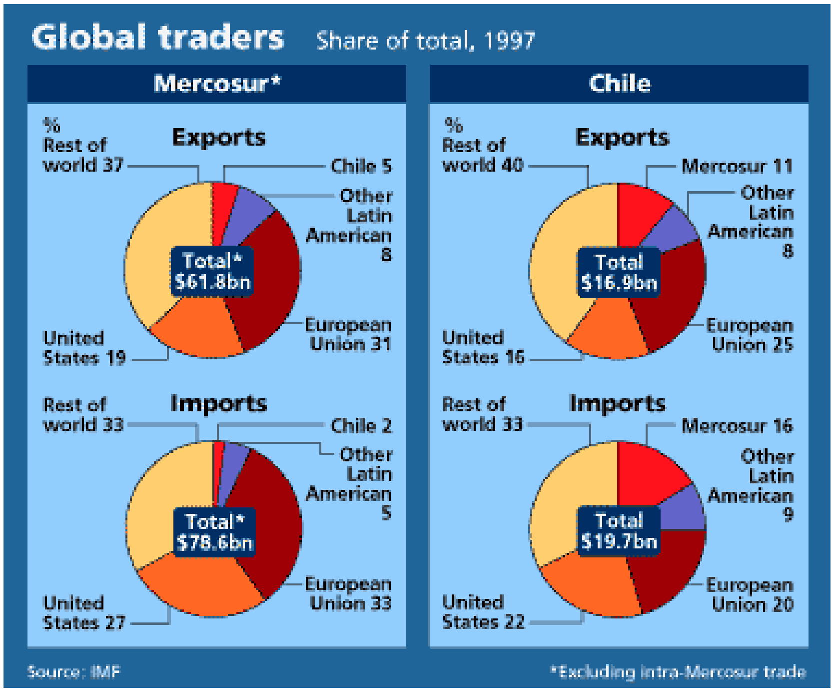

Figure 1: GLOBAL TRADERS IN LATIN AMERICA: MERCOSUR AND CHILE

Literature

The increasing multinationality of corporations and their executives is resulting in more managers having work responsibilities that are internationally oriented. This fact has important implications for regional integration because managers with an international work orientation - versus domestic managers, tend to believe that their well-being is highly dependent on developments outside their home country and that they stand to benefit from increased integration. This thesis has been tested with western European businesspersons (Mennis and Sauvant, 1976) in relation to the European Union and within the Canadian-American Automotive Trade Pact (Smetanka and Murray, 1985) with Japanese executives. However, the world-wide movement to regional trading blocs with special concessions for its members will start to impact South America most extensively as they consider the FTAA, a potential trading bloc which would cover North, Central and South America.

Much of the past research associated with personal support for regional integration is dependent on the respondents' attachments to his/her country. Attachments that are *sentimental* versus *instrumental* are more apt to look to the nation state as fully qualified to meet the economic needs of industry. Managers with an *instrumental* attachment will look at cooperative and joint efforts as more rewarding for the long-term economic well-being of the country (Kelman, 1969).

Support for economic integration in South America either on a regional basis, such as the Mercosur, or on a continental basis such as the FTAA, or even FTAA-EU is being pressured by global issues. Not only is it related to the "external interest" of the business elite, but to an individual's perception of the continuing value of regional integration on one's own country versus corporate economic interest. On the other hand, general or public support for free trade arrangements is influenced by many attachments to the national system and a study (Granzin, *et al.*, 1998) on American support for NAFTA showed several external influences. Some of this support was affected by variables as broad as U.S. conservatism to the public's believability of Ross Perot.

Canadians, who supported NAFTA a few years earlier, now have reservations about its success as reported by an Environics poll of 2000 people with only 28% support (*Globe and Mail*, July 2, 1999). This continues to indicate that public support for free trade arrangements can be fickle and not as stable as the business elite whose support has been steady from the beginning. Much of this business support is the result of their personal economic interest, which is connected with divisional and corporate interest in expanding products and services into foreign markets.

Conceptual Framework

Perhaps the most pervasive explanation of business executives' attitudes is that of economic self-interest. From this perspective, the attitudes of executives in larger Latin American companies simply mirror the interests of international business. Given that the objective interests of most business are in an open and harmonious trade system, most executives can be expected to support free trade. In addition, there will be support for the free movement of labor and capital across national boundaries, intergovernmental policy coordination, and other such measures that promote the unobstructed conduct of their business operations. Notwithstanding, it is the fear of foreign competition and the loss of jobs that will counterbalance the enthusiasm for free trade.

Other factors have also been shown to influence businessperson expectations of the gains from broadening the trading sphere. Mainly, these were the establishment size, level of current business activity, foreign business travel and the amount of interchange with foreign business colleagues. However, an individual defines their self-interest in relation to their own long-term career and personal goals. In addition, the relation of this perceived self-interest to individual attitudes is considerably more complicated than assumed by cursory observation. (Bauer, *et al*. 1972).[4] Our framework (Fig. 2) includes exogenous and indigenous variables that influence the relationship of opinions toward trade patterns and concerns for the nation state.

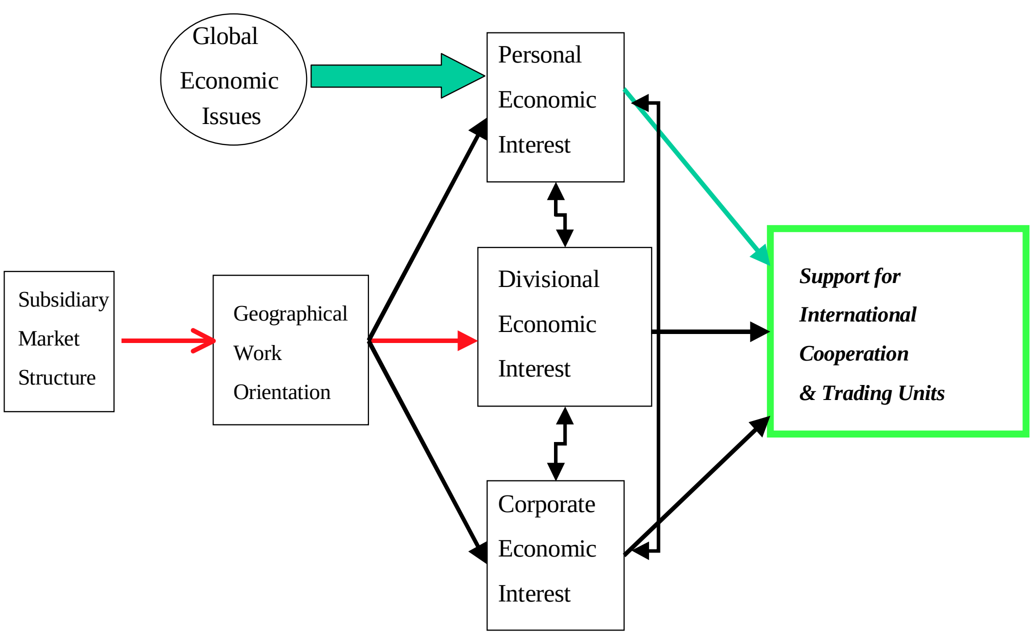

FIGURE 2. CONCEPTUAL FRAMEWORK

Current Issues

Trade and trading relations are topics of national and international interest to governments and economic planners who seek to best position their country for such negotiations. There is a plethora of information on free trade arrangements, customs unions and common markets that support both the benefits and dangers of opening the borders to trade and investment. The Internet has assisted the globalization march and there is no real turning back to a domestic-only market. However, the successes (i.e., benefits) have not all been equal or realized by different economic groups. The "trickle down" effect is slow and may be too slow for many.

A study of Mercosur by the Federal Reserve Bank of New York concluded that this customs union has contributed significantly to regional trade liberalization. But by encouraging trade within the group at the expense of trade with nonmembers, Mercosur may have limited member countries' access to high-technology imports, and important stimulus to growth (Connolly and Gunther, 1999). It would appear that although there was considerable trade creation within Mercosur, a case could be made that by excluding low-cost producers, trade diversion also emerged.

Some of the first discussions toward a FTAA have taken place among the Andean Pact of countries (Bolivia, Colombia, Ecuador, Peru, and Venezuela) and Canada. The Trade Minister of Canada at the time, Sergio Marchi, said "More and more, we have come to realize that our future prosperity is intrinsically linked to that of our hemisphere".[5] Now that the United States Congress has passed "Fast Track" legislation (*New York Times*, August 5, 2002) enabling the President to push ahead with FTAA negotiations, there should be quicker movement toward a hemispheric free trade pact. It is reasonable to expect that the final moves to globalization will take place through the World Trade Organization over the next decade.

Empirical Assessment

In order to measure elite opinions, we determined that there were several major characteristics that were inherent in this group. As elites, they would have access to government politicians, would have a personal interest in the outcome of trade decisions, and that they were nationals of one of the major Latin American countries.

It was determined that business executives in five Latin American countries were best suited as the target sample. First, they have a higher-than-average education, and most would speak English - the international language of business. Second, these executives should represent a variety of functional responsibilities in a cross-section of industries. The research would best be undertaken in their own countries in a familiar setting with translators available for difficult questions, as many were of a sensitive and private nature. The countries surveyed were: Argentina, Brazil, Chile, Colombia and Peru.

Sample

The 223 executives were part of management development programs sponsored by the University of California, Berkeley. The seminars were delivered in English with simultaneous translation and the questionnaire was administered in this method. The participants were selected by senior management and represented a number of industries and positions in each of the companies. Between 50 and 75 percent of the respondents were middle managers and represented all major corporate responsibilities in each of the companies. There was some variation in company size, respondent age and education from country-to-country in the sample. Political posture was reported to assist in the analysis.

The questionnaire, using a five point *Lickert* scale, elicited opinions on several economic and nation state topics, in addition to personal background information. First, measures of the strength of personal involvement in the system, including control and sharing of economic decisions with other countries were undertaken. Second, the respondents' posture to questions on regionalism and globalization extends our understanding of the influence of personal economic interest on their attitudes.[6]

Findings

The findings from our survey supported the major outcomes from a previous study on German reunification by Mennis and Sauvant. Several of the results of their findings were not supported. The major support indicated that work orientation is a major determinant of measuring support for greater trade liberalization. In particular, their study concluded, "interests are a function of work responsibilities" (Mennis and Sauvant, 1976). The results of our study similarly concluded that the more international the market for the respondents' products or services, the more support was evident for FTAA over Mercosur (34% versus only 21% for domestically-oriented respondents). In addition, Table 1 presents the complete results for other combinations of international and domestic markets.

On a query focusing only on a South American Free Trade Area (SAFTA), support appeared to be consistent across all respondents independent of their market orientation. Approximately 75 percent of all executives supported (i.e., agree or strongly agree) SAFTA.

This support for Mercosur or a Latin American-made regional trade group was not as strong as for membership in the larger FTAA. Only Colombia, currently not a member, would prefer Mercosur over the hemispheric trading area. Business respondents may easily feel that their country needs a smaller regional customs union before moving to the more competitive FTAA. As expected, support for forfeiting Mercosur over FTAA was greater with Argentina, Brazil and Chile as the larger or export-oriented countries.

Table 1: SUPPORT FOR MERCOSUR OVER FTAA

	MERCOSUR better than FTAA					
Market Orientation	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**	**Total**
Market						
Domestic	14.8	35.8	28.4	14.8	6.2	100.0
Domestic + exports	9.9	27.9	29.7	22.5	9.9	100.0
International + domestic equally		37.5	12.5	37.5	12.5	100.0
Exports + domestic	33.3	11.1	44.4	11.1		100.0
Exports only		33.3	33.3	33.3		100.0
Total	12.7	30.5	29.1	19.7	8.0	100.0

International Cooperation

In order to assess their attitudes on international cooperation, the Latin American executives were asked to express their opinions on a number of specific issues related to Latin American-international cooperation and policy harmonization. Support for cooperation among the five Latin American countries reveals different levels of support depending on the country. The choices with respect to the locus of decision-making on national issues of importance were:

Table 2: QUESTION: "MY COUNTRY WOULD BE BETTER REMAINING IN / JOINING MERCOSUR THAN JOINING FTAA"

(*Agree Or Strongly Agree With Frequencies By Percentages*)

Argentina	Brazil	Chile	Colombia	Peru
26	32	32	63	28
(*Disagree or Strongly Disagree with frequencies by percentages*)				
39	57	48	13	32

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1. *Independently;* i.e., by national governments according to the particular interest of the individual government
2. *With Consultation*; i.e., by national governments but with prior consultation among the governments aiming at the harmonization of legislation and administration
3. *Jointly;* i.e., by national governments at the same time with a unified policy program

On the whole from Table 3, executives do prefer to consult in matters of economic planning and development of natural resources; however, they want to act independently on decisions of tax, military and surprisingly, international diplomatic representation. This is not consistent across all countries, with Argentina being more an independent player and Colombia and Peru willing to consult or use joint decision-making.

Brazil, as the largest country will be a major force in pushing for closer ties with other countries and sees a more independent development of natural resources than some of its neighboring countries.

The aspects of the broader issue of whether there is sufficient support for a larger economic and monetary union raises doubts when support is lacking for jointly undertaking critical decisions. Executives support questions on free movement of people and capital but still want to limit joint decision-making for their international diplomatic representation. In the end, it would appear that there is a convincing embracing of integration on a continental basis (SAFTA) with 84% support, but limited support for the mechanism to broaden the free trade areas to a hemispheric or global arena.

Table 3: LEVEL OF SUPPORT FOR LATIN AMERICA COUNTRY COOPERATION

		Country (Frequency in Percentages)				
Functional Areas of Policy Harmonization		**Argentina**	**Brazil**	**Chile**	**Colombia**	**Peru**
Economic Development & Planning	independently	28.9	30.0	47.1	21.1	50.0
	consultation	44.7	51.7	44.1	52.6	43.2
	Jointly	26.3	18.3	8.8	26.3	6.8
International Diplomatic Representation	independently	51.4	18.3	42.4	28.9	54.5
	consultation	43.2	38.3	42.4	36.8	29.5
	jointly	5.4	43.3	15.2	34.2	15.9
Tax Policies	independently	43.2	46.7	51.5	60.5	69.6
	consultation	45.9	30.0	36.4	26.3	19.6
	jointly	10.8	23.3	12.1	13.2	10.9
Military Security	independently	57.9	67.8	75.8	44.7	86.7
	consultation	36.8	20.3	15.2	39.5	8.9
	jointly	5.3	11.9	9.1	15.8	4.4
Monetary & Balance of Payment Policies	independently	21.6	18.3	45.5	26.3	44.2
	consultation	45.9	63.3	42.4	42.1	51.2
	jointly	32.4	18.3	12.1	31.6	4.7
Judicial Authority	independently	75.7	71.7	69.7	78.9	77.3
	consultation	18.9	26.7	24.2	15.8	18.2
	jointly	5.4	1.7	6.1	5.3	4.5
Commercial Relations with Other Countries	independently	13.5	11.7		5.3	13.6
	consultation	40.5	36.7	38.2	26.3	50.0
	jointly	45.9	51.7	61.8	68.4	36.4
Development of Natural Resources	independently	34.2	57.6	48.6	15.8	26.7
	consultation	36.8	28.8	31.4	44.7	37.8
	jointly	28.9	13.6	20.0	39.5	35.6

Factor Analysis

For purposes of analysis, the items in Table 3 were factor analyzed and three dimensions emerged in the analysis, accounting for 56% of the variance (Table 4). The first factor is related to Latin American-international cooperation in areas usually relegated to nationally autonomous communities in the domestic realm of social, education, and law and order items.

The second factor describes commercial (i.e., trade-related) relations with Latin American countries and the international community. There is a high recognition of support for joint decision-making in this sphere. Finally, items of strong internal control are those decisions that affect military, judicial, tax, and overseas representation. In the latter, national sentiment is for these decisions to be made within the country.

Discussion

Latin American countries provide the next major threshold to integrating a major world market. This continent with a population of over 350 million and only two principal languages has immense potential to rival the other larger free trade areas. Early perspectives on the potential for an enlarged Mercosur or SAFTA appear to have strong support from the business community. As expected from previous studies, support is highest when personal economic interest has an international or offshore dimension.

Table 4: FACTOR MATRIX OF THE LATIN AMERICAN EXECUTIVES ON COOPERATION ITEMS

Principal Component Matrix	Component 1	Component 2	Component 3
Social Welfare Policies	0.710		
Education & Training	0.684		
Public Safety & Order	0.589		
Monetary & Balance of Pay Policies	0.552	0.291	0.366
Rules for Political Participation	0.537		
Economic Develop & Plan	0.528	0.414	
Develop of Natural Resources	0.489	0.266	
Commercial Relations Countries	0.145	0.709	
Judicial Authority			0.474
International Diplomatic Represent	0.270		0.519
Military Security	0.356	0.303	0.432
Tax Policies	0.519		0.373
Extraction Method: Principal Components Analysis 3 components extracted.			

Our findings do not support unconditional shared decision-making in order to initiate a larger trading bloc. Respondents were emphatic that national governments control decisions over items considered internal and the prerogative of their country's well being. They were willing to share items that enhanced market efficiency and at the same time, supported their own economic interest. Finally, business executives as elites and opinion makers did see market enlargement as a way to expand opportunities for the private sector. Questions were asked about the participants' assessment of the national system to be equally rewarded for hard work. There was considerable disagreement on fairness of the rewards across the countries surveyed in Latin America.[7]

Implications

Our findings and analysis of the research questions presented above suggest support for an enlarged Mercosur, incorporating the countries making up continental South America. This finding supports an earlier cross-sectional elite study sponsored by the Interamerican Bank of Desarollo. Approximately 200 persons in each of Argentina and Brazil. (Achard *et al*., 1994) were queried on opinions toward Mercosur's current structure and possible expansion. Principal findings gave strong support to Mercosur and its founding principles of free trade. There was only moderate support to expanding Mercosur to include countries outside of Latin America (37% for including non-Latin American countries versus 90% to include Latin American countries).[8]

Our study of business elites does not support an enlarged trading area beyond the continent. Personal economic interest continues to play a major role in determining whether the respondents are willing to transfer decision-making power to international bodies needed to implement a large common market. Respondents do have a national bias when confronted with questions on free trade with the United States. The geographically smaller countries of Chile, Colombia and Peru strongly support a free trade arrangement with the United States, while Argentina and Brazil only moderately support such an agreement.

The executives' personal attachment to the country was explored and findings indicate that strong nationalism will keep respondents from making commitments involving risk to their sovereignty. Benefits of freer trade and enlarged markets can be illusive, whereas the rewards of a protected market are immediate. Respondents see the need for a long-term transition to globalization; however, they have reservations about how well the benefits will be distributed across economic groups.

The findings of our study of Latin American countries remain valid even in their current monetary and political crises.[9] A look at Argentina and Brazil illustrates different structural problems that influence perceptions on globalization. There is an antagonistic feeling against offshore banks that have imposed harsh restrictions on personal savings, even though the stage was set by an internal crisis. Argentines feel they have lost control by opening financial services markets to foreigners and this is perceived as deepening the monetary crisis. Both instrumental and sentimental attitudes will play a role in how the current crisis unfolds.

Our research suggests that Latin American elites are resisting globalization in favor of regionalism, albeit a South American one, rather than a country-specific one, in wanting to join Mercusor, or a hemispheric one such as FTAA. Our findings are corroborated by the recent criticism of globalization and free trade, especially by those in developing nations (*New York Times Magazine,* August 18, 2002). Are ordinary people victims of rich countries' agendas in concert with huge global firms such as Nike, Microsoft and Citigroup as they dominate the poor in developing countries?

Will Latin America go Global?

A decade ago, Latin America cast aside its dictators and embraced democracy, freer trade, and a free-market system, albeit slowly at first. It appeared that the region had turned the corner – optimism in the region abounded and new foreign capital emerged to stimulate the region. Today the mood is quite the opposite – Argentina has defaulted on its national debt, and both Brazil and Uruguay have needed IMF (International Monetary Fund) bailout financing. Latin America did not plot an incorrect course more than a decade ago, it is just that that course is now more complicated than many had first envisioned and many of the region's political leaders have performed poorly (*The Economist*, March 2, 2002). After its current recession is over, our research with the region's business elites suggests that trade and globalization still hold an attraction, but the importance of national identity is very strong in the region.

Further Research

This study was a cross-sectional survey of business elite opinions on the Latin American situation toward current trade agreements and their enlargement to encompass continental and hemispheric arenas. However, it would over-simplify the case if we did not address the dynamic nature of free trade negotiations and national sentiment toward such complex treaties. Tensions and conflicts exist as businesspersons, along with other members of the country, grapple with the logic of free trade arguments and the reality of stronger competition in the marketplace. It is not a simple step from regionalism to globalization. The researcher must appreciate the need of executive flexibility in day-to-day business decisions on a longer-term basis.

The major countries (Argentina and Brazil) in Latin America should be revisited to verify patterns and strength of support by the opinion leaders for regionalism and globalization, especially after the terrorist events of September 11, 2001 and the monetary crises of Argentina, Brazil and Uruguay. If support can be sustained on a longitudinal basis, then there will be movement accepting a global concept. However if the patterns of personal involvement and national sentiment react against further trading enlargement, then there will be a slowing of globalization in Latin America.

Our study has been macro in its approach to opinion leaders and their influence; it would be beneficial to study smaller units in a micro setting and to which adjustments are being made to the current winds of globalization.

Much of Brazil has soured on the international community with the harsh corrections that were enforced by the IMF when their currency became unstable. It would also be of interest to broaden the elites to include legislators, professionals and other opinion leaders in the community. Our research has shown a propensity of business elites in Latin America to embrace regionalism as a necessary stepping-stone to globalization, and this follows the pattern of Europe and North America. Will other areas of the world follow suit – e.g., Southeast Asia?

References

[1] Achard, Diego, Silvia Flores Manuel, and Luis Edurado Gonzales. (1994). “Las Elitas Argentina Y Braxilenas Frente Al Mercosur”. Instituto para la integration de America Latina, Banco Interamerico de Desarolla, Buenos Aires.

[2] Bauer, R., I. de Sola Pool, and L. A. Dexter. (1972). *American Business and Public Policy: The Politics of Foreign Trade*. Chicago: Aldine-Atherton.

[3] Connolly, Michelle, and Jenessa Gunther. (May, 1999). “Mercosur: Implications for Growth in Member Countries”, in *Current Issues in Economics and Finance*, Federal Reserve Bank of New York. 5(7).

[4] *The Economist* (March 30, 2002). “Amigos but not full partners”. 32.

[5] *The Economist* (March 2, 2002). “Is Latin America losing its way?” 11.

[6] *The Economist* (June 26, 1999). “Reviving the European Connection”. 37-38.

[7] *Globe and Mail*, (August 14, 2002). “Tango at the abyss”. A11.

[8] *Globe and Mail*, Report on Business (June 30, 1999). “ Latin America, EU warm to free trade at first summit”. B12.

[9] *Globe and Mail*, Report on Business (July 2, 1999). “Canadians feel NAFTA does more harm than good, study says”. B3.

[10] Granzin, Kent L., John J. Painter, Jeffery D. Brazell, and Janeen E. Olsen. (1998) “Public Support for Free Trade Agreements: The Influence of Economic Concerns, Group Identification, and Cognitive Involvement”, *Journal of Macromarketing*, 18(4): 11-23.

[11] Hills, Carla. (1999). U.S. Trade Representative from 1989 to 1993, speech at the Tenth Anniversary Conference of Free Trade Pacts, Montreal, Canada.

[12] Kelman, Herbert (1969). “Patterns of Personal Involvement in the National System”, in *International Politics and Foreign Policy*, ed. James Rosenau. New York: The Free Press. 276-287.

[13] Mennis, B., and Karl P. Sauvant. (1976). *Emerging Forms of Transnational Community*. Lexington: D.C. Heath.

[14] *New York Times*, (August 5, 2002). “The Americas Prepare for Trade On a Fast Track”. 15.

[15] *New York Times Magazine* (August 18, 2002). “The Free Trade Fix”. 28-33.

[16] Smetanka, John, and J. Alex Murray (1985). “International Cooperation and the Expatriate Executive”, *International Journal of Intercultural Relations*. 3(1). 79-100.

[17] Stiglitz, Joseph E. (2002). *Globalization and its Discontents*. New York: W. W. Norton.

End Notes

[1] Globalization needs to be defined in order to grasp its impact on business more fully. In general, it is the result of a long process but more than anything else, it was the dismantling of the Berlin Wall which signaled the fallibility of national systems and the spread of capitalism, and its new rules of the game, worldwide. Globalization places pressure on companies to export within the continental block to which they belong.

[2] In the popular media, South America is used interchangeable with Latin America; however, purists would rebel and want to refer to Latin as only those countries that use the Romance languages. South America limits those countries to the Southern Hemisphere of the Americas. For our part, we have used Latin America to be the countries in South America.

[3] The *Economist* reported a tremendous reluctance by members of the EU (particularly France) to make any substantial move in creating a Free Trade Area between Mercosur (and associate member Chile) and EU. See *The Economist* June 26th, 1999, page 37-38.

[4] See Bauer, *et al.* (1972) for a discussion on the concept of economic self-interest and corporate interest.

[5] Report on Business, *Globe and Mail*, "Ottawa signs trade deal with Latin American countries", June 1, 1999, B-14.

[6] The questionnaire has five sections and four have been used and tested by one of the authors in a previous study. Results from this instrument have shown a high degree of reliability. Specifically, section one focuses on corporate and market profiles. Section two asks questions on attitudes toward domestic and international decision-making. Section three pertains to the individual's feelings toward the nation state and its role in their life. Section four was customized for this study and centers on trade, free trade and trading communities. Finally, section five asks demographic questions of the participants.

[7] Attitudes on the "trickle down effect" with regards to enlarged free trade areas are mixed. A recent survey of 2000 Canadians showed that 43% felt that NAFTA had hurt the economy and their personal well being. On the other hand, another general survey on free trade benefits showed that 48% supported liberalized trade. One might conclude that in general, the public will support freer trade, but on specific trade agreements the support has fallen considerably. (Report on Business, "Canadians feel NAFTA does more harm than good, study says." *Globe and Mail*. July 2, 1999, B-3.).

[8] The participants of the study of approximately 400 elite opinion makers in Argentina and Brazil were drawn from legislators, civil servants, businesspeople and others. The respondents gave strong support for Mercosur's success and potential integration of other Latin American countries (89% in Argentina and 93% in Brazil). The study also emphasized that the real importance was to prepare companies for global competition. (see Achard, *et al*., 1994).

[9] The in-depth series “South America’s Lost Decade” in *The National Post* describes and analyses the current crisis in Latin America in focusing on specific countries and offers suggestions for its resolution. August 19, 2002, A1; August 20, 2002, A1; August 21, 2002, A11; August 23, 2002, A1; August 24, 2002, A12; August 26, 2002, A9.

The Japanese Economy and East Asian Economic Integration

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Abstract

Recent trend show both the bright and not-so-bright outlook for the future of the Asia-Pacific region. The entry of China into World Trade Organization (WTO) gives new perspective to Asia-Pacific economy. Recently, the Republic of Korea (South Korea), China and Japan have linked up with the Association of Southeast Asian Nations (ASEAN), to create the ASEAN plus Three group (ASEAN+3) through Chiang Mai Initiative to enhance the stability in Asian economy, particularly on Asian currency market. China has also made a proposal to have China-ASEAN Free Trade Agreement (CAFTA) that to be concluded in the next 10 years. Other events, however, point to some uncertainties. The economic slowdown in US and Japan's contributes to slow economic growth in Asia, as these two countries are the most two important markets to the Asian products. The entry of China into the WTO instills fear among some Asian government that the burgeoning China's economy would pose too strong competition for them. The proposal on CAFTA may establish one-side advantages in favor of China. All these factors contribute to the challenges and prospects of the future of Asian economy. We believe the Asian nations need a leader to lead their economy for the future. Before the Asian financial crisis 1997, Japan was the "lead goose" heading a "flying V" of Asian economic geese. Many Asian economists are still confident of the importance role that Japan could play in the Asia-Pacific region. Japan is expected not only to increase trade investments and official development assistance (ODA) in this region, but also to play a regional leadership role. Japan is expected to act as the "balancer" with respect to China and provide a leadership role to disperse power in the region.

Introduction

Japan plays an important role in the Asian economy. For Japan's part, it considers Asian important not only because of its geographical closeness to Japan but also because of its historical association even in the pre-war period when Japanese business interests began to establish themselves in the some of Asian countries. More importantly, Asian has natural resources crucial for Japan's growing industries.

Japan's economic policy since the 1985 Plaza Accord, which was influenced by the appreciation of yen, bubble economy and the burst of bubble, brought much implication to the Asian economy. When Japan changed its economic policy towards Asia, Japanese capital transferred to Asian to establish their roles, particularly into East Asia, taking advantage of locations, abundance of raw material and cheap labor. The 1997 Asian financial crisis which was badly hit the economy of Asia also changed the Japan's economic policy toward Asian economy. The Miyazawa Initiative Plan was one of the elements of Japan's economic policy established just to help the Asian affected countries from the crisis.

Today, the world witnesses the economic slowdown in the United States (U.S) and Japan, which are the most two important markets to the Asian products. Although the U.S economy is said to be recovering soon, the economic of Japan will take longer time as Japan is now running on its structural reform. The performance of Japan's economic situation from now certainly will affect the economy of Asia in the future.

On one side, the future of Asia looks bright. The entry of China into World Trade Organization (WTO) gives new perspective to Asian economy. One may think that this is nothing t bother Japan but many leaders of Asian nations expect Japan to be a "balancer" to this new emerging factor and provide a leadership role to disperse power. Recently, the Association of Southeast Asian Nations (ASEAN), and the Republic of Korea (South Korea), China and Japan have linked up with ASEAN to create the ASEAN plus Three group (ASEAN+3) through Chiang Mai Initiative to enhance the stability in Asian economy, particularly on in Asian currency market. China has also made a proposal to have China-ASEAN Free Trade Agreement (CAFTA) that to be concluded in the next 10 years.

When Japanese Prime Minister Koizumi visited the Association of Southeast Asian Nations (ASEAN) early this year, the visit ends up with the signing of Japan-Singapore Free Trade Agreement and a proposal on the "Initiative for Japan-ASEAN Comprehensive Economic Partnership" as a new policy for the future cooperation.

On the other side, the future of Asian economy looks uncertain. The U.S. and Japan's economic slowdown contributes to slow economic growth in Asia. The entry of China into the WTO also fears some Asian government that China's economy will become too strong and become their strong competitor. The proposal on CAFTA may establish one-side advantages. All these factors contribute to the challenges and prospects of the future of Asian economy

The importance of Japan's economic roles is becoming more important in this century with the emergence of many new issues as mentioned above. Some Asia leaders sound very confident on the future Asia but some has complained their fears. In this aspect, growing expectations on the role of Japan started to flourish as the Asian economy enters into the 21st century. For the some Asian countries, Japan is expected not only to increase trade investments and official development assistance (ODA) in the country; but also include regional leadership roles in Asia.

This paper reviews all this changes in to reflect the future of Asian economy in the 21st century. It starts with review of Japan economic changes since 1985 to 1997 Asian financial crisis and implication on Asian economy. New emerging issues in this region also discussed. This study concludes with some ideas how Japan's economic policy can help Asian in the future.

Asian Economy after 1985 Plaza Accord

The performance of the Asian economy, particularly in East Asian, was so profound. The successful of economic development has been led by the result of 1985 Plaza Accord. Following the changes in Japan's economic policy towards internationalization, huge capitals, high level human capital and technology was transferred to the Asian economy. The economy entered new period with diversification of manufacturing industries, sophistication of industrial structure and active export. In the mid 1980s, the East Asian economy expanded rapidly to become the "growth center" of the world, in large part because of increased FDI from other parts of the world, as well as from and within East Asia. As a result, FDI grew rapidly in the late 1980s and replacing trade as the prime vehicle for global economic growth. The World Bank has recognized this achievement through "East Asian Miracle", in one of the publication in 1996.

A large part of FDI in East Asian countries has come from Japan and Asian newly industrializing economies (NIEs), which attained rapid economic growth by promoting export-oriented industrialization. Japan and Asian NIEs succeeded in upgrading their industrial structures by emphasizing FDI. They progressed further on the path of export-oriented industrialization and new FDI to other export-oriented countries in East Asia, helping those countries to make rapid progress along the same route to prosperity.

Major pull factors behind Japanese FDI in East Asia include the region's robust economic growth, low unit labor costs, and trade and FDI liberalization and pro-FDI policies. Until the late 1970s, Japan's FDI to Asia mainly went to NIEs of Korea, Taiwan and Singapore, attracted more by the promotion of inward FDI in their pursuit of high tech industrialization. These countries enjoyed positive growth brought about by the simultaneous expansion of trade and inward FDI. However, Japanese FDI in these countries reached a peak in the early 1980s and started to lose some of their cost advantage due to rapid wage increases and currency appreciation. Japanese FDI therefore started to look to other Asian countries such as ASEAN as new hosts for investment.

In 1990s, Japanese FDI into China has grown so quickly due to China's economic reforms, liberalization in trade and FDI policies, and its political and social stability. As of 1994, China was the largest recipient of Japanese FDI in Asia. The attractive of China as a host to FDI has increased as ASEAN countries have lost their attractiveness mainly due to the rapid increase in the production costs including wages, material and services costs, and shortage of manpower. In recent years, despite at significantly lower scale, Japanese FDI to other Asian countries such as Vietnam (and India) has begun to increase. A survey of companies conducted by the Export-

Import Bank of Japan revealed that India and Vietnam ranked the second and third, respectively, behind China as attractive host countries to Japanese investor.

According to this metaphor, as Japan -the most technological advanced country in Asia- moved away from being an exporter of labor-intensive manufactured goods such as textiles to more high-technology products, the newly industrializing economies (NIEs) took its place. Similarly, as the latter set of countries developed more skill intensive exports, other Asian countries, essentially Southeast Asian economies, stepped in to fill the vacancy.

In other words, Japan as a leader has achieved high economic growth era in the late 1960s. The high-growth trend that began in Japan first rippled out to South Korea, Hong Kong, Chinese Taipei and Singapore, and these four economies had gained world recognition as NIEs in the late 1970s. By mid-1980s, the members of the Association of Southeast Asian Nations (ASEAN) notably Malaysia, Indonesia, Thailand and the Philippines began to industrialize at an accelerating pace to catch up with other Asian NIEs.

The People's Republic of China, which shifted to reform and open-door policies after the third plenum of the Eleventh Central Committee of the Chinese Communist Party in December 1978 and Vietnam, which emulated China by adopting the *Doi Moi* (economic reform) policy, are now consistently achieving high growth rates. The economic growth of Asia was so profound. The NIEs growth rates were higher than Japan; the ASEAN was higher than the NIEs, whereas the People's Republic of China and Vietnam were higher than the ASEAN. Even during the recent financial crisis, while economy of NIES and ASEAN were hardly affected with negative growth, the economy of China and Vietnam was stand at higher rates**.** The primary engine for the region's economic growth is the export-oriented industrialization and the boom in intra-regional trade.

Japan has indeed played a significant role in the Asian success or 'miracle'. Largely, Japan's trade has produced it. The region has the substantial of Japanese foreign direct investment (FDI) in manufacturing facilities, mainly for industrialization and export promotion objectives, while Asian countries has become a large provider of primary commodities to Japan. Today, though facing domestic economic problem at home, Japan as she did in the previous Asian 'miracle', has promoted economic development in these countries through implementation various assistants and aid programs.

Overall, almost all East Asian economies were benefited from the 1985 Plaza Accord and appreciation of the yen. They economy were on remarkable economic progress. Learning from the heels of Japan's double-digit growth in the 1960s, Newly Industrializing Economies of South Korea, Taiwan, Hong Kong, and Singapore grew at very rapid rates from the mid-1960s. They were followed in the 1980s by the Southeast Asian economies (especially Indonesia, Malaysia, and Thailand), which then also grew exceptionally fast. All these countries experienced sustained economic growth at rates that exceeded those earlier thought achievable, with some attaining growth of 8–10 percent a year for a decade. In the 1990s, the socialist economy has turn into market-oriented economy. The economy of China and Vietnam are also experiencing the remarkable progress.

Asian Economy Following 1997 Financial Crisis

The financial crisis, whose start was marked by the Thai devaluation in July 1997, spread very quickly to the other regional economies. It adversely affected the real economy of Asian, weakened the financial sector and had some socio-economic implications. The outbreak of the crisis in July 1997 with a great fall in currency values, as a result of flow out of capital out of a region, has changed the perception towards the country dramatically. The effects of the financial crisis on the real economy became discernible during the 1998 when the real GDP growth rate slowed down in comparison with the earlier year.

Indonesia's economy was the most badly hit by the economic crisis that started to plague the region in mid-1997. The economy contracted by some 13.68 percent in 1998 with inflation skyrocketing to more than 77 percent. Millions of people have been laid off as many companies have either gone bankrupt or significantly reduced their production capacity. Some 66 banks were closed down. The crisis has badly battered people self confidence and increased feelings of insecurity.

For a time at least, Asia appeared to have learned its lessons from the 1997 crisis. Japan's leading role in helping several Asian countries after the breakout of the Asian economic crisis in 1997 is undeniable. The best-known case of Japan's assistance was probably the USD30 billion loan package pledge by the Japanese finance minister Kiichi Miyazawa in 1998 to help Asian countries, including Indonesia, cope with their economic crises.

The support certainly helped Asian economy to overcome the economic difficulties and that its economy returned to a stable growth. Japan positively extended her financial support under the framework of "A New Initiative to Overcome the Asian Currency Crisis--New Miyazawa Initiative" to assist its efforts in overcoming the current economic difficulties. The support package was a combination of loans by the Export Import Bank of Japan (JEXIM) and the Japan Bank for International Cooperation (JBIC). In addition, the Japanese Government provided interest payment assistance under the Asian Currency Crisis Support Facility (ACCSF) which the Japanese Government is working on to establish in cooperation with the Asian Development Bank, particularly to Indonesia.

Asian economy after financial crisis looks bright. The Asia economy entered into the 21st century with a little healthier economy. The recovery from the financial crisis of 1997/98 strengthened in 2000. The strong performance reflected the favorable external environment through most of 2000; expansive macroeconomic policies; competitive exchange rates; and, in varying degrees, progress in financial and corporate restructuring, and in economic reforms. Higher oil prices toward the end of the year had different effects on oil exporters and importers, but on balance were a negative factor for growth, and in some countries pushed up inflation slightly. In several countries, the impact of oil prices on inflation was offset by the influence of moderate food prices.

Many Asian counties were well positioned in 1999 and 2000 to take advantage of the rapid growth in import demand from industrial countries, especially the U.S. and Japan. GDP growth for the region was over 7 percent for the whole of 2000, up from just over 6 percent in 1999, though the pace slowed during the second half of the year. Domestic demand began to strengthen in a number of economies relative to the preceding two years. Hong Kong, China; and Singapore led the continued strong performance of the region, with economic growth in 2000 of 10 percent or more. In Indonesia, Philippines, and Thailand, recovery continued but remained somewhat fragile due to incomplete structural reforms, political uncertainty, and generally weak private investment.

Inflation was benign in 2000 for most Asian countries. In the NIEs, except Hong Kong, China, prices rose slightly faster than in 1999 as a result of higher oil prices but, even so, inflation remained at less than 2.5 percent in Korea; Singapore; and Taiwan as macroeconomic policies remained prudent and money supply growth was held in check. In Hong Kong, China, the consumer price index continued its deflationary trend due to weakness in property rental prices, but the rate of decline showed signs of moderating. In China, a strengthening of private consumption reversed the 1998/9 deflationary trend; the consumer price index rose by 0.4 percent. In Southeast Asia (except the Laos and Myanmar), despite a small pickup in inflation in the last quarter of 2000, overall inflation remained low and relatively stable.

Several Asian countries recorded double-digit export growth in 2000. The continuing global demand for goods related to information and communications technology (ICT) led to a surge in exports from Korea; Malaysia; Singapore; Taiwan; and Thailand. The Newly Industrializing Economies recorded the strongest growth performance as a group in the region in 2000, with Growth Domestic Product growth picking up to 8.4 percent. Growth also picked up in three of the ASEAN-4 countries (Indonesia, Malaysia, Thailand and Philippines).

In terms of GDP growth, Hong Kong, China; Singapore; and Taiwan performed well in 2000. GDP growth accelerated from 4.8 percent in 1999 to an exceptionally strong 7.9 percent in 2000. At the same time, the variation in economic performance was smaller relative to that observed in 1999. Hong Kong, China and Singapore recorded similar growth rates in 2000, with that of Taiwan somewhat lower. Buoyant exports, led by electrical and electronics products, were the primary growth engine as the rate of export increase more than doubled to around 20 percent in these three economies. Domestic demand also accelerated as consumer and investor confidence rose. Labor market conditions improved and property prices saw some recovery, while spending on new plant and equipment in the technology sectors increased. Imports also picked up, reflecting a combination of restocking of intermediate inputs and rising demand for consumer goods.

In the case of the Philippines per se, the economy entered into the 21st century with a positive, posting a 4.2 percent GNP growth rate by the end of the year 2000, a mild improvement from the 3.7percent growth rate level achieved in 1999. The domestic economic growth posted an increase of 3.9percent in real GDP, also a mild increase from the 3.3percent GDP growth rate recorded in 1999. Contributing highest shares to GNP was the services sector (43.2percent), followed by the industry (32.5percent) and agriculture sectors.

For the third quarter of 2001, the Philippines managed to achieve a 3.3 percent growth rate, not bad for an Asian economy amidst a slowing global economy after the September 11th terrorist attacks in the United States.

Judging from the 2-year positive growth performances since the zero growth in 1998, the speed of economic recovery of the Philippines is averaging at 4.0 percent a year, approximately a similar annual rate of recovery for a period of 6 years since the second economic fall in 1991. But the Philippines' economic recovery efforts still lagged far behind compared to the performances of other Asian countries, which were most badly hit by the currency crisis than the Philippines had experienced.

For Indonesia, the country is also moving for a bright transition economy. A new President Megawati Soekarnoputri assumed power in July 2001 after lawmakers dismissed AbdurRahman Wahid (Gus Dur) for incompetence in dealing with the country's economic and political crisis. Megawati's economic strategy and approach is trying to build up the level of confidence in the government and public. The government also stressed the crucial role of the private sector in helping the economy recovery, cut government spending, with a huge amount of the budget allocated to servicing overseas and domestic debts.

Today, ASEAN members and China, Japan and South Korea already discussed the introduction of their own liquidity fund. In May 2000, the members of the Asean+3 (Japan, South Korea and China) decided to create just such a fund during the annual meeting in Chiang Mai of the Asian Development Bank. The Chiang Mai initiative could have been the first step of monetary integration in East Asia, eventually leading to a monetary union in the future.

During the 1997/98 economic crisis, Japan again offers the world's largest assistance measures to support Asian economies. Up to May 1999, Japan has announced assistance measures totaling USD 80 billion to support Asian economies, including bilateral cooperation in the context of the IMF assistance packages, assistance for private investment activities, for economic structural reform and to alleviate the social consequence of the crisis. As part of these measures, Japan announced in October 1998 the so-called "Miyazawa initiative", a package of support measures totaling USD 30 billion, of which USD 15 billion will be for medium-long term financial needs in Asian countries. The other USD 15 billion will be used for their short-term capital needs during the period of economic reform.

These measures are important and welcome but it is generally recognized that the return of the Japanese economy to a sustainable long-term growth path would constitute the most important contribution Japan could make to the recovery of the Asian economy.

Asian Economic Integration: Challenges and Prospects

Faced with strengthening regional and integration in Europe and the Americas, countries in Asia can no longer afford to remain divided. The U.S., Canada and Mexico are heading for the implementation of the Free Trade Area of the Americas. The European Union, although was very slow, but consistently expanded its membership and built up a complex network of bilateral and multilateral relations to enhance its competitive strength. Compared with Europe and the Americas, regional cooperation in Asia has progressed badly.

The reality is that Asia is divided. There is not one country, or a combination of countries that can act as "a leader" to other Asian powers, such as Japan. Instead, many Asian leaders still are looking forward to Japan to take a role in leading the Asian countries towards economic cooperation and integration.

The recent accession of China and Taiwan as members of the WTO is likely to increase competition not only within China, but also among Asian nations as a whole. Others issues such as lacking of leadership, security threats and political instability are additional factor in some Asian countries that making more difficult for Asian countries to be integrated.

The future of Asian economy looks bright if Japan continues provides its leadership, capital, investment and trade during this difficult time of chronic economy. Some issues challenge the role of Japan in the future. These issues need to be analyzed in order to give a right direction to Japan to lead the Asian economy in the future. Those issues are discussed as follow:

1: China's Entry to World Trade Organization (WTO)
2: China's proposal on China-ASEAN FTA
3: Japan's position in Free Trade

China's Entry to World Trade Organization (WTO)

China is the seventh largest trading economy in the world but was outside of the WTO system. This year marked the first time that a low per-capita income economy (that is at the same time one of the top ten trading nations) becomes a member of the WTO. The entry into World Trade Organization (WTO) is expected to the gradual demolition of China's trade barriers and will subject China to bind to the rules. It will open its state-dominated economy to import and will also lead to an upsurge in Chinese exports.

China's presence in the WTO will lead to some very significant changes. Exposure to international competition will force China to reform its inefficient state-owned enterprise. China must also reinforce its social safety net to prevent a further widening of regional gaps in economic development. The political system under Communist Party will be also effected when China economy moving more toward market-economy.

China's entry will provide the Asian region with both opportunities and challenges. There will be advantages and disadvantages for Asia.

Scenario 1:

Many Asian countries want to see China in WTO. They expect this entry will certainly strengthen Asia's voice within the international financial organizations and give them greater bargaining power. Trade within Asia is expected to increase. Today, already about 70 percent of trade in the region is intra-regional. China already import twice as much from East Asia as it export. This is to say that China is an enormous market, which Asian countries can tap into.

Scenario 2:

The economies that are more complementary with China and have already got fairly well established trade and investment linkages with the Chinese market will gain advantages such as Hong Kong, to a lesser degree South Korea, and to some extent even Japan. It also presents a chance to expand and deepen the economic relations among the region's economies. Taiwan, which was accepted into the WTO along with China, will also benefit from a deeper integration with the mainland.

Scenario 3:

The Southeast Asia countries may face a huge competitive challenge because of their export structure is so much similar to China's. A lot will be the result of displacing exports in the U.S, Europe and Japan that used to come from other Asian countries. There will be more competition in the third-country markets in areas like electronics. Members of ASEAN, whose exports often compete directly with Chinese products in international markets, may face for very tough time. Other Asian nations are also fears that China's membership in the WTO could lead to a flood of exports of inexpensive high-quality products.

Scenario 4:

It will create a massive economic competitor that the countries of Southeast Asia will have to face it. There will certainly be greater competition for Foreign Direct Investment (FDI). Much of ASEAN members' economic development in the past three decades has been based on this investment, especially from Japan. This has slowed in the past four years, partly because of the Asian financial crisis. But it also has been the result of many investors, especially multinational corporations (MNCs) already taking a greater interest in China. China's WTO entry may further accelerate the "hollowing out" process of Japanese industries, which are actively relocating their production bases to China

Now, China is rapidly emerging as a manufacturing powerhouse for companies worldwide. MNCs will now be tempted to relocate even more of their productive capacity to China to take advantage of cheap labor there. FDI is already flowing into China rather than Southeast Asia. China becomes an attractive location for Japanese and U.S. investor because of the size of its domestic market and an abundant, well-trained and cheap labor force.

A decade ago, Southeast Asia attracted more than four times the investment going into China. But now the trend has been reversed, with 80 percent of the collective FDI going into China. In the first half of 2001, investment in China already has risen by 20 percent. Analysts believe this was partly in anticipation joining the WTO. The fear is that this trend will strengthen more in the near future. For those that rely heavily on foreign investment this development may be a bad news. It also will be a problem for ASEAN countries like Philippines and Indonesia, which is planning to attract more investment to stimulate the economy after financial crisis.

Proposal on China-ASEAN Free Trade Agreement

The economic argument for free trade is that it allows countries to focus resources more efficiently on areas where they enjoy a competitive edge, to the benefit of all. Liberalization of trade gives consumers' added choice and lower prices, while producers gain from the opportunities to expand their market beyond their own borders.

China and ASEAN leaders wrapped up a regional meeting in Brunei last year with a goal to pursue plans – excluding Japan and South Korea- to create the world's biggest free trade area within next 10 years. With a combined market of 1.8 billion people, a free trade area between ASEAN and China would have gross domestic product of USD2 trillion and two-way trade of USD 1.23 trillion.

Scenario 1:

Southeast Asia was the world's fastest growing region until a financial crisis hit in 1997. Since then, many export-driven economies have struggled to attract foreign investment. This is because many MNCs now relocate even more of their productive capacity to China to take advantage of its domestic market and an abundant, well trained and cheap labor force there. FDI is already flowing into China rather than Southeast Asia. So, the many Southeast Asian leaders believe they can resuscitate the region with their own free trade area and deal with China. On different issue, many ASEAN leaders also believe that the entry of China's into the WTO will create market opportunities for both ASEAN and China.

Scenario 2:

ASEAN nations are expected to post sharply lower growth, as exports, the main engine of growth for the region, have slid sharply due to the poor global environment and the fall in IT-related investment. At the same time, China has not affected by the global downturn. It remained a bright light, on track to growth of around 7.1 percent in 2001. According to Chinese Vice Foreign Minister, Wang Yi, the China-ASEAN FTA will bring about 50 percent increase in exports on both sides. It will add one percentage point to annual economic growth in the ASEAN countries and 0.3 percent in China. In this matter ASEAN countries hope that by bringing China into ASEAN FTA will help the region regain some of its appeal to investors as a trade and investment destination.

Scenario 3:

Will this pact leave Japan behind? Will this agreement threaten Japan's position in the region? When China proposed ASEAN to begin free trade negotiations with them, Japan only interested in the creation of East Asian economic region comprising China, South Korea, ASEAN members and itself. South Korea, on the other hand, wanted to establish an East Asia free trade block. China, however, is not so interested in creating an alliance with East Asian nations. China more prepared to deal a pact with ASEAN members without consulting or waiting for South Korea or Japan. China may understand that Japan inability to settle problems within its protectionist agriculture sector, shows sign that Japan is still unprepared to take part in Asia's regional economic zones.

Japan must see this resurgent of China with open eyes. Drawn by cheap labor, a growing number of Japanese companies have hastened to have their products manufactured in China. The result is that Japanese industry is in danger of being "hollowed out". Many economists argued that Japanese may lose in the economic competition with China unless something is done.

Scenario 4:

China's initiative for a free trade agreement with ASEAN has not escaped criticisms from regional economists who fear China with its big economy and market will swallow the smaller one. ASEAN will be on the losing end of the equation in this case. Some ASEAN leaders warned the plan must be carefully negotiated to avoid cheap Chinese goods from flooding into the region and harming their economies. Malaysian Prime Minister once said that if ASEAN not careful, instead of gaining from China-ASEAN FTA, ASEAN would lose out because ASEAN also will be a market for China. ASEAN should not be just a market for China. ASEAN may find China an overwhelming competitor in any case, without entering a bilateral free trade.

Japan's Position in Free Trade

Japan's Prime Minister Koizumi clearly mentioned early this year that he does not see any prospect for Japan to establish a free trade area with Southeast Asia in the near future. Japan only has a bilateral free trade agreement with Singapore, which was signed early this year. This is quite understandable as Japan is facing the issue of protected agriculture sector. Japan-Singapore FTA gives no harm to agriculture sector, which has virtually no farm export. So far, Japan has been unable to join a global trend and pursue bilateral and regional free-trade pact because of this factor.

Japan wanted to build up economic ties instead of establishing free trade area. Many believed that Japan's vision of a cooperative East Asia is less ambitious than China-ASEAN FTA to bring down trade barriers within 10 years. According to Koizumi's plan, Japan is going to take "step-by-step" approach, build up more concrete cooperation with ASEAN, not just in trade, but also in investment, technology, education and tourism.

Scenario 1:

In this matter, Japan has proposed for the establishment of "Initiative for Japan-ASEAN Comprehensive Economic Partnership" that could lay the groundwork for the creation of a free-trade area in the future. The plan is believed to reflect Japan's concerns about the challenges it faces from China's rise as a leading actor on the regional stage. Some ASEAN leaders welcomed Prime Minister Koizumi's new policy vision for East Asia of acting together and advancing together as sincere and open partners. But some leaders neither supported nor opposed the idea of Japan to include Australia and New Zealand into this community.

Koizumi may have his own reason did not want to mention the term of "Japan-ASEAN Free Trade Agreement" as expected by many ASEAN leaders. One must bear in mind that whatever word of decision on Japanese leadership in free trade agreement with Asian and ASEAN may reflect the U.S. – Japan relationship. Some economist believed that Koizumi's plan on "Initiative for Japan-ASEAN Comprehensive Economic Partnership" indeed covers all area of economic integration including free trade agreement.

Scenario 2:

Japan's inability to settle problems within its protectionist agriculture sector, shows sign that Japan is still unprepared to take part in Asia's regional economic zones. It will be more complicated for Japan to set up free trade zones with ASEAN, because it will face difficulties lifting restrictions on agricultural imports and cut tariffs due to pressure to protect domestic producers. Early this year Japan and Singapore has concluded their free trade agreement. But unlike other ASEAN members, Singapore exports a negligible amount of farm products to Japan. Still, bilateral talks met opposition from members of the ruling Liberal Democratic Party.

Scenario 3:

But if Japan does not act forcefully to liberalize its market, it will likely be left out in the cold. Japan officials must discuss to lift additional tariffs on agriculture products. Faction within the Liberal Democratic Party representing agricultural and fishery interest, for example, must now consider liberalizing trade of certain products, including goldfish, other tropical fish, tuna, orchids and coconut milk. But can Japan solve this problem easily?

Proposal and Recommendations

Asian economy faces huge challenge now. The U.S and Japan economic slowdown and the emerging of China in economic power are among the factors that certainly will picture the future of Asian economy. In this matter, Japan need to reconsider the expectations from Asian leaders about her roles. Some ideas and proposal are discussed below to maintain the Japan's role in Asian economy in the future. Many emerging issues recently require Japan to take several actions.

Upgraded Bilateral Talk with China

There is no real "China threat" to Japan. Although Japan and China were at odds over trade last year, Japan should not regard the Chinese economy as a threat. These two countries are not rivals but share a complementary relationship. China, which is becoming a regional major economic power, has a responsibility to dispel the anxiety of its neighbors and make a contribution to the shared prosperity of regional economy. Meanwhile, Japan, a global economic power, is expected positively build a system of division of labor with China and the rest of Asia. Japan must try to consider and prepare for future economic ties with China based on a long-term perspective, addressing such issues as an appropriate division of labor and complementary relations it should establish with China. Improving bilateral relationship with China is very important, but it is just as important to seek ways for cooperation, and the regional level to ultimately build a community in East Asia.

Today, other Asian nation faces huge challenge from China. China is the giant developing countries that undergone a dramatic qualitative change in the 1990s. China became strategically important as a center of production for many nations by accepting investment from al major countries of the world. Last year, China became a member of the WTO. In this matter, many Asian governments want Japan to be part of a tripolar structure, together with China and ASEAN, to disperse power. Asian is looking to Japan to play the role of "leadership" and "balancer" in the future. In this matter, trilateral talks between Japan-China (and South Korea) are significantly important and need to be implemented into several economic ties for the benefit of Asia in the future.

Japanese Role in Promoting Free Trade

China has formally agreed on a goal to conclude a free trade agreement with ASEAN within next 10 years. Japan is apparently being left behind in a move to create a free trade are in Asia. Japan has failed to take any initiative in regional economic integration so far (such as free trade agreement with ASEAN) because farmers and lawmakers they support are vehemently opposed to further liberalization of agricultural markets. In contrast with the Japanese, shackled by farm interest, Chinese political leaders have convinced ASEAN members that a free trade area would benefit everyone. This is to show that the sluggish pace (with Japan's protectionist agriculture sector) in creating the economic zone, in comparison with the smooth dealings with China, highlights the lack of vision and strategy of Japanese political leaders.

ASEAN and Japan share great interest in promoting further trade liberalization. They could intensify their cooperation to strongly urge other trading partners to move forward towards the early launching of the next round of WTO negotiations. A comprehensive agenda for the new round of negotiations will be in the interest of ASEAN and Japan although it will pose many new challenges. ASEAN and Japan should consult each other as much as possible on all the major issues in the WTO.

Japan must seriously consider initiatives to promote free trade under the so called "Initiative for Japan-ASEAN Comprehensive Economic Partnership". It will show the commitment of Japan in helping Asian nations concern about China's growing power. China is both an attractive market and a potential competitor in trade. In this matter, ASEAN need to boost relationship with Japan. Japan and ASEAN need to study ways to build up closer economic partnership following China's entry into the WTO. Japan must help ASEAN to be competitive as an investment base as possible to compete with China. This proposal must come in reality since Japan shows no interest in forming free trade area alone. Japan can lead ASEAN to make sure that this initiative will boost ASEAN preferential market access for ASEAN export and investment into China.

Japan's Leadership

Japan need to be a leader for Asian countries to stand up together to a great number of issues and challenges in order to create a brighter Asia in this 21st century. Asian countries understand that the big problem against Asian Approach is that the diplomacy of Japanese government is easily influenced by the U.S..

In the past, Japan failed to lead twice. In 1990, Malaysian Prime Minister Mahathir Mohamad called on Japan to join and lead the East Asian Economic Caucus (EAEC). However, Japan turned down the invitation out of deference to the U.S., which was unhappy with the idea of an exclusive Asian union. Consequently, EAEC suffered a setback.

The second time was when Japan proposed the establishment of an Asian Monetary Fund (AMF). Again, the plan was met with U.S. opposition on grounds that if Asia created a fund without international approval, it would undermine the influence of the International Monetary Fund (IMF). The Finance Ministry of Japan bowed to U.S pressure and the plan was aborted.

Asia, which accomplished such great growth as to be deemed a 'miracle', has also experienced the difficulties of a currency crisis and global economic slowdown. Under such circumstances, we believe that now is the time for us to question again the implications of the Japan's leadership, and to reconsider what action should be taken by Japan to ensure prosperity and peace in Asia. There are so many expectations from Asian countries for Japan to take a continuous leadership in the future. In light of the continuing quest for Japan's role in Asia appropriate to the 21^{st} century, we listed at least three main areas of Asian economic issues in which Japan, the world's second-largest economy despite her general lack of natural resources, is expected to take a lead role.

(a) Economic Leadership: Most Asian leaders would like Japan to take strong leadership in economic matters. In these difficult economic times, Southeast Asian leaders would expect to see some action, not just words and pledges from Japan. Many in the region were disappointed with Japan at the time of the Asian financial crisis when Tokyo withdrew its proposal to establish an Asian Monetary Fund, mainly as a result of opposition by the U.S.. Asian countries want Japan to protect not only her interest but must also convey and protect other Asian's interest during other Summit countries and the head of G8 industrialized nations meeting. By sharing this kind of responsibility, Japan and Asia will be able to build a brighter future.

(b) Leader in Social Safety Net: The role and leadership of Japan is needed in building social safety nets. The Asian economic crisis has had direct impact on the socially vulnerable in Asian countries-the poor, the elderly, women and children and the unemployed-and has come to threaten their very lives and ways of life. Although the Asian economy is on the right track of recovery after financial crisis, the social impact of the economic crisis in the Japan and the US has been extremely grave, and if we neglect this, substantial recovery and stable growth of the Asian economy in the future will become difficult. The building of social safety nets is important in order to give human elements to globalization. Japan to this point need to make serious efforts to extend investment, trade and aid, and must continue to actively address this issue in order to create a brighter Asia in the 21st century.

(c) Leader in response to the globalization: Current trends in the global economy reveal the characteristics of globalize capital and information movements. While this provides new opportunities for humanity, it also brings to the fore such issues as economic crisis, poverty and unemployment. People can still clearly recall that Asian countries, which enjoyed powerful growth, fell into currency crisis with the rapid large-scale movements of capitals. In this aspect, Japan must lead the Asian nation to reconstruct international financial system, placing emphasis on how to address short-term movements of capital, the improvement of financial mechanisms, International Monetary Fund (IMF) reforms and other issues. Furthermore, we must address the issue of globalization not only from a financial aspect, but also from the trade and investment aspect. The further activation of trade and investment is a key to prosperity of Asia.

New Reform Policy

Many Asian governments expect new Japan's responsibility in economic reform. In the past, Japan has tended to take over the role of the world's growth engine. However, Japan today facing its own problems to solve as it struggles against a decade-long recession.

The government must step up efforts to dispose of bad loans held by banks. It is important to take this action, as it will give effect to stock market prices.

Bold measures must activate capital markets, including easing taxes on stock transactions.

The government must press forward with deregulation in key sectors, such as non-technology, to stimulate consumer demand and job opportunities.

The budget must be balanced based on stable employment criteria, with priority placed on health care and other structural reforms.

The government and the Bank of Japan must form a joint strategy to overcome weakening Japan yen to further restructure the financial and corporate sectors. In Japan now, economic activity has weakened and prices continue to decline. Further efforts are needed to implement financial and corporate sector reforms to facilitate the growth potential. The adverse short-term impact of reforms on growth should be minimized where possible.

Japan need to increase consumer's demand. Japan's problem today is having a plenty of supply but it has lacked the lifestyle and other consumer spending that would absorb that surplus supply. This is shown by Japan's abnormally high level of personal savings in personal assets. If Japan fails to increase consumer spending, the economy will remain stranded.

Political Exchange Program

This recommendation is to promote closer working relations between Japanese political and leaders and their foreign counterparts in Asia, with the specific aim of building a new understanding of the bilateral economics and security relationship. So far, Japan has established the U.S.-Japan Parliamentary Exchange Program, which is now the oldest nongovernmental nonpartisan exchange program between members of the U.S. Congress and the Japanese Diet. Since then numerous political exchange programs between Japan and the United States involving members of Congress, Congressional staff, and state and local legislators has been organized. Japan also started a parliamentary exchange program with Australia. Now, it is a time for Japan to establish a similar program to encourage Japanese Diet members to participate in intellectual exchange programs that further bilateral relation with Asian nations.

Japan also can design a new program for young leaders to expose young leaders of Japan to the politics and policy-making process of the other Asian country, and to enhance understanding of Japan-Asia relations. The delegations may include all political persuasions and consist of federal and local members of parliament and their staff members. The program may consist such as annual bilateral exchange program and intensive study program in each country. Delegates will meet with senior government officials, representatives from political parties, industry executives, and community leaders. This proposal is believed can help creating personal networks among national leaders and to promote better understanding between these Japan-Asia and to fostered bilateral alliances in the future.

The Establishment of East Asian Monetary Fund (EAMF)

Asian countries now re-confirmed the need to have a financial and monetary stability in the region. ASEAN+3(Japan, China and South Korea) agreed to strengthen their financial cooperation in East Asia at Chiang Mai, Thailand in May 2000 (Chiang Mai Initiative). Many Asian governments suggest that the International Monetary Fund (IMF) remains incapable of dispensing proper advice to Asian economies. They advocate that an alternative institution an Asian Monetary Fund must be created to replace the IMF in the Asia-Pacific.

A proposal for an Asian Monetary Fund was first advanced by former Japanese Vice Minister of Finance Eisuke Sakakibura right after the outbreak of the Asian financial crisis in mid-1997, but was withdrawn later that year in the face of American opposition. It was Washington and the IMF that killed the original AMF proposal in 1997, on the ground that it would compete with and weaken the IMF. Despite seemingly mild reactions to the current proposal, Washington continues to oppose the creation of any institution that would involve either a weakening of US influence over the economies in the region or supplant the role of the IMF.

The original aim of an AMF was to make available a pool of funds to be quickly disbursed as a means of emergency balance of payments support for the crisis-hit economies. The proposal was enthusiastically welcomed by most East Asian economies. While the bulk of financing would have been from Japan, it reportedly received pledges of contribution from Hong Kong, Taiwan and Singapore. That proposal was envisioned as a much more solid mechanism capitalized to the tune of USD100 billion. The proposal in Chiang Mai was presented as a "network" of currency swap arrangements building on a more modest USD200 million swap agreement among the big five ASEAN economies. Japan must give full support towards the establishment of EAMF based on three arguments:

(a) First, a regional monetary fund could provide additional funds, bolstering the IMF's role as a lender of last resort.

(b) Second, such a regional fund could dispense macro- and micro-economic advice more appropriate for Asian economies. The second function is often overlooked, but remains extremely important. To successfully resolve crises, a regional monetary fund must promote macroeconomic reform to regain investor confidence and microeconomic reform to promote economic growth. Both can be painful in the short-run, but they are crucial to the long-term health of the economy.

(c) Third, China is not our opponent anymore. One of major strategic mistakes committed at the time of the EAMF proposal was that Japan did not fully consult with China and partly because of that China did not eagerly endorse the idea of establishing the EAMF. This time, not only has China been fully involved but China has been the key promoter. Particularly due to participation in the WTO, China will be the key player in Asia not only in the strategic or political sphere but also in the economic area in the coming years. Without China, any regional economic arrangement would not be effective.

In the context of the reforming international financial system, it means the establishment of EAMF in the short run and the formation of Asian currency bloc in the long run. While the US dollars are still widely preferred, most Asian countries are now expressing strong desire to create schemes for emergency regional financing and appropriate foreign exchange system, such as a “currency basket” scheme, where the Japanese Yen enjoys popular preference.

On the internationalization of Yen, the Japanese government and private companies including financial institutions have to sustain strong cooperation in expanding yen-dominated financial transactions. This will be a basic stream of the "Asian Approach" in the 21st century. In relation to this, strategic discussions must be focused on making the Japanese Yen a currency basket in Asia, the development of bond markets and the establishment of currency monitoring systems.

Indeed, ASEAN and China, Japan and Korea are in some way competitors with each other but, precisely, because of that, we need to enlarge our regional cooperation, involving regional trade, investment liberalization, foreign exchange, and international financial cooperation. ASEAN plus 3, however, is now the mechanism that will serve the purpose of EAMF establishment. What Asian nations want today is to see active Japan’s leadership to bring all effort towards financial cooperation.

The Chiang Mai Initiative may be the best option to establish EAMF. ASEAN members and China, Japan and South Korea already discussed the introduction of their own liquidity fund. The members of the ASEAN+3 decided to create just such a fund during the annual meeting in Chiang Mai of the Asian Development Bank. The Chiang Mai initiative could have been the first step of monetary integration in East Asia, eventually leading to a monetary union in the future.

It is good move designed to establish an Asian financial facility to provide assistance to countries whose currencies are under attack, is in danger of unraveling. The Initiative was viewed as a regional move to defend local currencies under attack without the necessity of having to turn to the IMF. The need for such a regional facility became apparent after the painful experience of East Asian nations during the financial crisis of 1997-1998. However, there is now a grave danger that once again the Asian countries will be denied the opportunity to set up a regional mechanism to deal with or prevent financial crisis without the interference or dominance of the IMF.

In this matter, we must call on the Asian governments participating in the Initiative to insist that the facility is established independently of the IMF. It would be a gross waste of public funds and also contrary to the interests of Third World countries to support a financial facility, which would give the IMF a key role in its operations. The Japanese government must also to stand firmly and not allow the IMF to take over this facility.

Promoting Interdependence in Asian Goods and Trade

The movement of goods in Asia is characterized by at least three factors: Asian manufacturing skills, small-medium enterprises and supporting industries; and foreign direct investment.

The fundamental strength of Asian economies lie on their inherent manufacturing skills, small and medium enterprising and “supporting industries”. Japan’s role in promoting original innovations and continuing technical assistance in these sectors is critical. Therefore, Japan’s existing technology-transfer programs, such as the “Senior

Volunteer Dispatch Program, must not only be continued but also expanded to include mobilization of retired experts from Japanese private companies and policy-level advisory services.

One of the driving forces of Asian economic development is foreign direct investment. While Asian countries will steadfastly exert more efforts of attracting foreign investments, it is important for Japan to continue and enhance her technical and financial assistance to develop the Asian investment infrastructure facilities. Established Japanese manufacturing firms in Asia may also be helped in developing long-term investment plans in the region. In relation, Japan is likewise expected to take an active leadership role in the ASEAN Free Trade Area (AFTA) and support the ASEAN Industrial Cooperation (AICO) system in expanding trade and investments in Asia. Additionally, Japan is expected to continue exercising the lead role in promoting free trade agreements with East Asia, particularly South Korea and Singapore.

A sustained cooperation between Asia and Japan for the sustainable development of these sectors is undoubtedly a priority considering the Asia's growing population and its comparative advantage on agriculture, fishery and forestry resources. Particularly on the agriculture sector, Asian countries expressed strong desires to see Japan expand her imports and open her agricultural markets. Japan therefore is expected to be more positive in improving market access, thereby fulfilling her demanded role as an Asian member while also making provisions for her own food security.

Promoting New Economy in Asian Information and Communications:

Asia is not behind on information technology development, but unfortunately lacks the needed information infrastructure to enhance Asian information networks and sustain technological advancement. In this regard, Japan is expected to support further developments in the "internet industry" sector, particularly data communications (such as graphics, audio) based on the cultural diversities of Asia. Positive initiatives by Japan in enhancing Asian information networks will signal the international community that Asia maintains its competitiveness in the 21st century.

As Asia fast developing into an economic community, Asian communications become more relevant. But apparently, certain weaknesses in the Japan-Asia communications sector remain as stumbling blocks to facilitate good communication based on good Asian understanding. While many Asians are eager to learn Japanese language and cultures, for instance, the facilities available in Asia for such are rare and small in scale. Japanese language classes by private institutions in Asia, in addition to being only few, are mostly expensive and therefore unaffordable to low-income learners. To address this issue, the idea of establishing Japan-Asia Library Centers in selected Asian cities would be worth-exploring. The functions of these centers may be linked to existing foreign student programs by the Japanese government. The efforts of Japan and Asian universities to sustain Japan-Asia relations under such programs as "international student and faculty exchange program", should also be supported and even expanded to include funding for research and studies, forum and conferences on matters related to establishing better Japan-Asia understanding and cooperation. In relation to this, Japan may consider exerting more efforts to attract more foreign students in Japan, affecting such reforms as providing short-term employment to foreign students, flexible university entrance and enrollment, relaxing some student visa restrictions; and providing affordable accommodation facilities.

Because the English language has taken roots not only in Asia but also world-wide, it is important to undertake educational reforms in Japan by starting English language in primary/elementary school system.

Promoting the Development of Asian Human Capital

The revitalization of the Asian economies therefore should put emphasis on Asian human resource development and exchange. Dual roles are expected of Japan in this effort. On one hand, Japan shall continue providing support to human resource development undertakings of Asian countries, and shall open herself to large-scale human exchange, on the other.

Now the people in these countries are facing challenges and opportunities in the rapidly changing global economy. It is essential to intensify our dialogue on current and emerging issues, many of which are related to development cooperation, such as poverty alleviation, and the preservation of the global environment, information and communication technology and development, and the prevention of communicable diseases such as HIV/AIDS. As the Hanoi Plan of Action pointed out the significance of human resources development, we also recognize that the capacity for building human resources in development cooperation has become indispensable for responding to these issues.

(a) Technical programs: In addition to her existing technical cooperation programs, Japan may also extend support to similar efforts of Japanese private companies in Asia, maximizing such schemes as “Senior Volunteer Dispatch” scheme, and technical training programs, including youth invitational and cultural exchange programs. In terms of technical training, the newly established J-Net program in Asia may be expanded to other Asian countries not covered as yet. Japanese advisory services under the existing Japanese expert/volunteer dispatch programs shall likewise be oriented towards advancing “soft” technologies such as law, accounting; sales and marketing.

Under this program Japan can dispatch of experts to improve curriculum development and educational administration, dispatch more Japan Overseas Cooperation Volunteers in technical programs and acceptance of trainees for language teacher training in Japan.

(b) Human exchange: In addition to existing Asian foreign exchange programs, Japan may explore the possibility of undertaking large-scale, long-term Asian human exchange program plans that include the enhancement of foreign student acceptance system, acceptance of foreign workers such as those in the medical-nursing sector, and reforms in the visa sector thereby relaxing constraints on human exchange in Asia.

Improving the environment and institution for accepting foreign students can be done through:

-Enhancing the assistance for foreign students studying in Japan at their own expenses through such measures as provision of financial assistance (provision of bounties for study, reduction of and exemption from school fees, etc.)

-Increasing the number of dormitories for foreign students (construction of "Tokyo Academic Park", etc.)

-Promoting mutual recognition of credits between Japanese colleges and ASEAN colleges

-Encouraging more lectures to be given in English in Japanese colleges and graduate schools

(c) Establishment of ASEAN-Japan University: Since university students and young personnel will be our main torchbearers in this 21st century, it is crucial to implement programs to maximize their potential. Malaysia and Japanese leaders has discussed the setting up of the ASEAN-Japan University, which would stress on technical training and information technology. The establishing of the university was one of the issues discussed at the meeting between visiting Japanese Prime Minister Junichiro Koizumi with Malaysian Prime Minister Mahathir during his visit early this year. Japan is expected to provide skilled Japanese workers to teach in technical fields at the university. In return, Malaysia is willing to provide the location for the Japanese-ASEAN University. It will be able to train people not only from ASEAN but also from other regions.

This proposal will back up Malaysia's Look East Policy introduced 20 years ago, which had been a strong point in Tokyo-Kuala Lumpur relations. Malaysia and other ASEAN nations still sending their students to study in Japan but it is very expensive for students to study there. On the contrary, if the proposed university is set up in a country like Malaysia, it would benefit Japan in providing the necessary manpower while making Japanese know-how on technical fields more accessible to people in ASEAN at a reduced cost.

Strengthening of Japanese aid in Asia

Vital to the continued economic recovery of Asia is the Japan’s Official Development Assistance mainly carried out by the Japan Bank for International Corporation (JBIC), JICA and Japanese Embassies in Asia. It is important that Japan continues to provide a steady stream of her ODA to Asia, with emphasis on human resource development, as it is this sector that ensures economic revitalization in the medium and long-terms.

To ensure the effective delivery of Japan’s ODA programs, Japan’s ODA implementing agencies must continue engaging in active policy dialogs with Asian recipient countries and exert efforts to help identify assistance needs peculiar to each recipient country.

Moreover, greater efforts to communicate effectively the Japan’s aid to Asia should be undertaken. In light of the changing generations of political leaders and policy makers in many of the Asian countries, it is extremely important for Japan as well as Asian recipient countries to undertake better publicity measures about the Japanese aid policies and success stories in Asia.

Conclusion

Asian has always regarded Japan to be an active partner in the economic development of Asia and we are confident that it will remain so. Since the Plaza accord, Japanese investors have continued to contribute to the development of Asian manufacturing industry. Japanese technology has facilitated Asian industrial development and Japanese institutions of higher learning have assisted in the training of Asian human resources. Japan's financial assistance has also allowed Asian to proceed with their financial development particularly during the crisis of 1997. Asian truly appreciates Japan's contribution and hopes that Japan will continue to be more active and reliable partner in the future.

Asia's ability to enhance its regional role in the future however will depend very much on the health of Japanese economy. Asia is very concerned to see the economic recovery of Japan. Asian knows Japan's government determination to implement the economic structural reforms aimed at revitalizing the economy. When Japan restores its economy back to health, it can resume its role as an engine for economic development for the Asian region. Sustained economic development is the best guarantee for Japan-Asian relationship in the future.

Some Asian governments' quite relief after Koizumi visit to Southeast Asian nations in January 2002. On his new policy towards ASEAN, Koizumi stated that he intended to develop Japan's new diplomatic vision for Asia, based upon the development of relations between Japan and the Association of Southeast Asian Nations (ASEAN) and the transformation in the global situation since the symbolic speech by former Prime Minister Takeo Fukuda 25 years ago.

The Prime Minister continued that Japan's ultimate goal in its relations with the ASEAN countries, the core of the region, was the creation of a community in which both sides could "act together and advance together" as ""heart-to-heart, sincere and open partners." More specifically Japan will cooperate based on 3 pillars: 1) Cooperation for prosperity through reforms; 2) Cooperation for stability through integrated efforts; 3) Cooperation for the future.

Although Koizumi did not pledge to establish Japan-ASEAN Free Trade Agreement to response to the high expectation from ASEAN on this establishment, his proposal on the "Initiative for Japan-ASEAN Comprehensive Economic Partnership" may serve this purpose in the future. What ever decision and pledges made by Japan certainly will picture the economy of Asian in this 21st century.

References

[1] Alan Rix, *Japan's Economic Aid: Policy making and Politics*, Croom Helm, London, 1980

[2] Asian Development Bank, Annual Report 2001.

[3] Bachtiar Alam, Discourse and Images of Japan in Indonesia: Some Preliminary Observation after the Asian Economic Crisis, paper presented at the "Regional Conference on Japanese Studies in East and Southeast Asia 2001", UI, July 2001.

[4] Center for Japanese Studies, UI, Japan's Official Development Assistance to Indonesia, Research Report, April 2000.

[5] Centre for Strategic and International Studies (CSIS), Japan-Indonesia Relations in the Context of Regionalism in Asia, Jakarta, 1976

[6] CSIS, Japan-Indonesia Cooperation: Problem and Prospects, Jakarta, 1977

[7] CSIS, Japan-Indonesia Relations: Past, Present, Future, Jakarta 1979

[8] CSIS Japan and Indonesia in a Changing Environment, Jakarta, 1981

[9] Cronin, Trends in Japan's Trade and Investment in Asia and the Pacific, July 1992

[10] Desmond Edward, When the Bubble Broke, Time International, March 11, 1996

[11] Faculty of Economics, UI, Economic Policies in APEC: The case of Indonesia, March 1997

[12] Gerona, Rey, Study on Poverty in the Philippines, Japan International Cooperation Agency (JICA)-Philippines Office, March 2001

[13] IMF, World Economic Outlook Financial Turbulence and the World Economy, October 1998

[14] JICA-Philippines Office, JICA's Activities in the Philippines (JFY 2001), September 2001

[15] JICA-Philippines Office, JICA in the Philippines, various years.

[16] JICA, JICA Annual Report 2000, October 2000

[17] JICA, The Country Study for Japan's Official Development Assistance to the Republic of the Philippines, March 1999

[18] Jose, Ricardo. Philippine-Japan Relations, 1940s to the 1960s. International Conference on Japanese Studies, Ateneo de Manila University & De La Salle University, 1999.

[19] *Kaigai Toushi Kenkyusho Ho* (Journal of Research Institute for International Investment and Development), Vol.23, No 1, January 1997, The Export-Import Bank of Japan

[20] Kristof, Nicholas, A New Economic Era for Japan?, New York Times, June 18, 1998

[21] McNulty, Jennifer, Japan's Bubble Economy, October 1997

[22] National Statistics Office (NSO), 2001 Philippine Yearbook.

[23] National Statistical Coordination Board (NSCB), 2001 Philippine Statistical Yearbook

[24] Panglaykim, J., Japanese Direct Investment in ASEAN: The Indonesian Experience, M 1983.

[25] Peter J Katzenstein and Takashi Shiraishi, Network Power: Japan and Asia, Cornell University Press, 1997

[26] Robert Orr, J. and Bruce Koppel, Japan's Foreign Aid: Power and Policy in a New Era, Boulder: Westview, 1990

[27] Tsuneo Akaha, and Frank Langdon, eds., Japan in the Post Hegemonic World, Lynne Rienner, 1993

[28] Villacorta, Wilfrido, Dr., The Philippine Performance during the Financial Crisis: Implications for US and Japanese Involvement, 18 May 1999, Conference on Southeast Asia's Changing Landscape: Implications for US-Japan Relations on the eve of the 21st Century, Bangkok, Thailand.

[29] Xia Liping, Trends of Japan's Economy and Foreign Policy, Shanghai Institute for International Studies (SIIS), undated

[30] www.mofa.go.jp/region/asia-paci/philippine, Japan-Philippine Relations, September 2001

The Third Option: Linking Top-down and Bottom-up Efforts in Community-Based Development

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Abstract

Globalization and top-down efforts in development concentrate power in the hands of people who have little knowledge or understanding of conditions at the local level. Community development, arising from the bottom-up, has limited impact beyond the immediate locale. Both approaches to development are proving increasingly irrelevant to the needs of those they seek to serve.

This paper outlines the Third Option in development, aimed at connecting top-down efforts with those coming from the bottom-up through mediating structures. They include volunteer groups, local economic development corporations, non-governmental bodies, co-operatives, etc.

Based on Canadian experiences, the most effective organizational structure for these ventures is identified; with emphasis on the role of their boards and staff, the moral basis of development and the part that language plays in informing and involving people in local development.

The World Bank claims that its main mission is, "To fight poverty with professionalism for lasting results." Many of the mega projects supported by bank funds have made life more difficult for those they claimed would benefit from them. The bank funded a project in the Tana River Valley of Kenya in 2001 that was driven by the ideas of the environmental movement rather than the needs of local people. They will be displaced by the $10 project so that rare monkeys can thrive in a wildlife reserve.[i]

At the end of the last century, staff of the bank spoke directly with poor people to determine their views on what needed to be done to improve their lives. The organization concluded that "people in poverty are an asset, not a liability."[ii] But they had limited capabilities for helping each other in efforts to better their lives. The bank now supports local development ventures and long-term integrative approaches. It also promotes partnerships between various actors in grassroots development.

Changing the World Bank's style in encouraging the elimination of poverty resembles the task of turning round a large cruise liner. This cannot be done quickly. This international organization, like many others, is under siege for its failures to solve the problems of world poverty and for promoting capitalism and neo-liberal ideas of the free market as the sole solution to all the ills of the world. Capitalism is now under attack. Demonstrators have taken to the streets at international trade meetings in Seattle (1999), Québec City and Salzburg (2001) to show their disapproval. One of the chants at Salzburg went: "Our world is not for sale, put the bankers in jail." The protestors include black-clad anarchists and naïve do-gooders, united by anger rather than ideology. They see capitalism as a predatory, exploitive force. But they offer no alternative to it as a way of rescuing people from poverty and dependence. Few, if any, poor people take part in these demonstrations. They are too busy struggling to survive and lack the time, money and resources to travel to distant places to make symbolic gestures such as catapulting teddy bears over fences as happened in Québec city.

A Third Option to capitalism and state domination of the economy does exist. The media generally ignore it and since it is holistic and cuts across boundaries, academics find it difficult to place efforts in the field into their traditional categories. This option concerns locally-based action.

In the 1980s, after a recession, the Economic Council of Canada, a government think tank, commissioned a series of studies of community economic development. They cover a wide range of local initiatives in marginalized areas of Canada. When a bank quit a small community in Labrador, residents formed a credit union. The bank manager stayed on to help this local initiative in its early stages, and it received support and services from a nearby caisse populaire just over the provincial border in Québec.[iii] In northern Saskatchewan, the Kitsaki First Nation hired an American with experience in community economic development. Under guidance, the Indians "depoliticized" economic development; removing it from the control of the elected band council. Forming a development corporation, the people of Kitsaki entered into joint ventures with non-Indians. Jobs and incomes have risen, and this First Nation has a sense of pride and achievement in solving its own development problems.[iv]

The report of the Economic Council stated:

"Canada has a rich tradition of community organizations…What is relatively new in this country is the use of community programs as tools for economic and business development."[v]

It then points up the rising tensions between the centers of power and the edges of society in Canada and the widening gap between rich and poor Canadians. Reliance on government and traditional forms of capitalism has not been helpful in tackling these problems. The report implies that community-based development can only be used in lagging areas, depleted regions, and with poor people. Our experience, however, indicates that the processes that work in community economic development can be used in a wide range of settings. In the Zamalek area of Cairo, a group of middle-class women, fed up with the poor performance in street cleaning and neighborhood maintenance by the local government, set up their own organization and are doing a much better job.[vi]

Hernando de Soto. In The Other Path, has pointed out that even the poorest people have organizational skills, initiatives and ability that can be used to solve their own problems with their own resources.[vii] De Soto's other path is the way of the Third Option, of community-based development. Squatters in Peru have shown skills in negotiating with outside bodies to improve their lot. The residents of a shanty town near Lima raised $103,000 (US) to pay archeologists to excavate mummies found in the community.[viii] They did so with the agreement that when the mummies were removed, the community would receive electricity and sewage services. The squatters occupied the area in 1989 and received a judge's permission to stay three years later. The name of their settlement, Tupuc Amuru, indicates their ideological stance. He was an Inka resistance leader who fought a rearguard action against the Spanish invaders in the 1500s. A rebel in the 1780-83 rising in Peru called himself by this name.

Community development in all its forms has always been a child of hard times, coming into play when the traditional methods of handling change fail or appear to do so. The approach was pioneered by some officials during the Great Depression of the 1930s, when the British government had a few funds for development in their colonies. Innovative individuals combined their resources with those of the local people (especially land, labor, etc.) to develop projects that benefited the community.[ix]

Community development, adopted with great enthusiasm by industrial and developing nations in the 1960s, looked like a cheap and easy way of involving local people in development, strengthening national unity and identity, and bringing those on the margins of society into its mainstream.

The process proved ineffective in most places. There was no training for it, and the warm and fuzzy nature of the approach ("Helping people to help themselves") attracted enthusiastic amateurs. In Canada, young men and women went to Indian reserves to "conscientisize" residents and bring about change. The energy, idealism and dynamism threatened the entrenched bureaucracy of the government department charged with looking after Canada's Indians and the program was scrapped.[x]

Endless discussions have focused on the concept of community. A study searching for areas of agreement looked at 94 definitions of the word, and concluded that "beyond the concept that people are involved in community, there is no complete agreement as to the nature of community.[xi] Community development is about relationships between people and how they can be made more fruitful and mutually beneficial in a specific place at a specific time. Those engaging in it must develop a sophisticated understanding of the potential and limitations of their community – and learn to appreciate their own abilities, values, limitations and ideological biases. Community development involves a journey inward, not just a search for instruments to empower people.

Community development ventures often failed because the structures set up to implement policies became bureaucratized. The staff became more concerned with routinizing their own existence instead of meeting the needs of those they were set up to serve. Because funding for innovative community ventures has always been tenuous, any such undertaking collapsed in anarchy and fell apart because of the inability of those running them to handle the tensions of change, inside and outside their boundaries.

Community development ventures are mediating structures that stand between individuals and mega structures (government, corporations, etc) that dominate modern society.[xii] Such organizations give people identity and roles in society through enabling them to become participants in local development rather than bystanders or consumers, voters and other roles ascribed to them by those in the megastructures. These mediating structures encourage local democracy, and are called local development organizations, community development corporations and venture groups if they engage in generating jobs and income. Inserting the word "economic" between "community" and "development" ensures realism in the efforts of these organizations. Among other things, economics deals with the allocation of scarce resources to competing ends. This means that mediating structures have to be businesslike, efficient, and accountable -- all those features that big organizations appear to have forgotten.

In Local Organizations, Milton Esman and Norman Uphoff presented the results of a study of 150 such bodies.[xiii] They note that:

"The romanticized view found in some of the community development literature, that village life is harmonious and equitable, has contributed to the disenchantment with local organization as an approach to rural development."

The same thing can be said of the way in which community development has lost its credibility in efforts at revitalizing depressed urban areas. Esman and Uphoff point out that civil servants prefer to "deliver prepackaged services to a waiting and receptive community [and] may see little benefit and much trouble in organized groups, especially among the poor." (p. 185)

The authors point out the importance of leadership in local organizations: "This variable is not readily amenable to policy prescription…Good leadership is hard to guarantee by design and … often hard to recognize in advance." (p. 233). They determined that the most unsuccessful co-operatives were those where training placed heavy emphasis on ideology, philosophy and goals of co-operation "but not enough on the mechanics of making co-operatives operate effectively." (p. 229) It is easier to impart abstract ideas about development, and participation, than to explain organizational dynamics, financial management, balance sheets, etc.

One of the imperatives that has emerged from top down or bottom up efforts in development is: "The beneficiaries of any project or program must be informed and involved in any decisions that will affect them."

Eastern Nova Scotia emerged as a pioneer in community economic development in the 1930s. The Antigonish Movement, through which poor fishermen, farmers and workers established co-operatives and credit unions and gained a measure of control over their economic destinies, used adult education techniques to organize people to: "Listen! Study! Discuss! Act!" They helped them to pool their nickels and dimes to provide capital for local collective business ventures. The leadership of the movement was indigenous, and included priests and men and women with a concern for the common good rather than their own advancement. The movement began in 1929, with the appointment of Father Moses Coady as director of the Extension Department of St. Francis Xavier University in Antigonish. The university educated the best and brightest young people in the region for business, the professions and careers elsewhere in Canada. In 1902, Father Jimmy Tompkins, a university professor, urged the university to take knowledge to the people where they lived and worked.[xiv] A small, abrasive individual, Father Jimmy would be called a social animator today. In the early years of the last century, he was seen as a nuisance, disturbing the tranquility of the campus. In 1922, the priest was expelled from the university and sent to the remote fishing community of Canso. Here he organized the local fishermen to start their own co-operative lobster plant. Pressured by various groups, the university established its Extension Department in 1929, and appointed Father Jimmy's cousin as director. Moses Coady was a large, imposing, charismatic figure with an ability to inspire and motivate people to become Masters of Their Own Destiny, the title of the only book he ever wrote.[xv] Coady hired A. B. MacDonald, a skilled educator, and the movement took off with Coady presenting his vision of the good and abundant life in small communities, and MacDonald doing the organizational work after the inspirational presentations.

In the 1930s, government was not omnipresent and had limited resources. And the capitalist system seemed to have collapsed as millions were thrown out of work in North America and Europe. The Antigonish Movement, by creating alternative business structures to traditional ones, generated jobs and wealth at the local level – and strengthened community life. Like all successful social movements, the one based at Antigonish lost its initial energy, idealism and vision, became routinized and focused more on maintaining its operations than spreading the word of its mission. People in the movement learned as they went along by participating in study clubs. As Coady put it:

"It did not involve teachers; it was in line with our whole cooperative idea; we would make education part of the self-help movement; the people would come together by themselves and discuss their problems."[xvi]

Discussions had to lead to action for the common good.

Coady picked up the concept of the study club from Sweden. This country has been described as a "study-circle democracy" with various adult education organizations encouraging civic culture through providing courses on a wide range concerns, including the role of media, nature appreciation, art and culture, etc.[xvii]

The leadership of the Antigonish Movement illustrates the pattern that ensures success in local economic development. Father Jimmy was the spiritual father of the movement, the visionary, demanding that his university serve the needs of the poor and marginalized people in the region. A voice in the wilderness, he persisted in his efforts to have the university take knowledge to the people for over 25 years before St. Francis Xavier set up an organization to do so. Father Jimmy was small, with a squeaky voice, and a poor teacher. Coady was a teacher with an impressive physical presence. He also had the vision of a better life for his people, and told everyone that they could do ten times more than they could. MacDonald, a born organizer, went into the highways and byways, showed people how to form credit unions and co-ops, and then monitored their progress. All these men spoke the language of the people – they were blunt, forceful and did not suffer fools gladly.

All communities have a bell curve distribution of sentiments. Some in them are "conservative" and want to return to the good old days. Others are "radical" and seek to leap into the future as quickly as possible. The majority of people in any community are neither conservative nor radical. They spend most of their time just getting through the day at work and at home. The genius of the Antigonish Movement lay in the way in which Coady and the staff linked the past traditions of self-help and mutual aid that had marked pioneer society to new forms of economic organization.

The most effective forms of community economic development ventures resemble a cross between a small business and a virtual corporation.[xviii] They have to avoid bureaucratization, and some may last for only a few years, acting as seedpods in which people learn innovative ways of generating jobs and wealth. The goals of these ventures include:

- Helping individuals, groups and collectives to make better decisions by understanding the nature of their communities and their own personal dynamics.
- Encouraging people to be more resourceful and to operate in sustainable ways that ensure continuity of action.
- Showing people, individually and collectively, how to motivate themselves and others to focus on specific activities related to community enhancement.

Organizations that do these things effectively require three sets of skills which are seldom found in one individual. When communities experience problems, they often bring in an expert or rely on what is known as The Little Dutch Person. Experts should be on tap – not on top. And while the stance of the Little Dutch Person looks heroic, standing with a finger in the dyke, it is no substitute for a careful appraisal of the structure of the dam, an examination of the level of the water behind it, and a survey of the conditions downstream should the dam break. Community economic development ventures require three skill sets that resemble those found in successful small businesses:

- A visionary capability. This role is played by the "ideas" person in a small enterprise who seeks new products or services that meet market needs. The visionary in a CED venture scans and screens activities inside the community and beyond its boundaries to identify opportunities and threats that can be exploited or avoided. The role is similar to that of a shaman in traditional societies. This person knew the land and where scarce resources lay – and also communed with the spirits to ensure that life in the community was in accord with their wishes. These days, shamans have to understand that policies and programs of the powerful, non-spiritual forces of government and large organizations whose activities dominate life in communities.

- Good management abilities. This means keeping an eye on multiple bottom lines to ensure that scarce resources (especially time and money) are used effectively.
- Animating and enabling skills. A small business – as the history of the dot.com ventures indicate – may have a brilliant idea and good management. But unless it has a product or service to sell, it soon fails. In community-based development, the role of the salesperson is taken by the animator and enabler. This person does not "sell" solutions or instant answers to problems. They are dynamic educators who know the right questions to ask and can direct individuals and groups to available resources inside and outside the community. Those seeking their help have to invest their own time and resources in finding solutions rather than relying on the government or someone else to take care of their problems.

Community economic development ventures have to avoid creating hierarchical structures. Like all creative and innovative ventures they have flat organizational forms. Control of the venture must always remain at the local level, and boards drawn from a wide range of community residents can ensure this. Boards must focus on policy and planning, and leave day-to day operations to the staff of the CED venture. Underlying all the activities must be a strong ethical and moral sense of the kind that marked the Antigonish Movement. Community-based development is not about "the community" which tends to become an abstract idea. It is about personal development and lifelong learning. The organizational form has to link these two kinds of development – the collective one that related to individuals, inside and outside the venture. Those running such ventures must not see governments and large corporations either as enemies or saviors. If you treat other people like enemies, they tend to play that role.

The Third Option, development by local organizations, is not an easy one. It requires knowledge of world trends – and street sense in the local community. It demands idealism and a strong grip on reality, business sense and the ability to see and go beyond the bottom line, knowledge of how the government and large corporations really operate (beyond the traditional rhetoric of right and left), and strong commitment to strengthening the identity and integrity of communities and their ability to tackle their own problems with their own resources, and to be wrong in their own way rather than right in those of others.

The pioneers in this field are not motivated by money or a desire for power. They are realistic idealists and idealistic realists, and are known as community social entrepreneurs.[xix]

Sydney, the city in which my university is located, is the site of the first community economic development corporation in Canada. Founded in the early 1970s, New Dawn owes its origin to the frustration of a small group of university faculty and local people with the efforts by federal and provincial governments to generate jobs.[xx] Cape Breton boomed in the last years of the 19th century as coal mining and steel making expanded. At the end of the last century, the governments poured $5 billion into these industries to keep them operating – without success. They also developed programs to generate jobs as thousands were laid off from the sunset industries. New Dawn, locally owned and controlled, has generated a number of jobs in sunrise ventures.

The corporation has learned as it went along, and made lots of mistakes. But it has survived and thrived, created jobs for hundreds of people, brought much-needed services to the community and engaged in innovative ventures, including turning a former military base into a seniors' residence.

A parable best illustrated what the Third Option is all about.

While making a large rose window for a medieval cathedral, a master craftsman was approached by a young apprentice. He told him that the bishop had asked him to make a window for a remote part of the cathedral. "We don't have money in the budget for that, "the master replied. "I want only the shards of discarded glass from the rose window," the apprentice replied. "And I will do the work in my own time." The master agreed to this. When the rose window was completed high up on the wall of the cathedral, people came to stare at it in wonder. Then word began to circulate about another beautiful window at ground level, in a remote part of the cathedral. Here the light had a special quality and it shone on those who stood in front of it.

This story has two alternative endings. In one, the master craftsman, mortified that his apprentice has created a more beautiful window than he has, commits suicide. In the other, he hands his work over to the young man and retires. In my community, the big windows of the steel mills and the coal mines have been shattered. But light streams, with increasing intensity, through the beautiful small windows of community economic development ventures.

End Notes

[i] "Monkey trouble: Some Kenyans fight to stay on primate preserve," Globe and Mail (Toronto), April 13, 2001.
[ii] James D. Wolfensohn, Chairman of the Board, p. 4 in Annual Report: The World Bank, 2000, Washington, D. C.
[iii] Wickham, John, Richard Fuchs and Janet Miller-Pitt, Where Credit is Due: A Case Study of the Eagle River Credit Union. Local Development Paper No. 4. Ottawa.
[iv] Decter, Michael B. and Jeffrey A. Kowall, A Case Sudy of the Kitsaki Development Corporation. Local Development Paper No. 5, Ottawa, Economic Council of Canada, October, 1989.
[v] The Economic Council of Canada, From the Bottom Up: The Community Economic Development Approach, Ottawa, 1990, p. 1.
[vi] "Egypt's other army", Community Times (Cairo), November, 2000.
[vii] De Soto, Hernando, The Other Path: The Invisible Revolution in the Third World, New York, Harper and Row, 1989.
[viii] Atwood, Roger, "Squeezing the Squatters," Archeology, 55 (4): 16, July-August, 2002. At the time of writing, the settlement had acquired electricity.
[ix] Kenneth Bradley, a former colonial official, tells the story of the origin of the community development movement in the British Empire in Once a District Officer, London, Macmillan, 1966.
[x] On the history of community development in Canada and elsewhere, see Lotz, Jim, The Lichen Factor: The Quest for Community Development in Canada, Sydney, UCCB Press, 1998.
[xi] Hillery, G., "Definitions of Community: Areas of Agreement," Rural Society, XX (2), 118-119, 1955.
[xii] Berger, Peter L. and Richard John Neuhaus, To Empower People: The Role of Mediating Structures in Public Policy, Washington, D. C. , American Enterprise Institute for Public Policy Research, 1977.
[xiii] Esman, Milton J. and Norman T. Uphoff, Local Organizations: Intermediaries in Rural Development, Ithica, Cornell University Press, 1984, p. 47.
[xiv] Lotz, Jim and Michael Welton, Father Jimmy: The Life and Times of Jimmy Tompkins, Wreck Cove, Nova Scotia, Breton Books, 1997.
[xv] The book was published in 1939 by Harper and Brothers, New York. See also, Little Mosie from the Margaree: A Biography of Moses Michael Coady, by Michael R. Welton, Toronto, Thompson Educational Publishing, 2001.
[xvi] Coady, Moses, "The Techniques of Adult Education," p. 89 in Laidlaw, Alexander (Ed.), The Man from Margaree: Writings and Speeches of M. M. Coady, Toronto, McClelland and Stewart, 1971.
[xvii] Milner, Henry, "True North strong and third," Globe and Mail, August 7, 2002.
[xviii] Davidow, William H. and Michael S. Malone, The Virtual Corporation, New York, HarperBusiness, 1992.
[xix] On the British experience, see Charles Leadbeater. The Rise of the Social Entrepreneur, London, Demos, 1997.
[xx] MacLeod, Greg. From Mondragon to America: Experiments in Community Economic Development, Sydney, Nova Scotia, UCCB Press, 1997.

Towards a Development of the Business in New Contexts Characterized by Different Rules of the Game

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Abstract

The growing interdependence among "systems-countries", even if they are rather far from each other, has produced a reversal of studious' thought on the "ways of international development", because of the incapability to explain the dynamics of international exchanges based on neoclassic theories.

International markets' interaction and therefore their systemic view gets rid of the concept that is the base of the evolutionistic pattern that considers each market as a separated unit, to filter into it one by one and for following stages.

According to the growing movement towards globalisation, somebody else believes that this model does not coincide with the parallel trend to the homogenisation of the world needs.

For both the operators the penetration of development comes from the creation of a "new knowledge" through the interaction with the local contexts (strategic factors – Thailand).

Interdependences between economic systems

In the last few years the scientific debate around the globalisation has focused the interest of operators and researchers, having the same for a "new" economic order, so that the term appears now extremely vast, even if it is often used with a different mean.

Nevertheless, looking back tothe past, the globalisation was already begun with the first geographic discoveries and the constitution of colonial empires. Surely peple like Marco Polo and Christopher Columbus can be considered an example for their time and our time. It appeared obvious, then, the need to lead back the phenomenon to its true cognitive essence, free from every limited interpretation. The difference between globalisation and the other social processes like for example the internationalisation[3] of the economic activities, is the "exponential growth of the relationships and the interdependences between the various countries of the world"[4].

In particular, the present globalisation seems the result of a process that it is leading to the progressive interdependences of the economic, financial, social and cultural forces of the planet. In this combining course, the political, economic and financial infrastructures of the States have become more and more interdependent and the various national cultures have endured a process of mutual osmosis. Then, it appears that the analysis "*the new of the present age of development is the globalisation of Capitalism, that is the removal of the force and of the logics of Capitalism to the social control of the national communities. (…) In this way there is not any longer the stable tie between state, territory, population and wealth - and the main model becomes the wealth without nations*" can be shared between them.

In order to understand how this kind of idea has become extremely topical, we need to think of the data, released by UNO[6] in which it is evidenced how 29 of the greatest economic entities of the planet are entrepreneurial organizations. In this special list, some "international corporations" such as the Exxon have exceeded in "financial wealth" States like Pakistan, whereby the General Motors, the Ford, the Daimler, the Toyota alone "weight" more or less like countries as Algeria, New Zealand, the Czech Republic, the Arabic Emirates, the Nigeria put together.

The Recent Past of the Worldwide Economy

It would be useful to reconstruct the evolutionary movement of the worldwide economy after the Second World War until nowadays, which can be divided in three main phases.

The development and the supremacy of the Western economies

For about 30 years there was a continuous expansion of the industry in the advanced economies, which hadthe opportunity to use the raw materials and the crude oil coming from the countries of the Third World exchanging them for finished or semi finished products. In this exchange the western enterprises obtained the greater advantages because they had paid the raw materials providing the finished products. All this had the property to slow down the economic evolution and, above all, the technological growth of those countries not yet industrialized. In this phase the phenomenon of the multinationals occurs and the internationalisation of the exchanges still belongs to few great enterprises.[9]

The energy crisis and the introduction of new players

Between 1975 and 1982 we notice a slow down of the globaleconomy, with a strong economic deflation that involve all the western countries.[10] In this changed scenery the multinationals begin to take advantage of the labour force of the local countries for the production of the finished products, also because it becomes more convenient to produce in the countries providing the raw materials.

In this way the oil producing countries become the interesting point for all the economy in the world, even if the large amounts of dollars flows in the banks of London, Zurigo, Frankfurt and Wall Street, supporting the worldwide finances. In this phase the concept of wealth without nations begins to assert itself and the interdependence between economic systems or at least between economic areas, becomes more and more an idea shared from operators and scholars. This concept will assert itself with greater strength at the end of the past century and in the first years of the new millennium. So,that, the "rules of the play" begin to change slowly, but inexorably.

The growing worldwide economic integration

Such process happens above all because of the influence of the new information technologies as well as the transportation. In this period – the last years 80/'90- we notice a sliding of the economic world-wide barycentre towards the East, and a huge growth of the economies of the South – Asian east: Hong Kong, Singapore, South Korea, Indonesia, the Philippines, Thailand. In this changing world there is the assertion of the transnational economic areas of free exchange, such as the area of the Mercosur, that attract investments and enterprises as Coca-Cola - Mc Donald' s. In this way the tendency to the creation of a unique culture is asserted, and this changes very old fashioned[11] "cultural borders". In this phase the relationships of interdependence between economic systems, in the meaning previously explained, become more and more close.

The New Status: The Punctuated Balance

In all social sciences, included the economy, the noticeable phenomena are usually characterized by a slow change, except in the moments of "punctuated balance" in which the environment has a sudden change immediately without warning and the previous axioms and main concept lose their value and new laws of operation become important and therefore regulate the game of the parts, without disruption of cultural and entrepreneurial exhange of information.[12] The social and economic systems introduce themselves in the phases of punctuated balance with consolidated structures, also if in slow evolution they come out with their characters completely changed.[13]

In fact, in this phase all is in motion, the lack of balance becomes the rule and the uncertainty, deriving from the disseminated complexity[14], dominates every economic phenomenon. This will undoubtley be the cause the disappearance of some *competitors* that were not able to adapt themselves to the new context and the creation of new agents ready to answer to the new economic rules. It appears obvious that the present world-wide economic system is crossing a period of punctuated balance, caused from simultaneous movements, identifiable like the "five economic axioms" .[15]

1. The end of the dichotomy between planned economies and capitalist economies. All this has caused the birth of the new trade markets, stimulating the worldwide demand; in this sense concrete examples are the disintegration of the Soviet Union and the opening to the market's economy of China or the fall of the Berlin's

wall. The end of the dichotomy determines, also, the end of the contrast between military and politic "blocks" that many times have limited also the areas of exchange between the trade operators.

2. The technological change towards an age dominated by industries with a high percentage of human intellectual energies. The enterprises of the XIX and XX century have been dominated by the closeness to the market of the raw materials and/or outlet; moreover they have been characterized by the concreteness of their *assets*. This has determined, for a long time, the distinction between productions that where mainly in need of labour, places in the underdeveloped nations, and of productions with a high use of money, places in the countries more industrialized. The new economic balance has instead moved the attention on the human intellectual energies.

3. Emphasized mobility of the people. This has created problems of cultural, religious and economic integration between people, often emphasized by previous ancient contrasts. The emerging problem in the new "punctuated balance" reveals the integration between men who work inside of the same economic organization coming from different cultures and religions.

4. The combined development of technology, communication and logistics. The development of similar synergies has generated a world in which everything can be produced and sold in any part of the planet. The borders of the different national economies become more and more instable.

5. The attempt of a change from a dominant economy to homogenized products**.** In the past the rules of the worldwide system of the trade, in some cases, have always been influenced by economic and military powers. In the new economic balance, instead, the "homogenized" products impose themselves at a planetary level. We can see a clear example of such situations in the use of Microsoft system spreaded at a world-wide level and often incompatible with other operating environments, so to generate many times situations of abuse from a dominant position.

The "punctuated balance" determines, therefore, the assertion of "new rules of the business" which will require the application of new business strategies.

The Thailand International Trade

The main macro economic indicators in Thailand, after an economic-financial crisis that lasted beyond three years, are marking a clear recovery (+1,1%); also the use of the productive capability records a greater increase from 52% to 55%, this data indicates that the industrial structure of the country is unused for almost fifty percent.[16] Such situation constitutes, together with other structural factors such as the tax reduction of the profits, less unions pressures, a further condition of interest for the activities of the foreign enterprises in Thailand. The following tables 1 and 2 underline the trade of Thailand with the greatest partners, as it shows from this reading, Italy appears in every low position, with wide margins to increase.

Table 1: MAIN COUNTRIES SUPPLIER OF THE THAILAND, 1998-2001 (JAN-DEC), VALUES IN MILLION OF DOLLARS

COUNTRY	1998 (JAN-DEC)	1998% (JAN-DEC)	1999 (JAN-DEC)	1999% (JAN-DEC)	2000 (JAN-DEC)	2000% (JAN-DEC)	2001 (JAN-DEC)	2001% (JAN-DEC)
JAPAN	10.184	23,69%	12.277	24,36%	15.330	24,68%	13.860	22,36%
UNITED STATES	6.051	14,08%	6.434	12,76%	7.310	11,77%	7.166	11,56%
CHINA	1.813	4,22%	2.500	4,96%	3.379	5,44%	3.711	5,99%
MALAYSIA	2.188	5,09%	2.516	4,99%	3.352	5,40%	3.073	4,96%
SINGAPORE	2.394	5,57%	2.987	5,93%	3.413	5,49%	2.847	4,59%
TAIWAN	2.236	5,20%	2.363	4,69%	2.899	4,67%	2.598	4,19%
GERMANY	1.846	4,29%	1.590	3,15%	1.953	3,14%	2.559	4,13%
KOREA	1.500	3,49%	1.770	3,51%	2.171	3,49%	2.119	3,42%
U. EMIRATES ARAB	717	1,67%	875	1,74%	1.786	2,88%	1.528	2,46%

AUSTRALIA	893	2,08%	978	1,94%	1.165	1,88%	1.381	2,23%
ITALY [22]	431	1,00%	406	0,81%	562	0,90%	667	1,08%
OTHER COUNTRIES	12.735	29,63%	15.710	31,17%	18.786	30,25%	20.466	33,02%
TOTAL	**42.987**	**100%**	**50.407**	**100%**	**62.106**	**100%**	**61.975**	**100%**

Sources ICE, 2002.

Table 2: MAIN COUNTRIES BUYER FROM THAILAND, 1998-2001 (JAN-DEC), VALUES IN MILLION OF DOLLARS

COUNTRY	***1998 (JAN-DEC)***	***1998% (JAN-DEC)***	***1999 (JAN-DEC)***	***1999% (JAN-DEC)***	***2000 (JAN-DEC)***	***2000% (JAN-DEC)***	***2001 (JAN-DEC)***	***2001% (JAN-DEC)***
UNITED STATES	12.133	22,27%	12.668	21,65%	14.737	21,31%	13.218	20,32%
JAPON	7.473	13,72%	8.267	14,13%	10.226	14,78%	9.948	15,29%
SINGAPORE	4.711	8,65%	5.079	8,68%	6.025	8,71%	5.284	8,12%
HONG KONG	2.791	5,12%	2.981	5,09%	3.482	5,03%	3.296	5,07%
CHINA	1.765	3,24%	1.865	3,19%	2.821	4,08%	2.860	4,40%
MALAYSIA	1.775	3,26%	2.126	3,63%	2.824	4,08%	2.720	4,18%
GREAT BRITAIN	2.143	3,93%	2.093	3,58%	2.369	3,43%	2.325	3,58%
NETHERLANDS	2.171	3,99%	2.197	3,76%	2.254	3,26%	2.022	3,11%
TAIWAN	1.729	3,17%	2.044	3,49%	2.415	3,49%	1.914	2,94%
GERMANY	1.551	2,85%	1.459	2,49%	1.642	2,37%	1.564	2,41%
ITALY [19]	702	1,29%	710	1,21%	832	1,20%	673	1,03%
OTHER COUNTRIES	15.529	28,51%	17.027	29,10%	19.539	28,25%	19.219	29,55%
TOTAL	**54.473**	**100%**	**58.516**	**100%**	**69.167**	**100%**	**65.044**	**100%**

Source ICE, 2002.

The greater investor countries in the first half-year of 2001 have been Japan, Europe, Taiwan, USA, Hong Kong and Singapore, but the more meaningful amount of investments are coming from the Americans, European and Japanese, as it is evidenced in the following figures. With reference to the private consumptions, those are in light recovery, in particular those related to the purchase of cars and motorcycles, while the value of imports of consumer goods is usually in strong reduction (-6,1% up to February 2002).[17] The inner inflation is in reduction (+1.4% up to March 2002) thanks to the deceleration of the wholesale prices of the industrial goods, only grown 1,8%. The trade with the foreign countries in the first two months of this year appears in decreasing 4,6% (medium average on annual base), also the exports are recording a decreasing of the 6.2%.

According to the data collected from the Board of Investment, with reference to new projects in the first half-year of 2001, the number of the foreign direct investments in Thailand is increasing and also their middle unitary value.

The next figure 1 underlines the number of projects, divided by country, that started in the first half-year of 2001, compared with the same period of 2000; while figure 2 shows the percentage growth of new start-up enterprises, divided by country, in the period 1999-2001.

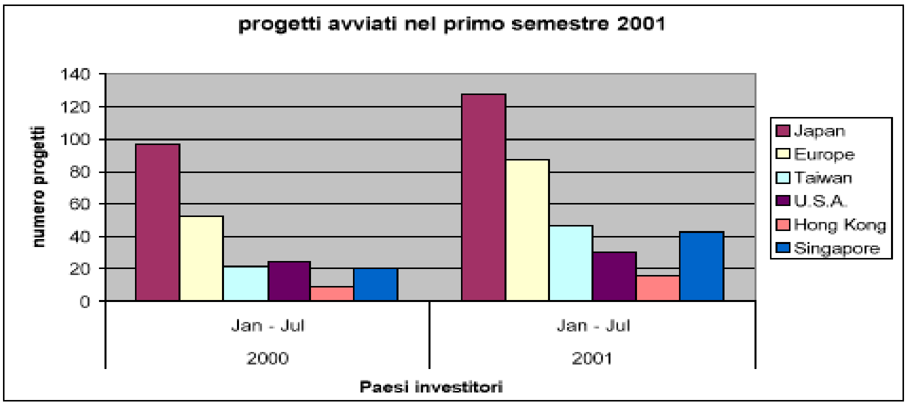

Fig 1: STARTED PROJECTS IN THE FIRST HALF-YEAR OF 2001
Source: Italian Trade Commission, Bangkok, 2001.

Because of the connection between the Thailand's economy and the American, European and Japanese economy (at the same time correlated between them) the real perspectives of recovery depend on an improvement of the exports towards these countries and therefore from the recovery of the same ones.

Anyway, the recovery appears threatened also by the increase of the public debit that has caught up 60% of the GDP, therefore instrument of the increase of the public expense does not appear useful anymore in future to stimulate the recover.

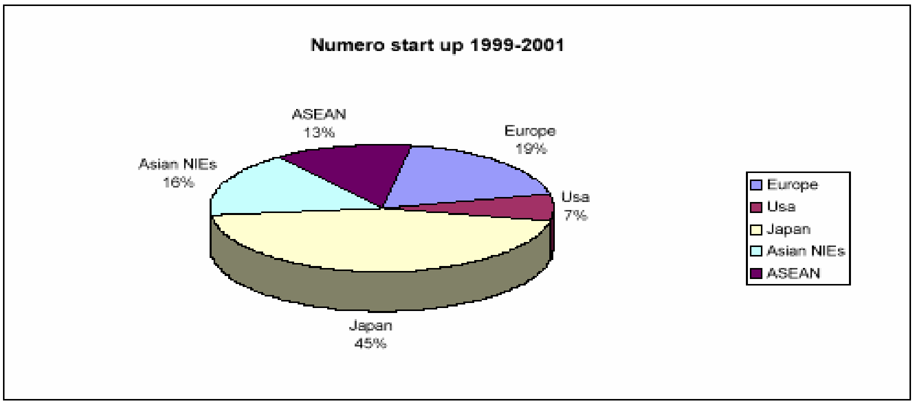

Fig. 2: NUMBER OF THE STAR-UP (1999-2001)
Source: Italian Trade Commission, Bangkok, 2001.

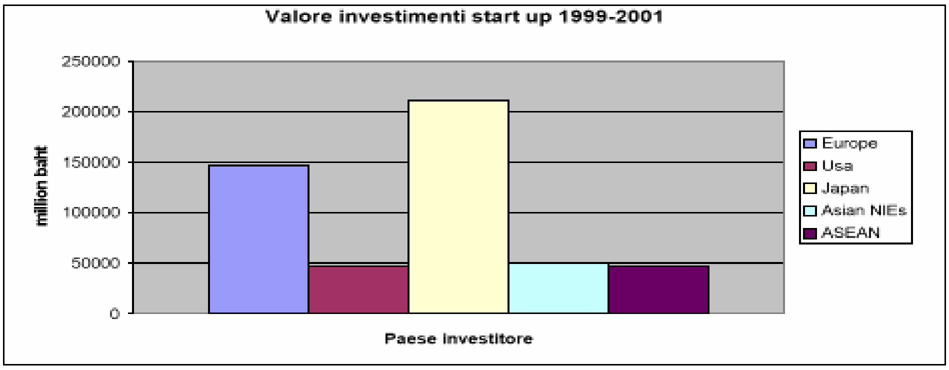

Fig. 3: VALUES OF INVESTMENTS START-UP (1999-2001*)*

Source: Italian Trade Commission, Bangkok,

The Exchange with Italy

The Italian investments in Thailand appear still poor, if we compare them with those of other European countries (cfr. tab. n° 1 and 2), moreover they become above all a trade presence.

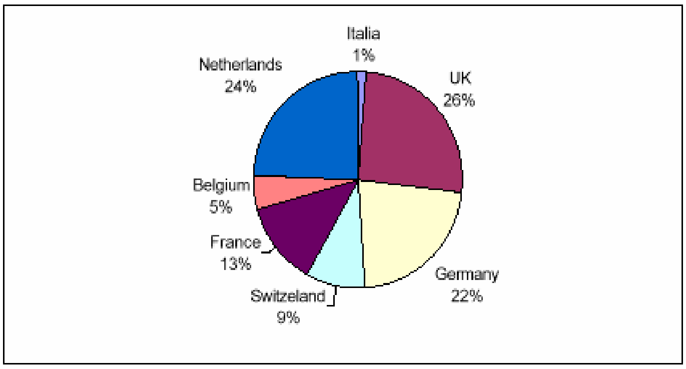

Fig. 4 : THE PRESENCE OF NETHERLANDS IN THAILAND

(Source Italian Trade Commission, Bangkok, 2001).

However, recently because of the devaluation of the Bath, the Italian productive activity appears to recover, thanks above all to the investments of industrial groups operating in the petrochemical field: (Saipem), mechanic (Iveco), telecommunications (Pirelli) and civil engineering (Impregilo, Astaldi, Vianini). To these initiatives, we need to add some medium-size companies operating in the field of the measurement instruments (Marposs) and road machines (Bitelli). As for the SME, these are very active in the fields of the electrical equipments, of the air conditioners, packaging and mono-use pharmaceutical in a single use. Very relevant are cases like "FIAT" because they begun to produce the Alpha Romeo 156 model at the General Motor's plant of Rayong and of the Italcementi that, thanks to the associated Ciments Francais, has acquired the control of the Jalaprathan, a society of concrete production, considered at the moment the most important extra European investment of the Italian society.

The exchange with Italy was influenced by the slowing down of the foreign trade. In fact, the Thailand's imports from Italy increased from 548 million dollars of 2000 to approximately 687 million dollars, almost more than 22%, of 2001, while the Thailand's exports diminished because they passed from 812 million dollars of 2000 to 673 million dollars of 2001 (-17%).

Table 3: FOREIGN TRADE OF ITALY WITH THAILAND, 1998-2001 (JAN-DEC), VALUES IN MILLION OF DOLLARS

	1998 (JAN-DEC)	1999 (JAN-DEC)	2000 (JAN-DEC)	2001 (JAN-DEC)	%01/00 (JAN-DEC)
IMPORT FROM ITALY	431	406	548	667	21,73%
EXPORT TOWARD THE ITALY	702	710	812	673	-17,19%
TOTAL	1.132	1.116	1.360	1.339	-1,51%
ITALIAN TRADE BALANCE	-271	-304	-264	-5,61	=====

Source ICE, 2002. [18]

Almost half of the Thailand's imports from Italy are constituted of machinery and plants. In these fields Italy has remarkable local market shares in wood working machinery, (18%), in packing machinery (14%), in equipments of catering and refrigeration (6.8%), and textile industries machinery (6%) and plastic working machinery (4%).

The following tables' evidence in detail the fields in which are recorded the greater exchanges between Italy and Thailand is recorded.

Table 4: IMPORT FROM ITALY 1998-2001 (JAN-DEC), VALUES IN MILLION OF DOLLARS

ITEM	**1998** (JAN-DEC)	**1998%** (JAN-DEC)	**1999** (JAN-DEC)	**1999%** (JAN-DEC)	**2000** (JAN-DEC)	**2000%** (JAN-DEC)	**2001** (JAN-DEC)	**2001%** (JAN-DEC)
MACHINES FOR INDUSTRIAL USE	147,31	34,21%	125,21	30,83%	172,30	31,45%	184,48	27,66%
ELECTRICAL MACHINERY AND PARTS	47,13	10,94%	34,28	8,44%	38,00	6,94%	74,84	11,22%
CHEMICAL PRODUCTS	45,51	10,57%	50,61	12,46%	61,72	11,27%	68,78	10,31%
TEXTILE PRODUCTS	23,01	5,34%	29,35	7,23%	32,09	5,86%	35,63	5,34%
METALLIC HANDMADE	26,18	6,08%	19,37	4,77%	21,38	3,90%	24,13	3,62%
MEDICINES AND DRUGGIST PRODUCTS	8,11	1,88%	15,65	3,85%	17,06	3,11%	23,40	3,51%
DOMESTIC ELECTRICAL APPLIANCES	3,81	0,88%	4,22	1,04%	8,50	1,55%	22,47	3,37%
OTHER METAL WASTES	5,55	1,29%	11,83	2,91%	16,52	3,01%	20,97	3,14%
OPTICAL AND SCIENTIFIC INSTRUMENTS	15,78	3,67%	14,00	3,45%	17,90	3,27%	19,62	2,94%
PLASTIC PRODUCTS	12,05	2,80%	13,22	3,25%	15,36	2,80%	16,25	2,44%
SKIN AND HIDES	6,01	1,40%	4,94	1,22%	7,98	1,46%	13,67	2,05%
CLOTHING, FOOTWEAR AND OTHER TEXTILE	12,89	2,99%	9,85	2,43%	12,25	2,24%	12,53	1,88%
OTHERS	77,32	17,95%	73,63	18,13%	126,84	23,15%	150,18	22,52%
TOTAL	**430,64**	**100%**	**406,16**	**100%**	**547,89**	**100%**	**666,94**	**100%**

Source ICE, 2002

Table 5: EXPORT TOWARDS ITALY 1998-2001 (JAN-DEC), VALUES IN MILLION OF DOLLARS

ITEM	1998 *(JAN-DEC)*	1998% *(JAN-DEC)*	1999 *(JAN-DEC)*	1999% *(JAN-DEC)*	2000 *(JAN-DEC)*	2000% *(JAN-DEC)*	2001 *(JAN-DEC)*	2001% *(JAN-DEC)*
PARTS AND ACCESSORIES FOR MOTOR VEHICLES	42,68	6,08%	70,15	9,88%	120,94	14,89%	93,20	13,86%
EQUIPMENT AIR CONDITIONED	30,09	4,29%	64,39	9,07%	74,46	9,16%	56,95	8,47%
JEWELLERY SHOP/PRECIOUS STONES	17,89	2,55%	23,67	3,33%	27,21	3,35%	37,19	5,53%
FRESH /FROZEN ICHTHYC PRODUCTS	44,48	6,34%	40,62	5,72%	36,47	4,49%	36,85	5,48%
TEXTILE PRODUCTS	44,47	6,34%	42,86	6,04%	40,84	5,03%	32,80	4,88%
RUBBER PRODUCTS	38,51	5,49%	35,65	5,02%	31,08	3,82%	28,71	4,27%
RUBBER	33,58	4,79%	27,40	3,86%	32,18	3,96%	28,70	4,27%
TELEPRINTERS	1,40	0,20%	17,18	2,42%	33,62	4,14%	27,43	4,08%
CLOTHING	39,06	5,57%	36,62	5,16%	30,53	3,76%	27,00	4,01%
LENS	4,35	0,62%	6,17	0,87%	10,24	1,26%	13,02	1,94%
FOOTWEAR AND PARTS	25,30	3,61%	24,69	3,48%	17,63	2,17%	12,25	1,82%
OTHER TETXILE	11,84	1,69%	14,36	2,02%	16,29	2,01%	11,85	1,76%
OTHERS	368,00	52,45%	306,00	43,11%	341,00	41,97%	266,63	39,64%
TOTAL	**701,66**	**100%**	**709,76**	**100%**	**812,49**	**100%**	**672,58**	**100%**

Source ICE, 2002.

A Global Vision

The growing interdependence among Systems – Countries, even if rather far from each other, has produced a reversal of the studious' thought on the avenues of international development, motivated by the impossibility of explaining the dynamic of international trade on the base of neoclassical concepts. Both the evolutionistic approach to the international development – Tesar, Cavusgil, Rugman, Czinkota – and the approach based on the organizing learning, which develops according to the entrepreneur's capability to learn by mistakes, are now obsolete.

The interaction existing between the international markets and the need to examine them from a systematic vision[19] eliminates the basic concept of the evolutionistic pattern that considers each market as a separated unit, to be filtered into it one by one and in following stages.[20]

So we need to focus on the diversities of the several countries, diversity that determines an environmental situation of complexity.[21]

The coming of the new technologies, the different level of an enterprise in reformulating its own offer to customers' satisfaction, the quickness of information, represents all varying factors that can be assumed by one organizing structure.[22]

In such scenery, extremely complex, a successful crucial privilege could be the chance of the enterprises to achieve a competitive advantage, not only searching conditions of evenness of the processes and of situations, but also taking advantage of the positive differentials inside the several sub-systems involved in the market processes: the final and intermediate demand, the various technologies, and the institutional and socio-cultural system. Such differentiation (effective or possible) of the situations in a particular space, can be defined using the concept of variety.[23]

The attention to the variety, in a synchronic sense, helps us to understand better the perspectives of internationalisation, compared to some present statements (globalisation), which analyse some kind of development of the foreign markets related to a condition of complete standardization of the products, and of the processes and the relationships by the enterprises.

The aim of this work is to indicate some international model of development that can be carried on in the mutual relationships between Italy and Thailand, starting from a common context (characteristic to the structure of the modern capitalistic systems) but with a difference between multinational approach and global approach. We would like, in fact, to observe how it is wrong to say that the total strategies represent a "continuum of the multinational strategies towards the internationalisation of the enterprises". The phenomenon "globalisation" considered as the homogeneity of the consumers' needs and the standardization of the markets is reductive, because we need to include some aspects linked to the worldwide scenery, such as the political, social, cultural and economic aspects.

It is very interesting to understand the strategic options used by the economic organizations to create models of behaviour characterised by the exclusive search of worldwide standards of competitiveness in each phase of the chain of the value and the performance of different strategies able to pick-up the advantages connected to the diversity and the specificity of the market situations.

The model of development that we propose wants to go beyond the study of the advantages through the exclusive research of conditions of relative equality and of standardization of the processes and the products, but through the exploitation of the different situations and present relationships in the worldwide economy and the markets maintaining a total strategic design giving a possible key of reading of the whole phenomenon.

An economic organization that counts the differences between countries can obtain a competitive advantage using:

a) the territorial geographic varieties, that are the easiest to single out and that allow, through the modern computer science technologies, to be present in whichever geographic part, economically interesting, in real time, with a relative increase of its own power of conditioning of the market;

b) the competitive varieties, that are the methods and the instruments to act the international strategic options suitable to the business or the territory, from the acquisitions to the fusions, to the strategies of development of an independent channel, to the participation, the consortia, the licensing, the franchising, the joint -venture and to many others;

c) The varieties of the markets that exist at two levels: at the level of input in the supplying markets and at the level of output in those of placement. In the first case the variety is in the equipment of the factors between competing systems –countries. The two system-country (Thailand – Italy) could be concurrent in the clothing, considering that Thailand produces magnificent texileand Italy is famous for the know – how of its designers, of its producers the creativity of the same ones. In the second case there are substantial differences in the different countries in the organization of the trade structures (organized and independent distribution, great distribution, co-operation, and other) and in the differences of the consumers' tastes.

d) The varieties of competences, referring to the differences within of the enterprise and from which depends the success or the survival of the same one.

From all of the above mentioned varieties takes origin the variety of the risks also in consequence of the governmental, financial, monetary and fiscal policies.

Conclusion

The Italian penetration in the Thailand's market is not considered in an aggressive quantity size, but in an interactive mode.

Actually, an enterprise or an economic organization can divide, in extreme synthesis, its objectives in three great categories[24]:

a) It must be economic in its present activities;

b) It must manage the risks that assume in order to conclude these activities;

c) It must develop an ability of learning inside its structure, in order to be innovative and flexible (to know how to adapt itself to the future changes). The following table shows two explanatory models according to the chosen strategic option.

Table 6: COMPARISON BETWEEN TWO EXPLANATORY MODELS

OBJECTIVES	ATTENTION TO :		MODEL	
	VARIETY	**HOMOGENIZATION**	**SYSTEMIC**	**GLOBAL**
CHEAPNESS OF PRODUCTION	BENEFITS COMING FROM THE OWNERSHIP OF MANY FACTORS AND CONSEQUENTLY BY THE MINOR COST OF THE SAME ONES	RESEARCH ECONOMIES OF SCALE AND OF LEARNING	SHARING OF THE INVESTMENTS AND OF COSTS BETWEEN PRODUCTS, MARKETS, OR SAB[25]	RESEARCH OF THE BALANCE BETWEEN ECONOMY OF SCALE AND OPERATING AND STRATEGIC FLEXIBILITY
MANAGEMENT OF THE RISKS	MANAGEMENT OF THE RISKS COMING FORM THE CHANGE OF THE COMPARATIVE ADVANTAGES OR OF LOCAL POLITICAL CHOICES	MANAGEMENT OF MAIN RISKS, BECAUSE THE ANSWERS OF THE CONCURRENTS ARE DIFFERENT AND IN DIFFERENT MARKETS	DIFFERENTIATIO N OF THE RISKS IN A PORTFOLIO LOGIC	ESTIMATED AND INTENSIVE MONITORING ON THE PROBABLE ANSWERS OF COMPETITORS
DEVELOPMENT OF CAPABILITY OF LEARNING: INNOVATION AND FLEXIBILITY	RESEARCH OF EXTERNAL LEARNING TO INTEGRATE WITH THE INNER ONE: COMPLEMENTA RITY	FIDELITY TO THE INNER KNOW-HOW, STATICITY AND EXCLUSIVE SPREAD OFF OF THE SAME	GLOBALISM AND INTERACTIVITY	REPEATABILITY OF THE FORMER BUSINESS

Source: our creation

The two models do not exclude each other and both generate development for the two operators; they are different options to act in different times and situations.

We prefer the systemic model. In this case the Italian operator can interact with the Thailand's operator offering his competences and resources even if they have to face problems linked to uncertainty and complexity, such as the administration of the relationships with development of the multilateral organisms, the elevated number of contenders, such as the United States, France and United Kingdom, but the interaction with the resources, the values, the competences of the Thailand's operator, allows to add the value creating new acquaintances, which will be used not only in that country but also in others.

The next figure evidences the importance of the interaction between the operators involved a systemic optical.

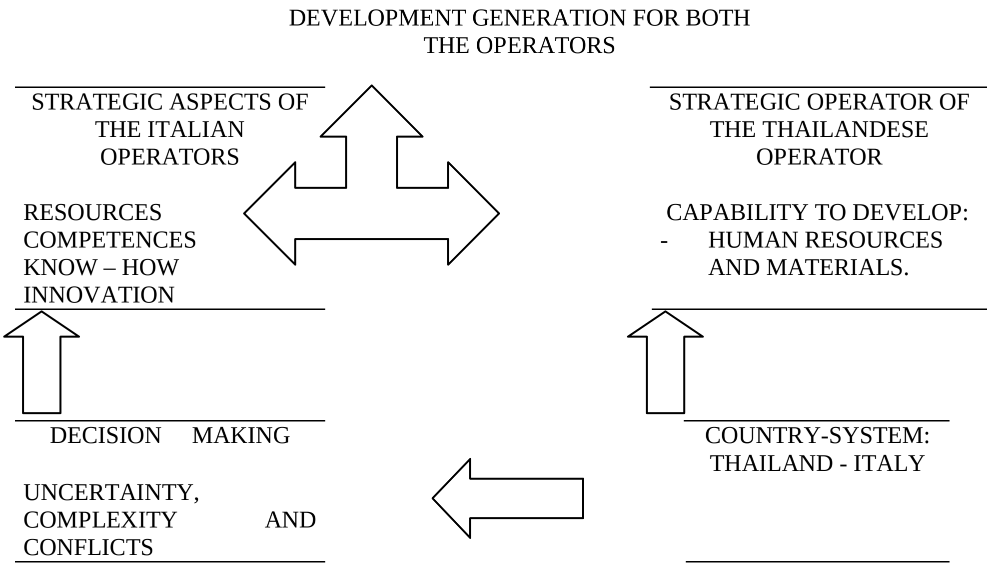

Fig. 5: THE INTERDEPENDENCE BETWEEN ECONOMIC SYSTEMS TOWARD THE INTERDEPENDENCE BETWEEN PARTNERS

The Thailand's operator currently must address and prepare a flexible and mobile organation to manage the environmental complexity and the pursuit of objects apparently opposite, possibly based on agreements not on equity, both towards the distributive networks and the suppliers (Benetton, Nike, etc).

Such option will succeed to break off the traditional isolation that initially can influence the enterprises of the emerging countries.

References

[1] Amoroso M. Interrelazione tra dimensione ed elasticità aziendale, Lischi Editore, Pisa, 1079.

[2] Arcelli M. *I "megatrends" della globalizzazione*, in Arcelli M. (a cura di) G*lobalizzazione dei mercati a orizzonti del capitalismo*, Laterza, Roma, 1997.

[3] Barile S. "Le proprietà dei sistemi vitali" in *Approccio sistemico e governo dell'impresa* seminario di studio, Gaeta 16 e 17 ottobre 1999.

[4] Calvelli A. *Scelte d'impresa e mercati internazionali*, Giappichelli, Torino, 1997.

[5] Caselli L. "Globalizzazione" in Caselli L. (a cura di), *Le parole dell'impresa. Guida alla lettura del cambiamento*, Franco Angeli, Milano, 1995.

[6] Caselli L. *Le tranding companies italiane*, Giappichelli, Torino, 1988.

[7] Cotta Ramusino E. *Imprese e industria finanziaria nel processo di globalizzazione*, Giuffrè, Milano, 1988.

[8] Di Bernardo B., Rullani E., *Il management e le macchine*, Il Mulino, Bologna, 1990.

[9] Golinelli G.M. *L'approccio sistemico al governo dell'impresa*, vol. I, II, Cedam, Bologna, 2000.

[10] Goshal S. "La strategia globale: uno schema di riferimento" in *Sviluppo e Organizzazione*, n° 104, Novembre – Dicembre, 1987.

[11] Hamilton I., *Un'economia mondiale in continua trasformazione*, in Bennet R., Estsall R., (a cura di) *La sfida del cambiamento globale*, Franco Angeli, 1996.

[12] Modigliani F., Dosi G. *Tecnologia e organizzazione industriale internazionale*, Il Mulino, Bologna.

[13] Rampa L. *L'economia keynesiana*, ISEDI, Torino, 1988.

[14] Thurow L., *Il futuro del capitalsimo*, Mondatori, 1997.

[15] Velo D."Internazionalizzazione" in Caselli L. (a cura di), *Le parole dell'impresa. Guida alla lettura del cambiamento*, Franco Angeli, Milano, 1995.

[16] Zamagni A. "Globalizzazione, nuovo ordine mondiale, società civile transnazionale", in Detragiache A. *Globalizzazione economica, finanziaria e dell'informazione*, SEI, 1998.

[17] Zan L. *Management strategico*, Utet, Milano, 1992.

End notes

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[2] Cfr. also Caselli L. *Le trading companies italiane*, Giappichelli, Torino, 1988. As globalisation we mean a situation completely new towards the past because the different situations and the economic, productive, social, cultural realities can interact and communicate on a worldwide level and - thanks to the dissemination of knowledge, technologies and information - can become parts interconnected of a wider system.

[3] For a more exact definition you can see Caselli L. “Globalizzazione” and Velo D. “Internazionalizzazione” in Caselli L. (by), *Le parole dell’impresa. Guida alla lettura del cambiamento*, Franco Angeli, Milano, 1995.

[4] In this view, the present economic collapse of South America is a clear example of interdependence. In fact, the slump of the Argentine has had an effect on the Uruguay, always considered the “Switzerland” of the Latin America. In order to understand this we have just to think that the Argentine deposits (in dollars) were almost always left in Uruguayan banks.

All this has induced a country as the United States to transfer in the month of August 1,5 billions of dollars (without waiting the decisions of the International Monetary Fund) to the Uruguayan banking system, in order to prevent the collapse, that would have probably made feel its negative weight on the stable American economy.

[5] Zamagni A. “Globalizzazione, nuovo ordine mondiale, società civile transnazionale”, in Detragiache A. *Globalizzazione economica, finanziaria e dell’informazione*, SEI, 1998, pag.196.

[6] Cfr. Il Corriere della Sera del 14 agosto 2002, “Multinazionali battono gli stati, Exxon più ricca del Pakistan”. Cfr. also Arcelli M. I”*megatrends” della globalizzazione*, in Arcelli M. (by) *Globalizzazione dei mercati a orizzonti del capitalismo*, Laterza, Roma, 1997, pag. 153.

The Author puts in evidence the wider content of the globalisation with a stress on some factors like the movement of the productive barycentre, the industrial organization and the review of welfare state.

[7] The definition is by Unctad, the conference of the United Nations for the commerce and the development, the list of UNO takes in consideration the Gross Domestic Product for the states and the added value (calculated starting not from the sales but, for reasons of homogeneity, from the sum of salaries and net profits) for the multinationals. The list is opened with little surprise, in head we find the United States (9,810 billions of dollars), then it follows the Japan, Germany, Great Britain, France, China, Italy (1,074 billions of dollars). From this point then on we find the first surprises, no other country is over l the thousand billions of PIL, Canada for example, – a country making part of G8 – it is in the eighth position with 701 billions of dollars, immediately after you can find the great multinationals with an added value often more to the UN (Underdeveloped nations).

[8] We have an example of the systematic vision of a unique global market with the advertising spot of the Ford Motor Company, filmed in many countries and contemporary projected in 200 countries that has caught up beyond a billion of people. The initiative is one of the first ones of the house of Detroit to build an image of global *brand*. Cooked Cfr. Ramusino E. *Imprese e industria finanziaria nel processo di globalizzazione*, Giuffrè, Milano, 1998, pg.33 and followings.

[9] For a right and close observation you see Modigliani F., Dosi G. *Tecnologia e organizzazione internazionale*, Il Mulino, Bologna, 1985, pg.377 and followings. Cfr. also Amoroso M. *Interazione tra dimensione ed elasticità aziendale*, Lischi Editore, Pisa, 1979.

[10] In this phase we notice that the “economy of the supply” imposes itself and so it was neglected the Keynesian theories. In this sense you can see Rampa L. *L’economia keynesiana*, ISEDI, Torino, 1988.”*Gli uomini di potere s’illudono di decidere tutto da soli ma in realtà sono schiavi di qualche economista defunto: nel bene e nel male, utilizzano senza accorgersene idée messe in giro da altri diventando poco più che strumenti per la loro diffusione*” as John Maynard wrote in the conclusions of his *Teoria Generale* and this observation seems today even more suitable because Keynes seems to influence politicians and governments. (cfr.Deraglio M.*La Stampa* of the 28th of February 2002). In the post-war period, the western elite praised Keynes as the saviour of the private property, who had indicated the way of a reformed Capitalism (the "new capitalism") so to avoid unemployment and to neutralize the revolutionary pushes; in the name of Keynes they launched the economic policies that carried to the "miraculous" increase of Western Europe and the keynesian macroeconomics became the unique language of a new supranational economic culture. Starting from the August of 1971, with the end of

the monetary system of Bretton Woods - based on the fixed changes and the convertibility of the dollar in gold, the Keynesian theories were quickly left as a memory of the years of the Great Depression, with an advantage of the supporters of the new "economy of the supply".
Today, on the wave of an external emergency (the terrorism) and of an inner emergency (the accounting scandals that have produced the collapse of all Stock Exchanges) Keynes seems returned very topical.
[11] Cfr. Hamilton I., *Un'economia mondiale in continua trasformazione*, in Bennet R., Estsall R., (by) *La sfida del cambiamento globale*, Franco Angeli, 1996, pg. 89-90.
[12] The concept of "punctuated balance" comes from the biological sciences ; it is a conceptual infrastructure used to explain the disappear of human being and the assertion of new forms of life together with great natural cataclysm . Cfr. Thurow L., *Il futuro del capitalismo*, Mondatori, 1997, (pg. de cfr.. 8-22).
[13] Some periods of punctuated balance can be observed also in the human history. For example the Napoleonic armies, although after almost two thousand years, were not able to move faster than Julio Cesar's ones: in fact both depended on the horses and on he wagons.
But seventy years after the death of Napoleon, the vapour trains reached more than 160 hour kilometres of speed. In the same period the industrial revolution was already in an advanced level and the economic age based on agriculture, old of thousand of years, had been replaced in less than a century by industrial age; and a social system, the feudalism, that had been the most adapted to survive for hundred of years, came quickly replaced from Capitalism.
[14] The meaning of complexity, a term very often too used, is meant in this job in the exception indicated in the introductory part to the present job, cfr. what is cited in notes 4 and 6 in the first paragraph.
[15] Actually Thurow L., op. cit. (cfr. pagg. 8-22) uses a different terminology, coming from the geologic sciences. In fact, he speaks about five tectonic plates, with a reference to natural phenomena, such as earthquakes and the eruption of volcanoes, provoked by the slight movement of the land plates, that at the end provoke great land changes.
[16] Cfr.ICE, *Tailandia congiuntura economica*, Roma, 2002.
[17] Cfr. ICE, *Tailandia congiuntura economica*, Roma, 2002.
[18] The value of the dollars' exchange/bath follows the order: *1 US$ = 41,27 Thai baht (1998); 1 US$ = 37,84 Thai baht (1999); 1 US$ = 41.16 Thai baht (2000); 1 US$ = 44.48 Thai baht (2001), Source: Trade Statistics Center*
[19] Cfr. Golinelli G.M. *L'approccio sistemico al governo dell'impresa*, vol. I, II, Cedam, Bologna, 2000.
[20] Cfr. among the others Calvelli A. *Scelte d'impresa e mercati internazionali*, Giappichelli, Torino, 1997.
[21] According to the systemic approach the complexity has been defined as the level of variances of a phenomenon, that is the number of possible cases qualitatively different one from each other for important aspects; cfr. Di Bernardo B,, Rullani E., *Il management e le machine*, Il Mulino, Bologna, 1990, pg.146
[22] On these themes you can see Zan L. Management strategico, Milano, Utet, 1992, pg.14
[23] The variety, in the theory of systems, represents the synchronic dimension of the complexity, referred to the space categories, while the variability is the diachronic dimension referred to the time categories.
[24]Cfr. Goshal S. "La strategia globale: uno schema di riferimento" in *Sviluppo e Organizzazione*, n°104 Novembre-Dicembre, 1987.
[25] Strategic area of business

Section 2
MNEs, FDI, Financial Markets & Banking

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A Longitudinal Study of Entry Mode Choices: Taiwan's Investment Experiences in China

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Abstract

To strive for sustainable growth, firms internationalized for two main reasons, namely: environments deteriorated in home and/or opportunities emerged abroad. The combined forces of push and pull accelerated the movements of capital, technology and intellectual capital from Taiwan to emerging markets, China in particular, in the past decade.

Concerning the entry mode choices into China, in addition to trade, material-processed, assembly, and compensate trade, the most popularly adopted ones were wholly-owned subsidiary, joint venture and strategic alliance. After the admittance of Taiwan and China into the WTO, more Taiwanese companies extended to PRC by re-allocating their value-added activities between the Straits in order to create and sustain competitive advantages. This study thoroughly examined publicly listed corporations in Taipei that had investments in China. Basing on the secondary data and in-depth interviews of companies, this study offered three main suggestions to the government of Taiwan to ensure her continuous economic prosperity.

Introduction

Confronting the attraction of China market and the challenge from the deteriorating investment environment in Taiwan, more and more Taiwanese firms rush into China in the past decade. They intend to exploit comparative advantages between Taiwan and China to extend and create their competitive advantage so as to successfully compete globally. However, under the challenges from the accession of Taiwan and China into the WTO, prosperous development of internet and customers' request for quick response and convenience, the successful business model in Taiwan could not be transplanted into China without second thought.

This study provides an overall picture of Taiwan's foreign direct investment in China. The authors analyze not only the current system of economic and trade in China, but make an in-depth exploration into the investment motives, industries, locations, and entry modes over a time span. This study also discusses risks involved in the investment in China and further offers suggestions to both government and enterprises to pursue their internationalization strategy. To maintain and even further create their competitive advantage, companies have to optimize value-added activities configuration between the Straits, choose a right industry to enter and suitable entry mode, utilize innovation and knowledge management system and deploy flexible coordination and control mechanism.

Current Economic and Trade Systems in China

Economic development in China experiences three stages. In the first stage, PRC government carried out village-related revolution and the system of family-allied production during 1979 to 1983. In the course of mid 1980 to that of 1990, Hsanung-level corporations developed as powerful economic driving forces. After that, the government stresses the establishment of market discipline, the cohesion in a society, and the connection with the world. However, interventions from government, protectionism, regional disparities, and the coexistence of dual systems between villages and cities are widespread domestically till now.

PRC government insists on domestic revolution and opening doors to foreign investments as two basic policies. Actively promoting investments near the coasts, the government carries out various favorable policies. Dispersed special economic regions along the coasts and in the nearby cities are well planned as the main economic development forces to further lead the entire society to advanced progress. As for the mid-west regions, investments are emphasized on the establishment of infrastructure to create network externalities and job opportunities, and increase welfare of customers and revenue income of governments.

While entering the 21st century, PRC government continues to implement macro reconciliation policy and infrastructure construction of transportation and water supply. Meanwhile, the government facilitates technological advancement of existing firms and selectively supports the investment on technical improvement for those enterprises that aim for export expansion and facilities import in order to maintain continuous development of the entire society.

Investment Motives in Mainland China

As Dunning (1988) proclaimed that the motives of foreign direct investment included market expansion, resource procurement, efficiency improvement, production rationalization, product quality assurance and customer retention. Maron and Risenberger (1994) further summarized two main factors that drove companies' globalization. Firstly, companies went global for such proactive reasons as seeking new markets, economies of scale, homogeneous world demand, reduction of global transportation and telecommunication costs, the establishment of technology protocol and trade policy of host government. Secondly, such threatening factors from external environment as foreign competition, volatile exchange rate, customer's globalization move and global technological change that forced companies to passively internationalize their operations.

Foreign direct investment from Taiwan mostly concentrates in Southeast Asia countries and Mainland China. The investment motives to the latter are push and pull forces. From the push force point of view, the increasing labor cost, difficulties in land acquisition and labor moves, and more intense international competition results in the dramatic increase of operation cost in Taiwan. As for the pull force, China offers significantly lower cost in skillful labor and land acquisition, potentiality of domestic market, easy accessibility of raw material, and tax incentives. Moreover, the shorter culture distance between Taiwan and China that entails lower operating cost and enables product life cycle extendable in China. As a result, China is the most attractive market for foreign direct investment during the past decade.

This study investigated 699 electrical and electronic companies as a sampling frame that had invested in China. Questionnaires were sent to executives who were familiar with their companies' operations in PRC in February 2002. Likert's 7-point scales were used to measure respondents' investment motives. Until mid of May 2002, 102 effective copies were returned with the response rate of 14.6%. The most cited motives are to exploit cheaper labor, follow customers or competitors, capture first-mover advantage and potentiality of local demand. The detailed information is provided in table 1 as below.

Table 1: STRATEGIC MOTIVES OF INVESTMENT IN CHINA

Item	**Average (Standard Deviation)**	**Item**	**Average (Standard Deviation)**
1.Cheap land and labor cost	5.778(0.921)	9.Customer's demand is globalized	5.296(0.950)
2.Major customers went to China	5.667(0.947)	10.Local customers prefer international brands	5.278(0.905)
3.Competitor went to China	5.657(0.929)	11.Wellconstructed infrastructure in industrial park	5.112(0.960)
4.Capture first-mover advantage	5.602(0.986)	12.Local sourcing	5.111(1.187)
5.Great local demand	5.463(0.932)	13.Shortened product life cycle	5.102(1.041)
6.Tax exemption	5.462(1.018)	14.Shorter culture distance	5.093(0.914)
7.Low raw material cost	5.426(1.104)	15.Easy to register in China	4.935(1.044)
8.suppliers went to China	5.343(1.025)	16.Lower exchange rate risk	4.639(1.045)

The investment types from Taiwan to China are either direct or indirect. According to the regulation on the investment in China, companies can directly invest there so long as their accumulated investment amount is less than one million dollars within two years. If the amount is over than one million dollars, firms have to indirectly invest China via third countries. Currently, most large public firms adopt indirect investment to build subsidiaries financially independent from headquarters.

Changes in Investment Scale, Industry and Region

Investment Scale

Investment scale from Taiwan to China had been continuously increased since the resumed commercial interactions between the Straits in 1987. The average size of investment during 1991 to 1993 is about 800 to 900 thousand US dollars. That of 1994 to 1996 has increased to mid-sized investment is about 1.4 millions. After that, the investment scale had been dramatically increased to 5.95 millions and 7.4 millions, respectively. In the end of 2001, the approved investment amount has been accumulated to 27.8 billion dollars.

Change in Investment Industry

Before 1994, most investments from Taiwan to China were from labor-intensive and low- end production industries. Basing on the division of labor between the Straits, companies in Taiwan can attain cost reduction and efficient resource deployment simultaneously. However, a growing number of high-tech companies were initiating investments in China after 1995. The shift of investment from high-tech industries could result in the danger of hallo-out effect if technology were not efficiently advanced in Taiwan.

From the development of investment in China, the focus of management had been changed from labor-intensive industries in the early stage to local market expansion during 1990 to 1996. The market-development type of investment was mainly in the industry of consumer goods, restaurant, entertainment and raw materials. After 1997, power and electronics companies, technology and capital intensive, were two major types of investors. This change in industry types was resulted from policies laid by China government like favorable tax treatments, low cost of land usage and reduced export ratios during the period of 1995 to 2000.

This study further investigated the distribution of investment by Taiwanese firms by industry. By using the data bank provided by Taiwan Economic Journal, this research analyzed 470 publicly traded companies that had invested in China before September 2001. These companies as a whole had built 1,126 ventures in Mainland China. Deducting firms at the preparation stage and without sufficient data, we derived 481 cases as valid samples. Total investment amount was approximately 325.1 billion New Taiwan dollars by the end of September 2001. It revealed that most of the investment was made by electronics firms that had continued to outperform other competitors in the international arena. For detailed information, please refer to Table 4 as below.

Table 2: INVESTMENT IN CHINA BY TAIWAN'S PUBLICLY TRADED COMPANIES

Industry	**1996**		**1997**		**1998**		**1999**		**2000**		**2001**	
	Amount NT$ 100M	%	Amount NT$ 100M	%	Amount NT$ 100M	%	Amount NT$ 100M	%	Amount NT$ 100M	%	Amount NT$ 100M	%
Electronics	58.170	19.2	126.657	24.0	248.891	30.8	348.165	33.6	1,615.600	56.2	1,858.454	57.1
Food	27.875	9.2	37.476	7.1	40.633	5.0	119.259	11.5	289.051	10.0	302.066	9.2
Plastics	11.871	3.9	28.705	5.4	30.517	3.8	23.352	2.3	117.564	4.1	255.755	7.7
Auto	2.901	2.0	2.946	0.1	4.319	0.5	4.754	0.4	182.063	6.0	150.017	4.6
Cement	14.338	4.7	27.873	5.2	110.998	13.7	115.065	11.1	119.167	4.1	121.293	3.7
Steel	1.776	0.5	6.938	1.3	9.366	1.2	9.608	0.1	53.714	1.7	56.151	1.7
Construction	16.446	5.4	33.763	6.4	44.397	5.4	51.187	4.9	55.720	1.9	55.720	1.7
Rubber	8.504	2.6	11.120	2.1	13.554	1.6	14.846	1.4	40.784	1.4	51.916	1.6
Consultancy	24.034	7.9	30.723	5.6	37.054	4.5	32.908	3.1	53.407	1.6	38.211	1.2
Textile	1.476	0.4	10.096	1.9	13.647	1.7	25.406	2.4	37.974	1.3	34.375	1.1
Electrical	5.769	1.6	7.817	1.5	16.196	1.6	23.534	2.2	26.708	0.9	30.377	0.9
Bio=chemistry	7.321	2.4	10.650	2.0	12.369	1.5	15.401	1.4	13.601	0.4	16.570	0.5
Paper	0.186	0.1	0.239	0.1	0.290	0.1	0.381	0.1	7.449	0.2	8.451	0.3
Telecommunication	0.685	0.2	3.258	0.6	5.826	0.7	6.420	0.6	7.135	0.2	6.653	0.2
Trade & Retailing	1.444	0.4	2.653	0.5	5.535	0.6	7.663	0.7	8.084	0.3	8.187	0.2
Glass	0.402	0.1	1.072	0.2	1.120	0.1	1.359	0.1	1.513	0.1	2.793	0.1
Transportation	16.011	5.3	16.073	3.0	20.576	2.5	25.157	2.4	28.546	0.1	0.356	0.01
Securities	0	0	0.656	0.1	0.656	0.06	0.656	0.06	0.636	0.02	0.642	0.01
Others	102.392	33.7	168.765	32.0	196.289	24.2	209.341	20.2	240.164	6.2	252.403	7.7
Total	**301.604**	**100**	**527.483**	**100**	**812.2.35**	**100**	**1,034.464**	**100**	**2,898.888**	**100**	**3,250.974**	**100**

Source Complied from the data bank of Taiwan Economic Journal.

Change in investment location

Most Taiwanese firms located their facilities near the coasts. Some of them placed overseas branches in specialized economic and technology development zones and the rest in the tax-bounded areas. 46 percent of Taiwanese companies, focusing on seeking cheap production factors, established their subsidiaries in Grongdung Province in 1992 to take advantages of financing and trans-shipment in Hong-Kong and bountiful human resources in China. When investment motive was changed from resource-seeking to market development, 51% of firms situated branches in Soochow Industrial Park in 2001 where provided highly qualified talents, healthy infrastructure and advanced technologies. Kungshan city, in particular, turns out to be the most popular site to attract foreign direct investment.

Entry Mode Choice

Concerning the entry mode choices into China, in addition to trade, material-processed, assembly, and compensate trade, the most popularly adopted ones were wholly-owned subsidiary, joint venture and strategic alliance. In the early stage of foreign direct investment from Taiwan to China, traditional and necessity industries were the first movers among others and selected turn-key operations as one of their major strategies. Recently, companies from high-tech industries are most welcome by China Government and provided with appealing taxation incentives such as tax-free for the first 5 years and half-taxed for the second 5 years. The host government focuses every effort on developing industries like telecommunication, bioengineering, new energy, space technology etc. to attract infusions of capital, technology and human capital.

Holding Company

Owing to the regulation for not allowing Taiwanese firms to directly invest in China, companies had to make investment through foreign holding company in the third country. These third countries offered favorable treatments such as a tax exemption, a tax credit, applied for a lower tax rate, and other incentives. In addition, they protected business secrets, have more relaxed foreign exchange control, and provided a healthy site for international offshore financial center, IOFC).

This study explored how Taiwanese firms invested overseas through third countries by using 855 companies as an example offered by the data base of Taiwan Economic Journal. The major findings were briefly summarized as follow. First, the first 4 countries as investment centers included: Virgin Islands (166 firms, 34.5%), Hong-Kong (114, 23.7%), Singapore (72, 15%) and Caiman Islands (39, 8.1%). Second, the amount of foreign direct investment there accumulates to 10.8 billion dollars from 470 publicly-listed companies. Those companies come from industries of electronics (US$ 3.13 billions), food (US$ 1.66 billions) and textiles (US$ 985 millions). Third, most of them had chosen foreign direct investment (45.32%) and major ownership (31.19%) but very few selected strategic alliance. The major reasons behind these investments were that there existed no well-established laws to protect intellectual properties, and in turn, forced companies to set a branch of their own to avoid the dilution of firm-specific advantages.

Entry mode comparison

Export entailed fewer involvements in foreign market expansion in terms of required resources commitment, and market knowledge. Contracts, based on mutual trust, resulted in possible leakages of intellectual properties. By contrast, foreign direct investment called for higher levels of resource commitment, control and market knowledge (Dunning,1988 Contractor,1990 Hennart,1991 Tsang,1997). Most Taiwanese companies went to China in their early stage by sending materials for processing, parts for assembly, sample for further processing and compensation trade. Wholly-owned subsidiary came the next and joint venture came the last (Luo,1995 Pan,1996). ROC government gradually opened doors to investor from China since 1993. Then more and more

Taiwanese firms tended to adopt wholly owned subsidiaries, joint ventures and cooperation as their priorities.

The mode of wholly owned subsidiary allowed foreign firms to decide form of organizational structure, way of management, and run the risk of performance. In terms of local market expansion, they could fully control the whole system of production and sales and encounter fewer agency cost. Nevertheless, it was not easy for them to access sale channels or raw materials in the local market that entailed more expansion costs.

Joint ventures allowed both foreign and local partners to share costs and profits based on the investment proportions. Generally, joint ventures had the rights to sell certain percentage of goods in the local market. Moreover, local partners could also contribute to management performance significantly because of their good connections with related people. However, joint ventures involved more than two parties whose philosophy and goals might not be compatible that resulted in management difficulties. Furthermore, if local partner delegated people from the Communist party who were not qualified and/or competent, the prospectus of ventures was even more pessimistic.

Cooperation without involving equity investment was also a popular entry strategy. Allies could establish management committee that guided profit and risk sharing. Cooperative strategy enabled foreign firms to make use of existing resources and facilities in China and to access market intelligence. If further through the connections with local government, investors could easily enlarge product lines, increase the percentage of domestic sales and reduce investment risk. However, the resources involved in negotiating and contracting would finally increase transaction costs. The last but not the least important point to bear in mind was to find a right partner to start with.

Although Taiwanese firms entered China through foreign direct investment, joint venture and strategic alliance, the most appropriate entry mode was depended on type of industry, investment environment and site, resource and capability availability, the value and tacitness of know how, and company's global strategy (Kogut & Singh,1988 Kim & Hwang,1992 Kogut & Kulatilaka,1994 Kutschker & Baurle,1997). The advantages of a joint venture were to spread development costs and risks among partners and easily access market knowledge. By contrast, this entry mode would not easily allow foreign companies to integrate local operations with those spread over the world. Most important of all, a joint venture could not completely control the leakage of core technologies. As for wholly owned subsidiary, this entry strategy could enable foreign investors to integrate their entire operations as one closely unified entity. However, wholly owned subsidiary might end as a failure ventures whose development cost and risk were all assumed by foreign investors.

The authors found that 45.3% of sample companies adopted wholly owned subsidiaries while investing in China. Among the others, 31.2% and 23.5% of firms utilized majority and minority equity investment, respectively. Furthermore, 100% ownership was popularly used in these industries as rubber (66.8%), electronics (62.6%) and bio-chemistry (57.1%). Majority ownership was adopted by steel (75%), telecommunication and cable (66.7%) and security (66.7%) industry. As for minority ownership was mostly adopted by transportation

(62.5%) and Auto (57.1%) industry. See the details as follow (Table 3).

Table 3: ENTRY MODE CHOICE BY TAIWANESE PUBLICLY LISTED COMPANIES

Industry	**Wholly-owned Subsidiary**		**Majority**		**Minority**		Sub-total
	firm	**%**	**firm**	**%**	**firm**	**%**	
Cement	1	7.14%	6	42.86%	7	50.00%	14
Food	19	34.55%	17	30.91%	19	34.55%	55
Plastics	11	31.43%	16	45.71%	8	22.86%	35
Textile	5	23.81%	8	38.10%	8	38.10%	21
Electrical	21	46.67%	15	33.33%	9	20.00%	45
Telecommunication	0	0.00%	4	66.67%	2	33.33%	6
Bio-chemistry	16	57.14%	5	17.86%	7	25.00%	28
Glass	2	33.33%	3	50.00%	1	16.67%	6
Paper	3	20.00%	5	33.33%	7	46.67%	15
Steel	1	12.50%	6	75.00%	1	12.50%	8
Rubber	4	66.67%	0	0.00%	2	33.33%	6
Auto	2	28.57%	1	14.29%	4	57.14%	7
Electronics	114	62.64%	45	24.73%	23	12.64%	182
Construction	5	31.25%	6	37.50%	5	31.25%	16
Transportation	0	0.00%	3	37.50%	5	62.50%	8
Department Store	1	50.00%	1	50.00%	0	0.00%	2
Others	11	52.38%	7	33.33%	3	14.29%	21
Securities	1	33.33%	2	66.67%	0	0.00%	3
Consultancy	1	33.33%	0	0.00%	2	66.67%	3
Total	**218**	**45.32%**	**150**	**31.19%**	**113**	**23.49%**	**481**

Source Complied from the data bank of Taiwan Economic Journal.

Franchising had become a very popular entry mode over the past few years. Generally speaking, franchisors enjoyed the benefits of entailing low expansion cost and capital cost but capturing more market information (Minkler, 1990). By contrast, franchisees encountered less operating risk and could fully utilize brand equity owned and enjoy the economy of scale of promotion initiated by franchisors. Moreover, return of investment for individual franchisee relied on his/her own performance. Thus, this kind of mechanism reduced costs of monitoring and governance of franchisors and also increased franchisees' incentives to work hard (Rubin, 1978).

Franchising was widely adopted in both Taiwan and China in the past few years. There were 1,126 companies, covering 226 different industries, operated 64, 066 stores and created US 38 billion dollars in Taiwan in 2000. In contrast to Taiwan, 1,800 firms had 26,000 stores that altogether created 250 billion dollars in China by the end of 1999. Taiwanese firms that plan to go to China have to exploit know-how, provide differentiated products or take a niche to enjoy the benefit from cost leadership. They can also capitalize on their brand equities and adopted franchising to tap into advantages from economies of scale. As for those small firms with fewer experiences in China, they could also adopt franchising to benefit from a shorter pay-back period and lower operating risk. However, to pay attention to any risks from China's legal regulations and cultural differences is very essential before any firms intend to expand market by franchising.

Conclusion

"21st century is, totally different 20th century, a discontinuous age" said Drucker. Competition in this century is not aiming for market share but for business opportunity based on firms' speed and persistence (Hamel & Prahalad, 1994). Encountering challenges from economy of internet and knowledge, enterprises of both Taiwan and China have to adopt globally strategic thinking and total solution. Such reengineering as industry, objective & mission, strategic system, operation flow, employee's productivity, consumer's value and brand equity is required to be put into practice (Lin & Liang, 2002). Firms should follow the trend of globalization in market, cost, government and competition and configure their value-added activities globally (Yip, 1995). Meanwhile, they could resort to management of innovation, knowledge and brand to strengthen their competitiveness of products and services and mechanism of control and coordination so as to tap into efficiency and effectiveness of international division of labor (Kutschker & Baurle, 1997).

Configuration between the Straits

According to the principle of comparative advantage, Taiwanese firms could locate such activities as production, supply-chain and distribution in China to take the advantage of first-mover. Secondly, they have to strengthen their core competencies and increase their operating scale. Thirdly, they could adopt strategic alliance strategy to cooperate with partners to gain mutual benefits.

The global configuration and investment in China of Taiwanese firms are categorized into four types. First, companies go to China for accessing fruitful resources. Second, they follow the path of their customers', including domestic and international ones, to produce products. Third, they aim to expand the great potential market in China. Fourth, they try to gain competitive advantages from operating businesses against their competitors.

For Taiwanese firms to continue their growth, they have to leverage their cutting-edge capabilities in research and development and production engineering to provide high value-added products. On the other hand, owing to her bountiful human resource and healthy industrial network, China could leverage her advantages of low cost and critical mass. Integrating comparative advantages from Taiwan and China, enterprises could leave value-added from these activities of R&D, innovation, branding, marketing and global logistics created in Taiwan (CIT, in short). In contrast to Taiwan, the other value chain activities such as production, manufacturing, and assembly could be located in China (i.e., made in China, MIC).

Choose a right industry

Before entering into China, companies should know what industry is much more welcomed by the Government of PRC. The following industries are eligible for tax-exemption and/or reduction while facilities are imported into China: modernization of agriculture, upgrading of industry, new and advanced technology, recycling and environment protection engineering, export-oriented investment and investment in inner land.

Optimal entry mode choice

While making the choice of entry mode, companies have to take the following factors into account: infrastructure, cost of building a factory, production and distribution, marketability, financing, and management risk. From the survey of this study, firms tend to adopt wholly owned subsidiary or majority investment when their operation is involved with know-how transfer and specific asset commitment. If companies aim for local market expansion or resource acquisition, they prefer to build a joint venture. Since most of technologies transferred from Taiwan are not very advanced or the protection mechanism of intellectual property right is not well in place in China, licensing is not a popular choice. As local market demand starts to grow for various industries, franchising based on successful formula developed in Taiwan could be one of good alternatives in the near future.

Innovation and knowledge management

In the knowledge society, executives recognize that competitive posture depends on the bases of time and knowledge (Bartlett & Ghoshal, 1995). Because competitiveness is the function of value divided by cost, enterprises emphasize more on value creation than merely cost reduction. They combine management of real world and e-commerce and integrate supply-chain, customer relationship and enterprise resource planning. Most important of all, they have to change their mindset, innovate their paradigm to maximize performance so as to increase customers' value.

As for the exchange in terms of personnel, flow and technology between the Straits, firms should select the most efficient way in transferring tacit knowledge. Through knowledge creation, absorption and diffusion within and across firms, they can accumulate and extend these actions to core activities (Davenport& Pursak, 1998; Gilbert & Gordey-Hayes, 1996). On the other hand, through continuous innovation could firms maintain their competitive advantage (Nonaka, 1994). In other words, both Taiwanese and Chinese corporations could deploy various incentives to stimulate employees to offer innovate ideas and/or methods in technology, market and product development, strategic thinking, etc. to bring about sale increase and successful opportunity.

Deployment of flexible coordination and control means

In addition to the integration of resources between the Straits and collaboration among firms in different sectors within an industry, Taiwanese companies have to deploy various formal and informal coordination and control mechanism to reap benefits from international operation and financial leverage. Headquarters formulates mission and strategies, dispatches top management to subsidiaries, deems review reports, etc. constantly to monitor the foreign operations (Martinez & Jarillo, 1991). Moreover, through training and education, job rotation, ad hoc teams across countries, compatible reward system and even conflict resolution mechanism, firms could create mutually shared culture (Nobel & Birkinshaw, 1998).

Suggestions for Taiwan Government

Basing on the secondary data and in-depth interviews of companies, this study gives three main suggestions to the government of the ROC. First of all, the government has to realize the policy of active liberalization but with effective administration by signing investment protection agreement between the Straits, and formulating the mechanism of repatriating capital and the most appropriate system of tax exemptions. Moreover, to narrow the cultural distance and reduce political risk in China, Taiwanese firms have to carefully examine the changes in investment regulation, and choose most suitable entry modes. Then taking their comparative advantages and complementarities of resources/capabilities between the Straits into account, corporations could achieve the most optimum configuration of their value-added activities. Finally, to balance the centralization and localization policies accompanied with the most appropriate mechanisms of control and coordination in order to increase effectiveness and efficiency of business management.

Reference

[1] Bartlett, C. A. & S. Ghoshal (1995),"Rebuilding Behavioral Context: Turn Process Reengineering into People Rejuvenation," *Sloan Management Review*, Fall, pp.11-23.

[2] Contractor, F. (1990),"Contractual and Cooperative Forms for International Business: Towards a Unified Theory of Modal Choice," *Management International Review*, 30(1), pp.31-54.

[3] Davenport, T. H. & L. Pursak(1998),Working Knowledge : How Organizations Manage What they Know, M.A.: Harvard College Press.

[4] Dunning, J. H. (1988), Explaining International Production, London: Irwin.

[5] Gilbert,M. & M. Gordey-Hayes(1996)," Understanding The Process of Knowledge Transfer to Achieve Successful Technological Innovation," *Technovation* , 16(6) , pp. 301-312.

[6] Hamel, G. & C.K. Prahalad (1994), Competing For the Future-Breakthrough Strategies for Seizing Control of Your Industry and Creating the Markets of Tomorrow, M.A: Harvard Business School Press.

[7] Hennart, J.F.(1991),"The Transaction Costs Theory of Joint Ventures: An Empirical Study of Japanese Subsidiaries in the United States," *Management Science*,37(4),pp.483-497.

[8] Hill, C. W. L., P. Hwang, & W. C. Kim (1990),"An Eclectic Theory of the Choice of International Entry Mode", *Strategic Management Journal*, 11(2), pp.117-128.

[9] Kim, W .C. & P. Hwang (1992),"Global Strategy and Multinationals- Entry Mode Choice," *Journal of International Business Studies*, 23(1), pp. 29-53.

[10] Kogut, B. & N. Kulatilaka(1994),"Operating Flexibility, Global Manufacturing, and the Option Value of a Multinational Network," *Management Science*, 40(1), pp.123-39.

[11] Kogut, B. & H. Singh(1988),"The Effect of National Culture on the Choice of Entry Mode," *Journal of International Business Studies*, Fall, pp.411-432.

[12] Kutschker, M. & I. Baurle(1997) ,"Three One: Multidimensional Strategy of Internationalization," *Management International Review*, 37, pp.103-25.

[13] Lin, M.Q. & W. K. Liang(2002),"The Impacts from Accession to the WTO and Coopetitive Strategies: A Comparative Study on Taiwan and China," paper presented in *Business & Economics Society International Conference*, Montreal Quebec, Canada, July 24-29, 2002.

[14] Luo,Y.(1995),"Business Strategy, Market Structure and Performance of International Joint Ventures: The Case of Joint Ventures in China," *Management International Review*,35,pp.241-264.

[15] Maron, R. T. & J. R. Riesenberger (1994),The Global Challenge-Building The New Worldwide Enterprise, U.K.: McGraw-Hill.

[16] Martinez, J. I. & J. C. Jarillo(1991),"Coordination Demands of International Strategies," *Journal of International Business Studies*, Fall, pp.429-444.

[17] Minkler, A. P.(1990),"An Empirical Analysis of a Firm's Decision to Franchise," *Economics Letters*, 34(1), pp.77-82.

[18] Nobel, R. J. Birkinshaw(1998),"Innovation in Multinational Corporations-Control and Communication Patterns in International R D Operations,"*Strategic Management Journal*, 19, pp.479-96.

[19] Nonaka, I. (1994),"A Dynamic Theory of Organizational Knowledge Creation," *Organization Science*,15(1), pp.14-37.

[20] Pan, Y.(1996),"Influences on Foreign Equity Ownership Level in Joint Ventures in China," *Journal of International Business Studies*, 27(1), pp.1-26.

[21] Rubin, P.(1978),"The Theory of Firm and the Structure of the Franchise Contract," *Journal of Law and Economics*, 21, pp.223-234.

[22] Tsang,E. W. K.(1997),"Choice of International Technology Transfer Modes :A Resource-Based View," *Management International Review*, 37(2), pp.151-168.

[23] Yip, G. S. (1995), Total Global Strategy-Managing for Worldwide Competitive Advantage, N. J.: Prentice Hall.

Appropriate Underpricing of the IPO Facilitated by the Investment Banks Enforced by the Economic Crisis: Evidence from Thailand

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Abstract

In general, initial public offerings (IPO) stocks are underpriced as documented in numerous studies, mostly from the U.S. As documented by Ritter (1984), the average IPO stocks were underpriced at 18.8 percent or higher. This paper is not aiming at proving that Thai IPO stocks are underpriced. Instead the objective of this paper is to show that investment banks did not set the price appropriately or did not leave any money for the investors to compensate the ex ante uncertainty of IPO stocks in the sample of before crisis. The result form the test of Proposition II indicates that most of the time during before crisis period investment banks underpriced too little and even overpriced in many cases. The result from the study shows that investment banks underpriced the IPO at 0.77 percent which is insignificant different from zero before crisis. However, the study finds that during crisis the investment bank did leave more money on the table for the investors compensating for the ex ante uncertainty at 12.29 percent. There is significant relation between ex ante uncertainty and initial return during crisis. Moreover, the relation between change in market share of the investment and mispricing set by investment banks was found but it is insignificant. The results from this study are to support two statements:

The underpricing in Thai stock market facilitated by the investment banks will be appropriately enforced once there are more institutional investors participate in the market. There is strong evidence of the positive relation between ex ante uncertainty and initial return during crisis and total sample whereas such strong evidence did not found during before crisis period.

There is weak evidence on the penalty impounded on the underwriters who try to cheat on the investors and issuing firms by underpriced by too much or too little by the market.

Introduction

Statement of the problem: generally, initial public offerings (IPOs) are underpriced by the investment banks. This study is to test whether the initial public offerings (IPOs) in Thailand were underpriced before and during crisis.

Objective of the study: to test two propositions as documented by Randolph P. Beatty and Jay R. Ritter (1985) by using data of IPOs in Thailand during two-time-period, before crisis and during crisis.

Two propositions are as follow:

<u>Proposition I.</u> Greater return is required too compensate the greater ex ante uncertainty of an issue.

<u>Proposition II.</u> Mispricing by the investment bank either overpricing or underpricing which is not commensurate with the ex ante uncertainty causes the investment banks to lose their subsequent market share.

Generally, IPO stocks are underpriced as we can observe from the positive initial return of the IPO stocks as indicated in various studies. This paper documented that there is relationship between the ex ante uncertainty and the underpriced level. Ex ante uncertainty means that when investors submit their purchase order, they are not certain about an offering's values once the stocks start publicly trading. Since the issuing firm cannot make any commitment that its stocks will be underpriced once it starts trading. Therefore, investment banks come into the picture to enforce the underpricing equilibrium. This means that the investment banks have no incentive to overdiscount or underdiscount the stocks. However, in the inefficient market with high degree of speculation due to asymmetric information, there are chances for the investment banks to give the insignificant discount for the IPO stocks or sometimes may overprice the IPO stocks.

Investment bank earns its reputation from the fair price settings. Since investment bank does not know the real market price of the IPO stocks on the trading day and the certain factor for pricing the IPO stocks is the ex ante uncertainty. Fair price settings in this context means the IPO stocks have to be underpriced to compensate the ex ante uncertainty. One may argue that how can the appropriate discount priced level be assessed? This answer can be answered by observing the behavior of the investors and issuing firms in the market. This means that if the underpricing set by investment bank is appropriate, the market share of such investment bank should increase over time. Hence, the appropriate underpriced IPO stocks set by the investment banks can be tested via the relationship between the percentage change of the market share and the absolute standard average return.

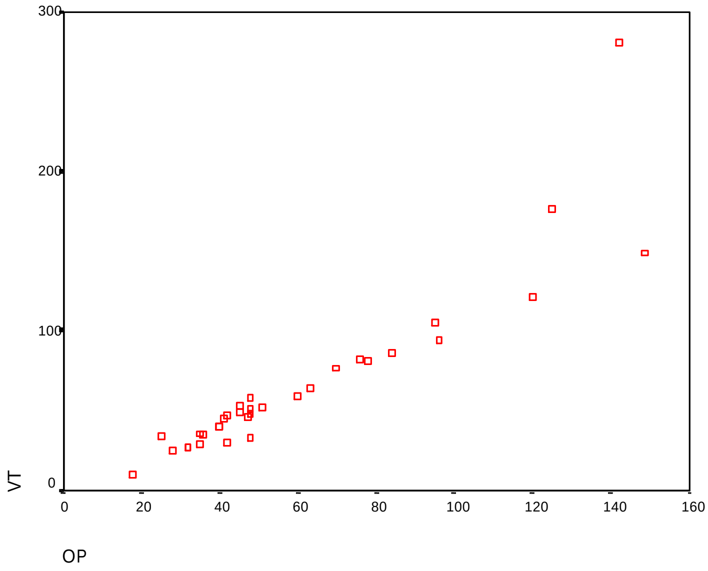

Fig 1

The scattergram depicts the relationship between offered price and the market price (closing price) on the first day the stock traded **before the crisis, 1996 to 1997**. Where OP, offered price, is on the horizontal axis and VT, closing price on the fist day, is on the vertical axis.

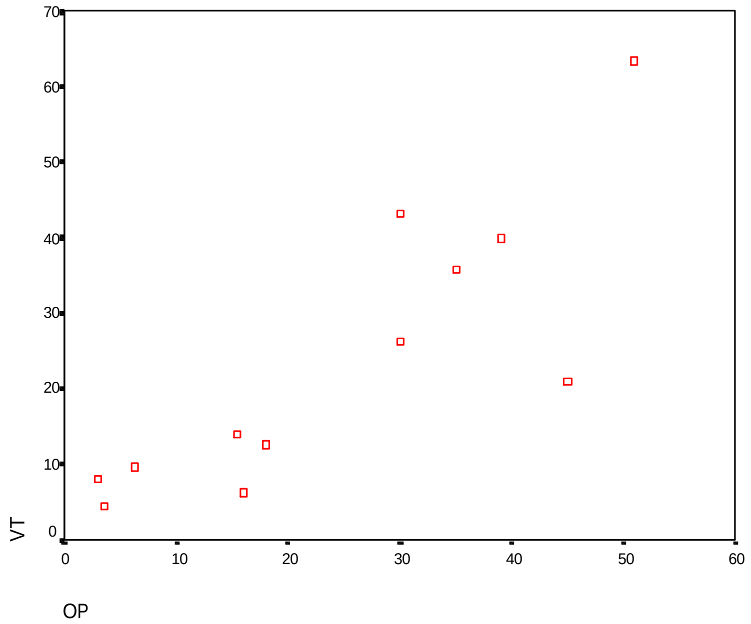

Fig 2

The scattergram depicts the relationship between offered price and the market price (closing price) on the first day the stock traded **during the crisis, 1998 to 2001**. Where OP, offered price, is on the horizontal axis and VT, closing price on the fist day, is on the vertical axis.

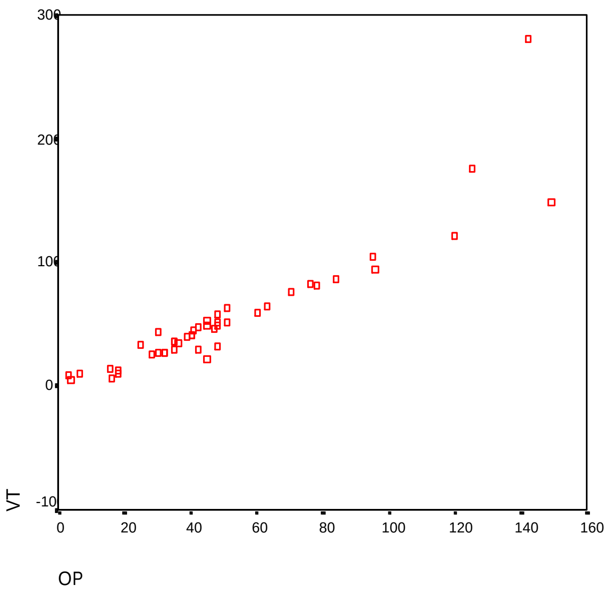

Fig 3

The scattergram depicts the relationship between offered price and the market price (closing price) on the first day the stock traded **total sample from 1996 to 2001**. Where OP, offered price, is on the horizontal axis and VT, closing price on the fist day, is on the vertical axis.

As shown in figure 1 to figure 3, they elaborate relationship between offered price and the closing price at the end of the first day of trading. If the graph depicts the straight line with slope of zero, there is no relationship between the offered and closing price. In the other words, there is no evidence for the underpriced IPO stocks. Three figures show positive relations between the closing price and the offered price. This supports the evidence of the underpriced IPO stocks because the positive slope shows the positive return due to the gain from higher closing price comparing with the offered price. However, stronger evidences supporting the underpriced IPO stocks will be discussed in the following sections.

Table 1 shows descriptive statistics before crisis period, 1996 to July 1997, during the crisis period, July 1997 to 2001, and total sample from 1996 to 2001. The average gross proceed (GP) of during crisis, 566.87 million Baht, was lower that of during crisis, 2,559.5 million Baht, but it cannot be concluded that during crisis firms did issue larger IPOs than those of before crisis. This is because the distribution of the proxies are skewed. Therefore, median is used to represent the gross period over the period. Median of the gross proceed of during crisis, 342.5 million Baht was actually lower than that of before crisis, 411.25 million Baht. The explanation is that during crisis, privatization activities arose, i.e., electrical power plants, petroleum industry. Therefore, the gross proceed during crisis was large but number of IPO transactions during crisis is lower than those of before crisis.

Table 1

Descriptive statistics of gross proceed, number of use for the proceed, sales, and potential. Periods of the analysis are before crisis, 1996 to 1997, and during crisis, 1998 to 2001. Total sample includes all observations from before and during crisis, 1996 to 2001. GP is gross proceed. Gross proceed is the amount issued for the initial public offerings of each firm. NUSE is the proxy for the number of proceeds used as indicated in the prospectus or it is the number of objective declared in the prospectus. Sales is the last twelve month sales of each firm reported in the financial statement. POTEN is the proxy for growth potential of each firm or it is the ratio of NUSE and SALES.

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The other factor worth for discussion is potential (POTEN). Potential is the ratio between number of used divided by sales of the last twelve month. The higher the potential ratio indicate the higher ex ante of the IPO stocks. According to the pecking order theorem[1]. Information theory[2] can be used to explain the behavior of issuing stock. Two types of assets, asset-in-place and growth opportunity[3], are worth to be discussed. Regarding to tradeoff theory, firm with high growth opportunity should use low level of debt because cash flows from the investment are uncertain. Firm with low opportunity growth and has high level of asset-in-place can use high debt level because the risk from future cash flows is lower than high growth opportunity firms. This means that any firm issues stock will signal high level of ex ante uncertainty of the future cash flows. Firm with good fundamental of business growth or with high sales level in the last period will have good reason for expansion by raising funds through IPO. However, the ex ante uncertainty regarding to the future cash flows is considered at a very high level during crisis. The discount price of the IPO is a must that the investment bank has to adopt. Moreover, during crisis number of survived firms were much lower than those before crisis left a lot of rooms for the growth to the existed businesses. Table 2 supports the above argument in that the number of investment banks decreased substantially from 39 investment banks to 11 investment banks.

Table 2
This table depicts number of investment banks of the two-analysis periods, which are before crisis period, 1996 to July 1997, and during crisis period, July 1997 to 2001. Data are obtained from the CANOFILE of the stock exchange of Thailand (SET).

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Table 2 (continued)
This table depicts number of investment banks of the two-analysis periods, which are before crisis period, 1996 to July 1997, and during crisis period, July 1997 to 2001. Data are obtained from the CANOFILE of the stock exchange of Thailand (SET).

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Data

Data used in this study are obtained from the Stock Exchange of Thainald (SET), specifically from the CANOFILE which contains prospectus and the financial statements of IPO firms during 1996 to 2001. Data set of all firms that conducted SEC-registered initial public offerings of common stock during 1996-2001, are 45 firms in total.

Data are split into two subperiods.

? The first subperiod, before crisis period, includes 33 firms that went public between 1996 and the second quarter of 1997.

? The second subperiod, during crisis period, includes 12 firms that went public between the second quarter of 1997 and 2001.

These subperiods have different ranges because number of firms engaged the IPOs were much higher before crisis subperiod. By splitting data into two subperiods, proposition 2 can be tested by detecting changing in market shares causing from mispricing by IB. The clarifications of each variables are discussed below.

Proxy and variable:

1. $$IR = \frac{(?_t ? OP)}{OP}$$

Where: IR = Initial Return
OP = Offering Price
$?_t$ = Closing bid price on the first day of public trading

Initial return (IR) is the proxy for the return from the underpricing of the IPO stocks. Positive value of IR indicates the positive return from purchasing the IPO stocks during the first trading day. This means that positive value of IR indicates gain from underpriced stocks. Negative IR indicates overpriced IPO stocks. The results (not shown) of the negative or overprice stocks of the total sample is 16 out of 45 observations and 11 observations of the overpricing occurred in the before crisis period. This means that the investment banks did not underpriced the IPO stocks and there is no evidence from the market indicating for the objection of the overpricing before crisis period.

2. Two proxies for ex ante uncertainty

? Log(#of uses of proceeds listed in the prospectus), the greater ex ante uncertainty, the greater number of the uses of proceeds listed
? Inverse of gross proceeds (INVG)

As discussed in section 1, two theories have been used to explain the risk of choices of financing to firm's value. The two theories are tradeoff theory and information theory.

3. Market share = (# of managed or co-managed IPO) / (total # IPOs)

Market share of each investment bank is calculated by allocating number of managed and the co-managed of an initial public offerings the investment bank engages in divided by total number of the IPO in the particular year. For example, if there are 3 investment banks engage in an initial public offering, each investment bank will be allocated by one-third to each co-manager and divided by the total number of IPO in the particular year.

4. PCG = (New Market Share – Old Market Share) / Old Market Share

Where: PCG = percentage change in the market share

Percentage change in the market share (PCG) is used to measure the consequence of pricing of line or mispricing in terms of overpricing or underpricing by the investment banks. With the premise that if the investment banks underprice or overprice too much the firm and the investors will not trust such investment for the future transaction causing losing market share. Hence, negative PCG is the penalty for the pricing off line and positive PCG can be viewed as reward of doing the good job by gaining more reputation from the market.

5. $$\text{SAR} = \frac{\overline{r_i}}{?_i \big/ \sqrt{N_i}}$$

Where: SAS = Standardized Average Return

Standardized Average Return is calculated by divided the average return and normalized by the standard deviation of the mean initial return, to get the standardized average return.

6. $$\text{ASAR} = \left| SAR \right|$$

Where: ASAR = Absolute Standardized Average Return

7. $$\overline{r_i} \; ? \; \frac{1}{N} \overset{N}{\underset{j?1}{?}} r_{ij}$$

Where: $\overline{r_i}$ = average return

8. $r_{ij} = p_{ij} - E(p_{ij})$

r_{ij} measures pricing o ff line which includes both overpricing and underpricing.

9. $E(p_{ij})$ = expected initial return obtained from the regression line.

Expected initial return from the regression obtained as shown in the next section. After conducting the structural change, there is no strong evidence indicating the structural change. Thus, the expected initial return equation is shown below.

Expected Initial Return Equation:

$ir = ?_0 + ?_1(LOGNUSE) + ?_2(INVGP)$

Empirical evidence and interpretation of the results

Proposition I test: the positive relationship between ex ante uncertainty and higher return from underpriced IPO stocks

As documented in the U.S. in numerous studies, there are evidences show that, on average, initial public offerings are underpriced. As documented in Ritter's (1984) reported that for the approximately 5,000 firms that went public during 1960 – 1982, the average initial public offering was trading at a price, 18.8 percent higher than its offering price shortly after public trading started. In the other word, the price of the IPO stocks was underpriced, on average, at 18.8 percent. This paper is not aiming at proving that Thai IPO stocks are underpriced but instead it tries to show that investment banks did not underpriced the stock appropriately or did not leave any money for the investors in case of IPO before crisis. Table 3 shows the results indicating relationship between ex ante uncertainty and initial return. Since IPOs are underpriced. This doesn't imply that an investor can always expect to realize excess returns. The degree of underpricing is directly related to the ex ante uncertainty about the value of an issue or as the ex ante uncertainty increases. This leads to Proposition I stated earlier. Results indicate the positive relationship between ex ante uncertainty and the return or the level of underpriced stock. Results in table 3 show the relationship between ex ante uncertainty and the initial return is significant only during crisis. Coefficients of inverse gross proceed (INVGP) are significant in both models for the during crisis period. This supports that either OLS or WLS can estimate the regression because the results from both models are not significantly different.

Table 3

This table contains the estimated coefficient for regression relating the initial return to the proxies of uncertaitny over the period of before crisis, 1996 to July 1997, after crisis, July 1997 to 2001, and total sample 1996 to 2001. The initial returns are defined as $(V_t – OP) / OP$, where ir represents initial return, V_t is the closing market price on the first trading day, OP is the offered market price. NUSE is the number of objectives indicating for the number of activities the firm plans to use the proceeds from the IPO in the prospectur. NUSE is used to proxy the ex ante uncertainty. INVGP is the inverse gross proceed used as the proxy for the ex ante uncertainty. Model 1 uses the Ordinary Least Square method (OLS) to estimate the regression. Model 2 uses Weighted Least Square (WLS) to estimate the regression line. WLS is used to correct the heteroskedasticity that is presented in the OLS. The weighting factor is logsale, where sales is the most recent 12-month revenues of the issuing firm. T-statistics is in the parenthesis.

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Table 3: (continued)

This table contains the estimated coefficient for regression relating the initial return to the proxies of uncertaitny over the period of before crisis, 1996 to July 1997, after crisis, July 1997 to 2001, and total sample 1996 to 2001. The initial returns are defined as $(V_t – OP) / OP$, where ir represents initial return, V_t is the closing market price on the first trading day, OP is the offered market price. NUSE is the number of objectives indicating for the number of activities the firm plans to use the proceeds from the IPO in the prospectur. NUSE is used to proxy the ex ante uncertainty. INVGP is the inverse gross proceed used as the proxy for the ex ante uncertainty. Model 1 uses the Ordinary Least Square method (OLS) to estimate the regression. Model 2 uses Weighted Least Square (WLS) to estimate the regression line. WLS is used to correct the heteroskedasticity that is presented in the OLS. The weighting factor is logsale, where sales is the most recent 12-month revenues of the issuing firm. T-statistics is in the parenthesis.

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The results of table 3 give the contradict results when different period is tested. Coefficients of LOGNUSE of the before crisis period are negatives for both models (OLS and WLS) and insignificant whereas the coefficients of LOGUSE from during crisis and total sample yield the same sign which is positive sign and significant only during crisis period but still insignificant in the total sample. Coefficients of INVGP in the before crisis period are negative and insignificant whereas they are positive and significant for both during crisis and total sample.

In conclusion, results from table 3 yield the different outcomes. As one can observe that there are contradictions of the coefficients from the models when the periods are different, the interpretation is that the before crisis can be ignored because none of the coefficient is statistically significant from zero. However, during crisis model will not be used because the observations during this period is very small which may lead to selection bias. Therefore, the total sample model will be used as the model capturing relationship between the initial return and the ex ante uncertainty. Proposition I stated in the introduction section will be tested by the total sample.

Table 4: STRUCTURAL CHANGE TEST OF RELATIONSHIP BETWEEN INITIAL RETURN AND EX ANTE UNCERTAINTY

Initial return and ex ante uncertainty (total sample)

This table contains the estimated coefficient for regression relating the initial return to the proxies of uncertaitny over the period of before crisis, 1996 to July 1997, after crisis, July 1997 to 2001, and total sample 1996 to 2001. The initial returns are defined as (V_t – OP) / OP, where ir represents initial return, V_t is the closing market price on the first trading day, OP is the offered market price. NUSE is the number of objectives indicating for the number of activities the firm plans to use the proceeds from the IPO in the prospectur. NUSE is used to proxy the ex ante uncertainty. INVGP is the inverse gross proceed used as the proxy for the ex ante uncertainty. Time is a dummy variable equals to 1 if it is the period before crisis, 1996 to July 1997, and 0 other wise. Model 1 uses the Ordinary Least Square method (OLS) to estimate the regression. Model 2 uses Weighted Least Square (WLS) to estimate the regression line. WLS is used to correct the heteroskedasticity that is presented in the OLS. The weighting factor is logsale, where sales is the most recent 12-month revenues of the issuing firm. Model 3 and Model 4 use the same estimation method as those in model 1 and model 2. The difference between model 1,2 and model 3,4 is the inclusion of Time factor in the model 3 and 4 to test for the structural change. T-statistics is in the parenthesis.

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Even though total sample seems to be the best model for capturing the relationship discussed above, structural change has to be taken into account. As the results from the different period between before crisis and during crisis are totally different, the test of structural change should be conducted. In table 4, the test of structural change is shown. Time is the dummy variable capturing the structural change. Time equals to 1 if the period is before crisis and 0 other wise. The results from table 4 reveal that there is no structural change from the before crisis period to during crisis period because the coefficients of Time in model 3 and 4 are insignificant. Moreover, when compare coefficients of LOGNUSE and INVGP among four models, the signs of these variable are the same with the same statistical results. The negative coefficients of LOGNUSE are persist in four model and insignificant and the positive of INVGP are all significant in all four models. The interpretation of the results is that there is significant relationship between the initial return and the ex ante uncertainty with no impact from the different periods. Since the positive initial return implies the underpricing of IPO stocks, the evidences form table 4 support Proposition I which states that "greater return is required too compensate the greater ex ante uncertainty of an issue.

The estimated equation for testing the Proposition I or the expected initial return regression equation is shown below:

$$ir = ?_0 + ?_1(LOGNUSE) + ?_2(INVGP)$$

$$ir = -0.013188 - 0.102748\ (LOGNUSE) + 25.7107\ (INVGP)$$

The coefficient of 25.7107 on the inverse of gross proceeds indicates that smaller offerings have substantially higher average initial return. The result from the expected initial return confirms the relationship stated in Proposition 1, there is positive relation between ex ante uncertainty and expected underpricing (see figure 4). R^2 and Adjusted R^2 are very low in all estimated regressions. This is not the major concern of the model because the objective of the model is not to predict the actual initial return but, instead, the model is aiming at showing that there is relationship as stated in Proposition I.

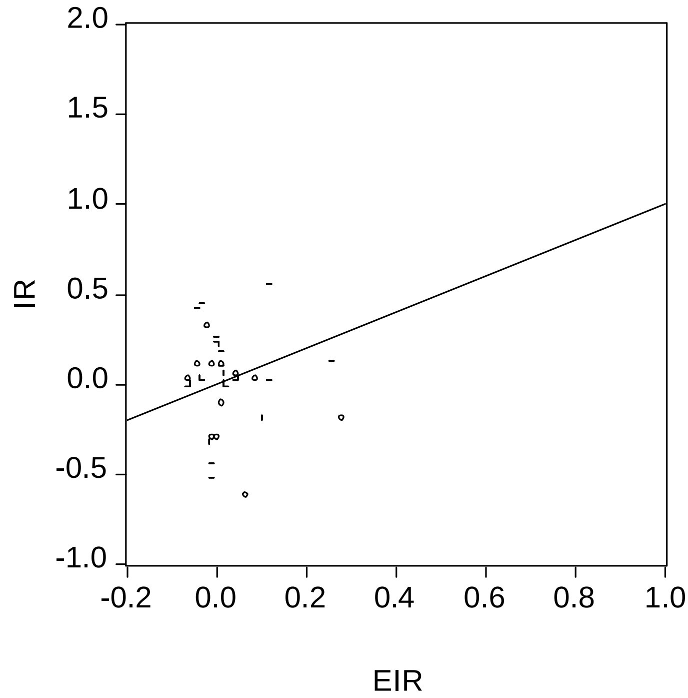

Figure 4:
Relation between the actual average percentage initial return (vertical axis) and the expected average percentage initial return (horizontal axis)

Proposition II test: Mispricing by the investment bank either overpricing or underpricing which is not commensurate with the ex ante uncertainty causes the investment banks to lose their subsequent market share.

To test Proposition II, the percentage change in market share of each investment bank is calculated by the following realtionship.

PCG = (New Market Share – Old Market Share) / Old Market Share

Where: PCG = percentage change in the market share

The major variable for testing the Proposition II is market share. Market share is calculated by allocating number of managed and the co-managed of an initial public offerings the investment bank engages in divided by total number of the IPO in the particular year. For example, if there are 3 investment banks engage in an initial public offering, each investment bank will be allocated by one-third to each co-manager and divided by the total number of IPO in the particular year. Market share is calculated as follow.

Market share = (# of managed or co-managed IPO) / (total # IPOs)

Percentage change in the market share (PCG) is used to measure the consequence of pricing of line or mispricing in terms of overpricing or underpricing by the investment banks. With the premise that if the investment banks underprice or overprice too much the firm and the investors will not trust such investment for the future transaction causing losing market share. Hence, negative PCG is the penalty for the pricing off line and positive PCG can be viewed as reward of doing the good job by gaining more reputation from the market.

Figure 5 depicts number of cases that the investment banks pricing on line (correct pricing) located exactly on the line with intercept zero and slope of one. If all the scatter points located exactly on the line, it can be interpreted that the investment banks did price the IPO stocks correctly and leave no money on the table for neither the investors nor the issuing firms. The off line pricing is the scatter points over and under the zero intercept and slope of one line. In the other words, scatter points above or below the line indicate mispricing by the investment banks. When the scatter points located above the line, it indicates that the investment banks did underprice the IPO stocks. On the other hands, when the scatter points located below the line, it also indicates that the investment banks overpriced the IPO stocks. From figure 5, the scatter points show that most of the time the investment banks did overpriced the IPO in Thailand. This can be explained by two reasons. The first is that most of the observations used for the analysis in this study basing on the IPO before crisis. Since number of IPOs before crisis, 33 firms, were higher than those of during crisis, 12 firms. Therefore, the results shown in figure 5 may stem from the bias by the nature of data used. The second explanation for the overpriced behavior in Thailand is that during the before crisis period investors in the market behaved as speculators. There were high demand for any IPO stocks. This means that investors did not pay enough attention whether the IPO stocks were underpriced or left some money on the table for compensating the ex ante uncertainty.

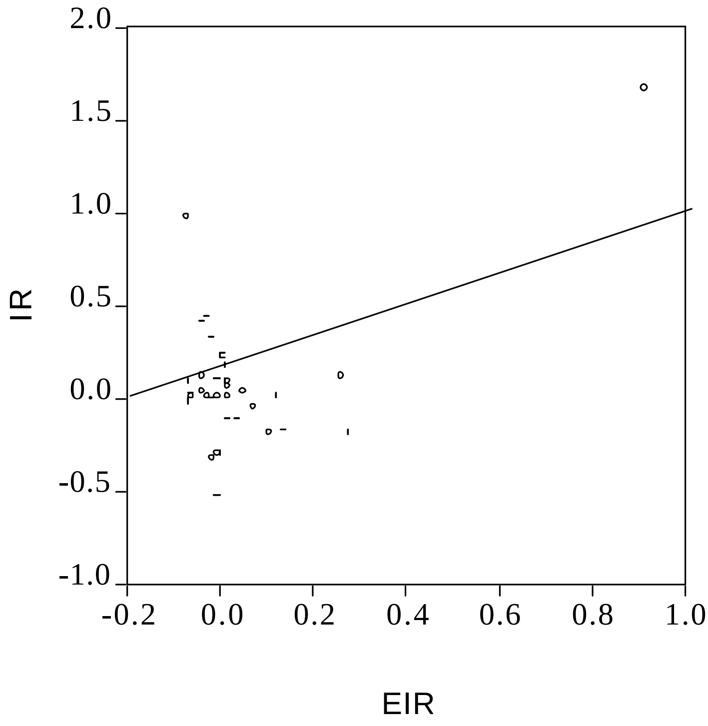

Figure 5:
Relation between the actual average percentage average return (vertical axis)
and the perdicted average percentage initial return (horizontal axis).
The line drawn has slope of one and intercept of zero

In conclusion, the evidence from figure 5 depicts that investment bank in Thailand overpriced the IPO stocks and only few cases that the investment banks left the money on the table for the investors or underprice the stock for them.

According to the premise discussed earlier stating that investment banks will not put their reputation at risk a small benefit from mispricing, therefore, the IPO stocks will be underpriced by them. However, the results did contradict to the premise set earlier with the explanation regarding to the behavior of investors during before crisis period. Thus, the test regarding to the impact of mispricing to the changes in market share has been conducted. By regressing the percentage change in market share (PCG) on absolute standardized average return (ASAR) for 6 underwriters of interest. This is because the number of investment banks had been reduced from 39 investment banks to 11 investment banks due to economic crisis. By matching the number of before crisis and during crisis, there were only 6 underwriters matched with the criterion.

Table 5: REGRESSION RESULTS INDICATING THE IMPACT OF MISPRICING TO THE PERCENTAGE CHANGE IN MARKET SHARE.

Ordinary Least Square (OLS) regression results with the percentage change in market share as dependent variable represented by PCG and Absolute Standardized Average Return (ASAR) as explanatory variable. Market share is calculated by dividing the sum of number of initial public offerings of underwriter i by the total number of initial public offerings in the particular period. The sum of number of initial public offerings of underwriter i can be calculated by the sum of number of the IPO the underwriter i engages plus the fractions of number of IPOs that the underwriter i engages or number of co-managed offerings. Standardized Average return (SAR) is defined as the ratio of mean return divided by standard deviation of the mean return. ASAR is defined as the absolute value of standardized average return.

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Results from table 5 indicates that as the value of explanatory variable changes from one standard deviation below to one standard deviation above, the expected initial return drops by 1.1214 percent. However, t-statistics and F-statistics indicate the insignificant relationship of the regression. This can be concluded that the relation from the regression is not an economically meaningful change.

In summary, the test for the Proposition II indicates that there is negative relationship between mispricing and percentage change in market share. Even though the relationship from the regression is insignificant, it indicates that market does penalize the investment banks who cheat on the underpricing equilibrium by overprice or underprice too much. The results from Thailand impounds that the penalty from cheating is more pronounced during crisis period (result is not shown). This means that investment banks in Thailand are pushed to the direction with more corporate governance.

Conclusion

Numerous studies had been conducted to show that the IPO stocks have to be underpriced by the investment banks regarding to the ex ante uncertainty of the future cash flows. However, this paper is not aiming to prove such underpricing issue but the objective of the paper is to depict that during before crisis period the underpriced IPO stocks in Thailand is too low or leave less money on the table for the investors. The explanation for the too low underpriced was that the behavior of most investors during before crisis was considered as that of speculators. During crisis period, the structure of investor structure had changed from individual based to be more institution investor base. This help promote more corporate governance in Thai corporation.

This study support Proposition I, which states the positive relation between ex ante uncertainty and the initial return from underpricing. Moreover, the result of testing Proposition II implies the penalty impounded on the underwriters who try to cheat on the investors and issuing firms by underpriced by too much or too little by the market. The relation from the test of Proposition II is insignificant. The results from this study are to support that the underpricing in Thai stock market will be placed on line once there are more institutional investors participate in the market.

References

[1] Barclay, Michael J., and Smith Jr., Clifford W., "The Capital Structure Puzzle: Another Look at the Evidence," The New Corporate Finance where Theory Meets Practice, Donald H. Chew Jr. (2001)

[2] Beatty P. Randolph, Ritter R. Jay, "Investment Banking Reputation, and the Underpricing of the Initial Public Offerings," Journal of Financial Economics (1986)

[3] Fama F. Eugene, and MacBeth James, "Risk, Return, and Equilibrium: Empirical Tests," Journal of Political Economy (1971)

[4] Fan, P.H. Joseph and Wong T.J., "Do External Auditors Perform a Corporate Governance Role in Emerging Markets? Evidence from East Asia," Working paper (January 2002)

[5] Field, Casares Laura and Hanka, Gordon, "The Expiration of IPO Share Lockups," Journal of finance (2001)

[6] Lehn, Kenneth and Poulsen, Annette, "Free Cash Flow and Stockholder Gains in Going Private Transactions," Journal of Finance (1989)

[7] Loughran, Tim and Jay R. Ritter, "The New Issues Puzzle," Journal of Finance

[8] Miller, Merton H., "Debt and Taxes," Journal of Finance (1977)

[9] Miller, Merton H., "The Modigliani-Miller Propositions After Thirty Years," Journal of Economics Perspective (1998)

[10] Modigliani, Franco, and Merton H. Miller, "The Cost of Capital, Corporation Finance and the Theory of Investment," American Economic Review (1958)

[11] Modigliani, Franco, and Merton H. Miller, "Corporate Income Taxes and the Cost of Capital," American Economic Review (1963)

[12] Myers Stewart, "The Capital Structure Puzzle," Journal of Finance (1984)

[13] Ritter Jay R., "The Long-run Performance of Initial Public Offerings," Journal of Finance (1991)

[14] Zingales, Luigi, "In Search of New Foundations," Journal of Finance (2000)

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End Notes

1. For more detail, see Myers C, Stewart, "The Capital Structure Puzzle", The Journal of Finance, 1984. The pecking order stated that firm prefers internal capital to external funds and if the external funds is needed, debt is preferred to equity
2. For more detail, see Barclay J. Michael and Smith W. Smith Jr., "The Capital Structure Puzzle: Another Look at the Evidence", The new corporate Finance where theory meets practice, Donald H. Chew Jr. page 197 - 209
3. For more detail, see "Capital Projects as Real Options: an introduction", Kester, Fruhan, Piper, and Ruback, Case problems in Finance, 11th edition, Irwin 1997

Determinants of Foreign Direct Investment in India: An Empirical Analysis of Source Countries and Target Industries

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Abstract

Emerging markets possess a lot of potential for foreign direct investment (FDI). FDI in India is on the increase but the country has not experienced a rapid growth of FDI inflow. Theories of FDI suggest that firm size, profitability, trade, interest rates, economy and inflation wield significant influence in attracting FDI. This study explores the factors that contribute to the explanation of FDI in India and tests whether the variables do really influence the flow of FDI into India.

Introduction

Foreign Direct Investment (FDI) has been one of the most fascinating and intriguing topics among researchers in international business. It is one significant form of rapid international expansion to increase ownership of assets, derive location-specific advantages and acquire additional knowledge. Many scholars have followed either of two schools of thought in explaining FDI. The microeconomic approach [Hymer 1976; Caves 1974; Kindleberger 1969] attempts to explain why firms of one country are successful in penetrating into other markets while the macroeconomic approach [Aliber 1970; Buckley and Casson 1976; Grosse and Trevino 1995] tries to examine why firms seek international expansion. Our study follows the latter approach, focuses on the impact of macroeconomic variables on FDI and seeks to explain the recent increase of inflow of FDI into India.

Literature Review

The motivation of our study comes from the question whether research on international business research agenda running out of steam [Buckley 2002] where China and India are suggested as possible country focus studies in terms of area applications and testing ground for concepts with empirical methods. While studies of FDI in the US, Japan and Europe have been prevalent, similar research on FDI in India is however limited. Restricted policy environment towards FDI and weak property protection rights have been described to cause significant R&D spillovers in Indian pharmaceutical sector [Feinberg and Majumdar 2001]. The relatively slow growth of FDI from Japanese MNCs in India as compared to China is attributed to the desire to gain only market access in India [Anand and Delios 1996].

Grosse and Trevino [1994] included geographical distance and cultural distance along with other variables such as bilateral trade, home country GDP and exchange rate to explain FDI in the United States. The impact of distance barrier has been significantly reduced due to the advent of technology. Transportation costs still remain a factor but the relative speed of access has considerably increased. The pace of communication has dramatically increased and also has become truly cost effective. Cultural distance may be treated as a dependent variable rather than as an independent variable to predict FDI governance, sequence and performance [Shanker, 2001]. Investment in India was relatively insignificant from the developed economies and so we did not consider home country GDP to be important for our analysis.

Foreign Direct Investment in India – Recent Trends

China ranked first among the top ten host economies of foreign direct investment among developing countries in 2001. Mexico, Chile, Singapore and Brazil were also among the top ten recipients while India with strong roots in a stable democracy and investment gap that could use foreign investment still could not invite substantial direct investment.

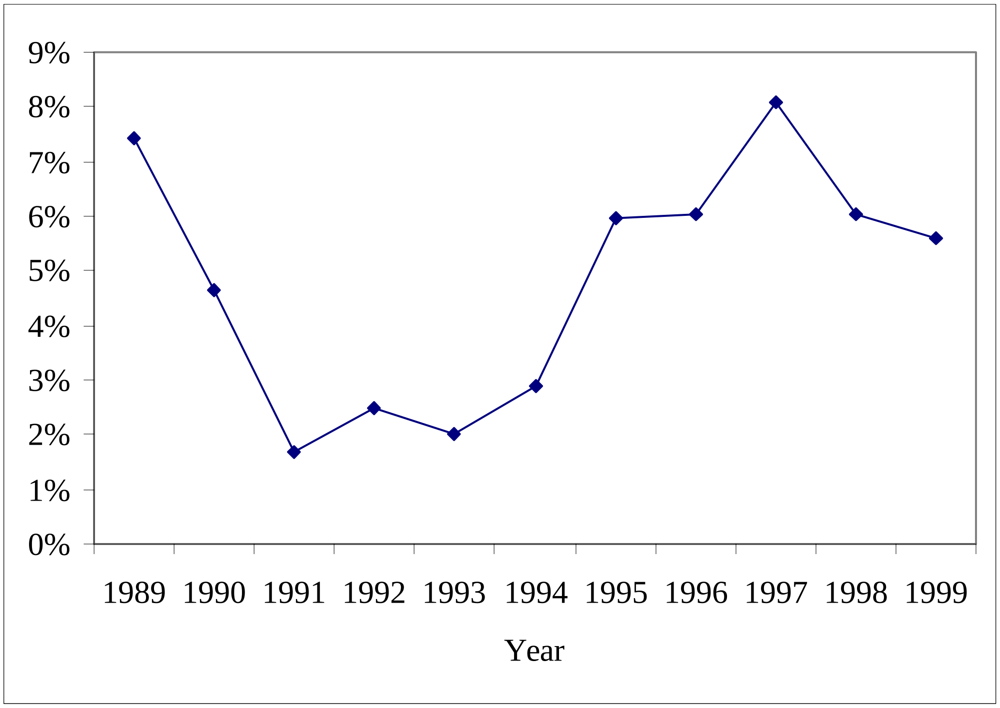

Fig. 1: FDI (INDIA) EXPRESSED AS A PERCENTAGE OF FDI (CHINA)

A comparison of FDI inflow into India in relation to that to China is shown in Fig.1. India has a better banking infrastructure, excellent legal framework, democratic values ingrained in the society and also uses English in all business documentation. That India could not muster consistently even seven percent of the investment flow into China over a decade clearly illustrates that the government initiatives are lacking in India.

Table 1: INVESTMENT INFLOW INTO INDIA IN US$ MILLIONS (1992-2001)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Direct Investment:										
Government	222	280	701	1,249	1,922	2,754	1,821	1,410	1,456	1,484
Reserve Bank of India	42	89	171	169	135	202	179	171	454	564
Non Resident Indians	51	217	442	715	639	241	62	84	67	33
Acquisitions	NA	NA	NA	11	125	360	400	490	362	509
Foreign Direct Investment	315	586	1,314	2,144	2,821	3,557	2,462	2,155	2,339	2,590
GDR/ADR	240	1,520	2,082	683	1,366	645	270	768	831	477
Foreign Financial Institutions	1	1,665	1,503	2,009	1,926	979	-390	2,135	1,847	827
Offshore Funds	3	382	239	56	20	204	59	123	82	39
Portfolio Investment	244	3,567	3,824	2,748	3,312	1,828	-61	3,026	2,760	1,343

Total Investment	559	4,153	5,138	4,892	6,133	5,385	2,401	5,181	5,099	3,933

Table 1 captures the total investment flow into India where we see a significant growth of FDI and also portfolio investment. It appears that the Indian government of India is engaged in liberalization efforts but however, cautiously and slowly.

Data and Methodology

Our primary source of data is the Reserve Bank of India through its periodical publications covering the eight-year period 1992 to 1999. The panel data includes investments from source countries of United Kingdom, United States, Japan, Germany, Switzerland and Sweden towards target industries of engineering (motors, electrical machinery, machinery and machines), ferrous and non-ferrous sectors, chemicals (industrial chemicals), medical cum pharmaceuticals, tea, trading, textiles and rubber.

Different explanatory variables have been used in various studies of FDI comprising a shopping list of variables. [Dunning, 2001]. Hymer and Hawthorn [1970], Caves [1971] and Trevino and Daniels [1994] all have attributed firm size and profitability being catalytic to the scope of international expansion. We used sales, return on equity, effective tax rate and profit after tax to explain firm size along with the number of foreign companies from each of the six countries located in specific industries and found profits after tax to be consistent and expected to be positive. Firm or industry-oriented theories and country-oriented theories of FDI [Vernon, 1966; Gray, 1982; Helpman, 1985] and Dunning's OLI paradigm include the relevant variables to focus on the specific advantages to the investor and the host as well. We included exports, imports, export intensity, import intensity, trade, balance of trade, terms of trade and the effects of these variables to be reflected in the exchange rate, GDP and also the inflation rate in India. We used terms of trade to capture the influence of trade in creating a potential for FDI. The movement in the macroeconomic factors of GDP, inflation rate and international trade plays a causal role in a country's FDI and so we used the variables of change in GDP, change in inflation rate, change in exports and change in imports in our empirical analysis. Interest rates in an economy are important for the foreign investors. In a country like India, foreign affiliates will be satisfied with higher interest rates on their term deposits but will be hesitant if commercial interest rates were high. We used the term deposit interest rates and the rates charged by commercial banks on bills purchased and discounted in our analysis. Initially, we considered portfolio investment and domestic capital formation as proxy variables for FDI, and the production and availability of electricity, natural gas coal and crude to serve as proxy variables for industrialization. Test results did not suggest any support for consideration of those variables and so we limited our analysis only to the variables indicated above. Table 3 in the appendix shows the correlation matrix of the variables included in our analysis.

Our basic model can be algebraically expressed as follows:

$$\begin{aligned}\text{FDI inflow into India} = \; & \alpha + \beta_1(\text{profits after tax}) + \beta_2(\text{change in GDP}) \\ & + \beta_3(\text{change in inflation}) + \beta_4(\text{interest rate for term deposits}) \\ & + \beta_5(\text{interest rate for commercial loans}) + \beta_6(\text{terms of trade}) + \\ & + \beta_7(\text{change in exports}) + \beta_8(\text{change in imports})\end{aligned}$$

Our empirical analysis attempts to explain the determinants of FDI in India rather than forecasting. We expect firms to invest primarily increase their profitability, which can be expressed in terms of profits after tax to ensure real profits and effective tax rate that accounts for available incentives. Profits after tax figures were available consistently and so we used them in our analysis. We expected the variable to be directly and positively related to the inflow of FDI. Trade and FDI are complementary since firms use international expansion to facilitate trade [Ajami and BarNiv 1984] and so exports and imports or changes thereof would influence the FDI.

Table 2: REGRESSION RESULTS ON FOREIGN DIRECT INVESTMENT IN INDIA

Independent Variable	Simple OLS Model (Complete Sample)	Target Industry	Source Country
Constant	4,703.39	5,276.300	7,390.953
	(3.175)**	(2.333)*	(3.187)**
Profits after Tax	1.596	1.245	9.302
	(1.561)	(0.324)	(2.620)*
Change in GDP	12,108.75	12,600.927	7,400.381
	(5.904)***	(4.093)***	(2.261)*
Change in Inflation	-51,880.17	-50,408.983	-53,900.793
	-(18.008)***	(-10,685)***	(-13.815)***
Term Deposit Interest	1,715.422	1,645.387	1,654.279
	(19.234)***	(12.063)***	(12.780)***
Commercial Interest	-958.691	-939.175	-987.085
	(-16.110)***	(-9.671)***	(-13.448)***
Terms of Trade	-14.944	-16.849	-22.144
	(-2.082)*	(-1.461)	(-2.307)*
Change in Exports	0.945	-0.102	2.514
	(0.480)	(-.037)	(0.787)
Change in Imports	7.129	6.794	11.821
	(4.047)***	(2.973)**	(2.635)*
Adjusted R^2	0.91	0.89	0.93
Number of Observations	88	44	43

t-statistics appear in parentheses for each variable in

* = significant at 90% confidence level

** = significant at 95% confidence level

*** = significant at 99% confidence level

We used terms of trade and expected it to bear a negative sign. The size of the market is important for both the host and the investor and so a positive change in GDP should lead to an increased inflow of FDI. Deposit and loan interest rates will act opposite of each other and foreign affiliates are likely to be satisfied with better deposit rates.

Conclusion

Our basic model yielded positive results with estimated coefficients bearing expected signs. All results of our analysis is reported in Table 2. Change in GDP turned out highly significant with a positive sign and that shows the effect of FDI on the host economy and that should be an encouraging factor for both the host and the source economies. Similarly, the high significance and negative sign of the change in inflation shows the adverse effect it can have on the inflow of direct investment. Other variables term deposit and commercial interest rates, terms of trade, change in exports and change in imports proved to be highly significant with the exception of change in exports.

We performed a similar analysis on target industries and source countries separately. As in the basic model, the variables yielded expected sign and many of them turned out highly significant. The variable change in exports was not significant in either analysis, and profits after tax and terms of trade were significant in only one of them. Each of the analysis was also performed with dummy variables to see whether a target industry or a source country played particularly a significant role in impacting the inflow of FDI into India but no conclusive evidence was available to reveal in the form of a concrete report.

Conclusion

Our analysis has reinforced earlier theories of FDI in economic factors such as profitability, trade, GDP, inflation and interest rates. This provides a congenial environment for foreign investors to enter the market or increase their investments substantially with renewed confidence. India as the host should also be satisfied that the influx of FDI is ultimately beneficial to its economy and will help in staying abreast of globalization. Therefore, the question still remains as to why India is not able to unearth the FDI to its full potential. We have perhaps raised more questions than we have answered in our analysis. The Government of India is aware of this factor and is also watching the current situation and trends of FDI. The government is taking steps to liberalize in an attempt to cope up with globalization and is deliberately slow in its efforts to open the economy completely as it does not want to invoke another emerging market crisis upon itself. While many emerging economies suffer the malady of banking crisis or financial crisis, India has not been subjected to any such mounting problems thanks to its highly conservative approach. However, significant policy changes are underway in monetary management, internal debt management, capital market, trade and foreign exchange market. This includes even a one hundred percent foreign ownership being permitted in its banking industry since January 2002.

The country is sincerely making an effort towards privatizing its industrial sectors, utilities and banking industry. The government also recognizes the financial burden that these industries have imposed in the form of subsidies, welfare schemes and development plans. It has been difficult to drastically dismantle the inefficient state-owned enterprises and write off all non-performing assets as well. Such changes, however indispensable have to be implemented only in stages to convince the people due to its strong faith in the democratic principles and also to avert any possible crisis that rapid liberalization may lead to. All of the current trends show a promise towards a market-based economy and so the inflow of FDI will significantly increase during this decade.

Table 3: CORRELATION MATRIX

	FDI	PAT	CHEXP	CHIMP	GDP	CHGDP	INFL	CHINFL	TDINT	COMMINT	EXP	IMP	TRBAL	TRADE	TOT	DUMMYI	DUMMYC
FDI	-																
PAT	0.263	-															
CHEXP	-0.035	0.026	-														
CHIMP	0.040	0.047	-0.005	-													
GDP	0.391	-0.009	-0.336	-0.295	-												
CHGDP	0.158	0.046	0.027	-0.175	0.022	-											
INFL	0.310	-0.038	-0.346	-0.304	0.992	-0.063	-										
CHINFL	-0.596	-0.124	0.002	0.178	-0.313	-0.573	-0.205	-									
TDINT	0.059	0.074	0.171	0.352	-0.517	-0.640	-0.469	0.544	-								
COMMINT	-0.308	0.008	0.298	0.381	-0.888	-0.248	-0.879	0.329	0.684	-							
EXP	0.430	-0.002	-0.327	-0.241	0.967	-0.157	0.974	-0.193	-0.290	-0.782	-						
IMP	0.331	-0.039	-0.332	-0.245	0.957	-0.222	0.971	-0.160	-0.302	-0.746	0.989	-					
TRBAL	0.039	0.154	0.295	0.219	-0.772	0.396	-0.808	0.028	0.290	0.509	-0.794	-0.876	-				
TRADE	0.376	-0.023	-0.331	-0.244	0.964	-0.194	0.975	-0.175	-0.297	-0.764	0.996	0.998	-0.842	-			
TOT	0.122	0.187	-0.059	0.105	0.112	0.063	0.119	0.090	-0.098	-0.370	0.057	-0.011	0.229	0.019	-		
DUMMYI	0.000	0.120	0.000	0.048	0.000	-0.032	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	
DUMMYC	0.000	-0.120	0.000	-0.048	0.000	0.032	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-1.000	-

References

[1] Ajami, R. A., and R. BarNiv, 1984. “Utilizing Economic Indicators in Explaining Foreign Direct Investment in the U.S.” Management International Review (Germany), Vol. 24, No. 4, pp. 16-26.

[2] Anand, J. and Delios, A., “Competing globally: How Japanese MNCs have matched goals and strategies in India and China”, Journal of World Business. 31, 3, Fall 1996, pp.50-62

[3] Buckley, P. J., and M. Casson, 1976. The Future of the Multinational Enterprise, London: Macmillan.

[4] Buckley, P. J., 2002. “Is the International Business Research Agenda Running out of Steam”, Journal of International Business Studies, 33, 2, pp. 365-373

[5] Casson, M., 1979. Alternatives to the Multinational Enterprise. New York: Holmes & Meier.

[6] Caves, R. E., 1971. “International Corporations: The Industrial Economics of Foreign Investment.” Economica, February, pp. 1-27.

[7] Caves, R. E., 1974. “Causes of Direct Investment: Foreign Firms’ Share in Canadian and United Kingdom Manufacturing Industries.” Review of Economics and Statistics, Vol. 56, august, pp.272-293.

[8] Caves, R. E., and S. K. Mehra, 1986. “Entry of Foreign Multinationals into U.S. Manufacturing.” In M. E. Porter (Ed.), Competition in Global Industries, Boston: Harvard Business School Press.

[9] Dunning, J. H.., and R. D. Pearce, 1985. The World’s Largest Industrial Enterprises, 1962-1983, New York: St. Martin’s Press.

[10] Dunning, J. H., “The Eclectic Paradigm as an Envelope for Economic and Business Theories of MNE Activity, “ International Business Review, 2000b, 9(1), pp. 163-90.

[11] Dunning, J. H., “A Rose by Any Other Name …? FDI Theory in Retrospect and Prospect”, Journal of International Business, 2000, Literature Review

[12] Feinberg, S. and Majumdar, S., “Technology spillovers from foreign direct investment in the Indian pharmaceutical industry”, Journal of International Business Studies, 32, 3, Third Quarter 2001, pp.421-437

[13] Grosse, R., and Trevino, L., “Foreign Direct Investment in the United states: An Analysis by Country of Origin”, Journal of International Business Studies, July 1994, pp. 139-155

[14] Hymer, S. H., 1976. “The International Operations of National Firms: A Study of Direct Foreign Investment.: Doctoral dissertation. MIT Press, Cambridge, MA (written in 1960).

[15] Hymer, S. H., and R. Rowthorn, 1970. “Multinational Corporations and International Oligopoly: The Non-American Challenge.” In C. P. Kindleberger (Ed.), The International Corporation, Cambridge: MIT Press.

[16] McLain, D., 1983. “Foreign Direct Investment in the United States: Old Currents, New Waves and the Theory of Direct Investment.” In C. P. Kindleberger and D. B. Audretsch, (Eds.),The Multinational Corporation in the 1980s, Cambridge: MIT Press.

[17] Rugman, A.M., "Internalization Theory and Corporate International Finance, " California Management Review: 1980, 13, pp. 73-9.

[18] Shanker, O., "Cultural Distance Revisited: Towards a More Rigorous Conceptualization and Measurement of Cultural Differences", Journal of International Business Studies, 32, 3, 2001, pp. 519-535

Determinants of Ownership Strategies of Nordic Firms in Asian countries – Empirical Evidence

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Abstract

The focus of this paper is on the ownership strategies – whether the foreign affiliate will be a WOS or JV. The paper tests the impact of various ownership, location and internalization factors on ownership structure decisions in an Asian context. There are very few studies so far where the ownership strategy decisions of Western companies in Asian markets have been analyzed, especially in more detail. Thus the knowledge of whether the impact of various ownership, location and internalization specific factors on the ownership structure has been the same in Asian countries as in Western Europe and in the USA is very limited. The empirical part of this study will be based on the ownership strategy behavior of Nordic firms in their 376 FDIs made in various Asian countries in the period 1965-2000, mainly after 1985.The results indicated that over 70 per cent of the FDIs were JVs and less than 30 per cent WOSs. The main influential factor in the decision-making had been GNP per capita, i.e. level of economic welfare in the target country. The other significant factors were parent size, parent's international experience and country risk.

Introduction

There has been a clear growth trend in foreign direct investments (FDIs) in the last forty years (see e.g., United Nation World Investment Report – several years). From early 1960s to the mid-1980s the investment flows mainly targeted to Western European counties and to the USA. However, in late 1980s and in the 1990s the interest towards FDIs in Asian countries increased remarkably. During that time, most of the foreign companies in Asian countries had been able to capitalize on their inexpensive labor, huge market potential and tariff protection. In late 1990s the Asian economic crisis somewhat influenced the amount of investments to South East Asia. However, there exists a great interest among Western MNCs towards FDIs in Asia. For instance in a study made by United Nations indicated that more than one quarter of the responding 198 MNCs had in February-March 1998 short and medium term plans to increase their FDIs in Asia [84]. Another indicator of the great interest of foreign firms towards FDIs in Asia is also the fact that from 1993 onward China has been the biggest recipient of foreign investments in the world after the USA. Other main destinations of FDIs within Asia have been Hong Kong, Singapore, and Indonesia.

The main goal of this paper is to analyze the ownership strategy behavior of Nordic firms in Asian markets. To be more specific, the goal is to analyze how different ownership (investing firm), locational (target country) and internalization related determinants have influenced the decision between wholly owned subsidiary (WOS) and joint venture (JV). The second goal is to analyze the similarities and differences in the ownership strategy behavior of firms of different Nordic origin in Asian markets.

In the past studies analyzing ownership strategy decisions the focus has been on FDIs made in Western Europe and in USA [7,61]. If the ownership decisions in other geographic areas have been analyzed then the focus has usually been in non-OECD countries in general or the focus has been on FDIs made in one single country (mainly in China). A review of previous studies seems to indicate that in fact the study made by Delios and Beamish focusing on ownership strategy of Japanese firms in various Asian countries is the only one giving more basis for comparisons (sample 1424 FDIs in nine Asian countries)[25]. Thus there is so far very limitedly information on the ownership strategy behavior of non-Asian firms in Asian markets. This study focuses on firms based in Nordic countries, i.e. Denmark, Finland, Norway and Sweden. All four countries are small-industrialized countries, where the domestic-market conditions are very different from those of the multinationals from US or Japan that have dominated past research attention. Although most of the Nordic firms, except some thirty Swedish MNCs, have started their foreign manufacturing operations in the late 1960s or more recently. However, several of largest Nordic companies have grown very rapidly in their main business fields especially in the 1990s and are among the top five European, some even among top five global companies. FDI flows by Nordic firms to Asian countries were rather modest until late 1980s, but especially in the 1990s there has been clear growth in the number of FDIs made by Nordic firms in Asia. This is the first study trying to analyze the ownership strategies of Nordic firms in those markets.

Literature Review and Hypothesis Development

The eclectic paradigm developed by Dunning integrates several strands of international business theories on cross-border activities [26,27,28]. It proposes that three types of advantages/ variables influence cross-border business activities: ownership-specific variables, location-specific variables and internalization variables. The degree of possession of various ownership-specific advantages (O) influences the degree of ownership chosen in foreign FDIs. Location-specific advantages (L) are essential in determining where firms will engage in cross-border value-adding activities. The level of location specific advantages may also be expected to influence the ownership strategies chosen. The last strand of the OLI approach comprises the internationalization advantages (I) that the company has in transferring assets within their organizations instead of via the market, because of the market failures. Thus the eclectic approach has been selected as the framework in this study because of the above-referred integrative nature of the approach.

Ownership-specific variables

Firm size

Firms need substantial financial and human resources to be able to engage in FDI. Such resources enable firms to absorb marketing costs, enforce patents and contracts, and achieve economies of scale. The size of the firm is usually an indicator of the firm's ability to absorb such costs [87]. Hence, large firms are likely to favor WOS over JV arrangements. Also empirical results indicate that impact of firm's size on high control ownership structure choices is positive [11,15,54,87]. Firms can access more control by holding more shares; investing firm with strong financial resources may enter foreign markets via the wholly owned subsidiary [9,36,56,58,66]. Similarly, the results by Stopford and Wells, Gommes-Casseres and Kogut and Singh also gave support to the assumption that the probability of choosing a JV is greater among small firms than among big firms [36,56,80]. Further, size is also often used as an indicator of the economies of scale. Organizational scientists found that as the organization's size increases, its extent of specialization, standardization and formalization will increase correspondingly [62]. For the large size MNCs, it also becomes possible that economies of scale can be realized in the areas of production, marketing, advertising, purchasing and R&D. It could then lead to higher efficiency gains and a lower marginal cost of production. Thus,

H1 *The larger the size of the Nordic investing firm, the higher the probability that they will enter the target Asian country with WOS.*

Research and development intensity

The speed of applications of new technology to products, partly fueled by changing consumer demand, has made access to technology essential for survival in many firms. At the same time new technology has bought a degree of complexity and has made it more difficult for firms to have in-house mastery of increasingly diverse technologies required to develop sophisticated products [50]. As developing advanced technologies may take a level of effort beyond one firm's abilities, JVs may be considered as an important vehicle to pool complementary technologies between partners [21]. Hence, an entering firm that is seeking technology and tacit knowledge is more likely to enter the foreign market through a JV with a firm that has the needed technology [71]. E.g. many JVs in the pharmaceutical and biotechnology fields have this kind of rationale [20]. Empirical support for a positive relationship between R&D intensity and WOSs has been found in studies by Larimo, Padmanabhan and Cho, and Sanna-Randaccio [61,69, 78]. Thus, we expect that Nordic firms have mainly been transferring technology to Asian countries and hence:

2 *The higher R&D intensity of the investing Nordic firm, the higher is the probability that they will enter target Asian country with WOS.*

Degree of diversity of the parents

The more diversified a firm is the more likely that the firm does not possess enough product and / or production specific knowledge in all the fields of industries it operates in to manage foreign unit alone. If a firm expands abroad in its core business pursuing a horizontal expansion, it can transfer existing organizational routines to the new venture: the firm may replicate itself on foreign soil [33,43,67]. If the firm diversifies into another business that is proximately to its core business, pursuing a related diversification, existing routines can be fairly easily modified to fit the new situation. Previous empirical results have been relatively unanimous about the direction of the relationship between the degree of diversity and degree of ownership, although only results by Gomes-Casseres and Zejan have indicated statistically significant support [36,88]. Thus,

3 *The more diversified the operations of the Nordic firm's are, the lower the probability that they will enter target Asian country through WOS.*

Industry experience

As discussed earlier, one type of tacit knowledge is how to operate in a given industry. In cases where the new investment is more comparable with or even totally similar to the current core activities, the investing firm does not need inputs from local firms. Thus, the firm will prefer a WOS to a JV. The greater the level of experience in the relevant industry, it is argued, the more confident a firm tends to be about making commitments, and about its judgment of the degree of risk exposure. Without appropriate experience, from the decision-maker's perspective, there tend to be stronger sense of risk and uncertainty, which is likely to constraint the decision. At the same time though, perceived risk exposure can be altered by the ownership arrangement choice: for example, high risk might be counterbalanced by the use of low-commitment mode such as JV arrangements [10]. The positive relationship between relevant industry experience and the propensity to set up WOSs is also confirmed by several empirical studies (e.g., Stopford & Wells; Gomes-Casseres; Hennart; Mutinelli & Piscitello, and Larimo) [36,41,61,66,80]. Thus, it is expected that

H4 Industry specific experience of Nordic firm increases the preference of WOSs when they will enter the target Asian country.

International experience

Limited or total lack of international FDI experience increases pressure to gain the operation mode specific and target country specific knowledge of how to manage a foreign unit. One way to limit the financial and management risks related to the FDI is to share the ownership with a local firm. Increased international experience, especially experience from FDIs, gives knowledge of how to plan and manage foreign units. Based on this accumulated knowledge the parent apparently wants to avoid sharing in decision-making and therefore prefers a WOS. Results in several other empirical studies give, however, support to the positive relationship between international experience and preference for WOSs [2,7,36,37,66,78,82]. Hence, it is expected that:

H5 The greater the international experience of Nordic firms, the higher the probability that they will enter the target Asian country through WOS.

Target country experience

International operation mode specific knowledge is one way to gain experience; another is target country specific experience. Target country specific experience gives to the investing firm knowledge of how to manage a unit in the target country. Hence, the more longer the firm has operated in the target country the more knowledgeable they should be about local conditions and practices, and the less need they should have for a JV partner. Empirical support for the positive relationship between target country specific experience and degree of ownership give the results in the studies made by Delios and Beamish and Larimo [25,61]. Thus, it is expected that:

H6 The greater the target country specific experience of the Nordic firms, the higher the probability that they will enter the target Asian country through WOS.

National origin

There are a lot of similarities in key features related to four Nordic countries: all four are developed market economies, having high standards of living: the market size in all four countries is in several fields of industries rather small, and the countries are culturally rather similar (e.g., Ronen and Shenkar categorize all four countries in the same Nordic cluster based on employee attitude [76]). Furthermore, except for the c.20 largest companies in Sweden, most companies have started their more intensive internationalization (in the form of manufacturing FDIs) in the 1960s or more recently. A difference between Nordic countries is that Denmark has been a member of EEC/EU from the early 1970s, whereas Finland and Sweden have been members from the beginning of 1995 and Norway is still outside the EU. However, this has not significantly influenced e.g. the direction of FDIs made, but four countries have made a great majority of investments in Western Europe, and North America. Therefore, it is expected that there are no statistically significant differences in the ownership structure behavior between firms of different Nordic origin.

H7a There are no significant differences in the ownership structure behavior between firms having various Nordic origins in target Asian countries.

In his study Erramilli found that two of the four dimensions by Hofstede appear to be especially important in influencing the entry mode decisions [31]. Erramilli suggests that in high power distance cultures firms will utilize more integrated modes of entry (WOSs) to maintain their highly centralized power structures [31]. He concluded that in firms from low power distance culture, more independent entry modes are acceptable. Based on the power distance measures of the four Nordic countries (Denmark 18, Finland 33, Norway 31 and Sweden 31), we would expect that Finnish, Norwegian and Swedish firms would utilize more often WOSs than would Danish firms. Hence,

H7b Firms with high power distance countries (Finland, Norway and Sweden) have more often used WOSs than firms from lower power distance countries (Denmark) in the target Asian countries.

In less uncertainty avoiding countries, managers feel more comfortable dealing with individuals from other cultures and will therefore find more independent entry modes acceptable [31]. Based on uncertainty avoidance dimension measures of the four Nordic countries (Denmark 23, Finland 59, Norway 50 and Sweden 29) we would expect that Finnish and Norwegian firms would utilize WOSs more often than Danish and Swedish firms. Thus,

H7c Firms with higher uncertainty avoidance countries (Finland and Norway) have more often used WOSs than firms from lower uncertainty avoidance countries (Denmark and Sweden) in the target Asian countries.

Location specific variables

Cultural distance

According to the Hofstede, "culture is a collective mental programming of the mind which distinguishes the member of one group or category of people from another [47,48]. Furthermore, according to Hofstede, "culture is learned, not inherited and it derives from one's social environment, not from one's genes [47]." Because executives perceive higher uncertainty in more distant countries, it has often been argued that the greater the cultural distance, the lower degree of control an entrant should demand. Sharing the ownership of the subsidiary with a local firm e.g. reduces learning costs because the management of the JV's labor force can be entrusted to the local partner (Kogut & Singh, 1988b). A number of previous studies have argued that the greater the perceived distance between the home and host countries, the more likely it is that a firm will favor JV over a WOS [4,7,9,56,58,66,68]. Therefore we expect that

H 8 The greater the cultural distance between the home country of the Nordic investor and the target Asian country, the lower the probability that they will enter the target Asian country through WOS.

Market growth

In addition to market size, market growth has been found to be an important determinant of overseas investment [34,52,83,85]. Firms tend not to commit substantial resources to a foreign market with a low growth or high demand uncertainty [38]. An acquisition allows a much quicker entry than setting up a new plant. Hence acquisitions may be preferred in high growth markets, since in these markets the opportunity costs of a delayed entry is high. If full acquisitions involve high management costs, investors may prefer to choose a partial acquisition, i.e. a JV. Thus, WOSs should be the preferred alternative in low-growth markets. Empirical support for these views has been found related to the FDIs made by Japanese, Dutch, and Finnish firms [7,42,61].

H 9 The lower the level of market growth in a target Asian country, the lower the probability that Nordic investing firm will enter that country through WOS.

Economic welfare

We have above suggested that growth of host market is one of the most powerful L-specific variables affecting the market seeking FDI by MNCs. The gross national product (GNP) per capita is also widely used to appraise the economic welfare of people living in target countries. A high level of welfare suggests that country be well developed. If the level of welfare is considered as a measure of market size, it can also be expected that the firms will attempt to establish a WOS in high welfare countries. The empirical results are somewhat mixed, Gomes-Casseres and Bell found support to the greater preference for a JV decision in countries of higher welfare [9,36,39]. However Papanastassiou & Pearce found support for WOS in countries of high welfare [70]. Dunning in his analysis of US MNEs also supported later conclusion [26]. Because very often countries of low economic welfare or low per capita GNP are politically unstable, it is expected that:

H10 The higher the level of economic welfare in target Asian country, the greater the probability that Nordic investing firm will enter that county through WOS.

Internalization variables

Country risk

In many studies country risk has been categorized as location specific variable, but we decided to use it as an internalization variable following Dunning and Chandprapalert [14,28]. Firms prefer to avoid countries with high political risk like expropriation or nationalization, or economic risk like restrictions of assets, and limitations on operational and managerial choices [71]. When an environment in a host country is uncertain and unpredictable, firms apparently hesitate to commit themselves too much as they may loose their strategic flexibility [4,53]. Thus foreign firms are more likely to be cautious with equity investment in countries having political unrest [75,77]. The results in several previous studies also give empirical supports for the positive relationship between low country risk and preference for WOSs [4,7,9,66]. Thus, it is expected that

H 11 The lower the level of risk in a target Asian country, the greater the probability that Nordic firm will enter that country through WOS.

Extent of scale economies

Scale economies arise when inputs of a firm are shared, or utilized jointly with complete congestion. The implications of scale economies with respect to competitive advantage have become increasingly clear; they produce a positive impact on corporate profitability [49]. This is typically actualized through enhanced innovative capability or some form of cost reduction. Researchers have argued that the benefits of global strategy, including economies of scope, increase firm's commitment to business unit and can best be exploited through hierarchical control, which in turn help the firm to achieve market as well as efficiency seeking motives of FDI [39,40,51,72]. Also within many industries, firms are no longer able to compete as a collection of nationally independent subsidiaries. Rather competition is based in part on the ability of scale economies, corporation to link and integrate its subsidiary activities across geographical locations [73]. In order to achieve these scale economies, tight co-ordination is necessary, as their implementation often requires business units to "sacrifice" subsystem gains for the benefit of the overall organization. Therefore, when the need for global integration is high, firms are likely to prefer WOS for its affiliates [71]. Hence,

H 12 Making the FDI in an industry where possibilities to reach scale economies are great increases the probability of preferring a WOS structure in Asian markets.

Methodology and the Sample of the Study

Ownership is captured in the study by a dummy variable, which receives a value of one if the firm owned 95%, or more of the subsidiary's equity and the zero it owned at least 10%, but not more than 94%. The 95% cut-off point has been chosen because the firm usually has de facto total decision power also in a situations where the share of ownership is a little under 100 % and the 95% cut-off point has been used in several other studies [3,37,42,80]. Because of the nature of the dependent variable, the binomial logit model is used in the analysis. In the binomial logistic model the probability of a certain type of ownership arrangement is explained by the reviewed variables. The regression coefficient estimates the impact of independent variables on the probability that the foreign unit is wholly owned. A positive sign for the coefficient means that the variable increases the probability of a WOS. The model can be expressed as:

$$P\ (y_i = 1) \ = \ 1 \ / \ \left(1 + \exp\ (-a - X_i B \right)$$

Equation [1]

where *yi* is the dependent variable, *Xi* is vector of independent variable for the *ith* observation, *a* is intercept parameter and *B* is the vector of regression parameters.

The empirical part of this study is based on data concerning manufacturing FDIs made by Nordic firms in various Asian countries in 1965-2000. The sample is based on information drawn from annual reports of firms, information taken from various business journals, survey information and other information received through direct contacts by one of the authors from companies in various Nordic countries. Of the identified c. 6000 manufacturing investments by Nordic firms in 1960-2000 in foreign markets, c. 670 FDIs were made in Asian countries. However, all the required information could be found concerning 376 FDIs. Of those 102 made by Swedish, 152 by Finnish, 73 by Norwegian and 49 by Danish firms. Of the FDIs 270 (71.8%) were JVs and 106 (28.2%) were WOSs. Thus the ownership strategy distribution in FDIs made by Nordic firms in Western Europe and North America seems to have been just the opposite to the ownership arrangement in Asian countries. As discussed earlier, Delios and Beamish found in their study of 1424 Japanese FDIs in nine Asian countries that 21.4 per cent of the FDIs were WOSs (23.0 % of all identified 2594 FDIs in the same period) [25]. In the whole Nordic FDI data the ownership arrangement could be identified in 540 cases. Of those 30 per cent were WOSs and 70 per cent JVs. Thus the relative shares of JVs and WOSs in the sample of this study and in the whole FDI database were rather similar.

Empirical Results

The results of the binomial logistic regression in the basic model are presented in Table 1. The estimated coefficients represent the utility of choosing WOS over JV: a positive coefficient means that full ownership will be chosen and a negative coefficient signifies the opposite. The model has a satisfactory overall explanatory power with a chi-square of 19.145 with 10 DF (p=0.038). Another way of measuring how well a maximum likelihood model fits the data is to use the model to classify observations. The ability to classify can be judged against the classification rate that would have been obtained by change. The rate is equal to $a^2 + (1 - a)^2$, where $\boldsymbol{a}$ is the proportion of WOSs in the sample. In the present case the baseline rate is 59.5 %. The result show that 71.3 % of the observations are correctly classified, a rate higher than would be expected by the proportional change criterion.

In the basic model only three of the reviewed variables - PSIZE, INTEXP, and GNPPC - were statistically significant. PSIZE has a positive sign and is significant at the 0.05 levels. Thus, as expected, large firms have greater financial and management resources and have therefore better possibilities to manage WOSs than smaller firms do. Additionally, antitrust questions have not caused as big problems as in North America and Western Europe. The result corresponds with the results of earlier studies [9,36,56,58,66].

INTEXP was only mildly statistically significant (at the 0.1 level). Related to INTEXP it was expected that the variable would have increased the probability of choosing a WOS, but INTEXP has a negative sign. Thus, international experience had surprisingly increased probability of choosing a JV alternative. The result is in accordance with the results by [25]. They explained the result with the role of sogo shoshas in Japanese FDIs. In Nordic case the role general trading companies in FDIs has been much more limited. Thus, the results indicate that either firms having more international experience had invested relatively more in Asian countries with ownership limitations and/or that they have had so good negotiation positions that the conditions for a JV have been acceptable. The founding definitely needs further analysis. Furthermore, as expected, GNPPC has a positive sign and the variable is statistically significant at the 0.006 levels. Thus a higher economic welfare in the target Asian country had clearly increased the probability of choosing a WOS alternative in FDIs made by Nordic firms. Countries of higher economic welfare offer better possibilities for a long-term presence and better profits than smaller markets, which had led to the preference of WOSs in those markets. The results coincide with the findings of the previous studies [2,61].

In addition to general influences of various factors on the organizational form behavior of Nordic firms an additional goal of the study was to analyze the similarities and differences in the behavior between Nordic countries. As discussed earlier, it was expected that there would not be any significant differences in the organizational structure behavior between Nordic countries based on economic similarity and e.g. the often-used categorization of all Nordic countries belonging to the same Nordic cluster. It was expected in 7a that the FDI behavior would be similar in all four Nordic countries. The situation was first tested using a logit run including country dummies. Against expectations the signs for all countries were not similar, but negative for Denmark and Finland and positive for Norway and Sweden. However, none of country dummies was statistically significant. Additionally, a chi-square test was made between the ownership distributions in the four samples. The test indicated a statistically significant difference in the behavior at the 0.1 levels. Thus it may be concluded that there has not existed any joint ownership strategy pattern in Nordic FDIs in Asian markets. The finding coincides with an earlier finding focusing on the ownership strategy behavior of Nordic firms at a global level. A joint feature in the results was, however, that in all four samples a majority of the units were JVs.

In H7b it was expected that firms from higher power distance Nordic countries (Finland, Norway, and Sweden) have more often used WOSs than firms from lower power distance countries (Denmark). Furthermore, in H7c it was expected that firms from higher uncertainty avoidance countries (Finland and Norway) have more often used WOSs than firms from lower uncertainty avoidance countries (Denmark and Sweden). Neither H 7b nor H7c received support. The share of WOSs was clearly higher in Norway (37.0%) and Sweden (35.5%) than in Denmark (22.4%) and especially in Finland (13.7%). Thus results in the Danish and Norwegian samples give support that the level of power distance and uncertainty avoidance in the home country of investors is important predictors of ownership strategy behavior. What concerns the Swedish sample, results give support only to the importance of level of power distance and in the case of Finland the results are in both cases just opposite to the predicted. The results are also not explained by the fact that Danish and Finnish firms would have invested relatively more than Norwegian and Swedish firms to Asian countries where ownership limitations had existed. In fact the situation was just the opposite.

A majority of the variables were insignificant in total sample. Therefore further runs were made in order to analyze the situation in more detail. As was discussed earlier, PSIZE was highly correlated with some other variables. Therefore PSIZE was excluded from the second model. The model indicates that GNPPC keeps its statistical significance, but the two other significant variables in the first model loose the statistical significance. Models three and four include results of the runs taking into account the ownership restrictions at the time of the investment. The model indicates that PSIZE and GNPPC were the only variable, which had significantly influenced the ownership choices made in those cases.

Models five and six include the timing of the FDIs. As discussed earlier, most of the investments in the sample were made in the 1990s. Only 76 of the FDIs were made in the period 1960-1989 (model 5).

Table 1: PARAMETERS ESTIMATES FOR BINOMIAL LOGIT MODELS

		Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Moc
	Expected sign	All included	PSIZE excluded	Ownership restrictions	No Ownership restrictions	1960 - 1989	1990 - 2000	Denmark	Finl
		Parameter Estimates	Parameter Estimates	Parameter Estimates	Parameter Estimates	Parameter Estimates	Parameter Estimates	Parameter Estimates	Para Estin
ONSTANT		-5.017 0.000	-3.485 0.001	-8.265 0.001	-3.802 0.025	-23.197 0.392	-3.113 0.027	-36.603 0.032	-5.1 0.1
SIZE	+	0.656 0.027**	-	1.675 0.009***	0.338 0.346	3.350 0.007***	0.321 0.338	7.818 0.035**	-0.2 0.7
&D	+	-0.004 0.979	0.049 0.765	-0.071 0.852	-0.005 0.978	-0.559 0.349	0.093 0.603	-1.398 0.140	0.0 0.9
IVER	-	-0.001 0.947	0.010 0.606	-0.064 0.179	0.005 0.822	-0.175 0.028**	0.024 0.268	-0.194 0.044**	-0.0 0.2
NTEXP	+	-0.683 0.063*	-0.126 0.641	-0.299 0.683	-0.665 0.150	-1.512 0.092*	-0.737 0.104	-2.729 0.226	1.4 0.2
CEXP	+	0.025 0.199	0.019 0.323	0.024 0.361	0.033 0.332	0.006 0.955	0.029 0.155	0.405 0.025**	1.3 0.2
ULTDIS	-	0.057 0.491	0.096 0.227	0.029 0.890	0.096 0.352	0.054 0.186	-0.009 0.924	1.752 0.112	-0.0 0.8
IARGROWT I	-	0.020 0.585	0.019 0.594	0.056 0.603	0.030 0.589	0.026 0.835	0.009 0.827	0.246 0.275	0.1 0.4
NPPC	+	0.482 0.006***	0.470 0.007***	0.773 0.082*	0.401 0.097*	1.246 0.038**	0.466 0.026**	-1.180 0.388	0.9 0.1
RISKS	-	0.015 0.139	0.016 0.093*	0.029 0.890	0.014 1.267	0.188 0.406	-0.012 0.252	-0.023 0.571	0.0 0.5
CALE	+	0.355 0.490	0.254 0.620	-1.164 0.297	0.491 0.430	7.981 0.764	0.119 0.824	3.766 0.057*	0.0 0.9
I		376	376	120	256	76	300	49	10
6 of correct bservations		71.3	71.3	74.1	70.3	82.9	70.3	83.7	86

However, four variables had significantly influenced the ownership strategies in the earlier FDIs. The results indicate that PSIZE had been most influential variable in the earlier FDIs (significant at the 0.01 levels). As in earlier models the variable has a positive sign. From the other significant variables GNPPC has a positive sign and INTEXP a negative sign, as in the full model (model 1). An interesting result is that DIVER is now statistically significant at the 0.05 levels. The variable has a negative sign as expected. Thus higher diversity of the parent had increased the probability of preferring a JV. Majority of the FDIs made in 1960-89 were cases where there existed ownership limitations (70%). The local ownership limitations had clearly less influence on FDIs made in the 1990s (24 %). However, only one variable – GNPPC – had been statistically significant in the latter time period. Furthermore, a second variable, INTEXP, was just out of statistical significance.

Models seven to ten include the results of the logit runs in the various Nordic samples. Taking into account the sample sizes in the Danish and Norwegian samples, one has to be somewhat cautious, especially with the Danish results. The results indicate that none of the reviewed variables were statistically significant in all four samples. Surprisingly all the reviewed variables were insignificant in the Finnish sample. Also in the Norwegian samples only one variable, PSIZE was statistically significant. As in the other models, PSIZE had increased the probability of preferring the WOS strategy.

In the case of Denmark and Sweden four variables were statistically significant. However, only one variable - DIVER - was statistically significant in both samples (at the 0.05 level in both cases), the other variables were different. Noteworthy in the results is that DIVER has a negative sign in the Danish and a positive sign in the Swedish sample. Thus, against expectations in highly diversified Swedish companies there had existed increased preference for WOSs. One possible explanation for this is that the highly diversified Swedish companies have invested mainly in their core industries and therefore preferred WOSs instead of JVs.

In the Danish sample the other significant variables were PSIZE, TCEXP, and SCALE. Thus joint for the Norwegian and Danish samples is the importance of PSIZE variable. Also The Danish sample was the only one where TCEXP and SCALE had been significantly influencing ownership strategy decisions made. It is difficult to state any clear explanation for the result. Both variables had positive signs. Thus, as expected, higher target country specific experience and greater possibilities to reach economies of scale effects had increased preference for WOSs. Earlier results have indicated that DIVER and TCEXP have not been very good explanatory for the ownership strategy behavior of Danish companies [61]. As referred above, one has to be somewhat more cautious with the Danish results, because of the rather small sample size.

In the Swedish sample, the other statistically significant variables were INTEXP, CRISK, and GNPPC. INTEXP and GNPPC were both significant at the 0.05 levels and were significant also in several other models, as discussed earlier. Instead CRISK was significant only in the Swedish sub-sample (only at the 0.1 level). The variable has a positive sign. Thus, as expected, a lower country risk had increased probability of choosing the WOS alternative. The results in earlier studies have also indicated that DIVER, INTEXP, and economic welfare have significantly influenced ownership strategies in Swedish FDIs, whereas CRISK has been insignificant [61]. The Swedish sample was too homogeneous related to the scale variable. Thus, the variable had to be excluded from the run.

Finally, the results indicate something joint for all four countries. R&D, CULTDIS, and MARGROWTH were all statistically insignificant in the four samples. These three variables were statistically insignificant also in the other models. Also earlier results have indicated that CULTDIS and MARGROWTH have been rather poor predictors of ownership strategy behavior in FDIs made by Nordic firms whereas R&D has in several cases rather well predicted the behavior, at least in FDIs located mainly in OECD countries [61].

Conclusion

The main goal of this paper was to analyze the impact of different ownership, location, and internationalization related variables on the ownership strategy behavior in Nordic FDIs made in Asian countries. A second goal was to analyze the similarities and differences in the ownership strategy behavior by firms of different Nordic origin. So far there is surprisingly limitedly research on the ownership strategy decisions by non-Asian firms in the area. Most previous studies focusing on ownership strategy decisions have analyzed the situation in the USA or in OECD countries. Therefore there is extremely limitedly information to confirm whether the same factors as in the USA and in other OECD countries have also been the key influencing factors in Asian countries.

The empirical part of the study was based on 376 FDIs made by Nordic firms in various Asian countries between 1965-2000. Of the reviewed FDIs 71.2% were JVs and 28.8 % WOSs. Thus Nordic firms have usually preferred JVs in Asian countries. The results concerning the relationship between WOSs and JVs were opposite to the situation are OECD countries, and US where two-thirds of the FDIs by Nordic firms have been WOSs.

A binomial logistic model was used in the analysis of the impact of different ownership, location and internalization variables on the ownership arrangement decisions. The results indicated that only three variables were statistically significant in the total sample. As was expected, large parent size and high economic welfare (high GNP per capita) in the target country market had increased the probability of choosing a WOS. The third significant variable, international experience, had against expectations not increased the preference for WOSs, but the probability of choosing a JV structure. For the other variables their insignificance was against expectations. Delios and Beamish found in their study (focusing on ownership strategies of Japanese firms in nine Asian countries) that ownership limitations and international experience had negatively affected the degree of ownership whereas target country specific experience had positively affected the degree of ownership. R&D intensity, relatedness of the investment and host country risks were all insignificant [25]. However, when the parent size was excluded, then country risk was mildly significant. Although it was planned, the influence of the relatedness of the investment could not be tested in this study, because the sample included extremely few unrelated types of FDIs. Concerning the influence of R&D intensity and country risk, the results in the study by Delios and Beamish and in this study, were similar [25].

Furthermore, the results indicated some differences in the significantly influencing factors depending on the ownership limitations in the target countries and on the timing of the investment. Finally, although a majority of the FDIs was JVs in all four Nordic sub-samples, the results did not give support to a joint Nordic ownership structure behavior. A surprising result was that none of the variables had significantly influenced the strategies of Finnish firms whereas those by Danish and Swedish firms were significantly influenced by four of the reviewed variables (although only one joint variable).

With reference to the OLI-approach, within the whole sample ownership (Oa) and location (L) specific variables had influenced the ownership strategies, not internalization variables (I). Concerning the four Nordic sub-samples, all variables were insignificant in the Finnish decisions, Norwegian FDIs were influenced by ownership specific variables (Oa), decisions of Danish firms by ownership (Oa and Ot) and internalization (I) variables, and decisions of Swedish firms by all three types of variables.

This study has several limitations. First, only official ownership limitations in the target countries at the time of investment were included. However, there are in several countries a lot of practical regulations and problems (red tape etc.), which cause extra troubles although WOSs are allowed. A further analysis of these regulations and problems could explain more the decision behavior. Related to the R&D –intensity industry level figures had to be used. Company level R&D figures could better explain the real influence of R&D –intensity. Because of lack of information about absolute and relative size of FDIs and competition related information could not be included. Adding to those variables would also be interesting in future. In addition, other interesting future research topics would be an analysis of the later changes in the ownership arrangements and an analysis of the relationships between ownership structures chosen and performance of the subsidiaries. Finally, because most of the investments by Nordic firms (and also by firms of other origin) in Asia were JVs, a more detailed analysis of the determinants between minority-, 50-50 –owned, and majority-owned units and/or an analysis of the partner selection criteria's used would be of interest.

References

[1] An empirical test of a transaction cost explanation, Journal of Law, Economics and Organization, 4:2, 305-336.

[2] Barlett, C. & S. Ghoshal (1989). Managing across borders: The transnational solutions. Harvard Business School Press, Boston.

[3] Beamish, P. (1985). The characteristics of joint venture in developed and developing countries. Columbia Journal of World Business, 20:3, 13-19.

[4] Bell J. (1996). Joint or single venturing? An eclectic approach to foreign entry mode choice. Tillburg University, The Netherlands (dissertation).

[5] Bell J. (1999). Entry modes and location decisions. In "Multinational Enterprises from Netherland," 172-190.Eds R. van Hoesel and R. Narula. Routledge Studies in International Business and the world economy.

[6] Benito, G. (1995). Studies in foreign direct investment and divestment behavior of Norwegian manufacturing companies. Norges Handelshoyskole. Norwegian School of Economics and Business Administration (dissertation).

[7] Benito, G. & L. Welch (1994). Foreign market servicing: Beyond choice of entry mode. Journal of International Marketing, 2:2,7-27.

[8] Buckley, P. & M. Casson (1976). The Future of the Multinational Enterprises. London: Macmillan.

[9] Caves, R. (1982). Multinational Enterprises and Economic Analysis. Cambridge: Cambridge University Press.

[10] Calori, R., T. Atamer & P. Nunes (2000). The dynamics of international competition, from practice to theory. London: Sage Publications.

[11] Chandprapalert, A (2000). The determinant of US direct investment in Thailand: A survey on managerial perspectives. Multinational Business Review, 8:2, 82-88.

[12] Cho, K. (1985). Multinational Banks: Their identities and determinants. Ann Arbor: UMI Research Press.

[13] Chang, S. (1995). International expansion strategy of Japanese firms: Capability building through sequential entry," Academy of Management Journal, 32:2, 383-407.

[14] Cho, K. & P. Padmanabhan (1995). Acquisition versus new venture: The choice of foreign establishment mode by Japanese firms. Journal of International Management, 1: 255–285.

[15] Cohen, B. (1975). Multinational firms and Asian exports. New Haven and London: Yale University Press.

[16] Collis, D. (1991). A resource-based analysis of global competition. The case of the bearings industry. Strategic Management Journal, 12, 49-68.

[17] Contractor, F. (1986). Strategic considerations behind international joint ventures. International Marketing Review, 3, 77-85.

[18] Contractor, F. & P. Lorange (1988). Cooperative strategies in international business. Lexinton, MA: D.C. Heath.

[19] Davidson, W. (1980). The location of foreign investment activity. Journal of International Business Studies, Fall, 26, 9-23.

[20] Davidson, W. (1982). Global Strategic Management. John Wiley and Sons, New York.

[21] Douglas, S. & M. Thomas (2000). Internalisation of Asian business. Singapore Management Review, 22:7, 1-17.

[22] Delios, A & P. Beamish (1999). Ownership strategy of Japanese firms: Transactional, institutional, and experience influences. Strategic Management Journal, 20:10, 915-934.

[23] Dunning, J. (1980). Towards an eclectic theory of international production: some empirical tests. Journal of International Business Studies, 26:3, 461- 491.

[24] Dunning, J. (1988). The eclectic paradigm of international production: A restatement and some possible extensions. Journal of International Business Studies,19:1, 1-31.

[25] Dunning, J. (1993). Multinational Enterprises and the Global Economy. Addison–Welsey Publishing Company, UK.

[26] Dunning, J. (1997). Micro and Macro Organisational Aspects of MNE and MNE Activity. Toyne, Brian & Douglas Nigh, In "*International Business: An Emerging Vision*," Columbia, SC: University of South Carolina Press.

[27] Elizabeth, M. & V. Rajaram (1996). Examining the US investments in the Asean region: Imperatives from a national competitiveness standpoint. Competitiveness Review, 6:2, 44-58.

[28] Erramilli, M. (1996). Nationality and subsidiary ownership patterns in multinational corporations. Journal of International Business Studies, 27:2, 225-248.

[29] Erramilli, M. & C. Rao (1993). Service firms' international entry-mode choice: A modified transaction-cost analysis approach. Journal of Marketing, 57:3, 19-20.

[30] Florida, R. & M. Kenney (1991). Transplanted organisations: The transfer of Japanese industrial organization to the US. American Sociological Review, 56, 381-398.

[31] Forsyth, D. (1972). US investments in Scotland. New York: Praeger.

[32] Ghosal, S. (1987). Global Strategy: An organizing framework. Strategic Management Journal, 8:425-40.

[33] Gomes - Casseres, B. (1985). Multinational Ownership Strategies. Harvard University. UMI Press, Ann Arbor, Michigan (dissertation).

[34] Gomes - Casseres, B. (1989). Ownership structures of foreign subsidiaries. Theory and evidence. Journal of Economic Behavior and Organization, 11, 1-25.

[35] Harrigan, K. (1985). Strategic flexibility: A management guide for changing times. Lexinton Books, Lexington, Massachusetts.

[36] Harrigan, K. (1985a). Vertical integration and corporate strategy. Academy of Management Journal, 28:2, 397-425.

[37] Harrigan, K. (1985b). Exit barrier and vertical integration. Academy of Management Journal, 28:3, 686-697.

[38] Hladik, K. (1985). International joint ventures: An economic analysis of U.S. – foreign business partnership. MA: Lexington Books.

[39] Hennart, J. -F. (1991). The transaction costs theory of joint ventures: An empirical study of Japanese subsidiaries in the United States. Management Science, 37:4, 483-497.

[40] Hennart, J. -F. & Y. Park, (1993). Greenfield versus acquisition: The strategy of Japanese investors in the United States. Management Science, 39: 1054–1070.

[41] Hennart, J. -F. & S. Reddy (1997). The choice between mergers/acquisitions and joint ventures: The case of Japanese investors in the United States. Strategic Management Journal, 18:1-12.

[42] Hennart, J. -F. & J. Larimo (1998). The impact of culture on the strategy of multinational enterprises: Does national origin affect ownership decisions? Journal of International Business Studies, 29:3, 515 – 538.

[43] Hill C, P. Hwang, & C.W. Kim (1990). An Eclectic Theory of the Choice of International Entry Mode. Strategic Management Journal, 11, 117-128.

[44] Hofstede, G. (1980). Culture's consequences: International differences in work-related values. Saga Publications, Beverly Hills.

[45] Hofstede, G. (1983). The cultural relativity if organizational practices and theories. Journal of International Business Studies, 14:2, 75-89.

[46] Hwang, P & C. Kim (1992). Global strategy and multinational's entry mode choices. Journal of International Business Studies, 23:1, 29-42.

[47] James, B.G (1992). Strategic Alliances. International Review of Strategic Management, 11, 479-499.

[48] Jones, G. & W. Charles (1982). Transaction cost analysis of strategy-structure choice. Strategic Management Journal, 9:159-72.

[49] Khoury, S (1979). International Banking: A Special Look at Foreign Banks in the U.S. Journal of International Business Studies, 10:3,36-52.

[50] Kim, W.C. & P. Hwang (1992). Global strategy and multinational's entry choice. Journal of International Business Studies, 23:1, 29-53.

[51] Kimura, Y. (1989). Firm - specific strategic advantages and foreign direct investment behavior of firms: The case of Japanese Semiconductor firms. Journal of International Business Studies, 20, 296-314.

[52] Kogut, B (1988). Joint ventures: Theoretical and empirical perspectives. Strategic Management Journal, 9:4, 319-332.

[53] Kogut, B. & H. Singh (1985). Entering the United States by Acquisition or Joint Venture: Country patterns and cultural characteristics. Paper presented at the joint EIBA-AIB meeting in London.

[54] Kogut, B. & H. Singh (1988a). The effect of national culture on the choice of entry mode. Journal of International Business Studies, 19:3, 411-432.

[55] Kogut, B. & H. Singh (1988b). Entering the United States by joint venture. Farok Contractor and P. Lorange editors, In "Co-operative strategies in international business," Lexington, MA: Lexington Books.

[56] Larimo, J. (1993a). Foreign direct investment behavior and performance. An analysis of Finnish direct manufacturing investment in OECD countries. Acta Wasaensia No. 32, University of Vaasa (dissertation).

[57] Larimo, J. (1993b). Ownership arrangement in foreign direct investments: Behaviour of Finnish firms in OECD countries. Journal of Euromarketing, 3:1, 75-111.

[58] Larimo, J. (2000). Choice of organizational structure in foreign markets: The impact of Ownership and Location specific determinants on the Foreign Direct Investment Behavior of Nordic Firms. Paper presented at the AIB meeting in Phoenix, Arizona. November 2000.

[59] Lawrence, P & J. Lorsch (1967). Organization and Environment. Homewood, IL: Irwin.

[60] Lynch, R. (1989). The practical guide to joint ventures and corporate alliances: How to form, how to organize, how to operate. New York: Wiley.

[61] Makino, S. (1995). Joint ventures ownership structure and performance: Japanese joint ventures in Asia. Doctoral dissertation. Faculty of Graduate Studies, The University of Western Ontario, London, Ontario. (dissertation)

[62] Makino, S. & A. Delios (1996). " Local knowledge transfer and performance: Implications for alliance formation is Asia," Journal of International Business Studies, 27:5, 905-928.

[63] Mutinelli, M. & L. Piscitello (1997). The influence of firm's size and international experience on the ownership structures of Italian FDI in manufacturing. Small Business Economics, 11:1, 43–56.

[64] Nelson, R. (1991). Why do firms differ, and how does it matter? Strategic Management Journal, 12: 61-74.

[65] Padmanabhan P. & K. Cho (1994). Ownership strategy for a foreign affiliate. An empirical investigation of Japanese firms. Paper presented at the 1994 AIB Annual Meeting in Boston.

[66] Padmanabhan, P. & K. Cho (1999). Decision specific experiences in foreign ownership and establishment strategies: Evidences from Japanese firms. Journal of International Business Studies, 30:1,25 – 36.

[67] Papansatassiou, M & R. Pearce (1990). Host country characteristics and the sourcing behavior of UK manufacturing industry. University of Reading, Department of Economics, Discussion papers in International Investment and Business Studies, Series B, Vol. II, No.140.

[68] Phatak, A., R. Muralidharan, & R. Chandran (1996). A study of the impact of location specific and moderating factors on the choice of entry mode in Thailand, Malaysia, and Indonesia. Journal of Euro – Marketing, 4:3, 37-.

[69] Porter, M. (1980). Competitive Strategy. New York: The Free Press.

[70] Porter, M. (1986). Competition in global industries. Boston: Harvard Business School Press

[71] Porter, M. (1990). The competitive advantages of nations. New York: Free Press.

[72] Rajib, N. & G. Turgut (2000). American firms in China: Issues in managing operations. Multinationals Business Review, 9:2, 40-46.

[73] Ronen, S. & O. Shenkar (1985). Clustering countries on attitudinal dimensions: A review and synthesis. Academy of Management Review, 10:3, 435-454.

[74] Root, F. (1987).Entry strategies for international markets. Lexington, MA: Lexington Books.

[75] Sanna-Randaccio, F. (1990). The ownership structure of foreign subsidiaries: Evidences from the Italian Multinationals. Paper presented at the annual meeting of European International Business Association, Madrid.

[76] Shane, S. (1994). The effect of national culture on the choice between licensing and direct foreign investment. Strategic Management Journal, 15, 627-642.

[77] Stopford, J. & L. Wells, Jr (1972). Managing the multinational enterprise. NewYork: Basic Books.

[78] Stopford, J. & K. Haberich (1978). Ownership and control of foreign operations. In German and Leontiades (eds.). European Research in International Business, 141-167. North-Holland, New York.

[79] Tang, Y (1994). Entry-mode choice between a wholly owned subsidiary or an equity joint venture by Japanese manufacturing entrants in North America. York University, Canada (dissertation).

[80] Terpstra, V. & C. Yu (1988). Determinant of foreign investment of U.S. advertising agencies. Journal of International Business Studies, 19, 33-46.

[81] United Nations (1998). The financial crisis in Asia and Foreign Direct Investment: An Assessment. United Nation Conference on Trade and Development.

[82] Weinstein, A. (1977). The U.S. multinational advertising agency and public policy. Journal of Advertising. 6:4, 19.

[83] Yip, P. (1992). Product and process patent protection in biotechnology: Too much or too little. Journal of Corporation Law, 17:3, 659-690.

[84] Yu, C. & K. Ito (1988).Oligopolistic reaction and foreign direct investment: The case of the U.S tire and textile industries. Journal of International Business Studies, 19, 449-60.

[85] Zejan, M. (1988). Studies in the behavior of Swedish multinationals. Ekonomiska studier utigivna av Nationalekonomiska Institutionen Handelshögskolan vid Göteborgs Universitet 23. Göteborg (dissertation).

[86] Zhao, H & G. Zhu (2000). Location factors and country-of-origin differences: An empirical analysis of FDI in China. Multinational Business Review. 8:1, 60-73.

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International Joint Venture Strategies and Performance in Asian Countries

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Abstract

The passed three decades have witnessed a growing theoretical and managerial interest in international joint ventures (IJVs). There are various reasons for the increasing use and importance of IJVs in world business. Especially in Asian countries IJVs seem to have been a very common form of operation. Several studies have, however, indicated that many IJVs have not met the goals set for them and that the failure/dissolution rates have been high. The earlier studies indicate that the performance of IJVs established in Asian countries seems to have been somewhat better than in ventures established in other areas. Based on earlier studies focusing on IJV performance some of the most commonly used variables in earlier studies were picked up for this study. The empirical part of the paper is based on the data of 98 IJVs established by Finnish companies in various Asian countries during 1980-1999. The results indicate that the influence of the reviewed factors was partly dependent on the measure of IJV performance. Furthermore, of the reviewed variables dominant foreign ownership and three dimensions of culture: individualism, masculinity, and uncertainty avoidance, had significantly influenced the results independent of the measure of performance.

Introduction

The past three decades have been characterized by a multiplication of studies focusing on the subject of international joint ventures (IJVs) and alliances. It has been estimated that there have been over 3000 books and articles discussing JVs in the late 1980s [1]. Because of the great interest in domestic and foreign JVs and alliances in the 1990s, the number has apparently grown over 4000 or even higher at this moment (mid-2002). Behind the great interest towards IJVs and other forms of co-operation arrangements by academians and managers are : 1) the increasing use of collaborative arrangements by companies and various public organizations, and 2) the relatively high failure rate of various types of collaborative arrangements.

What are the reasons for the increasing use of various types of cooperation arrangements including IJVs? Contractor and Lorange [11] present seven more or less overlapping objectives for the formation of IJVs: 1) risk reduction, 2) economies of scale and/or rationalization, 3) technology exchanges, 4) co-opting or blocking competition, 5) overcoming government mandated trade or investment barriers, 6) facilitating initial international expansion of inexperienced firms, and 7) vertical quasi-integration advantages of linking the complementary contributions of the partners in a “value chain”. It is evident that the reasons for forming IJVs are numerous and reach into all areas of business strategy. Although there may be very diverse motivations, the motivations can probably be distilled into three broad categories: 1) resource-driven IJVs, 2) market driven IJVs, and 3) risk-driven IJVs, see [58, 74]. The three categories are often interrelated, and several of the IJVs established in the late 1980s and in the 1990s are distinguishable from the earlier counterparts by their straddling of multiple objectives. An additional, often referred dividation of motives for IJV formation is the one presented by Harrigan [22]. She has divided the motives into three groups: internal, external, and strategic. Internal motives deal with sharing risks and expenses, exposure to innovation, and increasing access to resources. External motives include easing political tensions and combating global competition. Strategic motives underlying IJVs involve the possibility of diversification and future business.

The paper aims to give a review of literature on IJV performance indicators and factors affecting IJV performance in Asian countries and to analyse the IJV performance and factors related to the performance in IJVs established by Finnish companies in Asian countries. An additional goal is to analyse the existence and degree of variation in the results depending on the measure of performance. The empirical part of the paper will be based on a sample of 98 IJVs established by Finnish firms in various Asian countries.

An IJV is a unit where there are at least two partners from which one has its headquarters outside the target country of the unit. The unit may have been established as a greenfield investment or the IJV may be a partical acquisition of a local unit. The share of the foreign partner in the IJV must be between 10 and 94 % (commonly used limits for an IJV). The focus in the paper is on IJVs having manufacturing operations, and on the viewpoint of the foreign partner in the IJV.

The structure of the paper is as follows. In the second section an overview of IJV studies, especially of focusing on IJV performance in Asian countries, is made. In the third section the relationships between various variables and IJV performance are discussed. The third section also includes a development of hypotheses for the empirical part of the paper. In section four the sample selection, operationalization of variables used and key methodological issues in the study are discussed. Section five includes the presentation and analysis of results of the empirical study. Section six includes a summary and conclusions based on the study made.

IJV Performance and an Overview of the Empirical IJV Performance Studies

A major difficulty in evaluating the success of IJVs is due to the definition and the measures of performance. Academians have used numerous measures of IJV performance, many of which are conceptually ill-founded and have prima facie caused inconsistency in empirical findings [19, 53, 60]). In several studies only one criteria for IJV performance has been used, but there has been great variation which performance has been evaluated and which criteria has been used. The evaluation can be directed a) towards either the performance of the operation itself (JVPERF) or towards the performance of the partners (PARTPERF) (i.e. how the IJV characteristics influence the partner(s) performance), and b) the evaluation can be realized using subjective or objective measures or a combination of both types of performance measures (see [8]).

A review of empirical IJV studies indicates that an overwhelming majority of proxies identified in the literature correspond to JVPERF. Only a few studies assess PARTPERF. Objective measures of JVPERF have included longevity, survival, stability, combination of longevity/survival and stability, and various types of business indicators (e.g. profitability, market share etc.). As subjective measures have been used various items assessed by partner firm(s), various items assessed by IJV general manager, or a combination of them. All the measures have their own strengths and weaknesses. In this study the evaluation will be directed towards the JVPERF. The empirical part of this study will be based on two various measures of performance. Thus the analysis will give possibilities to compare how much variation there possibly exists depending on the measure of performance.

Based on an extensive search of empirical IJV studies, 77 studies focusing on IJV performance were found. Of those studies 25 focused on IJVs established in Asian countries. Of those studies 22 were made after 1990 indicating the increasing interest towards IJVs and IJV performance in Asian countries during the last ten years. The key characteristics of those studies where the focus was on IJV performance in Asian countries are presented in Table 1. As can be seen, there are great variation in the sample sizes (from four to over 2 400), methods of data collection (rather equally based on secondary or survey data or on interviews), methodologies used and the operationalisation of performance/measurement of performance (mainly based on financial or multidimensional measures). About half of the earlier studies have focused on IJVs made in China. The great focus on IJVs established in China is perhaps no wonder, because since the mid-1990s China has during several years clearly been the number one target country for FDIs in Asia and even globally on a second place after USA. In the studies the investing firms or at least a great share of them have been non-Asian based firms whereas in studies made in other Asian countries all or a great share of the investing firms have been originating from other Asian countries. Thus there is only very limitedly information of experiences from IJVs established by Western European companies in Asian countries.

Several of the earlier IJV studies indicate failure or instability rates of one third or higher. The results in IJVs established in Asian countries the situation has been much better (see e.g. [51 and 47]). However, also opposite results have been found. Sim and Ali [65] found in their study an instability rate of 67% in IJVs made in Bangladesh and Hu and Chen [31] found that over 94% of the reviewed IJVs in China were not successful. Also the results in some other studies not fulfilling the conditions set for literature review indicate that only 60 % of over 800 JVs and cooperative arrangements between US firms and local or foreign firms in Japan lasted more than four years and only 14 % survived more than ten years [64]. Furthermore, in an another study it was found that only five % of 110 JVs involving US, Japanese, Taiwanese, Singaporean and Hong Kong partners achieved all their objectives [75]. In the next section we shall discuss the relationships between various variables and IJV performance.

TABLE 1. SUMMARY OF METHODOLOGIES OF IJV STUDIES HAVING ASIAN FOCUS

Study	Number of Partners	Min. Duration of IJVs studied	IJV Location	Industrial Coverage	Type of Data	Method of Data Collection	Informant for Each IJV	Sample Size	Response Rate/ Participation rate	Statistical Performance Analysis	Performance Measure	Time Period	Performance/ Instability
Tomlinson 1970	2	N/A	India and Pakistan	Cross-section	Cross-sectional	Survey; interviews	N/A	71	N/A	Chi-square	Financial	N/A	N/A
Lecraw 1984	2	N/A	ASEAN	Cross-section/ light manufacturing	Cross-sectionl	Interviews	Parent firm manager	153	N/A	Correlation analysis	Multi-dimensional	1960-	N/A
Chen & Hu & Shieh 1991	N/A	N/A	China	Cross-section	Cross-sectional	Secondary	N/A	88	N/A	Descriptives/t-test / binomial sign test/ regression	Financial	1979-1990	N/A
Nakamura 1991	2	N/A	Japan	Chemical	Longitudinal	Secondary	N/A	12	N/A	Regression analysis	Financial	1984-1988	N/A
Phatak and Chowdhury 1991	N/A	N/A	India	Cross-section	Cross-sectional	Interviews	National IJV partners	22	N/A	Descriptive/ correlation analysis/ regression analysis	Multi-dimensional	N/A	N/A
Hu *et al.* 1992	2	N/A	China	Cross-section	Longitudinal	Secondary	N/A	42	N/A	Market model	Financial	1983-1989	N/A
Osland 1994	2	3 years	China	Cross-section	Cross-sectional	Interviews / secondary / observations	IJV manager / manager from at least one parent firm	8 cases (43 informants)	N/A	N/A	Multi-dimensional	N/A	N/A
Yan and Gray 1994	2	4 years	China	Electronics / pharmaceutical / personal hygiene / industrial process control	Cross-sectional	Interviews / documentary / secondary	IJV manager / manager from at least one parent firm	4 cases (11 informants)	N/A	N/A	Multi-dimensional	1964-1994	Strategic objectives largely achieved
Beamish and Inkpen 1995	2	3 years	Japan; Caribbean I.DC; North America	Business forms and printing; food processing and consumer product; automotive	Cross-sectional; longitudinal	Interviews / Survey	IJV manager / manager from both parent firms	5 cases, 40 interv.	80 %	Descriprives / chi-square	Stability	N/A	17% unstable
Luo 1995	2 or more	N/A	China	Cross-section	Cross-sectional	Secondary	N/A	127	N/A	Regression analysis / MANOVA	Financial	1989-1991	N/A
Makino 1995	2 or more	N/A	Southeast Asia/East Asia	Cross-section; electronics/ Automotive	Longitudinal /cross-sectional	Secondary/ interviews/ documentary	IJV manager; parent firm manager	1685; (1815 informants)	N/A	Descriptive/t-test/ Kolmogorov-Sminov test/ chi-square/ ANCOVA/ discrim. analysis/ MANOVA	Financial/ Stability	1985-1991	N/A
Hu and Chen 1996	2 or more	N/A	China	Cross-section	Cross-sectional	Secondary	N/A	2442	N/A	Descriptive/ chi-square/ t-test/logistic regression	Multi-dimensional	1979-1990	94,5% not successful
Makino and Delios 1996	2 or more	N/A	South-East / East Asia	Cross-section	Cross-sectional	Secondary	IJV manager	558	N/A	Descriptive/ t-test/ logistic regression	Financial	N/A	High performance in 68% of JVs
Luo 1997	2	N/A	China	Cross-section	Cross-sectional	Secondary	N/A	116	N/A	Multivariate regression model	Multi-dimensional	1988-1991	15,5% Discontinued
Luo and Chen 1997	2	3 years	China	Cross-section	Longitudinal	Secondary	N/A	101	N/A	MANOVA	Financial	1989-1991 (study prd) /before 1986	N/A
Lasserre 1997	N/A	N/A	Asia Pacific	Cross-section	Cross-sectional	Survey	Western Managers	98	12,2%	Correlation/ Multiple Regression	Multi-dimensional	N/A	N/A
Liu, Yang & Wei 1999	N/A	2 years	China	Cross-section	Cross-sectional	Interviews	Chinese managers	51	N/A	Correlations/ tobit regression	Multi-dimensional		Mean Performance: 0.7598/1
Lyles & Sulaiman &Barden and Awang Kechik 1999	2 or 3	1 year	Malaysia	Cross-section /Manufacturing	Cross-sectional	Interviews	IJV general managers	30	N/A	Descriptives/ correlations/ regression analysis	Multi-dimensional	N/A	N/A
Calantone & Zhao 2000	N/A	N/A	China	Cross-section	Cross-sectional	Survey/ interviews	Foreign managers of JVs	221	26%	Confirmatory factor analysis	Financial	N/A	N/A
Sim & Ali 2000	2 or more	3 years	Bangladesh	Cross-section	Cross-sectional	Survey/ interviews	N/A	59	N/A	Multivariate logistic regression/ ANOVA/ Chi square/Correlations	Stability	N/A	67% instability rate
Luo, Shenkar & Nyaw 2001	2 or more	N/A	China	Cross-section	Cross-sectional	Mail survey	IJV CEOs	295	38,3%	Multiple regression	Multi-dimensional	N/A	N/A
Pangarkar & Lee 2001	2 or more	3 years	Mainly Asian	Cross-section; Manufacturing	Cross-sectional	Mail survey	Manager of the Singaporean firm	58	N/A	Multiple regression	Multi-dimensional	1996-1999	Mean Performance 4.37/7
Yan and Gray 2001	2 or more	N/A	China	Cross-section Manufacturing	Cross-sectional	Mail survey /interviews	IJV managers	90	32,3%	MANOVA	Multi-dimensional	1981-1991	N/A
Luo 2002	2 or more	3 years	China	Cross-section Manufacturing	Cross-sectional	Mail survey	IJV general managers	134	26,8%	Multiple regression	Multi-dimensional	N/A	Mean performance: 4.74/5
Pothukuchi, Damanpour, Choi, Chen &Park 20002	2 or more	N/A	India	Cross-section	Cross-sectional	Interviews	Executives asso-Ciated with JV	127	N/A	Factor analysis; Multiple regression	Multi-dimensional	N/A	Mean performance: 3.6/5.0

Relationships Between Various Variables and IJV Performance

Although the study included the analysis of results in 77 empirical studies rather few of the reviewed variables were included in six or more studies. In total over 100 variables were found, but several of the reviewed variables were included in only a few studies. The results related to those 14 variables which were included in at least six studies are presented in Table 2. Because of unavailability of data only six of those variables could be included in this study (presented in bolded format). However, two additional variables (presented also in table 2) are included to the analysis. In the following we shall discuss in more detail the relationships between those variables and IJV performance and the results found.

Table 2: MOST REVIEWED FACTORS AND THEIR RELATIONSHIP WITH IJV PERFORMANCE (THE FIRST NUMBER INDICATES THE NUMBER IN ALL EARLIER STUDIES AND THE SECOND NUMBER THE NUMBER IN STUDIES FOCUSING ON IJVs IN ASIA).

		Direction of influence		
Variable	**Number of studies included**	**POS**	**NS**	**NEG**
Cultural distance	27/6	10/2	5/1	12/3
Age of the IJV	17/7	9/6	8/1	- / -
Dominant partner ownership	16/3	4/2	9/1	3/-
Size of the IJV	15/7	5/4	7/3	3/1
Foreign parent control	12/8	3/3	6/5	3/-
Related business IJV	11/4	7/3	1/1	3/-
Interpartner conflict	11/1	-/-	2/-	9/1
Commitment to the IJV	11/1	9/1	1/-	1/-
Relatedness of partners' industries	9/1	2/-	2/-	5/1
Size of the foreign partner	8/3	3/2	2/1	3/-
Dominant parent control	8/3	2/1	3/-	3/2
Existence of R&D operations	7/4	2/1	4/3	1/-
Earlier collaboration between partners	6/-	3/-	3/-	-/-
Size asymmetry	6/-	1/-	5/-	-/-
Target country experience	5/3	3/1	1/1	1/1
Number of partners	4/1	-/-	3/1	1/-

Related to the effect of the **size of the foreign partner firm** one could expect that because larger firms usually have more financial, management etc. resources and their international experience is greater than that of smaller companies, their need for a local partner is smaller. If they need a partner then based on above referred arguments their ability to negotiate and bargaining power is greater than that of smaller firms. Therefore it could also be expected that they would have better performance with their IJVs. The empirical results are, however, very mixed. From the eight studies where the relationship between size of the foreign partner and IJV performance have been analysed, three indicate support for a positive and three for a negative relationship whereas in two studies no statistically significant relationship could be found. The relationship has been analysed in Asian context in three studies from which two [73 and 51] indicated a positive and one [12] a non-significant relationship between the foreign partner´s size and IJV performance. One possible explanation for the negative relationship is that larger firms have made relatively more unrelated types of FDIs and in this kind of FDIs/IJVs the performance has often been poorer than in related types of FDIs/IJVs. Another explanation is that larger firms may have greater pressure to integrate various foreign units more tightly to their global networks than SMEs and therefore they more often buy the share(s) of the other partner(s) causing greater instability than in IJVs by SMEs. Based on above it seems that there does not exist any direct relationship between size of the foreign partner and IJV performance.

H 1 There is no direct relationship between the size of the foreign partner and IJV performance.

One aspect of experience is the **target country specific experience**. Target country specific experience should reduce uncertainty related to the operation environment and in this way increase the possibilities for better performance. However, target country specific experience may also reduce the need for a local partner after the starting period of the operation. The relationship has been reviewed in five studies from which three indicate support for a positive and one for a negative relationship. In one study no statistically significant relationship could be found. Of the five studies three have an Asian focus. The results in them are very mixed: Makino [50] found support for a positive relationship, Makino and Delios [51] for a negative relationship and Chen, Hu & Shieh [12] did not found any relationship between target country specific experience and IJV performance. Lasserre [38] analysed in his study the influence of earlier IJV experience in Asian countries on IJV performance, but no statistically significant relationship was found. Because theoretically experience should lead to better performance and in total there is more support for a positive influence, we expect that:

H 2 Target country specific experience has a positive influence on IJV performance.

An issue of greater interest related to partner selection has been the presence of an **overlap between business operations of the foreign partner and the IJV and those of the foreign partner and of the local partner.** Business field related experience reduces the amount of uncertainty and should therefore improve the possibilities for better performance. Unrelatedness of the operation to the foreign partner increases uncertainty and if the foreign partner does not have any target country specific experience the risks related to the IJV are especially high. Relatedness between the IJV´s business and the parent´s business should facilitate the transfer of tacit knowledge due to similarity in organizational processes [62]. Transfer of tacit knowledge is likely to be a key source of synergies in several inter-firm relationships [24, 72]. Furthermore, due to similarity with the parent, related IJVs are more likely to be tightly integrated with their parents which should increase possibilities for better performance e.g. in low-cost supply units (either for one of the parents or both of them). Finally, in some Asian countries like in China, the host governments view related types of units more favourably than unrelated types of units and grant them preferential treatments. In general the results in sevaral studies also confirm that the performance has been better/probability of divestment lower in related than in unrelated types of FDIs (see e.g. [40, 25 and 76]).

In an IJV context the influence of the overlap of the fields of industries between the foreign partner and IJV performance have been analysed in eleven studies and the respective related to the partners fields of businesses in nine studies. Related to the overlap of business fields of the foreign partner and IJV seven of the studies indicated support for a positive relationship, three for a negative relationship and in one study no relationship was found. Four of those studies have an Asian focus. In three of them support for a positive relationship was found [44, 45 and 47], and in one study no relationship was found [56]. What concerns the influence of the overlap between partners´ industries the results are more surprising. In five of the nine studies a negative relationship, in two studies a positive relationship, and in two studies no relationship was found. In Asian context the overlap between partners´ industries has been analysed in only one study where a negative relationship was found [73]. One explanation for the negative findings in several studies is that the performance has been measured often using stability as the measure. If both partners are operating in the same field this means that they are more or less competitors and in order to increase market power and better integrate all foreign units to their global networks they easily tend to increase their ownership in the IJV or buy the other partner totally out of the venture increasing therefore instability. If the operations of the local partner are partly or totally different to those of the foreign partner, the foreign partner apparently needs more the contribution of the local partner which may increase the stability in the ownership of the IJV. Thus, in summary for the influence of overlap between foreign partners and IJV´s business field the empirical results give clearly more support for a positive relationship. For the influence of the overlap between business sectors of the partners´ the results are more surprising. However, there seems not to be very good explanations for the latter findings. Based on the several arguments for better performance in related than in unrelated IJVs we expect that:

H 3 There is a positive relationship between relatedness of the IJV and performance of the unit.

Cultural distance between partners and its impact on IJV performance has so far been the most commonly reviewed variable. The distance has usually been expressed multi-dimensionally (based on Hofstede´s [28] four cultural dimensions and index developed by Kogut and Singh [35]). Cultural similarity decreases problems caused by cultural issues – e.g. different norms of behavior and productivity, measurement and goals related to performance - and should facilitate trust and cooperation between partners. Therefore a negative relationship between cultural distance and IJV performance could be expected. Twelve of the 27 studies including cultural distance also give support to the expectation of a negative relationship between this distance and IJV performance. In five studies no relationship was found while in as many as ten studies support for a positive relationship between cultural distance and IJV performance was found. Six of the studies have had an Asian focus. In total and within the Asian context, the results have also been mixed: in one study a non-significant relationship was found [47], two studies indicate support for a positive relationship [46, 56] and three studies for a negative relationship [31, 41, 65]. As explanations for the positive relationship it has been proposed that partners from culturally distant countries might have more to learn from each other and the that the potential opportunities to realize synergies may be quite great because of different kinds of strengths between Western and Asian companies (see [56]).

Barkema and Vermeulen [5] tried to analyse in more detail the impact of culture on IJV performance. Using the five different cultural dimensions by Hofstede - power distance, uncertainty avoidance, individualism, masculinity, and long term orientation – the authors expected that there exists differences in the impact of various dimensions. Differences in uncertainty avoidance are difficult to cope with because they imply differences in how people perceive opportunities and threats in their environment and how they act upon them [66]. In high uncertainty avoidance countries organizations tend to respond to uncertainty by building up a system of high formalization and hierarchy. In low uncertainty avoidance countries people are more attracted to flexible, ad hoc structures that leave more room for improvisation and negotiation. Differences in uncertainty avoidance lead to differences in how partners perceive and respond to events in the environment of the IJV, which will likely breed disagreement and disputes between the partners, and have a detrimental impact on the IJV´s performance. Power distance and individualism directly bear on issues of internal integration and influence relationships with personnel, such as the choice of control forms, reward systems, and so on (see e.g. Hofstede [28]). Management of personnel is usually one of the first activities to be left to the local partner. There is also evidence that MNCs do not transfer cultural values related to power distance and individualism to their foreign subsidiaries [68]. Thus tensions between the partners with differences along these dimensions may be avoided. Hofstede [29] and Shenkar and Zeira [67] suggest that having partners from both "feminine" and "masculine" cultures may even benefit the IJV. The aggressive attitude of one partner and the relationship orientation of the other may complement each other rather than collide. The above discussion suggests that differences in uncertainty avoidance would be more important than the other three dimensions. The empirical results by Barkema and Vermeulen [5] supported the expectations: uncertainty avoidance and long-term orientation had greater differential negative impact on IJV survival than masculinity, while the two other dimensions (individualism and power distance) had no impact.

What concerns the Asian context it can be said that all potential Asian cultures have rather similar cultural profile. This profile includes rather few layers of decision-making, more risk taking, greater group emphasis, and higher concern for relationships [71]. In IJVs between European and Asian firms the clearest incompatibility is in indiviualism and group orientation. Although there is not so clear evidence about the relationships (see above), however, somewhat more studies give support for a negative relationship between cultural distance and IJV performance. Therefore we expect that:

H 4 A high cultural distance between the home country of the foreign partner and target country of the unit has a negative impact on IJV performance.

H 5 Differences in uncertainty avoidance rather than differences in power distance, individualism, and masculinity have a negative impact on IJV performance.

Number of partners could also be expected to have an influence on IJV performance. The number of partners may be expected to affect coordination costs and managerial complexity of the unit. Thus, one would expect that the greater the number of partners in a IJV, the greater the chance for poorer performance/instability of the unit. Interestingly, the results indicate a negative relationship in one study whereas in three studies no relationship between number of partners and IJV performance was found. The influence has been analysed in Asian context only in the study by Hu and Chen [31] where no relationship was found. It may be that in cases of three or more IJV partners the benefits of extra partners in the form of financial support or good relationships with important governmental institutions or distribution outlets have been overriding the drawbacks of additional partners in the IJV. Thus we expect that

H 6 The number of partners does not significantly influence the IJV performance.

One of the most commonly reviewed variables so far has been the influence of the **distribution of ownership** in the IJV. According to Killing [33] the dominance of one partner will increase stability, because effective control will enable the parent to manage the IJV as a wholly owned subsidiary, avoiding the managerial costs inherent in a IJV. Thus it reduces transaction costs and stabilize the IJV. However, Beamish [2] and Blodgett [9] argue that roughly equal equity shares will result in greater stability because the partners are equally committed to the JV and both partners possess roughly equal bargaining power. **Dominant partner ownership** has been included in 16 studies from which nine report nonsignificant relationship with IJV performance. However, in four studies a positive relationship and in three studies a negative relationship has been found. Three of the studies analysing the relationship between distribution of ownership and IJV performance have had an Asian focus. In two of them a positive relationship was found [39, 47] and in one a non-significant relationship [42].

Killing [33] has argued that dominant-parent ventures would be expected to be more successful than shared-management ventures because coordination between partners entails significant costs making many ventures transitional rather than stable arrangements. Dominant-parent IJVs might reduce the risks associated with coordination and thus minimize the transaction costs and stabilize the IJV. The negative relationships have been explained by the view that dominance by one parent might frustate the other parent and lead to lost opportunities to realize synergies, see [2, 3 and 9].The results can be combined with the findings in three additional studies where it was found that there had not existed any statistically significant relationship between 50-50 –ownership and IJV performance [15, 32, 69]. Thus, other issues than ownership distribution seem to have been more influential and/or the influence of ownership shares on IJV performance depends on other decisions made. Thus we expect that:

H 7 The ownership distribution of the IJV does not significantly influence the IJV performance.

The **age of the unit** may also influence the IJV performance. Young units may have problems because of "liability of newness". According to population ecologists the organization mortality rates tend to decrease with age [23]. This is because the external and internal legitimacy of the unit increases and the unit succeed to develop needed networks for the operation. On the other hand, "old" units are more likely than newly established units to produce and market products that are in the mature and declining stages of the product life cycle. This provides a rationale for divesting "old" units that may override even significant age-dependent barriers to exit [22]. During the years the probability that there exists changes in the strategies of partner companies increases, causing increasing probability to change the original ownership structure of the IJV. The relationship has been reviewed in 17 studies so far. In nine of them a positive relationship has been found and in eight studies no relationship between age and IJV performance was found. Of the 17 studies seven have an Asian focus. In six studies a positive relationship was found [31, 42, 45, 50, 51, 53], and in one study [38] no relationship between age of the IJV and IJV performance was found. The findings in some studies suggest that the impact of age, or timing of the IJV investment on performance is a little bit more complicated than a straight linear relationship. For instance Kogut [34] observes a dip in performance in years five and six. Based on view of the population ecologists and earlier empiral findings both in general and in Asian context, for the empirical part of the paper we expect:

H 8 There is a positive relationship between age of the IJV and performance of the unit.

Sample and Operationalization of Variables

Based on various data sources (business journals, company reports, earlier surveys made by the author) 110 manufacturing IJVs established by Finnish companies in various Asian countries during 1975-2001 were identified. This represents some 15 % of all manufacturing IJVs established by Finnish companies in foreign countries in the same period. Because only few of them were made in the 1970s and a requirement of at least two years operation is needed before evaluating the performance, IJVs established in 1980-1999 was selected as a target group. In total 101 of the identified 110 were made in this period. The final sample was 98 units, because in three cases all the needed information could not be found.

The operationalizations of the variables used in the analysis are presented in Table 3. As may be expected, the highest correlations were between cultural distance and various dimensions of cultural distance. Otherwise the correlations were rather low indicating no severe problems with multicollinearity. The performance of the unit was evaluated in two different ways: 1) the IJV was still in Finnish ownership vs the unit was divested and 2) the IJV was still in the Finnish ownership and no greater changes in the ownership share vs greater. In the second alternative greater changes in ownership refer to changes of at least 20 % in the ownership or smaller changes where the minority changed to 50-50 ownership or to majority ownership or vice versa. The IJVs were established by 41 Finnish firms (over five IJVs only by Nokia) in twelve Asian countries China (27 units) and Malesia (21 units) as the main target countries.

Table 3. OPERATIONALIZATIONS OF THE VARIABLES

PARENT SIZE (PSIZE) : Total sales of the company in the year preceding the FDI changed to FIM values in 2001. A logarithmic version is taken because it may be expected that the influence is not linear.
TARGET COUNTRY EXPERIENCE (TCEXP): Whether the foreign partner had an earlier unit in the target country or not; if yes, the length of experience in years.
RELATEDNESS OF THE UNIT (URELATEDNESS): Whether the foreign company had experience from the same SIC field of industry of the IJV (=1) or not (=0).
CULTURAL DISTANCE (CULTDIST): Cultural distance between Finland and the target country of the IJV based on four dimensions by Hofstede (1980) and the formula developed by Kogut & Singh (1988) using all countries for which Hofstede informs the values of the four cultural dimensions.
POWER DISTANCE (PDI), INDIVIDUALISM (IDV), MASCULINITY (MAS), UNCERTAINTY AVOIDANCE (UAI): Distance between Finland and the target country of the IJV along each of the four dimensions based on Hofstede (1980).
NUMBER OF PARTNERS (NUMPART): Number of partners in the IJV.
DOMINANT FINNISH PARTNER OWNERSHIP (DFPO): Whether the share of the Finnish partner was 51-94 (=1) or less (=0).
AGE OF THE IJV (AGE): Number of years from the establishment of the units to 2001 or to the divestment of the unit.

Results of the Empirical Part

As discussed above, the sample was 98 IJVs established in 1980-1999 by Finnish companies in various Asian countries. Two different criteria were used in the analysis of performance and performance related factors based on the first sample. Of the 98 IJVs 38 (38.8%) were later divested. Greater changes (a change of 20% or from minority to 50-50 or majority or vice versa) had existed in 24 cases (24.5%). In total greater changes or divestment had existed in 53 cases (54.1%) i.e. in nine cases there had existed greater changes in the Finnish ownership before divesting the unit. Thus the divestment and instability rates in Finnish IJVs in Asian countries have been rather high (compare figures to the results in Table 1). The changes in ownership were in two cases towards decreased ownership and in 18 cases towards increased ownership. In 12 cases the IJV had later changed to a WOS of the Finnish firm. Thus the changes were in line with earlier findings concerning later changes in the ownership (see e.g. Gomes-Casseres [20] and Larimo [36]).

As discussed earlier in the analysis of the first sample logistic regression was used. The Nagelkerke R square value of the model is good (59.8 %). The results (see Table 4) of the first logistic regression model indicate that five of the reviewed 11 variables had significantly influenced the performance (that the unit was existing in

2001). Although cultural distance had not significantly influenced the performance, three dimensions of culture were important: A greater distance in individualism had had a negative impact on the performance (probability of existence) whereas a greater distance in two other cultural distance dimensions - masculinity and uncertainty avoidance – had had a positive impact on performance, ie. had decreased probability of divestment. Related to MAS and UAI variables the results were against expectations and also related to IDV it was expected that it would be insignificant. The two additional significant variables were DFPO and AGE variables. Against expectations DFPO had influenced positively performance. Thus the results support earlier findings by Lecraw [39] and Luo [47] that foreign majority owned units have performed better than shared units or minority foreign owned units. Instead AGE variable had the expected positive sign. Thus the possibilities for survival seem to increse if the IJV will survive the first years of the operation. The finding is in line with results in several earlierstudies [see 31, 42, 45, 50, 51, 53].

The results in the second logistic regression (Nagelkerke R square still rather good 46.8%) were partly similar and partly different to those in the first model. As in the first model DFPO, IDV, MAS, and UAI were also significant in the second model. All four variables had also respective signs as in the first model. The significance of DFPO had somewhat decreased and the influence of MAS respectively increased compared to the first model. In addition three other variables had statistically significantly influenced the performance: PSIZE, CULTDIST, and PDI. The negative sign for PSIZE indicates that smaller Finnish firms had performed better in their IJVs in Asia than larger ones. Thus the result is against our expectation of non-significant relationship between PSIZE and IJV performance. The negative sign for CULTDIST supports the view of greater management etc. problems along with greater cultural distance (in line with [31, 41, 65]).The significance of PDI variable indicates that all four dimensions of culture have had a significant influence when the IJV performance was measured by stability. The variable has against expectations a positive sign. The results seem to differ somewhat from the results by Barkema and Vermeulen [5]. Thus there is clearly a need for further analysis of the role and influence of various dimensions of culture on IJV performance.One of the significant variables in the first model – AGE – was not significant in the second model. This indicates that there may also exist very rapidly changes in the ownership distribution between

Table 4. RESULTS OF THE BINOMIAL LOGISTIC REGRESSION MODELS (N=98)

		Performance A*		**Performance B***	
VARIABLE	**EXPECTED SIGN**	**COEFFICIENT**	**LEVEL OF SIGNIF.**	**COEFFICIENT**	**LEVEL OF SIGNIF.**
Constant		-13.01	0.005	-10.411	0.059
Size of the Finnish partner (PSIZE)	0	-0.008	0.981	-0.599	0.065 a
Target country experience (TCEXP)	+	0.196	0.191	0.122	0.314
Relatedness of the unit (to Finnish partner)	+	7.654	0.709	7.69	0.712
Cultural distance (CULTDIST)	-	-0.818	0.336	1.513	0.084 a
PDI	0	0.064	0.174	0.104	0.067 a
IDV	0	-0.086	0.025 b	-0.079	0.021 b
MAS	-	0.093	0.093 a	0.155	0.010 c
UAI	-	0.081	0.002 c	0.064	0.018 b
Number of partners (NUMPART)	0	0.845	0.22	-0.338	0.532
Dominant Finnish partner ownership (DFPO)	0	1.557	0.018 b	1.021	0.076 a
Age of the unit (AGE)	+	0.34	0.001 c	0.044	0.474
% Correct observations		79.6		70.4	

Significance levels:a = p0.1 b = p=0.05 c = p=0.01 (one tailed)
* Performance A. Existing vs. divested IJVs
* Performance B. The Existing and no greater changes in Finnish ownership vs.divested or greater changes in ownership

partners and AGE variable is therefore no longer as important when the performance is measured by using stability as the evaluation criteria. This supports findings by Lasserre [38].

The results in both models indicated that three of the variables: URELATEDNESS, TCEXP, and NUMPART, were not significant. The insignificance of the URELATEDNESS variable may be partly dependent of the fact that there were very few totally unrelated types of investments from the point of view of the Finnish partner. Although also Pangarkar and Lee [56] found in their study related to IJVs in Asian countries that the variable had non-significant influence on IJV performance. What concerns TCEXP also Chen, Hu & Shieh [12] found in their study that target country specific experience did not influence significantly the IJV performance and Lasserre [38] found that this was the case also with earlier IJV experience in Asian countries. Thus other aspects related to the partners and IJV seem to be more important. Finally, as also expected, the number of partners did not significantly influence the performance of the IJV. Thus in some cases it is good to have more partners if they all fulfil their roles in the operation whereas sometimes it is better to have only two partners.

Conclusion

The role of IJVs in international business operations has been significant and there are no signs that their role would, at least significantly decrease in future. The situation may be in fact the opposite. Although the use of IJVs is very common, the failure rate of those ventures is high. The great importance and high failure rates of IJVs raises the question of how to evaluate IJV performance and how to secure success in IJV operations? Furthermore, it seems that there is variation in the results depending on the measure of performance. The goal of this paper was to make a review of previous studies analysing the IJV performance especially in an Asian context and to develop hypotheses about the relationships between various identified variables and IJV performance to be tested in the empirical part of the paper. An additional goal was to review how much variation may depend on the measure of IJV performance.

Based on earlier reviews of empirical IJV studies some of the most commonly analysed variables were chosen to be included in this study. Related to cultural distance the analysis of the influence of the four dimensions of culture by Hofstede [28] was added. In total eight hypotheses were developed based on theoretical aspects and findings in earlier empirical studies. Of the earlier studies 25 had been analysing IJVs in various Asian countries (mainly in China). The empirical part of the paper was based on IJVs established by Finnish companies in various Asian countries. The sample was based on statistical information about 98 units established between 1980-1999. Binomial logistic regression was used to analyse the influence of various variables on IJV performance. As the measure of performance two measures were used: 1) whether the IJV was still existing or divested, and 2) whether the IJV still existed and absence of great changes in the distribution of ownership vs unit divestment or existence of great changes (usually changes of more than 20%).

The results indicated that 38.7 % of the units were divested and that greater changes in ownership or divestment had existed in 52.3% of the units. Thus the failure and instability rates in the sample were rather high. Three different dimensions of culture – individualism, masculinity, and uncertainty avoidance – and dominant Finnish ownership had significantly influenced the IJV performance. Individualism had had a positive influence, the two others a negative influence on IJV performance. The results did not totally coincide with the eaerlier findings by Barkema and Vermeulen [5]. The results related to the positive influence of dominant foreign parent on performance in line with earlier findings by Lecraw [39] and Luo [47]. Based on the first performance criteria in addition the age of the unit had positively influenced the performance. However, when greater changes in the ownership were also included (second performance criteria) the age variable was non-significant. Instead parent size, cultural distance and also the fourth dimension of culture – power distance – had significantly influenced the performance. The influence of the parent size was negative and the finding was opposite to some earlier results [51 & 73]. The earlier findings related to the influence of cultural distance have been very mixed. The results in this study supported our hypothesis and were in line with findings in three earlier IJV performance studies in Asian context [31, 41, 65] indicating that greater cultural distance leads to greater management etc. problems decreasing the IJV performance. The statistical significance of all four dimensions of culture in the second model indicate the great importance of the planning and management of culture related questions in IJVs (especially in Asian context). Three of the reviewed variables: target country experience, relatedness of the unit, and number of partners were statistically non-significant in both models. In the case of number of partners the non-significance was supporting the hypotheses presented, in the two other cases a positive influence was expected. In the case of reladness the results may have been influenced by the very limited amount of totally unrelated types of IJVs in the sample.

In summary the results indicate that the measure of performance seems to have an influence on the results. Thus if possible, one should try to have several measures of performance. Another contribution of the study is that the influence of several of the reviewed variables have so far been analysed very limitedly in an Asian context. Especially information about IJV behavior and performance of firms originating from Northern European countries in Asian markets is extremely limited. Because of lack of information several potentially influencing variables like size of the IJV, size symmetry between partners, earlier collaboration and motives for establishment could not be included. In future the integration of those variables would be of interest. In future of interest would also be a comparison of results between IJVs established in Asian countries vs other locations (e.g. in Central and Eastern Europe or in Europe) or between IJVs located in various main target countries in Asia. Also an analysis of IJV behavior and performance in units established by Finnish vs by firms from other Nordic countries would be of interest because of the great similarity of the Nordic countries in several respects. Finally, as discussed in the paper, the relationship between some of the variables included in the study (e.g. size of the foreign partner) is perhaps not so linear or direct. Therefore more analysis of the possible unlinear and indirect effects between various variables and IJV performance is needed.

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References

[1] Anderson, E. (1990). Two firms, one frontier: On assessing joint venture performance. Sloan management review 31:2, 19-30.

[2] Beamish, P.W. (1985). The characteristics of joint venture in developed and developing countries. Columbia Journal of World Business 20:3, 13-19.

[3] Beamish, P. W. (1988). Multinational joint ventures in developing countries. New York: Routledge.

[4] Beamish, P. W. & A. C. Inkpen (1995). Keeping international joint ventures stable and profitable. Long Range Planning, Vol 28:3,

[5] Barkema, H. & F. Vermeulen (1997). What differences in the cultural backgrounds of partners are detrimental for international joint ventures? Journal of International Business Studies 28:4, 845-864.

[6] Beamish, P. W. & J. P. Killing (1997c) (editors). Cooperative strategies: Asia Pacific perspectives. San Francisco: New Lexington Press.

[7] Bell, J. (1996). Control and ownership in international joint ventures. In "Choice and Management of Entry Strategies in International Business" ed. by Larimo J. and T. Mainela p. 34-60. Proceedings of the University of Vaasa, Reports 18.

[8] Blanchot, F. & U. Meyer-Hofer (1997). Empirical literature on joint venture success: A review of performance measures and of factors affecting longetivity. In "Global business in the information age" edited by Macharzina K., M.-J. Oesterle and J. Wolff, p. 901-931, proceedings of the 23rd Annual EIBA Conference, Stuttgart, December 1997.

[9] Blodgett, L. L. (1992). Factors in the instability of international joint ventures. An event history analysis. Strategic Mangement Journal 13: 475–481.

[10] Calantone, R. & Y. Zhao (2000). Joint ventures in China: A comparative study of Japanese, Korean, and U.S. Partners. Journal of International Marketing 9:1, 1-23.

[11] Contractor F. J. & P. Lorange (1988). Why should firms cooperate? The strategy and economics basis for cooperative ventures. In: "Cooperative strategies in international business", edited by Contractor F. J. and P.Lorange, p. 3-28. Lexington, MA: Lexington books.

[12] Chen, H., M.Y. Hu & J.C.P. Shieh (1991). The wealth effect of international joint ventures: The case of U.S. investment in China. Financial management 20:4, 31-41.

[13] Chowdhury, J. (1992). Performance of international joint ventures and wholly owned foreign subsidiaries: A comparative perspective. Managerial International Review, 32: 115-133.

[14] Demirbag, M. & H. Mirza (2000). Factors affecting international joint venture success: An empirical analysis of foreign-local partner relationships and performance in joint ventures in Turkey. International Business Review 9:1, 1-35.

[15] Erden, D. (1997). Stability and satisfaction in cooperative FDI. In "Cooperative strategies: European perspectives", edited by Beamish P.W. and J.P. Killing, p. 158-183. San Francisco: New Lexington Press.

[16] Franko, L. W. (1971). Joint Venture Survival in Multinational Corporations. New York: Praeger Publishers.

[17] Geringer, J.M. (1988). Joint venture partner selection: Strategies for developed countries. Westport, CT: Quorum books.

[18] Geringer, J. M. & L. Hebert (1989). Control and performance of international joint ventures. Journal of International Business Studies 22:2, 235-254.

[19] Geringer, J. M. & L. Hebert (1991). Measuring performance of international joint ventures. Journal of International Business Studies 22: 249-263

[20] Gomes-Casseres, B. (1987). Joint venture instability: Is it a problem? Columbia Journal of World Business 22:2, 97-102.

[21] Habib, G. H. & J. J. Burnett (1989). An assessment of channel behavior in an alternative structural arrangement: The international joint venture. International Marketing Review 6:3, 7-21.

[22] Harrigan, K.R. (1985). Strategies for joint ventures. Lexington, MA: Lexington books.

[23] Hannah, M.T. & J. Freeman (1984). Structural inertia and organizational change. American sociological review 49, 149-164.

[24] Hedlund, G. H. (1994). A model of knowledge management and the N-form corporation. Strategic management journal 15, 73-90.

[25] Hennart, J.-F., D.-J. Kim & M. Zeng (1998). The impact of joint venture status on the longevity of Japanese stakes in U.S. manufacturing affiliates. Organization Science 9:3, 1-14.

[26] Hennart, J.-F. & J. Larimo (1998). The impact of culture on the strategy of multinational enterprises: Does national origin affect ownership decisions? Journal of International Business Studies 29:3, 515-538.

[27] Hennart, J.-F., T. Roehl & D. Zietlow (1999). "Trojan horse" or "work horse"? The evolution of U.S. – Japanese joint ventures in the United States. Strategic Management Journal 20:1, 15-29.

[28] Hofstede, G. (1980). Culture's consequences: International differences in work-related values. Saga Publications, Beverly Hills.

[29] Hofstede, G. (1985). The interaction between national and organizational value systems. Journal of Management Studies, 22, 347-357.

[30] Hu, M.Y., H. Chen & J. C. Shieh (1992). Impact of U.S.-China joint ventures on stockholders wealth by degree of international involvement. Management International Review 32:2, 135-148.

[31] Hu & Chen (1996). An empirical analysis of factors explaining foreign joint venture performance in China. Journal of Business Research 35: 165-173.

[32] Kachra, A. & L. Hebert (1999). Managerial behavior, IJV structure and venture performance. Working paper 199-22. Richard Ivey School of Business, University of Western Ontario, London, Ontario, Canada.

[33] Killing, J. P. (1983). Strategies for Joint Venture Success. New York: Routledge.

[34] Kogut B. & Singh (1988). Entering the United States by joint venture. In "Cooperative strategies in international business" edited by Contractor, F. and P. Lorange. Lexington, MA: Lexington Books.

[35] Kogut, B. (1988). Joint venture: theoretical and empirical perspectives. Strategic Management Journal, 9: 319-332.

[36] Larimo, J. (1993) Foreign direct investment and performance: An analysis of Finnish direct manufacturing investments in OECD countries. Acta Wasaensia No. 32, University of Vaasa.

[37] Larimo, J. (2001). International joint venture performance: An integrative review of the empirical literature in 1970-2001. Paper presented at the 26th annual EIBA conference in Paris.

[38] Lasserre, P. (1997). A contribution to the study of joint ventures in Asia Pacific. INSEAD working paper 97/14/ABA, Fontainebleau.

[39] Lecraw, D. (1984). Bargaining power, ownership, and profitability of transnational corporations in developing countries. Journal of International Business Studies 15:1, 27-32.

[40] Li, J. (1995) Foreign entry and survival: Effects of strategic choices on performance in international markets. Strategic management journal 16, 333-351.

[41] Liu X., Y. Yang & Y. Wei (1999). Control and performance of EU-China joint ventures: The perspective of Chinese Managers. Proceedings of the 26th Annual AIB Conference, Stirling, April 1999.

[42] Luo, Y. (1995). Linking strategic and moderating factors to performance of international joint ventures in China. The Mid-Atlantic Journal of Business 31:1, 5-23.

[43] Luo, Y. (1995). Business strategy, market structure, and performance of international joint ventures: The case of joint ventures in China. Management International Review 35:3, 241-264.

[44] Luo, Y. (1997). Partner selection and venturing success: The case of joint ventures with firms in the People´s Republic of China. Organization Science 8:6, 648-662.

[45] Luo, Y. & M. Chen (1997). Business strategy, investment strategy, and performance of international joint ventures: The case of China. In "Cooperative Strategies: Asian Pacific Perspectives" edited by Beamish P.W. & J.P. Killing, p. 341-374. San Francisco: New Lexington Press.

[46] Luo, Y., O. Shenkar & M-K. Nyaw (2000). A Dual Parent Perspective on Control and Performance in International Joint Ventures: Lessons From a Developing Economy. Journal of International Business Studies 32:1, 41-58.

[47] Luo, Y. (2002). Product diversification in international joint ventures: Performance implications in an emerging market. Strategic Management Journal 23, 1-20.

[48] Lyles, M.A. & Salk (1996). Knowledge acquisition from foreign parents in international joint ventures: An empirical examination in the Hungarian context. Journal of International Business Studies (special issue) 877-903.

[49] Lyles, M., M. Sulaiman, J. Barden & R. Kechik (1999). Factors affecting international joint venture performance: A study of Malaysian joint ventures. Journal of Asian Business 15:2, 1-20.

[50] Makino, S. (1995). Joint venture ownership structure and performance: Japanese joint ventures in Asia. Unpublished Ph.D. dissertation, University of Western Ontario, London, Ontario, Canada.

[51] Makino, S. & A. Delios (1996). Local knowledge transfer and performance: Implications for alliance formation in Asia. Journal of International Business Studies (special issue) 905-927.

[52] Millington, A. I. & B. T. Bayliss (1997). Instability of market penetration joint ventures: A study of UK joint ventures in the European Union. International Business Review 6:1, 1-17.

[53] Namakura, M. (1991). Modeling the performance of U.S. direct investment in Japan: Some empirical estimates. Managerial and Decision Economics 12, 103-121.

[54] Olk, P. (1997). The effect of partner differences on the performance of R&D consortia. In "Cooperative strategies: North American Perspectives" edited by Beamish P.W. and J. P. Killing, p. 133-159. San Francisco: New Lexington Press.

[55] Osland , G. E. (1994). Successful operating strategies in the performance of U.S. – China joint ventures. Journal of International Marketing 2:4, 53-78.

[56] Pangarkar, N. & H. Lee (2001). Joint venture strategies and success: An empirical study of Singapore firns. Journal of Asian Business, 17:3, 1-13.

[57] Parkhe, A. (1993). Partner nationality and the structure-performance relationship in strategic alliances. Organization Science 4, 301-324.

[58] Parkhe, A. (1996). International joint ventures. In: "Handbook for International Management Research", edited by Punnett B.J. & O. Shenkar, p. 429-452. Cambridge, MA: Blackwell Business.

[59] Phatak, A. & J. Chowdhury (1991). IJV success in developing countries: An empirical testing of a predictive model based on national partner´s responses. Paper presented at the AIB Annual Conference, Miami, Florida, United States.

[60] Pothukuchi V., F. Damanpour, J. Choi, C. Chen & S. Park (2002). National and organizational culture differences and international joint venture performance. Journal of International Business Studies 33:2, 243-265.

[61] Robson, M. & C. Katsikeas (1998). Determinants of international joint venture performance: An integrative review of empirical literature. In International Business and Emerging Markets Conference Proceedings of the 25th Annual Conference of Academy of International Business UK Chapter ed. By C. Millar and C. Choi p. 566-588. City University Business School, London.

[62] Saxton, T. (1997). The effects of partner and relationship characteristics on alliance outcomes. Academy of Management Journal 40:2, 443-461.

[63] Schaan, J.-L. (1984). Parent Control and Joint Venture Success: the Case of Mexico. Ann Arbor, Michigan.

[64] Selwyn, M. (1991). Making marriages of convenience. Asian Business 27:1, 26-28.

[65] Sim, A. B. & M. Y. Ali (2000). Determinants of stability in international joint ventures: Evidence from a developing country context. Asia Pacific Journal of Management 17, 373-397.

[66] Schneider, S. C. & A. De Meyer (1991). Interpreting and responding to strategic issues: The impact of national culture. Strategic Management Journal 12, 307-320.

[67] Shenkar O. & Y. Zeira (1992). Role conflict and role ambiguity of chief executive offices in international joint ventures. Journal of International Business Studies, 23:1, 55-75.

[68] Soeters, J. & H. Schreuder (1988). The interaction between national and organizational cultures in accounting firms. Accounting, Organizations and Society, 13: 75-85.

[69] Soonkyoo, C. (2000). Partner nationality, network relations, and venture survival: The case of Japanese cooperative ventures in North America. Paper presented at AIB Annual Meeting, Phoenix, Arizona, Nov 2000.

[70] Steensma H. K. & M. A. Lyles (2000). Explaining IJV Survival in a Transnational Economy through Social Exchange and Knowledge-Based Perspectives. Strategic Management Journal 21, 831-851.

[71] Swierczek, F. & G. Hirsch (1994). Joint Ventures in Asia and Multicultural Management. European Management Journal 12:4, 197-209.

[72] Teece, D. (1997). Technological transfer by multinational firms: The resource cost of international technological transfer. Economic journal 87, 242-261.

[73] Tomlinson, J. W. C. (1970). The Joint Venture Process in International Business: India and Pakistan. Cambridge: MIT Press.

[74] Wille, J. R. (1988). Joint venturing strategies. The handbook of joint venturing. Homewood, IL: Dow Jones-Irwin.

[75] Willet, H. (1992). High expectations foil many US/Asian joint ventures. Electronic Business, 18 (Jun), 7.

[76] Yamawaki (1995). Exit of Japanese multinationals in U.S. and European manufacturing industries. Unpublished working paper. Department of Economics, Catholic University of Louvain, Belgium

[77] Yan, A. & B. Gray (1994). Bargaining power, management control, and performances in United States-China joint ventures: A comparative case study. Academy of Management Journal 37: 1478-1517.

[78] Yan, A. & B. Gray (2001). Antecents and effects of parent control in international joint ventures. Journal of Management Studies 38:3, 393-416.

International Mutual Fund Economies of Scale: Evidence on Expenses, Subsidization, Management and Performance

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Abstract

This paper examines economies of scale in international and global equity mutual funds. The influence of scale economies on fund expenses and performance is examined. In addition, analysis is conducted to determine the extent, if any; smaller funds are subsidized by their fund families through access to community property, databases and analysis. The impact of management experience and structure on expenses and performance is measured in the context of fund assets under management. The evidence regarding economies of scale in the operations of mutual funds is mixed. Larger funds on average have lower management and operating expenses as well as lower 12b-1 fees. However, they have higher average loads than their smaller counterparts. In addition, they have lower turnover ratios. Also, smaller funds despite higher expense ratios do as well as or better than their larger peers from the same objective on a risk-adjusted basis in less developed thinly traded markets. The evidence on fund subsidization is also mixed. Smaller broad based global and international funds contained within larger fund complexes tend to have lower fees. The Energy objective with a specific focus on a particular industry segment that is widely held by large numbers of domestic, international, and global funds tends to have lower fees. On the other hand, China and Japan funds are generally contained in larger fund families, yet they have on average higher expenses. The results on management experience indicate that larger funds possess more tenured management at their helm and also have a higher incidence of team based management structure.

In their seminal paper regarding mutual fund economies of scale, Indro, Jiang, Hu, and Lee (1999) ask "Does fund size matter?"[1] Theory holds that as the size of the fund increases, the influence of quasi-fixed costs associated with fund operations and management on annual fund expenses and subsequently performance diminishes. However, at some point in the growth of fund assets, the average cost curve starts to rise as the fund becomes unwieldy causing diseconomies from additional growth.

Evidence of this concern is apparent to mutual fund management. According to Saunders-Egodigwe and Franecki (1998), mutual funds closing their portfolios to new investment reached record proportions in 1998. Management would not say no to new investment unless they believed that it adversely impacted the performance and reputation of the fund.[2] As the fund becomes too large, it becomes difficult to trade large blocks of stock at reasonable spreads.[3]

However, fund size may not be a significant factor for small funds associated with large families. Ang, Chen, and Lin (1999) cannily point out that these smaller funds may benefit from information sharing or subsidization in the form of common datasets shared by funds, fund family financial analysts and economics experts, and general fund family meetings and information sharing sessions on micro- and macro-economic issues. Their analysis shows that fund families with more funds in their stable provide shareholders with higher returns. However, they also find that this higher performance may be attributed to greater risk taking behavior and higher portfolio turnover.

We expand the analysis of Indro, Jiang, Hu, and Lee (1999) to answer the question:

? What influence does the fund size and total assets under management by the fund family have on fund expenses and subsequent performance of international mutual funds?

We partitioned the sample by more specific investment objectives rather than broad category classifications to glean more specific analysis and interpretation of results regarding international fund economies of scale and its influence on expenses and performance.

Other key issues addressed in this analysis include subsidization of smaller funds, fund management experience and structure, and the effects of specific versus broad objectives on fund size, expenses and performance.

Similar to Ang, Chen, and Lin (1999), we examine whether these funds are subsidized by their families providing a greater ability of smaller funds operating within the context of a larger fund family to access community property and analysis thus providing them advantages that funds from smaller less diversified families encounter. Or, whether the increased returns produced by these funds results from greater risk taking and more trading activity. The key question addressed in the subsidization analysis is:

? Do large fund families subsidize small funds within the family to keep expenses low for these funds while they are growing thus making them more competitive in the market?

In addition, the utilization of international mutual funds allows us to examine other size and scope issues surrounding fund expenses and performance. Commons sense indicates that it is easier to research and manage assets of a similar nature and context. Our dataset contains a wide array of fund objectives whose focus ranges from Global, international, and regional to specific countries as well as specific industries. This conglomeration of different objectives creates other questions that will be addressed by this analysis.

? Do funds with more focused or streamlined investment objectives have smaller economies of scale than funds with more diverse investment objectives?

? Do smaller funds that face higher proportional operating costs engage in riskier trading strategies to make up for lack of scale?

Recent Evidence

Studies by both the Investment Company Institute (ICI) and the SEC also report evidence of fund economies of scale.

A 1999 ICI study utilizing general equity funds finds that large equity mutual funds lowered their operating expenses as assets surpassed the $500 million mark and had lower fees than their smaller counterparts. They further report that equity funds with assets in excess of $5 billion exhibit 50% lower average annual operating expenses than their less well-endowed counterparts claiming $250 million or less in assets.

Similarly, a study by the SEC's Division of Investment Management in 1999 indicates that a fund's operating expense ratio falls on average by 68 basis points as the total assets under management rises from $1 million to $10 million. Also, operating expenses fall by 75 basis points as assets rise from $1 million to $10 billion. The study also found that, ceteris paribus, a fund with 10 funds in its family had an operating expense ratio 14 basis points lower than a one fund family. A fund family with 100 funds in its stable reported operating expenses 28 basis points below that of single fund families. The implications of these findings are clear. As Walbert (1997) aptly points out, such differentials in economies of scale and product diversity are needed to survive in an industry that is becoming increasingly global in scope. Walbert cites a report by Goldman, Sachs & Company predicting that the money management industry will shrink to 20 to 25 mega players with in excess of $150 billion in assets under management in the coming years.

Rao (2001) points out that more assets under management generates more fees but these economies of scale in management means that actual operating costs do not increases at the same rate. In addition, Rao finds that the age of the fund also contributes to lower expenses indicating a learning curve or increased subsidization by more developed fund operations. The flood of new assets during the 1990s has led to substantial profit margins for funds as they have maintained annual management fees and operating costs at higher rates (Stanton 2000). Clearly, as Sirri and Tufano (1993) also point out, there is an advantage to size allowing fixed costs, shareholder reporting burden and the hurdles associated with nationwide marketing and distribution of fund shares to be spread over a greater asset base

The costs encountered by smaller fund operations run the gamut. Brent (2001) indicates that as web technology becomes more complex and expensive to develop; smaller funds will find yet another area where they will experience difficulty competing with larger firms. Larger fund management companies are forcing new technologies onto the web and innovating on a daily basis. This constant pressure to upgrade the technology and quality of information available to clients via the web further squeezes firms with significantly smaller asset bases and corresponding technology budgets.

Collins and Mark (1997) find that the optimal size for a multi-product fund complex ranges from $20 billion to $40 billion. Based on these numbers, they indicate that the average fund group could increase efficiency by growing assets. Furthermore, Elton, Gruber, Das and Hlavka (1993) find, mutual fund underperformance is positively correlated with fund operating expenses. If this trend continues into the future, failure to achieve sufficient growth may cause smaller funds to fail or be assimilated by larger more cost efficient fund operations that offer the same products at similar prices.

Mutual Fund Fees and Asset Size

Mutual fund fees generally fit into one of three categories. An initial sales fee (a.k.a. front-end load) is a fee deducted from the initial amount of the acquisition typically to cover selling expenses by paying out commissions to the financial advisors or brokers that sold the fund shares. The amount of the initial sales fee can range from as high as 8.5% are can go as low as 1% and is typically reduced for larger initial purchase amounts. Larger funds with more developed distribution systems and marketing campaigns may be able lower these fees. Through direct marketing to the retail consumer via television and print media, these larger fund complexes may force financial advisors and brokers to sell these funds because clients will demand them rather than less well-known or even unheard of smaller funds. Detrimental to both fund families and consumers, initial sales fees may encourage churning of client funds by financial advisors and brokers that will move accounts from one fund family to another to obtain additional sales fees.

The 12b-1 fee is another category of fee. This fee name derives from the section of the Investment Company Act of 1940 that created the fee by allowing mutual funds to charge marketing and distribution expenses including compensation to the financial advisor or broker that sold the fund to shareholders. The fee can go as high as 1% with no more than .75% annually of fund asset value going to marketing and distribution. The remaining .25% is allocated to whoever sold the fund. Typically, the financial advisors or brokers that sold the fund obtain a majority of this fee. Due to the limitations on this fee, differentials across different sized funds may be minimal. From a fund perspective, this fee encourages financial advisors and brokers to maintain the funds in the account to obtain an annuity of income from the investment that increases over time as the assets under management increase.

The third category of fee relates to the operation and management of the fund. These fees are also based on a percentage of assets under management and can range from a low of a few basis points for institutional shares of large index funds to several hundred basis points for retail funds. The management fee portion goes to pay the fund advisors and sub-advisors. The remainder covers the operations and administration of the fund including the payment of overhead to cover physical plant operations, payroll and other related expenses. Clearly, this fee should be most influenced by fund asset size.

Data and Methodology

The dataset consists of all international and global equity mutual funds provided on Steele Systems Mutual Fund Database for the Year 2000 that have at least 20 observations regardless of fund duplication in the dataset for different fee structures for a given international/global objective classification. The dataset is partitioned according to investment objective rather than by broad fund category to obtain a more detailed analysis providing a set of 13 different international and global stock mutual fund objectives for analysis.

Once the international fund dataset is separated according to objective, each objective group is broken into two groups.

1. Full Set: Contains all mutual funds in the objective including duplicated funds with different fee structures such as A, B, C, and I shares.
2. Trimmed Set: Contains only the fund with the lowest management fee and hence the best performance from the group of duplicated funds within an objective that share the same name and securities.[4]

Funds with only one fee structure are retained in the trimmed sample.

The trimmed set is constructed to strip away a large portion of the marketing costs such as 12b-1 fees, retail fund management fees and other additional operating expenditures to focus on the actual management costs associated with the security selection and asset allocation decision process.

Exhibit 1 contains a listing of the different investment objectives examined for this study along with sample sizes by objective for both the full and trimmed sample. As Exhibit 1 indicates, the full sample contained a total of 1,543 mutual funds across 13 different investment objectives. Once the sample was screened for duplications related to same funds having different fee structures, the dataset was reduced to 708 funds. The International Equity objective classification provides the largest selection of funds at 604. The Global Energy objective, on the other hand, provides the fewest at 21 and once duplications are eliminated, only 8 funds remain with a Global Energy objective.

Exhibit 1: FUND OBJECTIVES EXAMINED AND SAMPLE SIZES FOR FULL AND TRIMMED SETS OF EACH OBJECTIVE.

	Full Set	Trimmed Set
Asia w/ Japan	50	22
Asia w/o Japan	65	28
China	22	11
Europe	113	46
Global Asset Allocation	62	29
Emerging Markets	174	81
Global Energy	21	8
Global Equity	234	100
Global Small Cap	41	14
International Equity	604	300
International Small Cap	68	31
Japan	52	22
Latin America	37	16
Totals	1543	708

Notes:

Full Set: Contains all mutual funds in a specific objective including duplicated funds with different fee structures such
as A, B, C, and I Shares.

Trimmed Set: Contains only the funds with a given name in a specific objective that have the lowest management fees
and hence the best performance from the group of duplicated funds. Single funds without different fee structures are retained

Initial Evidence

First, for the initial analysis, the full and trimmed set of each objective are sorted into quartiles based on the individual fund asset size to ascertain the differentials in expenses, performance, and fund characteristics across different asset classes.[5] This allows for comparisons within each objective and for comparisons across objectives where the average asset size of the largest quartiles may be significantly different.

Average fund assets under management for each quartile within each objective of the full and trimmed sample are contained in Exhibit 2. The China objective quartile 1 of the full and trimmed sample contains the smallest average fund size at $0.5 million and 0.2 million under management while the largest quartile for both the full and trimmed sample is the Global Equity objective group at $2.7 billion and $4.5 billion respectively. The average across objectives for each quartile ranges from a low of $2.1 million for quartile 1 to $731.7 million for quartile 4 of the full sample. This range increases for the trimmed sample with the smallest quartile averaging $3.8

million and the largest averaging $1.3 billion. These figures indicate a substantial disparity in fund size across quartiles and objective classifications.

Exhibit 2: AVERAGE FUND ASSETS UNDER MANAGEMENT FOR EACH QUARTILE ACROSS OBJECTIVES.

	Full Set: Quartiles				Trimmed Set: Quartiles			
Objective	1	2	3	4	1	2	3	4
Asia w/ Japan	1.10	6.35	25.62	389.14	1.52	17.48	43.50	713.80
Asia w/o Japan	1.43	5.28	17.18	161.71	1.90	9.81	36.69	228.36
China	0.50	2.82	8.48	85.72	0.17	6.70	32.40	115.63
Europe	1.96	9.99	49.88	664.61	5.52	26.55	122.21	1,437.61
Global Asset Allocation	2.97	22.24	97.33	1,007.69	4.21	26.20	87.86	678.12
Emerging Mkts.	1.09	6.77	31.93	307.32	3.70	23.58	80.42	460.34
Global Energy	2.20	10.55	25.60	92.12	6.95	11.85	19.45	119.30
Global Equity	3.66	23.40	109.24	2,722.23	7.18	36.74	112.06	4,542.26
Global Small Cap.	4.41	27.36	80.14	1,482.75	3.37	31.25	138.33	4,147.37
Inter. Equity	3.30	23.69	86.07	1,547.85	8.86	50.31	187.69	2,474.14
Inter. Small Cap	2.05	18.24	70.47	619.64	2.73	26.29	109.39	819.37
Japan	1.30	6.63	30.29	304.00	2.14	16.80	83.35	535.62
Latin America	0.76	4.01	17.48	128.21	1.50	7.58	26.45	218.60
Mean Across Objectives	2.06	12.87	49.98	731.77	3.83	22.40	83.06	1,268.50

Notes:

Full Set: Smallest to Largest Quartiles: Contains all mutual funds in a specific objective including duplicated funds with different fee structures such as
A, B, C, and I shares.

Trimmed Set: Smallest to Largest Quartiles: Contains only the funds with a given name in a specific objective that have the lowest management fees
and hence the best performance from the group of duplicated funds. Single funds without different fee structures are retained.

Exhibit 3 contains results for the average total family assets under management across the different fund size sorted quartiles for both the full and the trimmed set. Quartile 1 of the Global Asset Allocation objective provides the smallest average fund family size of just over $5.1 billion. The largest average family fund size is the 4th quartile of the Asia w/Japan objective group at $132.6 billion in total assets under management for the funds contained in this quartile. The range of means across objectives from the smallest to largest quartile goes from $18.0 billion to $75.2 billion for the full sample. However, this range increases substantially for the trimmed sample with a range of $17.8 billion to $124.9 billion in average total family assets under management. Once again, the Asia w/Japan group contains the highest average family assets under management at $232.5 billion while the smallest quartile of the Global Asset Allocation objective brings up the rear with average total family assets under management of just $2.6 billion.

Exhibit 3: AVERAGE TOTAL FUND FAMILY ASSETS UNDER MANAGEMENT FOR EACH FUND ASSET SIZE BASED QUARTILE ACROSS OBJECTIVES.

	Full Set: Quartiles				Trimmed Set: Quartiles			
Objective	1	2	3	4	1	2	3	4
Asia w/ Japan	9,357.96	47,268.98	31,460.90	132,636.82	16,607.78	28,694.72	11,720.73	232,575.48
Asia w/o Japan	13,816.36	18,846.75	16,567.52	55,232.05	15,837.29	6,500.16	14,922.16	102,306.21
China	30,249.62	31,216.50	5,365.92	100,130.85	28,316.50	296.30	12,497.45	183,883.43
Europe	18,170.38	31,377.57	30,832.23	95,389.96	24,451.71	2,358.17	33,910.47	170,763.17
Global Asset Allocation	5,139.67	6,072.55	55,256.83	25,692.75	2,576.91	11,927.98	118,882.03	13,406.99
Emerging Mkts.	20,328.91	22,820.46	34,420.84	52,560.09	14,466.35	20,791.23	36,786.03	70,330.58
Global Energy	5,611.74	36,851.03	10,772.46	97,293.70	5,752.60	4,154.55	10,180.15	137,868.85
Global Equity	21,691.28	13,157.21	30,712.03	66,710.87	11,273.45	11,542.71	33,388.07	94,984.60
Global Small Cap.	6,920.55	9,953.73	47,997.97	48,728.20	14,378.53	4,910.33	17,783.68	124,210.43
Inter. Equity	15,087.27	19,630.09	23,424.24	43,075.08	14,297.23	15,450.26	9,974.27	66,060.90
Inter. Small Cap	26,677.46	13,244.54	24,486.82	24,910.03	39,770.47	4,355.14	8,046.65	19,828.13
Japan	12,469.95	29,504.97	35,132.33	125,006.46	11,194.86	28,017.92	20,671.17	231,970.82
Latin America	49,385.67	28,543.99	27,986.17	109,703.19	32,856.10	11,289.18	21,530.70	175,978.18
Mean For Objectives	18,069.76	23,729.87	28,801.25	75,159.23	17,829.21	11,560.66	26,945.66	124,935.98

Notes:

Full Set: Smallest to Largest Quartiles: Contains all mutual funds in a specific objective including duplicated funds with different fee structures
such as A, B, C, and I shares.

Trimmed Set: Smallest to Largest Quartiles: Contains only the funds with a given name in a specific objective that have the lowest management
fees and hence the best performance from the group of duplicated funds. Single funds without different fee structures are retained.

Expense ratios with 12b-1 fees omitted are reported in Exhibit 4 for all quartiles and objectives. 12b-1 fees are omitted to obtain a clearer picture of actual fund operating and management costs. Economies of scale are evidenced in both the full and trimmed samples with the across objective average expense ratios for each quartile monotonically declining from quartile 1 highs of 1.70% and 1.64% to quartile 4 lows of 1.28% and 1.19%. The pattern basically holds for every objective except for Global Small Cap and Latin America where the differentials across quartiles are not pronounced. These results indicate overall support for increasing economies of scale with little diseconomy associated with increased fund size.

Corresponding to their small average fund size across quartiles and evidence of economies of scale, China exhibits the highest expense ratios for nearly every quartile. Contrary to evidence supporting increased economies of scale, the Global Asset Allocation objective provides some of the lowest expense ratios across both full and trimmed quartiles yet average fund sizes across the quartiles are not markedly greater than the average of all objectives. The Global Energy objective with small average fund sizes across all quartile groups provides similar results. Additionally, Global Equity, the objective with largest average fund size for the 4th quartile of the trimmed sample has an average fund expense ratio at 1.07% that is higher than Global Energy, Global Asset Allocation, Global International Equity, Japan, and Europe.

Exhibit 4 provides mixed evidence regarding subsidization. Providing little support for evidence of subsidization, family assets under management for China funds are larger than nearly every other objective group in every quartile indicating limited benefit in regards to sharing of resources and lower expenses for the fund. This may be the result of the specificity of the China investment objective are less operational efficiency of this market.

Undoubtedly, little sharing of analyst reports and databases occurs for such a market and increased trading costs resulting from higher commissions and spreads may also by occurring. We observe similar results for the Asia w/o Japan, Emerging Markets and Latin America objectives.

Exhibit 4: ANNUAL FUND MANAGEMENT AND OPERATING EXPENSES NET OF 12B-1 FEES FOR EACH FUND ASSET SIZE BASED QUARTILE ACROSS OBJECTIVES.

	Full Set: Quartiles				Trimmed Set: Quartiles			
Objective	1	2	3	4	1	2	3	4
Asia w/ Japan	1.97	1.85	1.90	1.13	1.59	2.00	1.66	1.05
Asia w/o Japan	1.72	1.78	1.89	1.51	1.75	2.05	1.55	1.55
China	2.14	2.07	2.11	1.49	2.04	1.91	2.34	1.30
Europe	1.76	1.49	1.44	1.17	1.68	1.68	1.31	1.03
Global Asset Allocation	1.32	1.14	0.96	0.96	1.32	1.23	0.83	0.94
Emerging Mkts.	1.92	1.95	1.90	1.55	1.71	1.90	1.64	1.45
Global Energy	1.61	1.78	1.43	1.00	1.70	2.65	1.50	0.79
Global Equity	1.49	1.31	1.31	1.03	1.43	1.37	1.28	1.07
Global Small Cap.	1.49	1.31	1.33	1.45	1.51	1.39	1.30	1.28
Inter. Equity	1.46	1.40	1.29	1.06	1.44	1.30	1.14	1.01
Inter. Small Cap	1.61	1.69	1.51	1.40	1.55	1.59	1.45	1.34
Japan	1.74	1.73	1.52	1.17	1.61	2.08	1.19	1.01
Latin America	1.88	1.88	1.74	1.75	1.93	1.70	1.84	1.60
Mean Across Objectives	1.70	1.64	1.57	1.28	1.64	1.76	1.46	1.19

Notes:

Full Set: Smallest to Largest Quartiles: Contains all mutual funds in a specific objective including duplicated funds with different fee structures

such as A, B, C, and I shares.

Trimmed Set: Smallest to Largest Quartiles: Contains only the funds with a given name in a specific objective that have the lowest management

fees and hence the best performance from the group of duplicated funds. Single funds without different fee structures are retained.

At the other end of the spectrum, all Global and broadly defined international objective groups such as International Equity and International Small Cap have lower expense ratios. Two leading explanations for these results are that these portfolios invest in more developed markets that are more operationally efficient than their less well developed counterparts. This is especially true of the Global portfolios that often hold significant some percentage of U.S. Securities. However, if market operational efficiency explained all of the differential, one would expect that both the Japan and Europe objective groups would exhibit lower expense ratios than the International Equity and Small Cap objectives. Average fund size may explain the expense differential for the Japan objective group but not for Europe.

The second explanation is that these objective groups receive greater levels of subsidization than do the other objectives. Support for potential subsidization is evidenced by the Global Energy objective which has relatively low average fund assets across all quartiles but expense ratios in all but the second quartile of the trimmed sample are not markedly different from the across objective averages. Fund management of global energy funds should be able to utilize analyst's reports and data sources from a broad category of funds. Both domestic and international funds of all stripes should contain energy related securities. In addition, the homogenous nature of the energy markets makes research and tracking of these securities much easier than that of a more general international fund or even specific country funds that contain a broad array of industry classifications within their portfolios.

The expenses reported in Exhibit 4 do not contain 12b-1 fees. To examine whether funds may be utilizing other fees to potentially subsidize lower operating and management fees, Exhibit 5 reports average 12b-1 fees for all quartiles across the objectives. The results reveal that fund management is concerned about total fees rising too high. The China and Latin America objective quartiles exhibit lower than average 12b-1 fees in nearly every quartile while lower operating fee funds such as International Equity and Global Energy tend on average to assess higher 12b-1 fees.

Exhibit 5: AVERAGE ANNUAL FUND 12B-1 FEES FOR EACH FUND ASSET SIZE BASED QUARTILE ACROSS OBJECTIVES.

	Full Set: Quartiles				Trimmed Set: Quartiles			
Objective	1	2	3	4	1	2	3	4
Asia w/ Japan	0.54	0.68	0.35	0.38	0.00	0.10	0.21	0.25
Asia w/o Japan	0.56	0.70	0.33	0.29	0.14	0.14	0.11	0.05
China	0.42	0.51	0.40	0.33	0.00	0.08	0.25	0.08
Europe	0.60	0.50	0.44	0.40	0.10	0.08	0.10	0.14
Global Asset Allocation	0.50	0.42	0.35	0.56	0.09	0.16	0.08	0.18
Emerging Mkts.	0.57	0.46	0.31	0.16	0.15	0.03	0.16	0.02
Global Energy	0.85	0.54	0.65	0.38	0.13	0.25	0.13	0.13
Global Equity	0.62	0.53	0.40	0.50	0.06	0.16	0.14	0.17
Global Small Cap.	0.55	0.61	0.61	0.45	0.00	0.31	0.19	0.25
Inter. Equity	0.54	0.45	0.32	0.16	0.12	0.08	0.05	0.05
Inter. Small Cap	0.55	0.48	0.47	0.18	0.55	0.08	0.09	0.03
Japan	0.57	0.53	0.44	0.24	0.25	0.43	0.08	0.05
Latin America	0.50	0.49	0.37	0.33	0.00	0.06	0.06	0.13
Mean Across Objectives	0.57	0.53	0.42	0.33	0.12	0.15	0.13	0.12

Notes:

Full Set: Smallest to Largest Quartiles: Contains all mutual funds in a specific objective including duplicated funds with different fee structures

such as A, B, C, and I shares.

Trimmed Set: Smallest to Largest Quartiles: Contains only the funds with a given name in a specific objective that have the lowest management

fees and hence the best performance from the group of duplicated funds. Single funds without different fee structures are retained.

Exhibit 6 examines whether fund management employs additional loads to compensate reduced fund size or to keep expense ratios lower. The loads reported are the maximum load charged by the fund. Contradicting economies of scale arguments in the assessing of fees, average loads increase nearly monotonically from the smallest quartile with an average load across the objectives of 0.72% and 1.09% for the full and trimmed sets to 2.00% for the largest quartile of the full set and 1.88% for the 3rd quartile of the trimmed set. The utilization of loads appears to be either consumer demand driven or to subsidize the offering of lower fees. Smaller funds with higher expense ratios appear to be trying to increase asset size by lowering loads making funds more attractive to prospective investors while assessing higher management, operating, and 12b-1 fees.

Evidence of utilizing loads to subsidize lower expense ratios is evidenced by the higher average loads charged by the larger funds with lower expense ratios. Another argument is that the larger funds charge higher loads on average because their increased fund size and consumer demand allows them the freedom to do so without concerns of asset levels dropping to critical levels. However, these funds may be utilizing the opposite marketing strategy from their smaller counterparts. They may be cutting management, operating and 12b-1 fees to boost reported returns that do not incorporate loads in their calculations. This makes these low fee funds more appealing to consumers selecting funds based on returns while maintaining higher loads to compensate for the lower expense ratios and 12b-1 fees. A financial advisor marketing this fund can argue that a consumer should pay the load/commission to obtain a superior fund with superior returns.

The evidence for the utilization of loads to subsidize lower expense ratios and 12b-1 fees is furthered by the results reported for the trimmed sample. A greater portion of the trimmed sample consists of funds restricted to institutional and larger accounts that typically do not assess either loads or 12b-1 fees to their shareholders. Thus, the average loads reported for the trimmed sample will be significantly higher for retail funds marketed to consumers than those reported in Exhibit 6. Therefore, evidence regarding economies of scale may not be as strong as evidenced by the lower average expense ratios reported for larger funds in Exhibit 4.

Exhibit 6: AVERAGE MAXIMUM LOAD ASSESSED BY FUNDS IN EACH QUARTILE ACROSS OBJECTIVES.

	Full Set: Quartiles				Trimmed Set: Quartiles			
Objective	1	2	3	4	1	2	3	4
Asia w/ Japan	0.38	1.31	3.17	1.60	0.00	2.46	1.79	2.80
Asia w/o Japan	1.27	1.72	2.05	2.28	2.46	3.11	2.36	1.21
China	0.00	2.00	0.00	2.42	0.00	0.00	2.88	1.00
Europe	0.65	1.14	1.95	1.71	1.48	2.41	1.85	1.00
Global Asset Allocation	0.38	0.28	1.66	2.12	0.00	0.59	1.61	1.57
Emerging Mkts.	0.55	1.70	1.24	1.03	1.34	1.01	1.66	0.44
Global Energy	1.15	1.38	1.05	3.35	2.88	2.38	2.63	2.88
Global Equity	0.84	1.06	1.92	2.38	1.14	1.95	2.31	2.92
Global Small Cap.	0.20	1.55	2.00	2.68	0.00	2.75	4.06	3.50
Inter. Equity	1.13	1.56	1.24	0.88	1.47	1.59	0.57	0.74
Inter. Small Cap	1.09	1.25	0.88	1.32	0.82	0.72	0.00	1.41
Japan	1.02	1.40	0.77	1.55	1.15	0.83	0.00	1.20
Latin America	0.64	1.50	0.64	2.67	1.44	0.00	2.75	1.94
Mean Across Objectives	0.72	1.37	1.43	2.00	1.09	1.52	1.88	1.74

Notes:
Full Set: Smallest to Largest Quartiles: Contains all mutual funds in a specific objective including duplicated funds with different fee
structures such as A, B, C, and I shares.
Trimmed Set: Smallest to Largest Quartiles: Contains only the funds with a given name in a specific objective that have the lowest
management fees and hence the best performance from the group of duplicated funds. Single funds without different fee structures are retained.

To provide further insight into the cause of lower expense ratios for larger funds, the turnover ratios for each quartile with in each objective are reported in Exhibit 7. The average across objectives reveals that the largest quartile has a turnover ratio of just over 80% for the full and trimmed sets. This turnover ratio is 20% lower than the 3rd quartiles, which have the next lowest average turnover ratios. This result provides evidence against increased economies of scale in the management of funds.

Exhibit 7: AVERAGE TURNOVER RATE OF EACH QUARTILE ACROSS OBJECTIVES.

	Full Set: Quartiles				Trimmed Set: Quartiles			
Objective	1	2	3	4	1	2	3	4
Asia w/ Japan	103.94	107.52	136.06	88.26	137.66	164.92	121.68	82.84
Asia w/o Japan	110.09	127.78	92.04	79.48	116.13	93.34	131.46	75.23
China	160.38	135.02	56.46	38.47	130.70	101.77	37.00	44.93
Europe	119.85	122.82	106.40	86.43	115.68	101.87	97.15	91.89
Global Asset Allocation	56.63	179.39	88.14	63.66	136.51	242.08	63.31	93.29
Emerging Mkts.	120.55	98.43	127.50	95.46	103.73	106.76	123.03	81.74
Global Energy	129.08	99.25	67.56	116.98	102.25	89.00	95.70	143.25
Global Equity	92.98	83.74	96.59	88.32	110.13	104.64	84.22	91.06
Global Small Cap.	123.76	132.57	102.36	83.64	98.73	168.18	91.73	62.23
Inter. Equity	82.68	93.59	84.28	75.28	84.34	77.75	80.31	70.26
Inter. Small Cap	107.60	177.62	201.38	134.08	114.19	158.85	188.43	121.50
Japan	122.03	50.98	98.69	79.87	89.26	95.47	106.32	62.54
Latin America	82.67	147.21	101.02	44.14	131.53	165.78	94.23	42.65
Mean Across Objectives	108.63	119.69	104.50	82.62	113.14	128.49	101.12	81.80

Notes:
Full Set: Smallest to Largest Quartiles: Contains all mutual funds in a specific objective including duplicated funds with different fee structures
such as A, B, C, and I shares.
Trimmed Set: Smallest to Largest Quartiles: Contains only the funds with a given name in a specific objective that have the lowest management
fees and hence the best performance from the group of duplicated funds. Single funds without different fee structures are retained.

Larger funds may be keeping operating expenses lower by reducing turnover and the resulting transactions costs that occur from this decreased trading activity. Or, the size of their portfolios may make it too costly in terms of spreads and liquidity constraints to actively trade portfolio percentages similar to that of smaller funds. In addition, subsequent analysis in Exhibit 12 indicates that management tenure is greater for large funds. These funds may have equities within the portfolio that have significant tax overhangs. Management does not want to create large tax liabilities for existing and especially new shareholders by selling large portions of these holdings.

Exhibit 8 contains year 2000 performance results for each objective across fund size quartiles. The performance results account for management, operating, and 12b-1 fees but do not include loads in their calculation. For the full sample, which contains all funds including duplicated funds with different fee structures, Exhibit 8 provides evidence of both economies of scale and diseconomies of scale. The smallest quartile of objectives provides the poorest average performance at (-16.25%), while the 3rd quartile provides the best at (-12.68%). Diseconomies are evidenced by the lower return of (-14.27%) provided by the largest quartile.

Exhibit 8: AVERAGE YEAR 2000 RETURN FOR EACH FUND ASSET SIZE BASED QUARTILE. OBJECTIVES.

	Full Set: Quartiles				Trimmed Set: Quartiles			
Objective	1	2	3	4	1	2	3	4
Asia w/ Japan	-32.77	-37.53	-35.08	-33.69	-34.79	-32.35	-33.80	-32.76
Asia w/o Japan	-32.83	-35.10	-33.64	-26.84	-33.09	-29.31	-35.64	-25.87
China	-15.20	-13.90	-13.86	-13.29	-12.73	-11.13	-19.39	-12.86
Europe	-7.04	-10.14	-3.50	-6.11	-8.81	-6.17	0.65	-6.42
Global Asset Allocation	0.01	-3.20	-3.40	-0.43	0.03	-4.95	-3.04	-2.45
Emerging Mkts.	-31.82	-28.33	-28.87	-30.69	-27.24	-29.68	-31.19	-30.11
Global Energy	13.35	33.13	53.77	33.56	47.31	5.72	32.59	12.84
Global Equity	-10.83	-10.68	-11.33	-10.32	-12.32	-10.83	-7.27	-10.70
Global Small Cap.	-12.89	-7.72	-6.41	-13.75	-11.41	-2.87	-10.95	-14.21
Inter. Equity	-16.41	-17.24	-17.00	-13.38	-16.97	-15.90	-15.33	-12.24
Inter. Small Cap	-10.02	-16.21	-15.25	-15.65	-16.11	-7.66	-17.50	-13.66
Japan	-39.55	-38.84	-34.26	-39.84	-39.12	-35.49	-37.47	-35.96
Latin America	-15.20	-14.72	-16.04	-15.05	-13.18	-18.61	-15.99	-16.42
Mean Across Objectives	-16.25	-15.42	-12.68	-14.27	-13.72	-15.32	-14.95	-15.45

Notes:
Full Set: Smallest to Largest Quartiles: Contains all mutual funds in a specific objective including duplicated funds with
different fee structures such as A, B, C, and I shares.
Trimmed Set: Smallest to Largest Quartiles: Contains only the funds with a given name in a specific objective that have
the lowest management fees and hence the best performance from the group of duplicated funds. Single funds without
different fee structures are retained.

When the trimmed set is examined, further evidence of diseconomies of scale in performance is evidenced. The best performance is returned by the smallest quartile with an average across objectives of (-13.72%) and the worst return is provided by the largest quartile at (-15.45%). However, these differences are not substantially different. Undoubtedly, the broad disparity in return values and rankings for the quartiles within each objective with little apparent pattern is the reason for this lack of significance. As a result no definite conclusions can be drawn from these results.

Exhibit 9 expands the return analysis to include 3-year total returns for all the objectives. The 3-year total return figures illustrate a clear pattern. Smaller quartiles do worse than larger quartiles nearly across the board. The only glaring exceptions are the Latin America and to some degree the China objective. The smallest quartiles for these objectives exhibit some of the objectives' best returns. This may be the result of a more focused management with fewer assets to monitor or simply a statistical artifact.

Exhibit 9: AVERAGE 3-YEAR TOTAL RETURN FOR EACH FUND ASSET SIZE BASED QUARTILE ACROSS OBJECTIVES.

	Full Set: Quartiles				Trimmed Set: Quartiles			
Objective	1	2	3	4	1	2	3	4
Asia w/ Japan	4.23	4.01	25.59	29.67	8.96	41.39	34.14	25.94
Asia w/o Japan	-0.74	-2.16	2.45	14.28	-7.58	15.18	-1.76	19.61
China	28.48	25.08	-2.22	21.20	30.80	-2.86	-7.68	31.85
Europe	17.05	26.30	52.77	50.73	17.20	25.48	62.70	47.86
Global Asset Allocation	8.69	19.68	23.88	42.65	16.93	30.69	27.04	37.99
Emerging Mkts.	-19.51	-12.55	-11.37	-12.98	-5.23	-13.21	-13.90	-11.95
Global Energy	16.15	-5.70	21.72	27.63	9.51	-21.76	24.97	27.20
Global Equity	25.36	38.09	42.51	49.41	26.19	45.26	43.12	50.05
Global Small Cap.	37.76	55.52	54.59	43.65	24.36	79.32	57.16	52.41
Inter. Equity	26.78	28.02	33.14	39.78	30.77	31.25	35.40	39.38
Inter. Small Cap	44.51	66.17	92.55	84.00	33.96	79.00	83.57	86.34
Japan	19.62	29.89	36.95	46.26	17.21	15.13	38.27	71.67
Latin America	0.38	-9.54	-20.66	-14.41	-7.17	-15.37	-9.66	-18.09
Mean by Objective	16.06	20.22	27.07	32.45	15.07	23.81	28.72	35.40

Notes:
Full Set: Smallest to Largest Quartiles: Contains all mutual funds in a specific objective including duplicated funds with different
fee structures such as A, B, C, and I shares.
Trimmed Set: Smallest to Largest Quartiles: Contains only the funds with a given name in a specific objective that have the lowest
management fees and hence the best performance from the group of duplicated funds. Single funds without different fee structures
are retained.

Returns without being placed in the context of their relative risk can often be misleading indicators of fund management skill. Exhibit 10 contains 3-year Sharpe's ratios to provide some control for risk in the analysis of relative fund performance across quartiles. The results in Exhibit 10 confirm those reported in Exhibit 9. As a rule, larger mutual funds outperform their smaller counterparts in both absolute and risk adjusted terms over a 3-year period. Once again, Latin America and China stand out as exceptions to this rule. The results from these two objectives contradict traditional financial theory. The smaller funds within these objectives with higher expense ratios and 12b-1 fees outperform their larger counterparts with lower fees in both absolute and risk adjusted terms. Possibly, when buying information in these markets, "you get what you pay for." Market timing as evidenced by turnover ratios provides no insight into these results. China's small quartile has the highest turnover ratio of any group, while Latin America's small quartile shows below average turnover.

We are left with two potential explanations. The smaller funds operating in China and Latin America are more nimble and streamlined allowing them to focus more intently on a smaller number of securities within thinly traded markets. Or, the results are a statistical artifact. Limited support for the streamlined argument is found in Emerging Market and Asia w/o Japan objective performance statistics where no clear pattern exists across size based quartiles. Of all objective classes, these four categories probably trade in the most illiquid, least developed, and thinly traded markets. Therefore, these markets may face quicker diseconomies of scale in their average cost curve. Once the analysis moves to the more developed markets, the pattern is clear, smaller funds do not perform as well in absolute or risk adjusted terms.

Exhibit 10: AVERAGE 3-YEAR SHARPE'S RATIO FOR EACH FUND ASSET SIZE BASED QUARTILE ACROSS OBJECTIVES.

	Full Set: Quartiles				Trimmed Set: Quartiles			
Objective	1	2	3	4	1	2	3	4
Asia w/ Japan	-0.19	-0.15	0.03	0.16	-0.15	0.17	0.17	0.11
Asia w/o Japan	-0.16	-0.17	-0.12	-0.03	-0.22	0.02	-0.17	0.02
China	0.08	0.06	-0.15	0.03	0.10	-0.15	-0.20	0.13
Europe	0.09	0.16	0.36	0.46	0.05	0.16	0.38	0.47
Global Asset Allocation	-0.12	0.06	0.21	0.38	0.04	0.23	0.32	0.30
Emerging Mkts.	-0.40	-0.31	-0.30	-0.31	-0.24	-0.32	-0.33	-0.30
Global Energy	0.00	-0.29	0.06	0.13	-0.06	-0.52	0.07	0.14
Global Equity	0.10	0.27	0.33	0.44	0.16	0.33	0.34	0.46
Global Small Cap.	0.12	0.27	0.30	0.18	-0.02	0.48	0.27	0.34
Inter. Equity	0.14	0.16	0.23	0.32	0.17	0.22	0.27	0.32
Inter. Small Cap	0.28	0.45	0.60	0.60	0.20	0.62	0.51	0.62
Japan	-0.04	0.14	0.22	0.25	-0.04	-0.01	0.21	0.47
Latin America	-0.13	-0.23	-0.31	-0.26	-0.21	-0.28	-0.20	-0.30
Mean Across Objectives	-0.02	0.03	0.11	0.18	-0.02	0.07	0.13	0.21

Notes:

Full Set: Smallest to Largest Quartiles: Contains all mutual funds in a specific objective including duplicated funds with different fee
structures such as A, B, C, and I shares.

Trimmed Set: Smallest to Largest Quartiles: Contains only the funds with a given name in a specific objective that have the lowest management
fees and hence the best performance from the group of duplicated funds. Single funds without different fee structures are retained

Can the differentials in performance and expenses be partially attributed to the management tenure or structure rather than the size of the fund or fund family? To further explore this question, the average management tenure of each quartile within each objective is calculated for the full and trimmed set. The results for this analysis are contained in Exhibit 11. Nearly across the board with few exceptions, larger fund quartiles are associated with greater management tenure. For no objective classification does the smallest quartile have the greatest management tenure.

As should be expected these results indicate that larger funds are associated with longer serving management. Management of surviving funds stay at the helm guiding the fund as it grows assets over time. The two go together. However, this evidence does provide an additional explanation for the lower expenses and corresponding higher returns provided across objectives by the large quartile portfolios. One can argue that these funds possess more experienced management that is more capable of controlling costs and maximizing shareholder returns.

In addition to the management tenure we examine the management structure to determine if a given structure may explain the lower fees and higher risk adjusted performance. For this analysis, we partition funds into those managed by a name individual and those managed by a team. Hinsz, Tindale, and Vollrath (1997) contend that group members work together and correct other's errors in completing complex tasks under great uncertainty.

Exhibit 11: AVERAGE FUND MANAGER HIRE DATE FOR EACH FUND ASSET SIZE BASED QUARTILE ACROSS OBJECTIVES.

Objective	Full Set: Quartiles 1	2	3	4	Trimmed Set: Quartiles 1	2	3	4
Asia w/ Japan	10/23/98	12/26/97	04/01/96	05/10/95	06/25/98	12/01/95	08/26/95	11/06/96
Asia w/o Japan	01/28/98	05/03/97	07/22/97	11/23/95	07/23/97	08/14/97	02/26/97	11/05/94
China	11/30/97	03/31/96	11/06/97	08/05/96	09/30/97	07/02/95	11/30/97	06/21/95
Europe	07/31/98	07/04/98	04/19/97	08/06/96	04/17/98	10/31/97	12/29/95	12/23/95
Global Asset Allocation	04/23/97	01/15/95	02/07/96	08/11/93	03/01/96	03/28/94	07/14/96	03/02/94
Emerging Mkts.	02/21/98	06/26/97	01/07/97	04/29/96	04/12/97	01/09/97	02/08/97	04/08/96
Global Energy	10/13/97	01/10/96	01/12/96	08/25/94	03/18/95	11/30/96	04/16/97	01/30/95
Global Equity	03/18/98	03/23/97	01/21/97	10/20/94	08/08/97	02/15/97	08/15/96	02/09/93
Global Small Cap.	01/30/98	07/15/97	03/25/96	07/29/95	03/12/98	02/22/97	06/08/96	01/20/94
Inter. Equity	10/19/97	08/11/97	10/24/96	03/15/95	11/24/97	03/17/97	06/08/96	07/02/94
Inter. Small Cap	12/08/97	06/11/98	04/11/97	06/08/95	03/10/98	07/13/97	10/26/96	12/31/94
Japan	10/22/97	08/16/97	12/17/97	01/08/95	01/31/96	03/26/98	08/06/94	11/19/94
Latin America	04/25/98	02/11/97	09/23/96	01/11/96	04/01/97	11/30/96	06/01/97	01/07/93
Mean Across Objectives	1/22/98	03/30/97	12/08/96	06/20/95	05/19/97	11/10/96	08/12/96	11/11/94

Notes:
Full Set: Smallest to Largest Quartiles: Contains all mutual funds in a specific objective including duplicated funds with different fee structures
such as A, B, C, and I shares.
Trimmed Set: Smallest to Largest Quartiles: Contains only the funds with a given name in a specific objective that have the lowest management
fees and hence the best performance from the group of duplicated funds. Single funds without different fee structures are retained

The results for this analysis, contained in Exhibit 12, provide mixed evidence on this question. The small quartiles of the full sample have the greatest proportion of team managed funds while the larger quartiles experience less team management. However, as the duplicated funds from the full sample are weeded, the results observed for the full sample are actually reversed. The largest quartiles have the highest average proportion of team managers. By eliminating all of the duplicated funds, the trimmed sample probably provides a clearer picture of this issue. This evidence indicates that if team management does provide superior timing, the management structure indicates a slight advantage may be given to the larger quartiles.

Exhibit 12: PROPORTION OF FUNDS MANAGED BY A TEAM FOR EACH FUND ASSET SIZE BASED QUARTILE ACROSS OBJECTIVES.

Objective	Full Set: Quartiles 1	2	3	4	Trimmed Set: Quartiles 1	2	3	4
Asia w/ Japan	27.27	7.69	23.08	8.33	20.00	0.00	50.00	0.00
Asia w/o Japan	25.00	25.00	12.50	12.50	28.57	0.00	28.57	14.29
China	50.00	40.00	20.00	16.67	33.33	33.33	50.00	33.33
Europe	51.85	31.03	3.45	17.24	27.27	27.27	16.67	18.18
Global Asset Allocation	26.67	25.00	37.50	6.67	28.57	25.00	28.57	42.86
Emerging Mkts.	19.51	14.29	26.19	26.19	10.53	20.00	20.00	40.00
Global Energy	0.00	16.67	0.00	20.00	0.00	50.00	0.00	50.00
Global Equity	36.84	37.29	32.76	19.30	24.00	32.00	44.00	28.00
Global Small Cap.	20.00	36.36	44.44	50.00	0.00	50.00	25.00	66.67
Inter. Equity	26.35	32.43	20.13	26.85	30.14	26.67	26.67	27.03

Inter. Small Cap	56.25	23.53	23.53	47.06	57.14	37.50	25.00	37.50
Japan	30.00	25.00	9.09	27.27	50.00	16.67	0.00	40.00
Latin America	0.00	20.00	0.00	11.11	0.00	50.00	0.00	25.00
Mean Across Objectives	28.44	25.71	19.44	22.25	23.81	28.34	24.19	32.53

Notes:
Full Set: Smallest to Largest Quartiles: Contains all mutual funds in a specific objective including duplicated funds with different fee structures
such as A, B, C, and I shares.
Trimmed Set: Smallest to Largest Quartiles: Contains only the funds with a given name in a specific objective that have the lowest management
fees and hence the best performance from the group of duplicated funds. Single funds without different fee structures are retained.

Summary of Initial Results

At this point, the evidence regarding economies of scale in the operations of mutual funds is mixed. However, based on the initial analysis, we conclude:

1. Support of scale economies: Larger funds tend on average to have lower management and operating expenses as well as lower 12b-1 fees. As a general rule, over longer holding periods, larger funds outperform their smaller counterparts in both absolute and risk adjusted terms.
2. Non-support of scale economies: Large funds charge higher average loads than their smaller counterparts, and they have lower turnover ratios than do their smaller competitors. Smaller funds despite higher expense ratios do as well as or better in less developed thinly traded markets. Large funds have more experienced management and utilize teams to a greater extent than do their smaller counterparts. Over a one-year time horizon during a down market, small quartiles performed as well as or better than large firms.
3. Support of subsidization: Asset allocation and broader based global and international funds contained within larger fund complexes tend to have lower fees. The Energy objective with a specific focus on a particular industry segment that is widely held by large numbers of domestic, international, and global funds tends to have lower fees.
4. Non-support of subsidization: China and Japan funds are contained in the larger fund families yet they have on average higher expenses.
5. Support objective specificity: The Energy objective group with a very specific objective tends to have lower expenses than country objective funds.
6. Non-support of objective specificity: More specifically defined objectives in terms of geographic investment focus have on average higher expenses than their more global counterparts.

References

[1] Ang, James, Chen, An-Sing, and Lin, James W. 1999. "Information Sharing, Return Characteristics, and Portfolio Beta: The Case of Mutual Funds." *The Journal of Investing*, (Fall): pp. 54-64.

[2] Baumol, W.J., S.M. Goldfeld, L.A. Gordon, and M.F Koehn. 1990. "The Economics of mutual Fund Markets: Competition Versus Regulation." *Rochester Studies in Economics and Policy Issues*. Boston: Kluwer.

[3] Brent, Andrew 2001. "Small Fund Companies Face Online Challenges." Web Finance, (May). Available online http://web.lexis-Lexis.com/universe/docu...Al&_md5=b9cc9079094207ef309fed66399352e8

[4] Collins, S., and Mack, P. 1997. "The Optimal Amount of Assets Under Management in the Mutual Fund Industry." *Financial Analysts Journal*, (Sept/Oct): 53(5): 67-73.

[5] Dermine, J., and L.H. Roller. 1992. "Economies of Scope and Scale in French Mutual Funds." *Journal of Financial Intermediation*, 2(4) (September): 1077-82

[6] Elton, Edwin J., Martin Gruber J. Gruber, Sanjiv Das, and Matthew Hlavka. "Efficiency with Costly information: A Reinterpretation of Evidence from Managed Portfolios." *Review of Financial Studies*, 6 (1993), pp. 1-22.

[7] Hinsz, V. B., R. S. Tindale, and D. A. Vollrath, 1997, "The Emerging Conceptualization of Groups as Information Processors," *Psychological Bulletin* 121, 43-64.

[8] Indro, Daniel C., Jiang, Christine X., Hu, Michael Y., and Lee, Wayne Y. 1999. "Mutual Fund performance: Does Fund Size Matter?" *Association for Investment Management and Research*, (May/June): 74-87.

[9] Loeb, Thomas F. 1983. "Trading Cost: /the Critical Link between Investment Information and Results." *Financial Analysts Journal*, (May/June): 39(3): 39-43.

[10] Rao, S. P. Umamaheswar 2001. "Economic Impact of Distribution Fees on Mutual Funds." *American Business Review*, (Jan): 19(1): 1-5.

[11] Saunders-Egodigwe, Laura, and David Franecki, 1998. "Slam: Mutual-Fund Closings Set a Record Pace." *Wall Street Journal* (May 21): C1, C21.

[12] Sirri, E., and P. Tufano. 1993, "Competition and Change in the Mutual Funds Industry." Financial Services, edited by Samuel L. Hayes III. Boston: Harvard Business School Press.

[13] Stanton, Frank 2000. "When Fat Margins Are Hazardous to Your Health." *Morningstar.Com*, (June). Available Online http://news.morningstar.com/doc/article/0,1,3204,00.html

[14] Walbert, Laura 1997. "Is Bigger Really Better?" *Institutional Investor*, (Aug): 31(8): 151.

End Notes

[1] Precursors to this analysis were Baumol, Goldfield, Gordon and Koehn (1990) who find significant economies of scale in the 1980s for mutual funds and Dermine and Roller (1992) who document significant economies of scale for small to mid-sized French fund families that diminish for the larger fund families.

[2] Reputation concerns surrounding fund closings may also be attributed to objective creep. As fund assets expand, the ability to find securities the meet the stated objective of the fund diminishes. Consequently, a small cap value fund may have to become a mid-cap value fund if they wish to keep growing assets under management.

[3] Loeb (1983) found that bid-ask spreads increase significantly with block size. This increase may be attributed asymmetric information fears of market makers are basic liquidity issues.

[4] Loads are not considered in the calculation of management fees and performance. A fund may subsidize management and operating fees with up-front loads. Consequently, depending on the specific investor and their holding period needs, an investor may do better in the same fund with a different fee structure.

[5] Due to the small number of observations available for several of the objectives examines, quartiles rather than deciles are employed.

Micro Level Factors and Globally-distributed Engineering as a Path to Sustainable Globalization

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Abstract

Multinational Enterprises (MNEs) are increasingly relying on Globally-Distributed Engineering (GDE) projects in which sites around the world collaborate on the development of new manufacturing and product technologies. Many of these projects now include sites in Emerging/Newly Industrializing Economies (E/NIEs). The success of these ventures is increasingly important both for the competitiveness of the MNEs and for the development of the E/NIEs. This paper argues that the growing importance of this form of GDE makes it vital that scholars address new research questions, particularly questions concerning "micro level factors" involved in strategy formulation, siting decisions and the internal dynamics of these engineering projects.

Introduction

Recently, multinational enterprises (MNEs) have begun locating some of their advanced engineering activities in emerging/newly industrializing economies (E/NIEs). These activities are then coordinated with engineering activities in the home country and at other sites. U.S. producers of hard disk drives, for example, continue to perform most of their product development in the United States, but have shifted their manufacturing process development activities to Southeast Asia [33]. This move to globally distributed engineering (GDE) poses new challenges in the cross-national integration and management of complex activities, both for MNEs and for E/NIEs.

While there have been a number of studies of how E/NIE policies and MNE strategies effect technological spillovers in E/NIEs (for recent reviews see [5] and [36]), and a growing documentation of the technological contributions to MNEs that can be made by E/NIE engineers and other technical people (e.g. [2], [3], [4]), the literature has so far concentrated on MNE strategies and high level E/NIE policies. We argue that more attention should be given to micro-level factors such as the internal dynamics by which technical expertise is transferred and to the local institutional arrangements that mediate such transfers. Given our limited understanding of such micro-level factors, we also lack an adequate understanding of how micro-level factors interact with macro-level factors. Research, for example, suggests that technical human resources are important both in attracting MNE foreign direct investment (FDI) and in increasing the technological absorptive capacity of E/NIEs (e.g., [52]), but we know little about the relationships between local engineering schools and the MNEs. More broadly, Etzkowitz and Leydesdorff, (e.g. [17]) suggest that a "triple helix" of government, business, and education largely determines development capacity. But what role do MNE's play in the triple helixes of host E/NIEs? A better understanding of micro-factors and their interaction with the more widely studied macro-factors could help guide E/NIE policy-makers at both the national and regional level to maximize the benefits their countries receive from the GDE projects of MNEs. It could also help guide MNE decision-makers.

The next section of the paper reviews some of the literature that has contributed to our understanding of the processes of knowledge transfer that occur via MNE activities in E/NIEs. A third section discusses some key micro-level factors that have been largely ignored by researchers, and reviews some literatures that can help provide a framework for understanding the role of micro-processes. A fourth section motivates and lists specific research questions that evolve from this framework. Finally, a concluding section reprises the major issues raised in the paper.

Macro-Level Factors and Technology Transfer via MNEs

Much of the literature on the multinational technology activities of MNEs has taken the point of view of top corporate or governmental decision-makers. Research questions have tended to center on such issues as whether or not MNEs should locate their advanced technology activities in E/NIEs or, conversely, whether or not E/NIEs should seek these activities. A generation ago much of the thinking about the transfer of technology by MNEs was based on the concept of the "product life cycle." MNEs were seen as constantly generating new technology in their home countries, while passing on their older technologies to operations in other countries.

By the 1980s and 1990s thinking about the role of E/NIEs in MNE technology strategy was beginning to change. Ghoshal and Bartlett (e.g. [2], [18]) argued that operations in E/NIEs can make important contributions to the technology of MNEs. Birkinshaw and Hood ([3], [4]) showed how MNE affiliates in E/NIEs can use country-specific advantages to enhance an MNE's firm-specific advantages. McKendrick et al. [33] argued that U.S. hard-drive manufacturers maintained their competitiveness by shifting their process development activities to Singapore. Zanfei [55] argued that foreign technological activities are beneficial because they allow firms to draw on local technological resources. Some empirical studies suggest that a significant and growing share of the technology developed by MNEs comes from their foreign subsidiaries (e.g. [16], Patel [41], however, finds no such evidence).

The product life cycle concept also suggested that the E/NIEs were essentially dumping grounds for outmoded technology that would contribute little to sustainable development. In a widely cited article from that era, Lall [28] argued that technology transfer through MNEs reduces the ability of indigenous enterprises to assimilate, improve, and export the technology. Many E/NIE governments focused on the negative impacts of technology imports from MNEs. India, for example, imposed a comprehensive set of guidelines in 1969 to closely regulate technology transfers, and in 1975 it expelled a number of MNEs. Many Latin American countries imposed similar policies. South Korea, Taiwan, and Singapore, however, found ways to use the MNEs to upgrade their own national technology systems and move into the ranks of developed economies ([21], [22], [29]). In these, and some other countries, local firms moved from contract manufacturing to eventually compete with the MNEs they had originally supplied. While debate about the impact of MNEs on E/NIEs continues today (for a recent critical view, see [45]), policy makers in many E/NIEs began to see the most restrictive technology import control and FDI regulatory regimes as counterproductive [12], [25], [42]. In India the regulation of foreign investment was liberalized, and in 1997 complete foreign ownership was allowed for software companies.

Amsden [1] notes that some countries have been able to develop without proprietary, pioneering technology, "borrowing already-commercialized technology, devoid of the radically new products and processes that had enriched the North Atlantic…involving intense learning, an extensive role for government, and the formation of specific types of business enterprises." Thus, MNEs may contribute to development through the distribution of engineering work, which, in turn, requires development of locally-based knowledge-generation capacity —the "triple helix."

Consistent with this new view on the potential role of MNEs, recent research suggests that MNEs have not restricted innovation activity to their home countries (see [9] for a summary of the literature, [38] for a review of research suggesting that MNE behavior in E/NIEs is not dissimilar to that of local firms, and [35] for a review of research showing that host countries generally benefit from FDI.). Many authors mention the success of the Indian software industry in this regard. The impressive growth of this industry seems to have been aided by joint ventures started in 1994 by IBM and GE. These joint ventures became two of the three largest software companies in India. Both are now majority Indian owned. Government policy to attract foreign software and other high tech firms has led to the establishment of a number of technology zones that also support domestic software and engineering firms.[1] There are leading-edge technology projects in India whose success seems dependent on the GDE of MNEs [48].

This is not to deny that the globalization of technological activities often imposes costs on E/NIEs. Countries trying to develop higher-skilled workforces, for example, face problems of "brain drain" unless they can develop and/or attract sufficiently high-skilled work to provide employment opportunities [1], [48]. R&D activities by foreign MNEs may also be subject to sudden reductions or withdrawals. On balance, a recent study concludes that the U.S. economy, not the E/NIE economies, has so far been the primary beneficiary from these activities.

In sum, the literatures on MNE global technology strategies and E/NIEs suggest that both MNEs and E/NIEs can benefit from GDE, but such benefits cannot be taken for granted. A task for researchers is to better specify the conditions that underlie success. Some years ago Cusumano and Elenkov [13] argued that there is a need to bring together the research streams on MNE strategies and E/NIE government policies. Clearly MNE strategies and E/NIE policies interact, requiring an understanding of both before a full understanding of either is possible. We argue that there is a need to broaden the focus of inquiry even further than this. There is a need to know much more about cultural and institutional differences (and the implications of stereotypes about both), learning styles, institutional support systems, as well as the fast-evolving information technologies that facilitate the global dispersion of technology. We term these additional areas "micro-level factors" in that they occur at the level of specific globally-distributed arrangements rather than at the grand level of MNE strategies and E/NIE policies.

Micro-level Factors and Technology Transfer

Micro-level factors have not been much studied in the context of technology transfer from MNEs to E/NIEs, but the importance of at least some of them is well recognized. The OECD [40], for example, has called on MNEs to help develop institutional support systems by establishing ties with local universities and public research institutions. We argue that the formation of these institutional interrelations, the "triple helix", depends heavily on micro-level factors and the operational practices of MNEs as these interact with conditions in the E/NIEs (see Fig. 1).

MNE home country culture, host country culture, and corporate culture

In a study of German MNEs, Kotthoff ([27]) suggests that globalization occurs at three levels: MNE strategy formulation, the organization of production, and the reconciliation of host and home country values and orientations. It is the successful resolution of issues at the third of these levels that, according to Kotthoff, is the most important condition to becoming a successful global company. One of Kotthoff's more provocative findings is that as MNEs scatter their key activities around the globe, they tend to compensate for this dis-integration by developing a high degree of integration in the MNE's social and cultural space. As a result the MNE's home country social and cultural space comes to dominate.[2] These findings are consistent with those of Moss et al. [37]). In a study of high-technology electronics and product engineering in the U.S., Europe, and Asia, these authors found home country dominance and control increased as foreign subsidiaries grew in importance to the MNE's overall global strategies. As the MNEs moved increasingly to globally-distributed production and engineering, there was an increase in the social integration of the globally distributed teams. This generally involved attempts to change local practices and to staff key positions with people from the MNE headquarters.

Aside from concerns about this "cultural imperialism," there are other issues regarding GDE and culture. The institutional and professional norms, practices, and values of engineers can come into play in both decision-making about GDE (e.g. what to do where), and at the individual level of knowledge-transfer. Some writers (e.g. Rodrigues et al. [44] argue that preferred learning styles differ between countries. This may imply that methods of transferring technology within GDE groups that are effective in one country may be less successful in another. More generally, one might speculate that "real" and perceived cultural differences are of critical importance in determining what happens in the relationships between MNE managers and host country engineers. Regardless of the cultural differences themselves, it matters how actors interpret culture and make use of it in working with those from other cultures. Cole [11] notes, for example, that in the early 1980s U.S. managers assumed that Japanese quality practices were inextricably tied to Japanese culture, and thus unsuitable for use in the U.S. As a result they missed important opportunities for learning. Thus, *interpretations* of culture presumably also influence decision-making about the global distribution and integration of engineering activities.

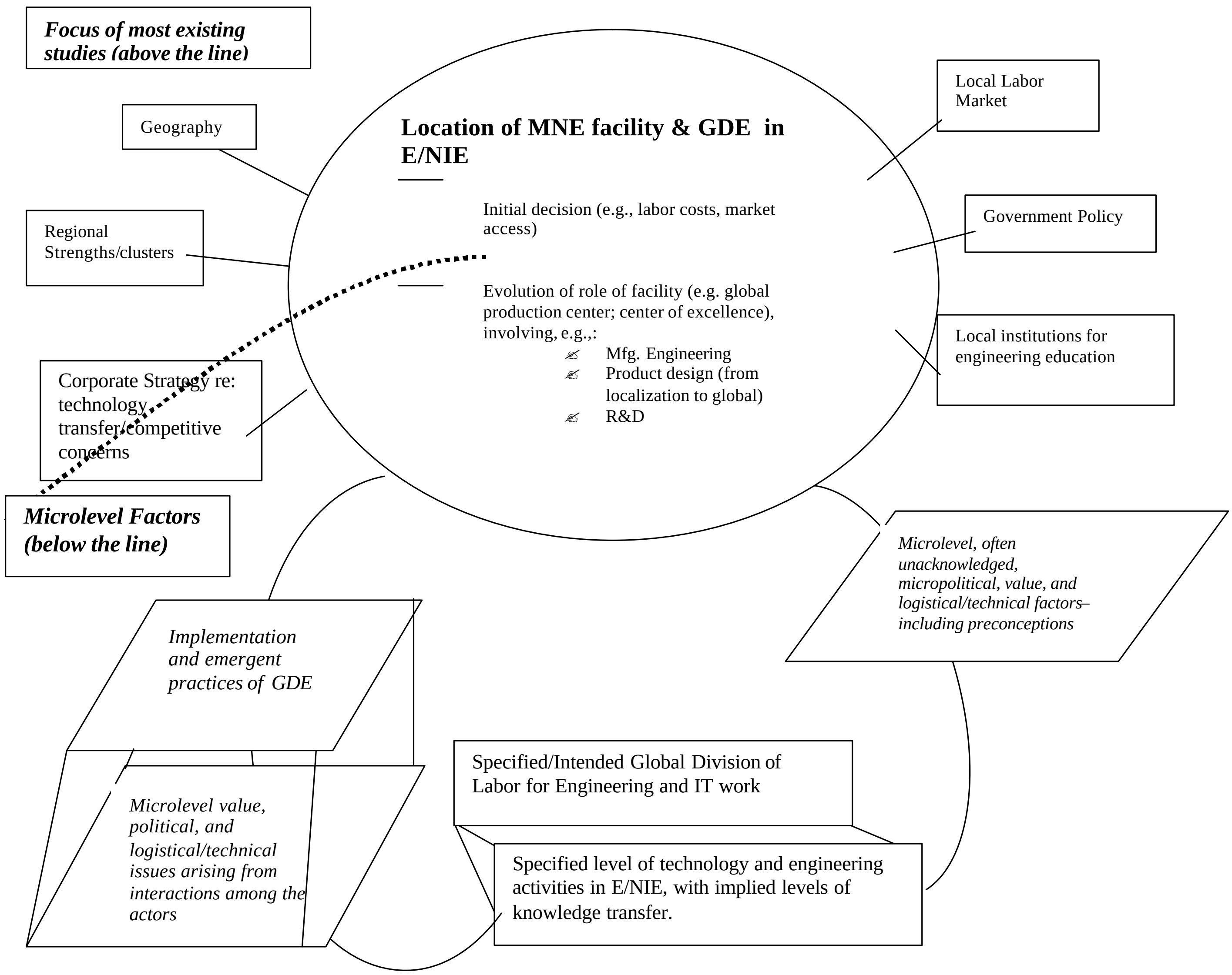

Fig. 1: A SCHEMATIC OF MACRO-LEVEL FACTORS UNDERLYING PLANNED LOCATION/KNOWLEDGE-TRANSFER AND MICRO-LEVEL FACTORS SHAPING THE *PRACTICE* OF GLOBALLY-DISTRIBUTED ENGINEERING

Research is needed to test and elaborate on these ideas. Such research might begin by examining initial E/NIE GDE strategies and rationales. It might ask: which activities were globalized and why? It might look at how these changed over time. Based on Kotthoff's work [27], we might hypothesize, for example, that GDE accelerates the transformation of local company culture into the transnational company culture.

GDE and Host Country Educational Institutions.

The importance of a highly-skilled workforce in attracting higher-skilled industry is well known, and the contributions of local educational institutions to innovation and industrial growth have been examined in both advanced economies and in E/NIEs. Some studies have concentrated on the role of colleges in regional clusters for innovation and competitiveness, while others have looked at the influence of industry clusters on local colleges (e.g., [46], [50]). Less attention has been paid specifically to the interaction between MNEs and local educational institutions in the *development* of technical/engineering skills. At one E/NIE site of a German MNE, the authors were told that the MNE headquarters wishes to shift more engineering work to local engineers, and has asked the local university to re-structure its engineering program to meet this need. The university has been doing this to the satisfaction of the MNE, but the consequences of the curricular changes for other employers of the university's engineering graduates have not been evaluated. There is the risk, for example, that overly firm-specific skills will be created, and that these firm-specific skills will be of little value to graduates not employed by the MNE.

There are also questions about the value of MNE firm-specific skills to broader economic development. For example, do these skills transfer to other firms and other segments of the economy to improve the overall industrial base? An emphasis on developing technical skills to meet the needs of a specific MNE may also lead to other problems for the E/NIE. It might, for example, result in the most talented technical people leaving the host country to work in operations of the MNE in other countries. In discussing "late industrialization," Amsden [1] notes the unexpected brain-drains that occurred until industrial policies were introduced to create production capacity necessary to absorb school-leavers. An example is India, which has long faced the problem of the emigration of a significant percentage of its most highly educated citizens (until recently 90% of the computer science graduates of the elite IIT left India, mostly for the U.S.), in large part due to a lack of opportunities commensurate with their skills.[3] GDE, of course, can also ameliorate this problem. Increased globally-distributed software development has lowered the emigration of Indian software engineers. Indeed, some past emigrants have moved back to India. The result has been what has been called a shift from brain drain to "brain circulation." (e.g. [47], Chronicle of Higher Education, 1999).

In other areas the interests of the MNE may also conflict with those of the E/NIE. The MNE employer, for example, may find it attractive to have an *over-supply* of human resources tailored to its technical needs, which may be a waste of scarce human resources for the E/NIE. This, too, suggests the need to look carefully at the implications of the educational accommodations being made for MNEs.

Problems in Technology and Knowledge Transfer.

Research on groupware and on distance collaboration suggests that the technology used in implementing GDE helps determine the actual extent of knowledge transfer that takes place and also influences the interplay of social factors. The field of Computer Supported Cooperative Work (CSCW) has produced relevant research ranging from studies of the implications of different technical designs to studies of organizational and social issues involving trust and group dynamics. They have looked at how conflicting design objectives can be identified and resolved (e.g., [26]), and how systems design can shape work processes and negotiations between different work groups [23], [48], [51]. In general, these studies have demonstrated the need to attack the dispersion/ collaboration problem from both sides, to increase the technological capability to capture a greater range of communication (verbal, nonverbal, environmental) and to improve the means of communicating through various media, all of which are more limited than direct face-to-face contact.[4] Gronbaek, et al. [20] found the use of CSCW for engineering projects is constrained by a mix of technical limitations and social factors. This is still an issue, despite improvements in technology and design [34].

Researchers increasingly draw our attention to the importance of the *knowledge* transfer, which includes "tacit knowledge," as opposed to the *information* transfer, that must occur in technology transfer (e.g., see [39]; see [43] for a review of the limitations of technology for knowledge transfer). Key to the success of GDE is using the capacity of this technology to support the transfer of the tacit and emergent knowledge involved in engineering. This is particularly challenging when different social and cultural backgrounds and languages must be bridged. The transfer of tacit knowledge calls for motivation, trust, common rules of communication, and a common knowledge base to enable learning (and teaching) by doing. These prerequisites are especially difficult to achieve in broadly dispersed teams.[5]

The technical difficulties in using CSCW technologies for GDE are further complicated by the nature of the social world in which they operate. Communications are often difficult in cross-cultural interactions, in long-distance interactions, between product engineers and process engineers, and between engineers and other staff. Successful GDEs must also overcome language differences and different approaches to engineering. Other problems may stem from differing concepts about the purpose of engineering—for example, the relative value attached to innovation, profit, and professional recognition. A range of social factors may facilitate and hinder knowledge transfer within GDE systems [31]. GDE projects must simultaneously cope with all of these sources of difficulty.

Overall, we need to know much more about the technical limitations and unrecognized technical capabilities that constrict GDE and/or that transfer greater local autonomy because of limits to centralized control, oversight and integration in local engineering functions.

A New Research Agenda

This review suggests that new, emergent conditions are making globally distributed engineering increasingly important both for the success of MNEs and for the development of E/NIEs. While previous research has given us important insights into the processes involved at the macro level, and the implications of those processes, the micro-level factors interacting with these conditions are less well understood. This suggests the need for a new research agenda that would address the role of engineering and technology in development through knowledge transfer and diffusion in E/NIEs at a micro level. It would examine organizational, value, logistical, and technological factors that facilitate or hinder the development of higher-skilled engineering and IT work in E/NIEs. It would examine the international division of engineering labor, the integration of engineering teams, and the consequent impact of globally distributed engineering on both E/NIEs and MNEs. It would examine the ties to, and impact on the curriculum of engineering colleges in E/NIEs hosting GDE.

General Issues on Division of technical labor within MNEs.

One area of considerable interest is the allocation of engineering activities within GDE projects, how this division of labor is determined, and how it evolves. What factors contribute, for example, to the development into centers of excellence of E/NIE sites that were initially intended simply to adapt products for local market? An image that suggests a true win-win-win situation amongst MNE, MNE home country, and E/NIE host country appears in McKendrick et al. [33]. These authors argue that the U.S. hard drive industry was able to retain international competitiveness by moving its production activities to Singapore and neighboring areas. In the process, product development activities remained in the U.S., but manufacturing process engineering activities were shifted to Southeast Asia. Southeast Asia gained high-skilled, high paid jobs, while the U.S. retained jobs that, McKendrik et al. argue, would otherwise have been lost. This suggests two research questions.

1. What are the processes by which MNE technology activities in E/NIEs extend in scope and begin to approach technological frontiers? What are the barriers to these processes? To what extent are the technological activities in the E/NIEs truly part of an integrated globally distributed system as opposed to being separate, local, and distant from the technological frontier.

2. Do the conditions identified by McKendrick et al. as explaining the success of U.S. multinationals in the hard drive industry in Southeast Asia apply to other industries involving other production-product configurations?

Culture, Values, and Cultural Stereotypes.

An example of relevant institutional values would be biases against technologies developed outside the home organization or culture (the "Not Invented Here" syndrome). Another example would be views about national engineering traits (e.g., the view that certain countries may be good at "value engineering" – lowering cost, improving manufacturability – but not at innovation) [24]. Countries also seem to differ in the weight they give various factors considered important for "good engineering," such as teamwork, individual inventiveness, or business focus [31]. This leads to three additional research questions:

3. To what extent do images of culture influence MNE *strategies* on the location of technological activities? Are these images changing?
4. How do images of cultural differences influence *interactions* in multinational technology teams? Does learning occur to facilitate these interactions (if so, what are the major facilitators for learning)?

Logistical Issues

One area of empirical interest is that recent trends might be expected to have conflicting impacts on GDE. For example, while the increased use of concurrent engineering is generally thought to limit geographically dispersed development work, new technologies facilitate greater dispersed collaboration. More general questions of interest here concern the use of technology in GDE — its capabilities and limitations. Some sites may focus on the promise of new technology and develop plans for highly dispersed engineering, while others may be much more cautious and proceed with more limited expectations about the degree of integration via the technology. Relevant research questions include:

5. What communications technologies/groupware are being used? How effective are they? What surprises have there been? What future developments can be expected?
6. How have new information technologies changed the location and organization of GDE? (At an MNE currently being studied by the authors, the length of expatriate assignments for most engineering personnel has been cut from three years to three months. The expatriate engineers are expected to use IT to continue work on projects in the home -country during their absence).
7. Have soft technologies, such as the increased use of concurrent engineering had an impact on the willingness of MNEs to use GDE, or on how they use it?

Local industry-education linkages

An additional important area is how local engineering departments change to accommodate the MNEs. How do existing education systems influence the decisions of companies about where to locate engineering work? Is there a diffusion of practices within the E/NIE educational system? More specific research questions include:

8. What programmatic and curricular changes do the MNEs seek in E/NIEs? How influential are they in getting the changes they want?
9. To what degree do the changes result in the creation of new 'fungible" human technological resources? How suitable they for local labor market demands?

Factors Contributing to Technical "Success."

An important research goal is to identify the factors that lead to the technical success of GDE. While some of the research questions described above are relevant to this, some additional questions in this area include:

10. What do MNEs believe makes a "good"/high performing global engineer? Are these characteristics different from those associated with a successful engineer in the MNE home country? What are the salient experiences and education for developing this engineering knowledge/practice?
11. What makes an overseas technology effort successful from the standpoint of the MNE headquarters?

Other Aspects of Knowledge Transfer

Other concerns include engineering processes within GDEs and how the special challenges of globally distributed engineering are met. There is a need to examine initial MNE GDE strategies and the rationales for them. One issue is which activities are globalized and why. What changes occurred subsequent to the globalization of the activities and what factors led to those changes? To the extent that higher skilled work is transferred to E/NIE sites, we would expect to see increased knowledge transfer and the development of local human capital formation. We would further expect increases in local college capacity and investment by the MNE. However, to the extent that local engineering is limited to manufacturing engineering, and the transfer of existing manufacturing processes (vs. innovation in manufacturing processes), we would expect less knowledge transfer. This leads to the following research questions**:**

12. How centralized/decentralized are the GDEs? How much local autonomy is there, and at what levels?
13. How do standard operating procedures differ between the home and host countries for the same or similar processes. What changes occur in the culture of the local site? Are there patterns in the roles assumed in GDE teams by home E/NIE host country engineers?

Conclusion

Older images of MNEs grudgingly siting low-tech activities in E/NIEs to take advantage of cheap labor or to avoid trade barriers are far less applicable than in the past. Increasingly, MNEs are finding it advantageous to draw on the engineering skills of their E/NIE sites, and new technologies are making it increasingly easy for them to do this. Centers of technological excellence are emerging in countries that not long ago lacked the infrastructure believed necessary to support frontier technological work. This aspect of globalization, as with many others, is increasing the interdependence of globally distributed actors. It is also making it increasingly important for firms to ensure the sustainability of these activities by seeing that a positive sum relationship is nurtured with their host E/NIEs.

Similarly, older images of development policy suggested that E/NIEs needed to develop domestically-controlled businesses and find specialty niches in the global economy that they could fill through a comparative advantage based on workforce availability and/or natural resources. In an emerging perspective, an E/NIE's knowledge-based assets may provide it a competitive advantage, and these may come from developing knowledge-based industrial activity within an MNE. Globally-distributed engineering provides that opportunity, but the conditions under which it does so are not well understood nor are the implications for development (see Table 1).

This new globalization environment substantially changes what we need to know to understand the trends, costs, and benefits of globally distributed engineering for all its stakeholders.

The research agenda proposed here would help fill this need by uncovering some of the micro-level implications of strategies pursued by multinationals, i.e., how the transfer of engineering functions to E/NIEs results (or not) in direct knowledge transfer and ultimately to development by building engineering human resources. Such research would also inform national education policy directed at increasing engineering capacity. We believe such research would offer insights that can be helpful both to MNE managers trying to build on corporate strengths and to E/NIE policy makers trying to ensure that the transfers of technology occur that are beneficial to their countries.

Table 1: EMERGENCE OF NEW PATTERNS OF GLOBALIZATION

Old Globalization Patterns		**New Globalization Patterns**	
MNE Goals:			
Strategic objectives:	Low cost production and expanded sales of mature and commodity products	Develop and draw on local technological capabilities	
Labor:	Low cost labor for low tech/low skill mfg	Lower-cost science/technology human resources; unique and expanded supply of high-end science/technology human resources	
Markets:	Sales of low-tech, commodity products and/or older products	Global production centers for enhanced global competitiveness	
Engineering:	R&D mostly for "localization" of product; involves low-end engineering; MNEs retain tight control over technology	"Centers of Excellence" discovered — Offshore knowledge work requires local science and engineering human resource development; diffusion of technology know-how	
Outcome:	Low levels of technology and knowledge transfer; late life cycle product transfer; low levels of local investment	Need to develop local engineering, science, and other high skill capacity:	Manufacturing Eng. Design Eng. IT Corporate R&D Finance/accounting
Host Country (E/NIE) policies for development			
Strategic objectives	Retain capital, foster domestic industry development Domestic presence/domestic value-added Defend economic and political autonomy	Extent of technology and knowledge transfer depends on interaction of E/NIE government policies + collaborative technology capacity/limitations + MNE "culture" and strategy	
Labor:	Jobs for unskilled	Local jobs for science/technology human resource development and retention of high skill ("brain circulation")	
Markets:	Protect local markets, use for bargaining	Share of profits from global trade; investment in local development	
Engineering:	Force MNEs to share technology; disputes about level of technology transfer and intellectual property protection	Upgrade local capabilities; development of high technology sector	

References

[1] Amsden, A. (1997). Bringing production back in--Understanding government's economic role in late industrialization. *World Development*, April.

[2] Bartlett, C.A. & Ghoshal, S. (1998). *Managing across borders: the transnational solution*. 2d ed. Boston: Harvard Business School Press.

[3] Birkinshaw, J. (1998). Multinational subsidiary evolution: capability and charter change in foreign-owned subsidiary companies. *Academy of Management Review*, Oct.

[4] Birkinshaw, J. & Hood, N. (1998). Building firm-specific advantages in multinational corporations: the role of subsidiary initiative. *Strategic Management Journal*.

[5] Blomstrom, M & Kokko, A. (20010. "Foreign direct investment and spillovers of technology." *International Journal of Technology Management*. 22: 435-454.

[6] Brewer, T. & Nollen, S. (1998). Knowledge transfer to developing countries after WTO theory and practice in information technology in India" Working Paper 98-14 Report to the Carnegie Bosch Institute

[7] Bucciarelli, L. & Kuhn, S. (1997). Engineering education and engineering practices: improving the fit. In *Between craft and science: technical work in U.S. settings*. In S. Barley and J. Orr (eds.). Ithaca: Cornell University Press.

[8] Cantwell, J. (1989). *Technological innovation and multinational corporations*. Oxford: Basil Blackworth.

[9] Cantwell, J. (1995). The globalization of technology: what remains of the product life cycle model?" *Cambridge Journal of Economics*. 19: 155-174.

[10] Clark, K. & Fujimoto, T. (1991). *Product development performance*. Cambridge, MA: Harvard Business School Press.

[11] Cole, R.E. (1999). *Managing quality fads*. New York: Oxford University Press.

[12] Correa, C.M. (1995). Innovation and technology transfer in Latin America: a review of recent rrends and policies." *International Journal of Technology Management*.

[13] Cusumano, M. & Elenkov, D. (1994). Linking international technology transfer with strategy and management: a literature commentary. *Research Policy*.

[14] Davenport, T. (1998). Successful knowledge management projects. *Sloan Management Review*, Winter.

[15] Dowlatshah, S. (1996). An empirical assessment of continuing education needs. *Journal of Management in Engineering*, September 12, 37-44.

[16] Dunning, J.H. (1994). Multinational enterprises and the globalization of innovatory capacity. *Research Policy*.

[17] Etzkowitz, H. & Leydesdorff, L. (2000). The dynamics of innovation: from national systems and 'Mode 2' to a triple helix of university-industry-government relations, *Research Policy* 29: 109-123.

[18] Ghoshal, S. & Bartlett, C.A.. (1988). Creation, adoption, and diffusion of innovation by subsidiaries of multinational corporations. *Journal of International Business Studies*.

[19] Ghoshal, S. & Westney, D.E. (1994). *Organization theory and the multinational corporation*. New York: St. Martin's Press.

[20] Gronbaek, K., Kyng, M. & Mogensen, P. (1993). CSCW challenges: cooperative design in engineering projects. *Communications of the ACM* 36(4): 67-78.

[21] Hobday, M. (1995). *Innovation in East Asia*. Cheltenham, UK: Edward Elgar Publishing, Ltd.

[22] Hobday, M. (2000). "East versus Southeast Asian innovation systems: comparing OEM- and TNC-led growth in electronics." In *Technology, Learning, and Innovation*, L. Kim and R. Nelson (eds.). New York: Cambridge University Press.

[23] Hughes, T., Bijker, W. & Pinch, T. (1987). *The social construction of techonological systems*. Cambridge, MA: The MIT Press.

[24] Jin, D. (2001). *The dynamics of knowledge regimes: technology, culture and competitiveness in the USA and Japan.* London: Continuum.

[25] Kim, L. & Dahlman, C. (1992). Technology policy for industrialization: an integrative framework and Korea's experience. *Research Policy*.

[26] Klein, M. & Dellarocas, C. (2000). A knowledge-based approach to handling conflicts workflow systems. *J. Computer-Supported Collaborative Work.* Special Issue on Adaptive Workflow Systems.

[27] Kotthoff, H. (2001). Pluri-local social spaces in global operation German companies. Pp. 1-17 in L. Pries (Ed.) *The Emergence of Transnational Social Spaces.* London.

[28] Lall, S. (1980). Developing countries as exporters of industrial technology. *Research Policy* 9: 24-52.

[29] Lim, Y., (1999). *Technology and productivity: the Korean way of learning and catching up.* Cambridge, MA: MIT.

[30] Lynn, L.H., (2002). Engineers and engineering in the U.S. and Japan . *IEEE Transactions on Engineering Management*. 49: 95-106.

[31] Lynn, L. & Salzman, H. (2002). What makes a good engineer? U.S., German and Japanese perspectives. *Proceedings of the European Applied Business Research Conference*. Rothenburg, German. June.

[32] Lynn, L., Piehler, H. & Kieler, M. (1993). Engineering careers, job rotation and gatekeepers in Japan and the United States. *Journal of Engineering-Technology Management.*

[33] McKendrick, D., Doner, R., & Haggard, S. (2000). *From Silicon Valley to Singapore: location and competitive advantage in the hard disk drive industry.* Stanford University Press.

[34] Mills, K. (1999). Introduction to the electronic symposium on computer-supported cooperative work." *ACM Computing Surveys* 31(2): 105-16.

[35] Moran, T. (2000). The product cycle model of foreign direct investment and developing country welfare. *Journal of International Management*. 6: 297-311.

[36] Moran, T. (2001)., *Parental supervision: the new paradigm for foreign direct investment and development.* Washington, D.C.: Institute for International Economics.

[37] Moss, P., Salzman, H. & Tilly, C. (2000) Limits to market-mediated employment: from deconstruction to reconstruction of internal labor markets, *Industrial Relations Review Annual*, F. Carre & M. Ferber (Eds.)

[38] Mytelka, L. (2000). 'We the People': the transformation of state-TNC relations at the turn of the millennium. *Journal of International Management*. 6: 313-325.

[39] Nonaka, I., & Takeuchi, H. (1995). *The Knowledge-Creating Company,* Oxford University Press.

[40] OECD. (2000). The OECD guidelines for multinational enterprises. Paris.

[41] Patel, P., 1995. "Localised Production of Technology for Global Markets." *Cambridge J of Econ*.

[42] Reddy, M. & Zhao, L. (1989). International technology transfer: a review. *Research Policy*.

[43] Roberts, J., (2000). From know-how to show-how? Questioning the role of information and." *Technology Analysis & Strategic Management*, December.

[44] Rodrigues, C. ,Bu, N. and Min, B. (2000). Learners' training approach preference: national culture as a determinant. *Cross Cultural Management: An International Journal*. 7: 23-32.

[45] Rodrik, D. (1999). The new global economy and developing countries: making openness work. Washington, D.C.: Johns Hopkins Press for the Overseas Development Council.

[46] Rosenfeld, S., (1998). Technical colleges, technical deployment and regional development, OECD, Regional Technology Strategies, Inc.. Modena, Italy.

[47] Sadagopan, S. (1999). Information technology for India. Working paper, Indian Institute of Information Technology–Bangalore.

[48] Salzman, H. with Biswas, R., (2000). The Indian IT industry and workforce: implications for U.S. H1-B Policy. Report to the National Academy of Sciences.

[49] Salzman, H. & Rosenthal, S. (1994). *Software by design: shaping technology and the workplace* Oxford University Press

[50] Saxenian, A., (1996). *Regional advantage: culture and competition in Silicon Valley and Route 128.* Cambridge: Harvard University Press

[51] Suchman, L., (1995). Representations of work: making work visible." *Communications of the ACM* 38(9):56.

[52] Urata, S. & Kawai, H.. (2000). Intrafirm technology transfers by Japanese manufacturing firms in Asia. In T. Itoh and A. Krueger (Eds.). *The role of foreign direct investment in East Asian economic development.* Chicago: University of Chicago Press.

[53] Vernon, R. (1966). International investments and international trade in the product cycle." *Quarterly Journal of Economics*.

[54] Vernon, R. (1971). *Sovereignty at bay*. New York: Basic Books.

[55] Zanfei, A. (2000). Transnational firms and the changing organization of innovation activities. *Cambridge Journal of Economics*.

Endnotes

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[1] In 1984 India set up the first Software Technology Parks of India (STPI) to promote the electronics industry. Today the STPIs are large modern buildings, comparable to those found in U.S. technology parks. Mumbai/Bombay has the largest STPI, with 2 million square feet; Hyderabad has an STPI with 1 million square feet, Chennai (Madras) will be opening one with 1.2 million square feet, and Bangalore has two STPIs with combined space of over 2.5 million square feet [47]. Much of this growth is due to the presence of foreign firms, spurred by changes in ownership requirements.

[2] He argues that the social spaces of international companies are not truly global, but are "pluri-local". He finds that "when the companies recruit managers for key positions in the subsidiaries abroad these persons always have to be very reliable and absolutely loyal to the company," and thus [the German firms] staff about half of the top tiers by managers from the German headquarters and for the other positions, in Brazil they were largely locals of German descent and in Turkey they were children of Turkish migrants, grown up in Germany – "for all of them German is a second mother-tongue...who are Germans in habits, language, and culture…to ensure a space of trust is seen as the central problem."

[3] Partly for this reason (and probably in part due to bureaucratic constraints), the government has not increased the number of university slots for computer science majors, hoping to thus educate for domestic rather than foreign skill needs by, for example, increasing the number of allocating seats for civil engineering [48].

[4] Defined in this way, one can see the multiple dimensions and size of the task. A recent symposium on CSCW concluded: "...despite advances in processing power and bandwidth, the exponential growth in the size of the World-Wide Web, and the nearly ubiquitous deployment of a de facto standard commercial operating system, effective computer supported collaboration eludes us." [34]. Be that as it may, the organizational *attempts* at dispersion continue apace.

[5] Understanding "knowledge conversion" [39] as an interplay between implicit and explicit knowledge is only one dimension; transference of knowledge while leaving untouched its status as *tacit* knowledge may be as important. Davenport [14] argues that, "While knowledge and information may be difficult to distinguish at times, both are more valuable and involve more human participation than the raw data on which we have lavished computerization during the past forty years."

Modeling Barriers to International Capital Flows: A Multicountry Framework

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Abstract

To explain the bias in favor of domestic securities known as the "international diversification puzzle," the literature has considered many possible irritants of capital movements across national boundaries but the results remain inconclusive. This paper demonstrates that this complex multivariate problem can be addressed within an analytic hierarchy process (AHP)-driven expert system. The AHP can be modeled to select an optimal investment portfolio (OIP), herein a multinational portfolio composed of national markets where barriers to capital flows are least likely to adversely affect its return. Experts examined these barriers in relation to six national markets and the euro zone. The U.K. turns out to be their market of choice closely followed by Canada, and the Euro Zone. There is gain to be made from using the opinion of those with first-hand understanding of foreign markets and knowledge-based expert systems such as the AHP are best suited to capture that expertise.

Introduction

The underlying theoretical basis of diversification formalized in Markowitz Portfolio Theory and the Capital Asset Pricing Model has been well documented in the finance literature. International diversification enables investors to reduce the unsystematic risk of investing in one economy. Business cycles do not happen uniformly across countries; when one country is experiencing rapid growth, another may be in a recession. By investing across countries, investors should logically eliminate from their portfolios part of the cyclical fluctuations that would arise from the domestic business cycle. Such investors will only be exposed to systematic risk related to the global economy.

Since Markowitz's seminal work (1952), many of the studies that have explored the merit of holding international assets as a part of a strategically balanced portfolio confirm diversification as the most important motivating factor in international investment. For example, in Worzala's survey (1994) diversification is ranked as very important by a substantial majority of respondents. In a survey of British investors, Baum (1995) also finds diversification as the main motivator of international investment.

But in spite of the theoretical and matter-of-fact groundings of international diversification, many studies have demonstrated that investors nevertheless hold portfolios that consist nearly exclusively of domestic assets. This violation of standard theories of portfolio choice is known as the "international diversification puzzle." For example, in 1991 French and Porteba report that U.S. investors hold about 94 percent of their financial assets in the form of U.S. securities. For Japan, U.K., and Germany, the share of domestic assets in each case exceeds 85 percent. They find an explanation to the apparent tendency of U.S. pension funds to overweight their own equity market in explicit limits on cross-border investment known as the 'prudent man' rule. In Japan where insurance companies cannot hold more than 30 percent of their assets in foreign securities this rule is also interpreted as limiting their degree of international exposure. In France a foreign investor may not hold more than 20 percent of any firm without prior approval from the *Ministère de l'Economie et des Finances*.

In 1995, Tesar and Werner showed that domestic assets continue to overwhelmingly dominate portfolios despite the rapidly growing volume of international financial trade. They examined the foreign investment positions of major industrial countries and found that international investment as a fraction of the total domestic market of stocks and bonds equaled about 3 percent for the U.S., 4 percent for Canada, 10 percent for Germany, 11 percent for

Japan, and 32 percent for the United Kingdom. Excluding the U.K., calculations of a diversified portfolio would have much higher fractions devoted to international assets.

So why do investors seem to have this bias in favor of securities of their home country? Standard models of optimal portfolio choice cannot rationalize this pattern of asset holdings, even in the presence of unhedged foreign exchange risk. Of the several possible reasons, Worzala (1994) finds that transaction costs in less liquid markets and particular taxation regimes such as a dividend withholding tax on payments to foreign shareholders could have significant repercussion for investment performance. He considers them among the most significant irritants of capital movements across national boundaries.

Barriers to capital movements can take many other forms such as foreign exchange and capital controls. Exchange controls increase pure exchange rate risk while capital controls restricts capital flows across national boundaries. Where formal capital controls on foreign investment exist, securities command abnormal risk premium. Both effects are well documented in the literature (Errunza and Losq, 1985; Eun and Janakiramanan, 1986). Or perhaps, evidence given by Gatti and Tverski in 1990 that households behave as though unfamiliar gambles are riskier than familiar gambles even when they assign identical probability distributions to the two gambles should be given serious thought in future investment portfolio research.

Obviously many factors can constraint the flow of capital movements across national boundaries. Various methodologies have been used to explain investors' bias in favor of domestic securities but the results remain clearly inconclusive. This study advocates a different approach to this multivariate problem. It suggests that this problem can also be addressed within an analytic hierarchy process-knowledge-based expert system.

First, the finance literature is used to identify the most significant barriers to international capital flows. These barriers are then submitted to the review of a sample of international investment experts operating in the New York metropolitan area. Using their market experience, they identify the most formidable of these barriers by comparing them to each other. They also compare them in relation to a sample of countries they were provided with. This identification and selection process ultimately generates the optimal investment portfolio (OIP). This diversified portfolio best represents a frictionless multinational portfolio. It is composed of national markets where barriers to international capital flows are least likely to adversely affect its return. This process takes full advantage of practitioners' knowledge of these markets by providing them with a comprehensive model that integrates the effect of all the interactive parameters.

The Analytic Hierarchy Process (AHP): A Knowledge-Based System Model

This research illustrates how the OIP can be formed based on the analytic hierarchy process (AHP), first developed by Saaty (1980). The AHP is a simple decision analysis model appropriate when the decision maker wants to deal with complex, unstructured, and multi-attribute problems in arriving at the overall best decision. Applications of the AHP have been reported in numerous fields such as conflict resolution, project selection, budget allocation, transportation, health care, and manufacturing, but it has yet to be applied to portfolio selection. The strength of the AHP lies in its ability to mimic practitioners' judgment about the importance that would be attached to different influential factors and to structure a complex and multi-attribute system matrix. The AHP assumes the three basic principles of logical analysis: constructing hierarchies, establishing priorities, and maintaining logical consistency.

Structuring The Hierarchy

The AHP initially breaks down a complex multi-criteria decision-making problem into a hierarchical structure. The hierarchy pyramid is structured by enumerating the relevant elements that should enter into the decision outcome. The elements are then grouped in levels.

The top level of the hierarchy, referred to as focus, consists of a single element or goal, which is the overall objective. The elements that affect the decision are called attributes or criteria. They are included in the subsequent levels, each of which may have several elements. Attributes are mutually exclusive and their priorities are independent of the elements positioned below them in the hierarchy. The lowest level of the hierarchy is referred to as alternatives, which are decision options (see Fig. 1) (Saaty, 1980).

Setting Priorities

Once the problem has been decomposed and the hierarchy constructed, the prioritisation procedure starts in order to determine the relative importance of the elements on the next higher level. The pair-wise judgment starts from the second level (first level of attributes) and finishes in the lowest level alternatives. The AHP uses pairwise comparisons to establish priority weights for all elements in the hierarchy. Pairwise comparisons are repeated until all combinations of elements have been exhausted. The level comparisons result in a "priority vector," which indicates the relative importance of the elements with respect to each criterion.

The decision maker must express preference between each pair of elements. Each pairwise comparison is scored as: equally important (1), moderately more important (3), strongly more important (5), very strongly more important (7), and extremely more important (9) (Saaty, 1980; 1982). An even preferential number scoring system can also be used to represent comparisons among a pair of attributes. This method of ranking enables the decision maker to incorporate his/her experience and knowledge in an intuitive and natural manner.

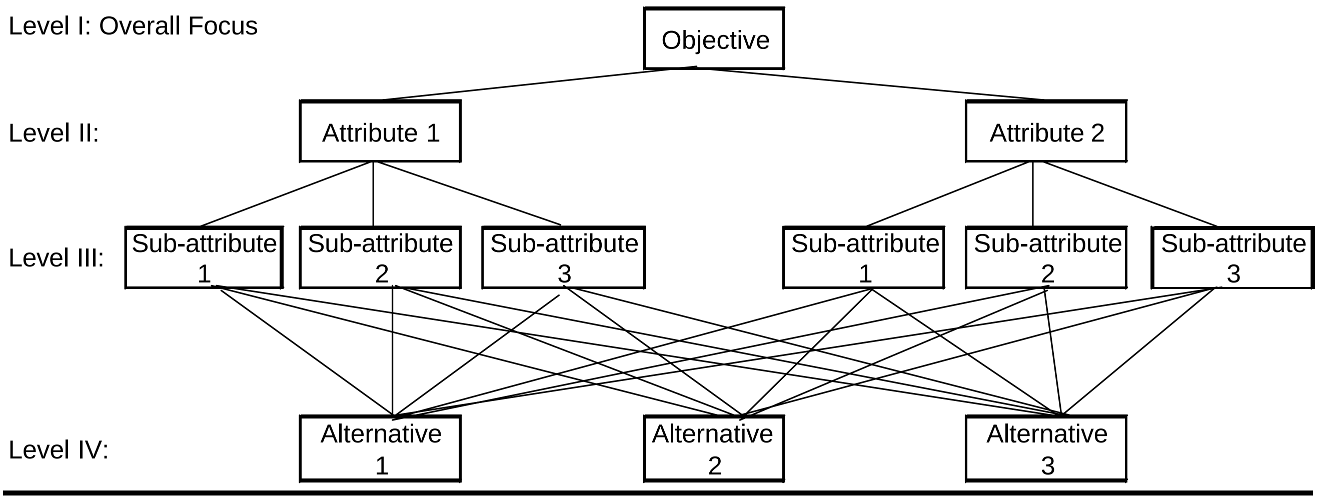

Fig. 1: A GRAPHICAL REPRESENTATION OF THE MECHANICS OF THE AHP

Maintaining Logical Consistency

After forming the preference matrices, the mathematical process commences in order to normalize and find the priority weights for each matrix. The AHP process then determines the consistent nature of the pairwise comparisons (i.e. consistency ratio (CR)) for all matrices. If the CR value is larger than 0.10 (which is the acceptable upper limit for CR (Saaty, 1982)), it implies that there is a 10 per cent chance that the elements are not compared well. In this case the decision maker must review the comparisons again.

The mathematical process then starts to integrate the assigned weights in order to develop an overall evaluation process (i.e. the mathematical process to determine the CR values and the corresponding weights for each alternative). Although the mathematical process of the AHP is tedious, the use of expert system makes it simple and accurate to apply (Turban, 1993).

Application Of The AHP Model

The hierarchy in this application contains four levels (see Fig. 2). The first level of the hierarchy identifies the objective: selection of the OIP. The second and third levels are the intermediate levels, which include the criteria and subcriteria used to achieve the overall objective. These are the macro (criteria) and micro (subcriteria) barriers that determine the choice of the OIP. The fourth and final level of the hierarchy lists the particular national markets from which this portfolio will be constructed. The macro and micro barriers to international capital flows are defined in Table 1.

Pairwise comparisons are used to establish priority weights for all the elements of the hierarchy. First, the decision maker provi des judgments about the relative importance of each macro and micro barriers of levels two and three in terms of its effect on the overall objective. Next, a preference is specified for each national market (level four) relative to each barrier. Given the information on the relative importance of the barriers and national market preferences with regard to each barrier, a mathematical process is used to synthesize the information and provide priority measures indicating the ranking of all the national markets.

Table 1: DEFINITION OF MACRO AND MICRO BARRIERS TO INTERNATIONAL INVESTMENT

- **Discriminatory Taxation**: In some overseas markets, U.S. investors are more heavily taxed than domestic investors.
- **Exchange Risk**: U.S. investors in overseas markets are subject to the risk of dollar appreciation, which diminishes their total return when profits are repatriated.
- **Legal Restrictions**: U.S. investors face a complex web of regulations and rulings overseas, including:
  - **Foreign Ownership**: Limitation of the percentage of foreign ownership of financial assets or restriction of ownership to specific areas.
  - **Market Regulations**: Foreign ownership flowing into or out of overseas markets might be restricted through the imposition of capital controls.
- **Liquidity Risk**: In a shallow overseas market with insufficient demand, attempts to liquidate assets on a large scale reduce the market value of the assets.
- **Political Risks**: Funds invested internationally fall under the jurisdiction of the host country, subjecting international investments to rules established by local governments no matter how arbitrary or unfair such regulations may appear. The most common types of political risks are:
  - **Expropriation of Assets**: The government of the country where funds are invested confiscates the capital investment.
  - **Repatriation of profits**: U.S. investors are unable to convert earnings into dollars for the repatriation of profit because of the host government's rigid currency rules.
- **Psychological Barriers**: Distance from overseas markets and perceived differences in work habits and standards may cause investors to hesitate in investing in foreign markets. This reluctance can be triggered by the following:
  - **Language Barriers**: U.S. investors can find it particularly difficult to conduct business in a national market that uses a language with which they are unfamiliar.
  - **Source of information**: Availability and dependability of information on individual companies and industries may vary greatly from one national market to another. This set of data, if available, may be hard to translate into familiar standards for comparison purposes. For example, differences in accounting measurement and auditing practices between the United States and other countries may make the financial statements from a firm located in a foreign market harder to interpret.
- **Transaction costs:** These are the costs incurred in placing the order and securing the certificates. Because of the international dimension of the investment, these costs can be higher than domestic costs. Major transaction costs are:

- **Custodial fees**: These fees cover international custodial services such as automated trade notification, cash management services involving different currencies, and a network of sub custodians in different countries.
- **Management Fees**: These are fees charged by international money managers. They might be higher than those charged by domestic management because they reflect higher costs in terms of international database subscription, research, communication costs, and so on.

Bold nodes represent macro barriers to international investment whereas clear nodes represent micro barriers.

The basis of this procedure is the completion of an "n x n" matrix where the entries (a_{ij}) set forth the answers to the series of questions included in the survey. For example, "Which national market (a_i or a_j) is more advantageous for the U.S. global investor with respect to foreign exchange risk?" Using the comparison scale, the answer to this pairwise comparison is entered into the "n x n matrix." If the entry "9" is shown at the a_{12} position (e.g., Euro Zone vs. Australia), this means that national market a_1 (Euro Zone) is "extremely favored" over national market a_2 (Australia) with respect to "foreign exchange risk."

One result of a pairwise comparison of elements within the matrix structure is that a diagonal that runs from the upper left corner of the "n x n" matrix to its lower right corner is composed entirely of cells with the value "1." This depicts the comparison between a national market and itself. Once the upper triangular portion values above the "1 diagonal" are known, the lower triangular portion values can be determined because the transpose values are reciprocals (Saaty, 1982). Subsequently, in our example above, 1/9 is entered at the symmetric position a_{21}. Once all the entries of the matrix are available, one can easily solve for the priority weights for all elements in the hierarchy.

Sample Design

The size of the sample is limited to seven markets to minimize inconsistencies in respondent judgments. A larger sample would generate an excessive number of pairwise judgments, which would heavily tax the capacity of the respondents to be consistent throughout the survey (Miller, 1956). Also, as the collaboration of U.S. global investment experts is critical to the completion of this study, a larger sample would mean a longer survey, which could limit the number of responses, thereby weakening the results of the analysis. Choice of the countries used in this analysis assumes that a low correlation coefficient between the U.S. market and other national markets is a key capital flow driver. It is generally accepted that if markets tend to experience somewhat identical cycles, diversification across national markets will be less effective.

Note that, in the sample, the Euro Zone is the area in which the euro is the single currency for its twelve members.[1] Due to a lack of common statistics, the inclusion of the Euro Zone in the sample is justified by showing the correlations of Germany and France with the U.S in Table 2. This choice should be self-explanatory. In addition to being considered the two "economic engines" of Europe, their macroeconomic aggregates are widely viewed as having initially set the benchmarks for inclusion in the Euro Zone.

Table 2 reports the correlations coefficients among the monthly returns of nine major stock markets in 1987-2000. Of the eight correlations reported between the United States and the eight other markets (bottom row), the highest is the coefficient between Canada and the United States (0.77). This comes as no surprise since Canada, being a neighboring country and the largest U.S. trading partner, has strong business linkages with the United States. The next highest correlation is found between the U.S. and the U.K. markets (0.67). Given the strong linguistic and economic ties between the two countries, the high correlation is also not surprising. On the other hand, the lowest correlation is found between the U.S. and the Japanese markets (0.26). This is to be expected considering that the 1990s saw the United States in a long and strong business cycle expansion. But the decade brought only severe recession in Japan.

TABLE 2: CORRELATION COEFFICIENTS AMONG MONTHLY RETURNS OF MAJOR STOCK MARKETS, 1987-1998
(All returns are converted to U.S. dollars)

				Correlation Coefficients				
Stock Market	**AU**	**CA**	**FR**	**GE**	**HK**	**JA**	**SI**	**UK**
Australia (AU)								
Canada (CA)	0.65							
France (FR)	0.43	0.46						
Germany (GE)	0.33	0.35	0.68					
Hong Kong (HK)	0.62	0.65	0.42	0.38				
Japan (JA)	0.25	0.29	0.42	0.25	0.19			
Singapore (SI)	0.68	0.63	0.47	0.45	0.78	0.37		
United Kingdom (UK)	0.6	0.59	0.59	0.52	0.58	0.45	0.66	
United States (US)	0.56	0.77	0.55	0.42	0.61	0.26	0.66	0.67

Source: Morgan Stanley's Capital International Perspectives (1999).

The correlation coefficient matrix as a whole conveys that capital markets are becoming increasingly integrated. However, although their convergence has gradually decreased some of the benefits of international portfolio diversification, the correlation coefficient between markets are still far from 1.0, indicating that there are still factors acting against their total integration.

Data Collection

The AHP does not need a formal data set. It requires that experts use experience gained in the field to state judgments on criteria and alternatives. In this case, qualitative judgments on the barriers to international capital flows as defined in Table 1 are obtained from a 25-page questionnaire mailed during the fourth quarter of 1999 and first quarter of 2000 to 40 randomly selected firms operating international investment divisions in the New York metropolitan area. Bearing in mind that this study is based on the interview survey method conducted in an international context, the response rate could be considered fairly high with 15 respondents completing the survey.[2]

The respondents are high enough in their institutions' management hierarchy to have decision responsibility. Their experience making international investment decisions ranges from 3 to 10 years with an average of 4 years and 9 months. The names of the institutions that responded and accepted to be subsequently interviewed are listed in Table 3. Note that this list excludes five participants who did not answer all the questions in the survey because of their stated lack of expertise in some of the specific national markets included in the sample. All of the respondents insisted on having their names and remarks kept confidential. Two respondents also insisted on having the names of their employers undisclosed. In effect, the survey's findings reflect the answers of 15 representatives although Table 3 lists only 13.

TABLE 3: LIST OF RESPONDENTS*

AT&T Investment Management Corporation	Mellon Financial Company
Barclays Capital	Merrill Lynch & Co.
Cendant Corporation	New Jersey Division of Investment
Citigroup	Prudential Financial
Hoffmann-La Roche, Inc.	Teachers Insurance Annuity Association
Ingersoll-Rand Co.	Name of institution withheld upon request
International Paper Company	Name of institution withheld upon request
Lucent Technologies, Inc	

* Five organizations responded partially to the survey and thereby were not included in the analysis.

Source: Respondents were selected from "The Money Market Directory of Pension Funds and their Investment Managers", Standard & Poor's, 1999.

The survey outlines a scenario in which a U.S. investor is considering adding foreign securities or other types of foreign investment products to a portfolio of U.S. assets.[3] It asks respondents to evaluate the specific barriers to international capital flows as defined in Table 1. Other factors, such as inflation or interest rate differentials, were to be considered equal for the purpose of this study. The AHP model and the logic of its procedures were explained to the respondents and illustrated with simple examples by a group of graduate students who met with them. The same group of students met with them subsequently to go over the answers and collect some of their thoughts.

The first part of the questionnaire asks the respondents to use their perspectives as expert global investors (without regard for a particular national market) to evaluate the relative importance of each barrier to international investment. They did this through a series of pairwise comparisons of each barrier to every other barrier. The AHP matrices of levels two and three of the hierarchy in Figure 2 are calculated from these pairwise judgments.

In the second part of the questionnaire, the respondents are asked to make pairwise comparisons of the national markets with respect to each impediment in levels two and three of the hierarchy. Responses to the second part of the survey are used to construct level four of the hierarchy.

All responses were combined using the geometric mean for each pairwise judgment to estimate the relative priorities. The resulting (geometric) mean judgments are evaluated using Saaty's eigenvector method to estimate the priority of each barrier in terms of its contribution to constraining international capital flows and its subsequent weight in determining the OIP.

Findings

Table 4 shows respondents evaluation of the seven macro barriers of level two of the hierarchy in relation to each other (pairwise) and with respect to the selection of the OIP. The vector of priority weights in the bottom row can be interpreted to describe either the importance of one macro barrier over another or the relative attention that each should be paid in the selection of a national market for investment.

TABLE 4: SECOND LEVEL OF THE HIERARCHY:
COMPARISON MATRIX OF THE MACRO BARRIERS TO CAPITAL FLOWS

Macro Impediments	Discri-minatory Taxation	Exchange Risk	Legal Restrictions	Liquidity Risk	Political Risks	Psycho-logical Barriers	Transaction Costs
Discriminatory Taxation	1	1	1	1	1	2	2
Exchange Risk	1	1	1	1	1	3	3
Legal Restrictions	1	1	1	1	1	2	3
Liquidity Risk	1	1	1	1	1	3	2
Political Risks	1	1	1	1	1	3	3
Psychological Barriers	½	1/3	½	1/3	1/3	1	½
Transaction Costs	½	1/3	1/3	½	1/3	2	1
Priority Weights	0.15	0.217	0.165	0.152	0.181	0.067	0.068
$?_{max}$ = 7.032			C.I. = 0.005			C.R. = 0.004	

The priority weights show that "foreign exchange risk" is the most important barrier, and "psychological barriers" the least important. "Foreign exchange risk" is given almost 20 percent more weight than the next highest barrier, "political risks," and approximately 46 percent more weight than "discriminatory taxation." These results imply that a national market with a stable currency is the most important criterion to U.S. global investors. If the currency of the market in which the funds are invested weakens against the dollar, earnings will convert into fewer dollars.

Although this result outlines the important role played by foreign exchange markets' in the world economy, it comes as a surprise especially in light of the many financial tools that could be used to neutralize "foreign exchange risk." Experts, however, justified their answer emphasizing that these tools are not "exactly free" and are often "as good as the ability of analysts to forecast the path of a currency." Some brought up past predictions of a strong euro that proved to be wrong.[4] But, in reality most respondents acknowledged that they have become especially wary of "foreign exchange risk" after the severe currency crisis in Mexico in late 1994 followed by that of Asia in 1997 and then Russia, Brazil, and Turkey.[5] As expected, these crises are hardly the ingredients for successful investing.

In descending order of importance, the other highly ranked impediment is "political risk." Defined as the inability to repatriate profits or/and likelihood of the capital investment being expropriated (micro impediments from level III of the hierarchy in Figure 2), the former seems to give more worry to the respondents than the latter. This result does not come as a surprise given that most countries have hardly any recent history of expropriations. As shown in Table 5 (Panel b), on the average, the respondents believe that the likelihood of a foreign government restricting repatriation of profits (0.106) is about twice as likely than a potential threat of expropriation of foreign assets (0.056). Seemingly, respondents have learned hard lessons from the rigid currency rules adopted by Asian countries in an effort to stop extreme short-term capital movements.

Table 5: THIRD LEVEL OF THE HIERARCHY:
COMPARISON MATRIX OF THE MICRO BARRIERS TO CAPITAL FLOWS

(Panel a)

Legal Restrictions	Foreign Ownership	Market Regulations
Foreign Ownership	1	1
Market Regulation	1	1
Priority Weights	0.086	0.078
?$_{max}$ = 2.001; C.I. = 0.001; C.R. = 0.001		

(Panel b)

Political Risks	Expropriation of Assets	Repatriation of Profits
Expropriation of Assets	1	½
Repatriation of Profits	2	1
Priority Weights	0.056	0.106
?$_{max}$ = 2.000; C.I. = 0.0003; C.R. = 0.0003		

(Panel c)

Psychological Barriers	Language Barrier	Sources of Information
Language Barrier	1	1/3
Sources of Information	3	1
Priority Weights	0.018	0.049
?$_{max}$ = 2.0002; C.I. = 0.0002; C.R. = 0.0002		

(Panel d)

Transaction Costs	Custodial Fees	Management Fees
Custodial Fees	1	½
Management Fees	2	1
Priority Weights	0.02	0.059
?$_{max}$ = 2.0006; C.I. = 0.0006; C.R. = 0.0006		

Other macro impediments of importance to the respondents are “legal restrictions,” “liquidity risk,” and discriminatory taxation.” Components of “legal restrictions” are “foreign ownership” and “market regulations.” Their weights in Table 5 (Panel a) represent the priority of each one of these micro barriers in the selection of the OIP. For example, the first weight represents the portion of “legal restrictions” attributed to “foreign ownership” (0.086). The two weights are not very different, although the respondents express a slightly higher concern for “foreign ownership” problem in national markets where foreign capital can be limited by percentage than for “market regulations” such as imposition of capital controls.

Constraints on ownership of financial assets to specific industries are still common in many countries. Although not included in the survey, some respondents gave the example of China still banning foreign investment in the telecommunications and banking industries whereas its financial markets still remain off limits to foreign firms. They also believe that the financial markets of most emerging economies lack both depth and liquidity for dollar-denominated debt, equity, interest-rate derivatives, and repurchase agreements.

On the other hand, macro barriers such as “psychological barriers” and “transaction costs” (0.067 and 0.068, respectively) are judged by our sample of experts as insignificant impediments. These results are quite puzzling at first because one would expect a U.S. investor about to venture into unfamiliar markets to be affected by such factors. “Psychological barriers” such as the numerous differences in work habits and work standards that may exist between foreign markets and U.S. financial markets, and higher “transaction costs,” such as the extra costs involved in securing the ownership of a foreign certificate, would seem impossible to ignore when diversifying a portfolio across national boundaries.

Table 5 (Panels c and d, respectively) breaks these two elements into the micro barriers of level III for the specific purpose of gathering more information from the respondents on their relative importance: “language barriers” and “sources of information” are micro aspects of “psychological barriers” while “custodial fees” and management fees” are micro aspects of “transaction costs.”

The results show that survey participants believe these particular micro barriers should contribute only marginally to the selection of the OIP. When further interviewed, respondents justified their answer by the assertion that most U.S. investment firms trading internationally have established their own international links, thereby eliminating the need for costly intermediaries. Local staffing has reduced "psychological barriers." A number of respondents mentioned that "language" is not much of a hindrance as most of the foreign experts they deal with speak adequate English. When asked about differences in accounting and reporting practices in the sampled national markets, participants responded that a knowledgeable local staff, versed in local accounting practices, provides them with an effective way to cope with this problem.[6]

The pairwise comparison procedure is also used to determine the priority ranking of the seven "national" markets in terms of the barriers to international investment (level four of the hierarchy). The question asked now is: "Of the two national markets being compared in terms of a specific investment barrier, which one should be favored?" Tables 6 and 7 show the matrices and the national market priority weights for macro and micro impediments. These results show reasonable consistency indices, which indicate that experts responded with largely consistent judgments.

The priority weights summarized in Table 8 (excerpted from Table 6) show that four out of the seven macro barriers are judged less important in the case of Canada and the U.K. than for the other national markets: "transaction costs," "psychological barriers," "political risks," and "legal restrictions." These results indicate the respondents' preference for these two markets. The respondents' evaluation of the micro impediments underlying "legal restrictions" and "market regulations" also show that they are less of an impediment to the U.S. investor in Canada and the U.K. Japan shares respondent preference with the U.K. with regard to "liquidity risk." This is not a surprise, as Japan and the U.K have the two largest capital markets outside the U.S. That U.K. and Japanese markets are the most liquid after the U.S. is of particular interest as an important market selection criterion.

On the other hand, the results in Table 8 indicate that in Australia foreign investments are taxed the least, followed next by the U.K., Canada, and the Euro Zone. "Discriminatory taxation" is judged the highest in Japan. The Japanese market does not seem to be an obvious choice for an investor who is reluctant to pay higher taxes.

With "foreign exchange risk" the most heavily weighted macro impediment (0.217), the national market that is most favored by the respondents with respect to this factor will be prominent in the selection of the OIP. In this case it is the U.K.—not an unexpected result as the British Pound had tended to be more stable than the euro or the yen. For investors especially wary of currency fluctuations, the British market should be the market of choice, followed by the Euro Zone, Canada, and Japan. Although the Hong Kong dollar has been quite stable in the midst of Asia's crisis, respondents remain quite skeptical. With new problems in the financial system cropping up almost daily, they believe that it is a matter of time before China's central bank will introduce radical changes, such as allowing the currency to float freely.

TABLE 6: FOURTH LEVEL OF THE HIERARCHY
COUNTRY PAIRWISE COMPARISON WITH RESPECT TO THE MACRO BARRIERS

Discriminatory Taxation	1	2	3	4	5	6	7
1. Australia	1	1	1	1/2	1/2	1/2	1
2. Canada	1	1	1	1/2	1	1	1
3. Euro Zone	1	1	1	1/2	1	1	1
4. Hong Kong	2	2	2	1	1	1	1
5. Japan	2	1	1	1	1	1	2
6. Singapore	2	1	1	1	1	1	1
7. U.K	1	1	1	1	1/2	1	1
Priority Weights	0.018	0.020	0.020	0.023	0.028	0.022	0.019
?$_{max}$ = 7.048; C.I. = 0.008; C.R. = 0.006							

Exchange Risk	1	2	3	4	5	6	7
1. Australia	1	1	1	1/2	1	1	2
2. Canada	1	1	1	1	1	1/2	1
3. Euro Zone	1/2	1	1	1/2	1	1	1
4. Hong Kong	2	1	2	1	2	1	2
5. Japan	1	1	1	1/2	1	1	1
6. Singapore	1	2	1	1	1	1	1
7. U.K	1	1	1	1/2	1	1	1
Priority Weights	0.033	0.027	0.028	0.041	0.028	0.035	0.025
?$_{max}$ = 7.071; C.I. = 0.012; C.R. = 0.009							

Legal Restrictions	1	2	3	4	5	6	7
1. Australia	1	1	1	1/2	1	1/2	1
2. Canada	1	1	1	1/2	1	1/2	1
3. Euro Zone	1	1	1	1/2	1	1/2	1
4. Hong Kong	2	2	2	1	1	1	2
5. Japan	1	1	1	1	1	1	2
6. Singapore	2	2	2	1	1	1	2
7. U.K	1	1	1	1/2	1/2	1/2	1
Priority Weights	0.021	0.021	0.019	0.028	0.028	0.031	0.017
?$_{max}$ = 7.055; C.I. = 0.009; C.R. = 0.007							

Liquidity Risk	1	2	3	4	5	6	7
1. Australia	1	2	1	1	2	1	2
2. Canada	1/2	1	1	1	1	1/2	1
3. Euro Zone	1	1	1	1/2	1	1/2	1
4. Hong Kong	1	1	2	1	2	1	2
5. Japan	1/2	1	1	1/2	1	1/2	1
6. Singapore	1	2	2	1	2	1	2
7. U.K	1/2	1	1	1/2	1	1/2	1
Priority Weights	0.026	0.019	0.018	0.029	0.016	0.028	0.016
?$_{max}$ = 7.048; C.I. = 0.008; C.R. = 0.006							

Political Risks	1	2	3	4	5	6	7
1. Australia	1	1	1	1/3	1	1/2	1
2. Canada	1	1	1	1/3	1	1/2	1
3. Euro Zone	1	1	1	1/2	1	1	1
4. Hong Kong	3	3	2	1	3	2	2
5. Japan	1	1	1	1/3	1	1	1
6. Singapore	2	2	1	1/2	1	1	2
7. U.K	1	1	1	1/2	1	1/2	1
Priority Weights	0.020	0.018	0.025	0.050	0.022	0.028	0.019
?$_{max}$ = 7.040; C.I. = 0.007; C.R. = 0.005							

Psychological Barriers	1	2	3	4	5	6	7
1. Australia	1	1	1	1/2	1	1/2	1
2. Canada	1	1	1	1/2	1	1/2	2
3. Euro Zone	1	1	1	1/2	1	1/2	1
4. Hong Kong	2	2	2	1	2	1	2
5. Japan	1	1	1	1/2	1	1/2	2
6. Singapore	2	2	2	1	2	1	2
7. U.K	1	1/2	1	1/2	1/2	1/2	1
Priority Weights	0.009	0.008	0.008	0.015	0.009	0.012	0.006
?$_{max}$ = 7.063; C.I. = 0.011; C.R. = 0.008							

TABLE 7: FOURTH LEVEL OF THE HIERARCHY

COUNTRY PAIRWISE COMPARISON WITH RESPECT TO THE MICRO BARRIERS

Foreign Ownership	1	2	3	4	5	6	7
1. Australia	1	1	1	1/2	1/2	1/2	1
2. Canada	1	1	1	1/2	1/2	1/2	1
3. Euro Zone	1	1	1	1	1	1	1
4. Hong Kong	2	2	1	1	1	1	2
5. Japan	2	2	1	1	1	1	2
6. Singapore	2	2	1	1	1	1	2
7. U.K	1	1	1	1/2	1/2	1/2	1
Priority Weights	0.010	0.010	0.012	0.016	0.014	0.015	0.009
?$_{max}$ = 7.016; C.I. = 0.003; C.R. = 0.002							

Market Regulations	1	2	3	4	5	6	7
1. Australia	1	1	1	1/2	1	1	1
2. Canada	1	1	1	1	1	1	1
3. Euro Zone	1	1	1	1/2	1	1	1
4. Hong Kong	2	1	2	1	1	1	1
5. Japan	1	1	1	1	1	1	2
6. Singapore	1	1	1	1	1	1	1
7. U.K	1	1	1	1	1/2	1	1
Priority Weights	0.010	0.011	0.011	0.013	0.013	0.012	0.009
?$_{max}$ = 7.040; C.I. = 0.007; C.R. = 0.005							

Expropriation of Assets	1	2	3	4	5	6	7
1. Australia	1	1	1	1/2	1	1/2	1
2. Canada	1	1	1	1/2	1	1/2	1
3. Euro Zone	1	1	1	1/2	1	1/2	1
4. Hong Kong	2	2	2	1	2	1	2
5. Japan	1	1	1	1/2	1	1	1
6. Singapore	2	2	2	1	1	1	2
7. U.K	1	1	1	1/2	1	1/2	1
Priority Weights	0.013	0.012	0.012	0.024	0.013	0.020	0.012
?$_{max}$ = 7.048; C.I. = 0.008; C.R. = 0.006							

Repatriation of Profits	1	2	3	4	5	6	7
1. Australia	1	1	1	1/2	1	1/2	1
2. Canada	1	1	1	1/2	1	1/2	1
3. Euro Zone	1	1	1	1/2	1	1	1
4. Hong Kong	2	2	2	1	2	1	2
5. Japan	1	1	1	1/2	1	1	1
6. Singapore	2	2	1	1	1	1	2
7. U.K	1	1	1	1/2	1	1/2	1
Priority Weights	0.010	0.009	0.010	0.015	0.010	0.013	0.008
?$_{max}$ = 7.032; C.I. = 0.005; C.R. = 0.004							

Language Barrier	1	2	3	4	5	6	7
1. Australia	1	1	1	1	1/2	1	1
2. Canada	1	1	1	1	1	1	2
3. Euro Zone	1	1	1	1	1	1	2
4. Hong Kong	1	1	1	1	1	1	2
5. Japan	2	1	1	1	1	1	2
6. Singapore	1	2	2	1	1	1	1
7. U.K	1	1/2	1/2	1/2	1/2	1	1
Priority Weights	0.020	0.003	0.003	0.030	0.030	0.030	0.020
?$_{max}$ = 7.016; C.I. = 0.003; C.R. = 0.002							

Sources of Information	1	2	3	4	5	6	7
1. Australia	1	1	1	1/2	1	1/2	1
2. Canada	1	1	1	1/2	1/2	1/2	1
3. Euro Zone	1	1	1	1	1	1	1
4. Hong Kong	2	2	1	1	1	1	2
5. Japan	1	2	1	1	1	1	2
6. Singapore	2	2	1	1	1	1	2
7. U.K	1	1	1	1/2	1/2	1/2	1
Priority Weights	0.006	0.006	0.006	0.009	0.008	0.009	0.004
?$_{max}$ = 7.024; C.I. = 0.004; C.R. = 0.003							

Transaction Costs	1	2	3	4	5	6	7
1. Australia	1	1	1	1	1	1	1
2. Canada	1	1	1	1/2	1	1	1
3. Euro Zone	1	1	1	1	1	1	1
4. Hong Kong	1	2	1	1	1	1	1
5. Japan	1	1	1	1	1	1	1
6. Singapore	1	1	1	1	1	1	1
7. U.K	1	1	1	1	1	1	1
Priority Weights	0.010	0.008	0.009	0.011	0.011	0.011	0.008
?$_{max}$ = 7.008; C.I. = 0.001; C.R. = 0.001							

TABLE 8: MARKET WEIGHTS WITH RESPECT TO THE MACRO BARRIERS TO INTERNATIONAL CAPITAL FLOWS

Macro Impediments	Discri-minatory Taxation	Exchange Risk	Legal Restrictions	Liquidity Risk	Political Risks	Psycho-logical Barriers	Transaction Costs	Overall Priority
Australia	0.018	0.033	0.021	0.026	0.020	0.009	0.010	0.137
Canada	0.020	0.027	0.021	0.019	0.018	0.008	0.008	0.121
Euro Zone	0.020	0.028	0.019	0.018	0.025	0.008	0.009	0.127
Hong Kong	0.023	0.041	0.028	0.029	0.050	0.015	0.011	0.197
Japan	0.028	0.028	0.028	0.016	0.022	0.011	0.009	0.142
Singapore	0.022	0.035	0.031	0.028	0.022	0.012	0.011	0.161
U.K.	0.019	0.025	0.017	0.016	0.019	0.006	0.008	0.110
Priority Weights	0.150	0.217	0.165	0.152	0.181	0.067	0.068	1.000

Shaded numbers indicate experts' preference for a national market(s) vis-à-vis a specific macro impediment.
For example, Australia's market weight of .018 indicates that our panel of experts sees its tax system as the least discriminatory to foreign capital.

Finally, Australia, the U.K., and the Euro Zone are accorded about the same priority weights with respect to "political risks" (and its micro components "expropriation of assets" and "repatriation of profits"). Hong Kong's priority weight sends a flag of considerable concern. The problem in Hong Kong seems to be the level of both political and legal uncertainty due to skepticism toward China's current "hands off" policy. Its potential true reversion to China where a shifting regulatory environment has worn out many respondents (they have reassessed their commitment to China after years of losing money there) has led to Hong Kong's negative rating.

The overall preference for each of the markets is obtained by summing the product of the impediment's priority weight times the market's priority weight with respect to that impediment. The outcome (see Table 8, far right column) presents a basis for the investor to make a decision regarding the selection of the optimal global portfolio.

The U.K. is the national market of choice, closely followed by Canada, and the Euro Zone. For the latter, the choice is based on the premise that with ongoing integration, differences in individual market regulations are being systematically eliminated. The overall priority weights associated with the U.K and the Euro Zone show that the respondents are hard pressed to prefer one over the other. Although the U.K. has yet to join the Euro Zone, global portfolio managers may already have started to view them as one market.

Overall priority weights next indicate inclusion of Australia (0.137) and to a lesser extent Japan (0.144) in the OIC. Excluded by the U.S. investor highly concerned with individual market imperfections are Singapore and especially Hong Kong.

Conclusion

This study adapts Saaty's AHP to evaluate market barriers to capital flows across national boundaries. The AHP makes it easy to model their influence on the OIP. This process readily lends itself to multicriteria decision-making because of its ability to deal with subjective judgments.

Survey respondents use the AHP-derived priorities to rank several national markets in terms of particular barriers to international capital flows. The most important constraint is exchange risk. The OIP is then constructed by selecting those national markets judged least likely to be affected by the most important impediments. Each stage of the AHP hierarchy contributes to the construction of the portfolio.

The national markets that constitute the OIP are judged least frictional, so they are suitable for investors who want to diversify across national boundaries without assuming significant international portfolio risk. Of course, substantially higher returns may be achieved in those national markets judged less integrated with the U.S. economy such as Hong Kong and Singapore. The respondents judge risks in these two emerging markets as significantly higher, and only those U.S. global investors willing to assume higher levels of risk should include them in their portfolios.

One of the main challenges faced by this study is to convince enough decision makers to contribute to this research. Justifiably, some might view this challenge as the study's weakness. After all, how many time-pressed executives are going to take the time to fill out similar surveys whenever one wishes to generate an OIP using a knowledge-based expert system. Those skeptics are reminded that a multinational corporation or an institutional investor intending to use the AHP for the same purpose is not subject to the same challenge. Opinion surveys are unlikely to be sent to international senior managers of other corporations to collect the needed information. More likely, in-house expertise will be harnessed within such a process-driven system to build the OIP. Assuming this is the case, this research has demonstrated that the AHP is an appropriate approach to selection of such an investment portfolio. There is gain to be made from using the opinion of those with first-hand understanding of foreign markets and knowledge-based expert systems such as the AHP are best suited to capture that expertise.

References

[1] Baum, A.1995. Can foreign investment be successful? *Real Estate Finance*, 12(2): 81-9.

[2] Choi, and Levitch. 1991. International accounting diversity: Does it affect market participants? *Financial Analyst Journal*, 47(4): 73-82.

[3] Errunza, V. and E. Losq. 1985. International asset pricing under mild segmentation: theory and test. *Journal of Finance*, 40(1): 105-24.

[4] Eun, S. C. and S. Janakiramanan. 1986. A model of international asset pricing with a constraint on the foreign equity ownership. *Journal of Finance*, 41(4): 897-914.

[5] French, K and J. Poterba. 1991. International diversification and international equity markets. *American Economic Review*, 81(2): 222-226.

[6] Ritov H., I. Gatti, and A. Tverski. 1990. Differential weighting of common and distinctive components. *Journal of Experimental Psychology*: *General*, 19(1): 30-41.

[7] Jacquillat B. and B. Solnik. 1978. Multinationals are poor tools for international diversification. *Journal of Portfolio Management*, 4(2): 8-26.

[8] Markowitz, H. M. 1952. Portfolio Selection. *Journal of Finance*, 7(1): 77-91.

[9] Miller, G.A. 1956. The magical number seven, plus or minus two: Some limits on our capacity for processing information. *Psychological Review*, 101(2): 343-352.

[10] Saati, T. L. 1980. The analytic hierarchy process, planning, priority setting, resource allocation. New York: McGraw-Hill.

[11] Saati, T. L. 1982. Decision making for leaders: The analytical hierarchical process for decisions in a complex world. Belmont, CA: Lifetime Learning Publications.

[12] Standard & Poor's. 1998. The Money Market Directory of Pension Funds and their Investment Managers. New York: McGraw-Hill.

[13] Tesar L. and I.M. Werner. 1995. Home bias and high turnover. *Journal of International Money and Finance*, 14(4): 467-492.

[14] Turban, E. 1993. Decision support and expert systems: Management support systems. Basingstoke: Macmillan

[15] Worzala, E. 1994. Overseas property investments: how are they perceived by the institutional investor? *Journal of Property Valuation and Investment*, 12(3): 119-41.

End Notes

[1] The euro area includes Austria, Belgium, Germany, Greece, Spain, France, Ireland, Italy, Luxembourg, The Netherlands, Portugal, and Finland.

[2] Firms were selected from the 1998 *Money Market Directory of Pension Funds and their Investment Managers*, Standard & Poor's.

[3] Because we examine the case of a U.S. investor considering the addition of foreign securities to an existing portfolio of U.S. securities, we do not sample portfolio managers around the world.

[4] Indeed, as the U.S. economy slowed in 2001 forecasters tho ught that the dollar would decline in value. While it weakened some, it still remained relatively strong. In fact, an inflation-adjusted, trade-weighted dollar against the euro shows the latter losing about 13 percent of its value since its debut on January 1, 1999 thanks to the dollar (recent) habit of defying conventions.

[5] The unhitching of Argentina's peso from its tie to the dollar, which caused the Argentine currency to plunge and the dollar to soar, happened after the survey was administered.

[6] A study by Choi and Levitch (1991) suggests that international accounting diversity affects the location of investing. The authors do not specify whether accounting differences have the same negative impact on international investments when investment firms employ their own accounting staff overseas.

Risk and Return Issues of Stocks in the Knowledge Economy

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Abstract

The dominance of intellectual property, which constitutes the basic element of the knowledge economy, in wealth creation in all industries is highly evident today. The foundation of technological innovations lies in the successful development of intellectual property and is a crucial business strategy as technology drives economic growth. The central theme of this paper concerns the informational efficiency of the security markets, in this case the Australian equity market for the intellectual property sector, and the general awareness that in competitive markets there are no 'free lunches' to investors. Inherent in the fact that all things come at a price in competitive security markets, the risk-return relationship in finance explains this by propounding the notion that higher expected returns come with the need to bear greater investment risk. The major challenges in this study have been how one should measure risk and what should be the quantitative trade-off between risk and expected return of a security in an industry that is relatively new and draws its value from intangible assets.

The volatility and the consequent predictability of stock prices have been contentious issues in finance for a long period of time. The predictability of return relates to what component of stock returns can be predicted given specific information. The variability of stock price indices cannot be accounted for by information regarding dividend alone since dividends do not vary enough to justify the price movement. In this paper, the factors contributing to the predictability of equity prices in the Australian e-commerce sector are identified, analysed and the issues and implications for the financial markets are discussed and explained. Using Australian e-commerce sector financial data, this study provides an empirical identification and analysis of the market factors that contribute to the value of stocks in the knowledge economy and draw from it the underlying issues of volatility and predictability. This paper presents new approaches to econometric specification, estimation and testing in relation to e-commerce stock predictability including stationarity tests, cointegration modelling and analyses. The implications and extrapolations from the empirical findings for investors and stakeholders in the new economy are stated.

Introduction: Stock-Return and Risk in the Knowledge Sector

The dominance of intellectual property, which constitutes the basic element of the knowledge economy, in wealth creation in all industries is highly evident today. The foundation of technological innovations lies in the successful development of intellectual property and is a crucial business strategy as technology drives the engine of economic growth. The successful development and implementation of technological innovations depend, amid other qualities, on the efficient and effective financial management of the business process. It is from this perspective that it is crucial to understand the relevant capital markets pertaining to the funding of technological innovations and the role they play in ensuring the momentum of technological advance in the market is maintained. The decision whether to proceed with new product development should be based on an assessment of expected returns from the project against its risk exposure. Empirical evidence suggests that financial markets reward firms that embrace innovation (Cooper 1984; Firth and Narayanan 1996).

The central theme of this paper concerns the informational efficiency of the securities markets, in this case the Australian equity market for the knowledge intensive sector, and the general awareness that in competitive markets there are no 'free lunches' to investors. Inherent in the fact that all things come at a price in competitive security markets, the risk-return relationship in finance explains this by propounding the notion that higher expected returns come with the need to bear greater investment risk. The major challenges in this study have been how one should measure risk and what should be the quantitative trade-off between risk and expected return of a security in an industry that is relatively new and draws its value from intangible assets. The risk profile of e-commerce stocks, as a proxy for the knowledge economy, is evaluated to help account and explain investor's behaviour and to provide a rational framework for individual investors and firms in terms of the risks they are willing to bear and pay for.

The objectives of this paper are: firstly to highlight the emerging financial issues of risk and return pertaining to the development of the knowledge economy using the Australian e-commerce sector a case study, and secondly to explain the macro-economic determinants of valuation, as representative of systematic risk, for e-commerce stocks and thirdly the results of the AEMM valuation model are used for a three-asset portfolio choice analysis. This paper also provides an empirical analysis of some other important issues in the e-commerce financial market such as market efficiency, volatility and predictability. This paper provides a critical review of the different theories of valuation of stocks and presents an alternative hypothesis regarding e-commerce stock pricing and risk profile. It also conducts econometric studies using Australian e-commerce data to support this hypothesis empirically.

The paper is structured as follows: Section 1 summarises the issues of stock return vis-à-vis the knowledge economy. Section 2 provides a review of the financial theories, concepts, and models relating to valuation and financial risk and empirical studies on predictability, while Section 3 reviews the study conducted in this paper on e-commerce pertaining to valuation and predictability. Section 4 briefly explains the data collection and Section 5 presents the empirical evidence of the tests on the model developed in this paper on valuation, volatility, predictability, efficient market hypothesis and portfolio choice. The implications of the portfolio-choice analysis are discussed in Section 6, specifically addresses the implications of results on e-commerce stock return predictability and portfolio selection. In Section 7 contains the conclusions of this study.

Theory

The theory of the firm stresses that the impetus for the emergence of business corporations is the specialised institutional structure that comes into being to reduce the transaction costs (Coase 1937*)*. The theory of the firm expounds contractual relationships as a pervasive feature of economic life (Borland and Garvey 1994). New research into the tantalising effects of the knowledge sector on the rules that govern exchange would provide the catalyst to illuminate the impact of this phenomenon on the value of a firm. The era of increasing returns is upon us, where diminishing returns hold sway in the traditional part of the economy – the processing industries. Increasing returns reign in the newer part – the knowledge-based industries (Arthur 1996*)*. New economy businesses are achieving market capitalisations that took old economy firms much longer to achieve. Different management techniques, strategies and government regulations are needed for the two economies, i.e. different understandings (Bontis 1996).

General Valuation Principles

The value of a financial asset is the present value of the cash flows expected from that asset. To ensure that an investor does not pay more than the worth of the asset, the intrinsic value reflecting the cash flows from the asset has to be substantiated by economic reality. The idea of the rational investor and the efficient markets hypothesis (discussed below) underpin stock prices and they reflect the true value of economic fundamentals and market efficiencies which will prevent attempts by investors to make excess profits.

The simple "efficient market model" of stock prices maintains that the actual price is the expected present discounted value of future dividends. The fundamental principle of valuation under perfect competition is that the price of each share must be such that the rate of return, comprising of dividend plus capital gains per dollar invested, on every share will be the same throughout the market over any given interval of time (Miller and Modigliani 1961). The value of all assets (in this case stocks*)* must comply with the law of economics where investors choose to allocate their scarce resources (capital*)* in order to satisfy wants (returns) according to personal circumstances (risk). One of the fundamental principles of economics is that value is created by scarcity, at the moment the demand for e-commerce stocks appears to far exceed supply causing prices to escalate[i]. The proliferation of e-commerce stocks in the future may eventually satiate demand and cause stock prices to fall back into line with the general market (Kindleberger 1989). As Porter (1980) emphasised, in a competitive market with free entry, firms cannot earn sustainable supranormal profits indefinitely because that would encourage other firms to enter and drive down prices. This situation implicates the concept of efficient market hypothesis of an assumed world (Fama 1970, 1991). In such a market the share price will be an unbiased estimate of its intrinsic value, where investment value is the present value of the share's future cash flows as estimated by well-informed and capable investors.

Risks in Finance

The study of risk as represented by volatility is an important area of research in finance. The concept of risk in finance underlies the consequences of undesirable outcomes and their implications to individual investors or firms. Thus when stock prices are volatile, this means that prices fluctuate widely and can be difficult to predict. The risk implications relevant to this study are the volatility risk associated with stock returns and the valuation of risk in the context of e-commerce equity returns. In finance, the primary risk of stock returns is associated to variations in second moments, such as variance (or standard deviation).

Valuation and Risk Principles of E-Commerce Stocks

The development of the knowledge sector as a business medium for the foundation of market dominance and continuing profitability of firms has been driven by the rapid growth of intellectual property. The value of e-commerce stocks is affected by the level and rate of development of intellectual property in the economy. In spite of its growing importance, there is no absolute valuation method for intellectual property (Dabek 1999). Introducing new knowledge-based products into the market has its fair share of risk, and may even be considered extremely risky in certain circumstances. Managing the project life cycle (PLC) from beginning to successful commercialisation of the new product entails difficult decisions that involve risks and determine the future course of the program as well as the firm's future revenue and profitability. This means that it is far more difficult to estimate cash flows, growth and discount rates in the knowledge economy than in more traditional and stable industries.

There has been enormous growth in e-commerce on a global scale as reflected by e-commerce stock prices and not all this growth can be explained by the firm's financial fundamentals. The limitations of conventional approaches compel the use of currently important e-commerce and real economic activities, in an integrated and analytical manner, to visualise the economic logic behind this recent development. The growth of e-commerce is largely a result of advances made in information technology (IT) and the study of information as a key economic variable has been given much more attention by disciplines other than economics (Arrow 1996). Information aspects of business have not received the same attention as the trilogy of capital, labour and resources leading to a situation of uncertainty about the economic impact of information, as a key economic resource, for the exploitation of virtual business or e-commerce. The virtual world is one where many of the conventional constraints of physical economic processes (R & D, manufacturing, distribution and marketing) no longer apply and firms, big or small, can sell their products to anyone in the world just as easily.

Arthur (1996) defines the criteria for firms subject to increasing returns as those having made high investments in information systems on their operations and are now using this information relatively cheaply, capable of locking in customers and networking by supplementing one firm's core strengths with those of other and creating a win-win situation for all. The current trend of mega corporate mergers and acquisitions[ii] is growing and will continue to be prevalent as strategic alliances continue to be struck to exploit e-commerce capabilities, including management and technical expertise. A parallel can be drawn between the present e-commerce firm and the neo-Schumpeter model of repeated innovation by a 'new theory' firm. Schumpeter (1934) emphasised the important role played by the financial sector in economic growth and recently supported by King and Levine (1993). Schumpeter's theory of economic development promotes the causal relation between the financial and the real sectors.

The benefits derived from the financial sector are the efficient intermediation between lenders and borrowers through capital mobilisation, risk management, project screening and monitoring and transaction cost reduction. These activities invariably contribute to market efficiency by addressing the problems of high transaction costs and information asymmetries (Pagano 1992). Therefore, the financial sectors disseminate information, as reflected by financial variables, about the real market factors influencing economic growth and ultimately stock prices. Fama (1970, 1990, 1991) conducted extensive study of the relation between stock market returns and fundamental economic activities in the United States. Huang and Kracaw (1984), Chen (1986, 1991), Pearce and Roley (1988), Fama (1991) and Wei and Wong (1992) have modelled the relation between asset prices and real economic activities using factors such as productivity, growth rate of gross national product, production rates, yield spread, inflation, unemployment and other real activity indicators.

Stock Valuation Models: A Critical Review

Modern financial management is largely concerned with the functioning of the firm in relation to optimal matching of the uses and sources of corporate funds that will maximise the firm's market value: in essence, the value of the firm is estimated from the present value of its earnings over all future periods (Chew 1997). The central consideration of this postulate is the explicit recognition of the effects of all future periods. The effects include investment decisions in technology and industry and thus the question arises, in e-commerce valuation, as to whether the principles adopted by the market in valuing e-commerce stocks are appropriate and reflect all future period effects. The effects on an e-commerce business will depend on the performance of various critical success factors that decide the growth prospect of the firm. Valuation of an e-commerce firm, as proposed by researchers at McKinsey (2000), should be based on other factors including customer relationship to customer-value analysis. The relevant value chain model in this context is to create value with information that describes and provides customers with a series of value-adding activities connecting the firm's supply and demand sides (Rayport and Sviokla 1999).

Efficient Markets Hypothesis

The situation of noise trading (Black 1986) implicates the concept of the Efficient Markets Hypothesis (EMH) of an assumed world (Fama 1970, 1991). Noise traders are not fully rational in their investment decisions and often overreact to fundamental news or are subject to systematic biases, such as positive feedback trading strategies, providing a reinforcing mechanism for market trends. The concept of Efficient Markets Hypothesis (EMH) of an assumed world (Fama 1970, 1991) is that in such markets the share price will be an unbiased estimate of its intrinsic value, where investment value is the present value of the share's future cash flows as estimated by well-informed and capable investors. The EMH holds:

- that the return of an investment is equal to its opportunity cost (allocative efficiency);
- that stocks are always in equilibrium;
- that it is impossible for an investor to consistently beat the market (information efficiency), and
- the market achieves Pareto efficient allocation of resources (Laffort 1989)

The EMH predicts that share prices fairly reflect all information that has been fully revealed to the market. As the stock price reflects all relevant information about the stock, this price must represent its fair market value. Then stock price only moves in response to new information that, by definition, is unpredictable. Hence stock price should be random and must follow a Markov process. Therefore, e-commerce stock prices must be fairly valued in market equilibrium situation. Information technology is interpreted as a fundamental factor transforming the real economy to high profit growth in the future (De Long 1996). In the context of EMH, this implies that the stock market reflects the future growth of the real economy because investors have incorporated this high growth expectation into their investment decisions and therefore fundamentally justify the stock prices.

The valuation models for stock prices discussed in the next section are based on this EMH.

Discounted Cash Flow Method

The DCF method operates under the premise that the value of a firm is obtained by the sum of the present value of cash flows to be generated by the firm's existing assets and the present value of cash flows to be generated from future growth opportunities. The use of future cash flows to determine stock prices is consistent with the randomness in security returns under the efficient markets hypothesis (Campbell, Lo and MacKinlay 1997). The Law of Iterated Expectations supports this position (Samuelson 1965). While the financial performance of most e-commerce firms does not justify their market value (Bontis and Mill 2000), there is a need for a more profound understanding of the issues and a comprehensive valuation method to address the risk-return situation. There is a need to clarify the investment process into steps and choices to help the investor overcome the uncertainty and identify the most appropriate valuation model to estimate the absolute investment value of an e-commerce firm and its common stock.

In the context of contemporary e-commerce stocks, the absence of positive cash flow poses a problem in adopting the DCF method for valuing a firm. Even if positive cash flows can be reasonably estimated in the absence of historical earnings, the extrapolation of growth on earnings estimates might be based on weaker foundations. The two major elements in the valuation of knowledge-based stocks, other than cash flow, are the potential growth and risk exposure of the firm. The DCF Model (based on dividends) incorporating growth (presented below) may create problems with valuation especially when the valuation of the discount rate (*k*) and the assumed dividend growth rate *g* are close, the result being highly sensitive to minor changes in the assumptions. The discount factor in the DCF model provides for risk adjustment. When they are equal, the valuation is infinite.

$$V = \frac{D_1}{k - g}$$

where:
V = the value of the firm;
g = the growth rate;
D_1 = the dividend in period 1; and
k = the discount rate;

Capital Asset Pricing Model (CAPM)

The CAPM is an economic model that predicts a trade-off between systematic risk, known as beta (?), and expected return under specific conditions. It is an economic model that restricts the parameters of statistical models to provide a more constrained normal return. It proves that the relationship between prices of assets in a general equilibrium, where the investors select assets to maximise the mean-variance utility, is linear. Although the CAPM is widely used there are many criticisms (Roll 1977) against the CAPM. The evolving nature of the e-commerce sector creates a situation where information is dynamic with the constant introduction of unanticipated operating conditions in the industry, creating information surprises that cause e-commerce stocks to move in a magnitude or direction not predicted by CAPM. The use of the CAPM has been restricted recently due to doubts on the restrictions imposed by the CAPM on the market model, since these restrictions can be relaxed at little cost by using the market model (Campbell, Lo and MacKinlay 1997).

Limitations of Current Models

The discounted cash flow models for stock valuation where future dividend are discounted at a constant rate poses two problems, the absence of earnings in the vast majority of e-commerce firms and the argument that stock prices are too volatile to be rational forecasts of future dividends discounted at a constant rate (Shiller 1981). The absence of the earnings data required by and the limitations of traditional valuation models makes it imperative that proxies and alternative models be used to determine the value of stocks of many e-commerce firms.

Efficiency, Volatility and Predictability of the E-Commerce Sector

The development of new products in the knowledge economy is inherently riskier and involves commitment of valuable resources, failure could cost their sponsors substantial amounts of money. The implications of the EMH in e-commerce stocks relate to the efficient allocation of capital in the sense that under the EMH market financing conditions and the firm's cost of capital are optimal. It follows that if markets are efficient there is no need to defer projects or for government intervention. The measure of volatility of the e-commerce stocks vis-à-vis other market benchmarks and statistical analysis is crucial as a further test of market efficiency for the allocation of financial resources. If the e-commerce prices do not reflect market fundamentals then resources will be misallocated and hence, volatility tests are joint test for informational efficiency. The predictability of e-commerce stock returns depends on the statistical analysis of the random walk hypothesis of the stock prices. If e-commerce stock prices were unpredictable, such test would support the rational expectation element of the

EMH that forecast errors should be zero on average and uncorrelated with any information available at the time the forecast was made. The EMH emphasises that it is impossible for investors to persistently make supernormal profits.

It is also argued in the mainstream financial economics discipline that it is possible to develop stock market models based on the EMH to assess the predictability and volatility path of stock prices and returns (Cuthbertson 1997).

A New Valuation Approach for the E-Commerce Equity Market

The lack of historical financial information for the firms within the e-commerce sector and its rapid evolution makes it imperative to evaluate the sector at the macro level. Macroeconomic analysis generally focuses on changes in macroeconomic conditions as a result of changes in government policies, market structure, technology, culture and other reasons. As these factors change, expectations about the performance of a particular firm, industry and economy will change and affect the investment weighting given to a particular sector. The advent of the Internet has been both pervasive and significant, affecting all market aspects including government policies, competition, lifestyle, costs and growth perception. The Australian E-commerce Multifactor Model (AEMM) used in this study has been developed to address the macroeconomic variables that are considered pervasive to e-commerce equity value (Oh and Islam 2001).

There is commonality in the view that the variations in expected returns are rational variations in response to market conditions (Chen 1991; Schwert 1990; Fama 1989, 1990). This research adopts the fundamental factor approach to estimate return for e-commerce equity from an *ex post* perspective.

Valuation of E-Commerce Stocks Using a Linear Multi-Beta Model

The linear multi-beta model developed in this paper uses the method of ordinary least squares (OLS) for measuring e-commerce stock returns. The CAPM is used to describe the market fundamentals and for comparison of results between the models. The multi-beta models generalise the concept of risk under the traditional CAPM that market risk, risk that cannot be diversified away, underpins the pricing of assets. Market risk is measured using a series of risk factors that determine the behaviour of asset returns, whilst the CAPM measures risk only relative to market return. Traditional asset pricing methodologies, such as those of Sharpe (1964), Lintner (1965), Merton (1973) and Ross (1976) show that the expected return on a financial asset is a linear function of its betas or covariances with some systematic risk factors. The technique of factor analysis will be used to analyse data within the broader multivariate linear model developed in this paper and if non-linear relationship is expected, then a variable might be transformed so that the relationship becomes linear.

Empirical Analysis of the Australian E-Commerce Sector

Data

The e-commerce firms in this study are selected from the population of pure-play e-commerce companies from a variety of sectors listed on the Australian Stock Exchange. The definition of pure-play e-commerce firms are those firms whose business activities are exclusively Internet based, including those with a few embryonic Internet businesses, and rely on their Internet expertise to provide the impetus for future growth. The proxy for market return for the study period is calculated from the closing SP/ASX 200 index on the last trading day of the month in the period July 1999 to June 2000 obtained from the Australian Stock Exchange. The macroeconomic variables used are monthly data for the corresponding period as the stock market data, selected from various sources such as the Australian Bureau of Statistics and the Reserve Bank of Australia.

Econometric Analysis and Empirical Findings

E-Commerce Stock Valuation and Volatility

In this section, a comparison of the actual, historical e-commerce market returns with risk (both beta and standard deviation) to study e-commerce volatility, and the results provide a benchmark for highlighting the empirical behaviour of e-commerce stocks (the market return for the period is 10.96%). The tendency of a stock to move up or down with the market is reflected in its beta coefficient, ?. Table 1 shows the e-commerce sectors had positive returns except for the High Technology sector. Volatility measured against the market, represented by beta, is generally higher for most sectors with the exception of Miscellaneous Financial Services (0.57), Casino & Gaming (0.03) and High Technology sectors (-0.26). This indicates that the majority of e-commerce stock returns were more volatile than the market return in the study period. The Health & Medical Services sector had the highest beta of 19.86 and one of the lowest returns, whilst, Casino & Gaming sector had the second highest return but one of the lowest betas. From the perspective of risk-return relationship, the risk and return trade-off appears not to hold in the sample stocks in the study period.

Table 1: RELATIVE MARKET VOLATILITY OF SECTORS AND TRADE-OFF BETWEEN RISK* AND RETURN

Sector	Beta	Return	SD
Health & Medical Services	19.86	0.39%	1105.33%
Miscellaneous Services	6.39	5.41%	47.04%
Retail/Retail Investment	5.22	4.20%	29.74%
Diversified Media	5.00	0.67%	28.99%
Computer & Office Services	4.93	0.07%	30.32%
Equipment & Services	4.25	26.97%	140.37%
Other Telecommunications	3.74	2.67%	21.38%
Miscellaneous Financial Services	0.57	0.44%	30.69%
Casino & Gaming	0.03	24.06%	56.33%
High Technology	-0.26	-1.26%	27.45%

*ranked in order of beta

Though e-commerce firms have a number of advantages over traditional firms such as lower operating costs, the recent market consolidation[iii] of e-commerce stocks indicates a reaction to market risks and conditions faced by this sector and investors are constantly studying to see how changing technology will end up transforming the market. This confirms the general systematic risk level of the e-commerce stocks and that they move predominantly in a volatility sphere of their own, and relatively independent of the market.

The total risk associated with the e-commerce stocks is decomposed from the analysis of variance (ANOVA) of the stock return to market return regression by dissecting it into systematic and unsystematic risks. The systematic and unsystematic risk profile as measured by the market index, S&P/ASX 200 indicates that the e-commerce stocks were to a large degree subject to unsystematic risk (82%) rather than systematic risk (18%) in the study period (Oh and Islam 2001). This means that there was less of a tendency for the e-commerce stock prices to move together with the general market variability and unsystematic or firm-specific risk explains 82% of their variance. This situation can be explained by the higher return variability of the e-commerce stock portfolio; where monthly ? equals 49.82% (Appendix 1), compared to the general market; monthly ? of 3.13% (Appendix 2).

The Multivariate Regression Model - Results

The following sections present the results of the tests done in estimating the multi-beta models for e-commerce stock valuation. This is a linear multifactor model, which is developed following the dominating practice of adopting linear models in stock pricing econometric modelling. The underlying hypothesis in this model is that this set of factors is important in determining and explaining the movements in e-commerce stock prices. The set of factors include the relevant forces in the Australian financial market, international and the global financial system the influence of which is proxied by the NASDAQ and foreign exchange rate.

The AEMM developed in this study is a static model (Oh and Islam 2001), it has the limitations that time is not incorporated here. However, AEMM is relatively appropriate if it is assumed that investors are myopic (no systematic variations in the investment opportunity set) and the utility function of the investors is logarithmic. This multifactor model differs from the traditional CAPM and the market model in that both are single-factor models. A test of stationarity in a financial model helps detection of the lack of the influence of time (i.e. the trend in the time series), and together with the cointegration test they enable the study of the long-term effects of the explanatory variables on the dependent variable.

Table 2: COINTEGRATION STATISTICS OF SERIES WITH FIRST DIFFERENCES

Cointegration Series	Critical Value*	*t*-statistic $(\overset{?}{?}_{t-1})$	*p*-value	
(?NAS)	-3.04	-5.3614	0.0003	Cointegration
(?CC)	-3.04	-3.7237	0.0040	Cointegration
(?FE)	-3.04	-3.7076	0.0041	Cointegration

*Asymptotic Critical Values from Davidson and MacKinnon (1993), at the 10% significance level and no time trend.

On the basis of the criterion of goodness of fit, the following equation is selected for analysing e-commerce stock price:

$$stockret(?\overset{?}{PR})_t = \underset{(-1.2772)}{-0.1900} + \underset{(3.7657)}{0.0013?NAS_t} + \underset{(1.9345)}{0.0692?CC_t} - \underset{(-2.1045)}{0.3287?FE_t} \quad (1)$$

$R^2 = .6421$

All three factors in the estimated equation are statistically significant at the 10% significance level (t-statistics in parentheses) and this validates the present model and confirms the evidence of their pervasiveness on the portfolio return of the e-commerce stocks. While systematic risk measured by the *NAS*, *CC* and *FE* explains more than half of the variance (56.62%) of the e-commerce portfolio return PR, in the equation. Such systematic risk level is consistent with empirical study done by Drummen, Martin, Zimmermann and Heinz (1992) where systematic risk explains almost half of the variance of European stocks. The estimated model therefore provides a better measure of e-commerce portfolio return compared to the average 17% systematic risk level by the market model using the S&P/ASX 200 as the market index in this study. From an e-commerce portfolio perspective these three explanatory variables have the strongest influence on e-commerce stock return across all the stocks and sectors evaluated in this study. They remain statistically significant even when we use a more stringent significance level of 10% (c = 1.943). Of the three pervasive factors, *NAS* and *CC* have a positive correlation and *FE* has a negative correlation with the return of the portfolio of e-commerce stocks.

Predictability

Following the practice for testing market efficiency in the literature, asymptotic analysis is used to test the weak- form EMH that information observable to the market prior to month t should not help to predict the return during the month t for the e-commerce sector return (the estimates for the EMH tests by sector are presented in Appendix 3). The weak-form EMH tests using the autocorrelation of returns data suggest the validity of the EMH for the returns of the e-commerce stocks in this study. The low R-squared of these tests supports the EMH. This indicates the tests based on (*ex-post*) real returns cannot be used to predict excess returns. De Bondt and

Thaler (1985) finds stocks with extreme price movements appear to have strong negative serial correlation of returns and are thus mean reverting. This would be contrary to the EMH in that it would be possible to make supernormal profits from predictability in stock prices. For the constructed e-commerce portfolio, there is no evidence of negative serial correlation except for some industry groups at the sector level. A longer time series data would be necessary to conduct a meaningful study of this volatility issue for the e-commerce stocks.

Portfolio Analysis

The portfolio analysis is conducted under the Kuhn-Tucker conditions considering constrained optimisation within the context of a three-asset portfolio, being e-commerce stocks, S&P/ASX 200 stocks and cash, based on data of the study period. The GAMS[iv] portfolio evaluation program (Thompson and Thore 1992) is used to run the data. The program selects the portfolios by solving a series of problems with different lambda (?), representing risk aversion using the equation below (the risk parameter is denoted by ? and when ? is large, there is greater risk aversion).

Maximise:

$$19.95x_1 + 0.96x_2 + x_3 - ?(0.22x_1^2 + .0009x_1x_2 + .0019x_2x_1 + .0009x_2^2)$$

Subject to:

$$14.66x_1 + 7.47x_2 + x_3 = \$1.394$$

$$x_1, x_2, x_3 = 0$$

The results of a series of parametric tests for various values of ? are shown in Table 3.

Table 3: OPTIMAL SOLUTION[v]

??	ESTOCK*	MKT STOCK*	CASH*	Expectation	Variance
0.0005	31.62	0	1,393,972	41.452	9836.148
0.0006	26.34	0	1,393,978	34.544	6830.658
0.0007	22.59	0	1,393,981	29.609	5018.444
0.0008	19.76	0	1,393,984	25.908	3842.244
0.0009	17.57	0	1,393,986	23.029	3035.848
0.0010	15.81	0	1,393,988	20.726	2459.037
0.0015	10.55	0	1,393,993	13.817	1092.906
0.0020	7.91	0	1,393,996	10.363	614.759

*$'000.

The general conclusion about the market-stock drawn from this parametric test is that it would not be a portfolio choice under all circumstances. This is largely due to its insignificant impact, in a portfolio context, in terms of the stock's relatively small expected return (0.96%) in relation to its risk (standard deviation = 3%). When risk aversion is less (i.e. ? is small) there is a tendency to purchase more of the riskier e-commerce stocks. When risk aversion is high (i.e. ? is large), the preference would be to hold more cash rather than the less risky market-stock, as the trade-off between the risk-return of the market-stock would tend to favour holding cash. This optimisation test confirms the riskiness of e-commerce stocks as an investment choice as manifested by the small amount allocated for investment in this highly volatile asset. When risk aversion is at its lowest in the test (i.e. ? = 0.0005), the amount invested in e-commerce stocks is only $31,620 out of the sum of $1.394 billion for investment (or 0.000023%). This suggests that the investor would rather choose to hold cash than to invest substantially in any of the two stocks when the e-commerce stock is too risky and volatile and the market-stock's return is too low for its risk level to be considered an advantage to holding cash.

Conversely, the analysis suggests that the investor has to have relatively low risk aversion to remain invested in e-commerce stock.

In a three-asset portfolio selection scenario consisting of one risk-free asset, the e-commerce stock becomes a portfolio choice in preference to the market stock. The trade-off in portfolio choice is between the riskless asset and the highly volatile e-commerce stock. The relevant optimal portfolios would consist of a very small proportion in e-commerce stock and mainly in cash. From table 7.1, with increasing proportion of e-commerce stock in the optimal portfolios, from *?* = 0.0020 to *?* = 0.0005, we are able to see a four-fold increase in expected return but a sixteen-fold increase in portfolio risk. This confirms the earlier results that the inclusion of e-commerce stock in a portfolio leads to a disproportionate increase in portfolio risk.

Conclusion

Valuation

The multifactor modelling approach is used in this study to explain the return-generating mechanism of shares consistent with the various theories that have been advanced (i.e. Sharpe 1964; Lintner 1965b; Mossin 1966; Ross 1976) and at the heart of these pricing theories is the notion that one or more pervasive factors are dominant source of covariation among asset returns. The systematic risk measured by the ?*NAS*, ?*CC* and ?*FE* factors in the estimated AEMM model, explains more than half of the variance (56.62%) of the e-commerce portfolio return ?*PR*. The parameters in our regression of e-commerce stock returns, based on a set of predictive variables, appear to be weak when described by usual statistical measures. This is first evidenced by the low estimated systematic risk for e-commerce stocks that suggests e-commerce stocks to be in a unique universe. The use of a higher significance level for testing the null hypothesis for correlation between the dependent and the explanatory variables is another example. This suggests a weaker predictive quality for the variables. Nevertheless the selected pervasive factors do tend to explain a substantial part of the e-commerce portfolio return with an R^2 of 64.2% for the estimated three-factor model using the first difference data of the time series.

Systematic and Unsystematic Risks

The excessive volatility against market return of the e-commerce stock returns is attributed to the high level of unsystematic risk (low R^2) in the stocks as discovered in the regression analyses using the market model. The low compliance of e-commerce return to the market return reflects emphasis on different economic fundamentals in stock valuation. It appears doubtful that information for equity valuation can be used consistently and therefore rationally in the absence of an agreement (or general understanding) on the economic fundamentals that determine e-commerce valuation –therefore suggesting a strong presence of event effects in e-commerce stock prices in the market.

As the business activity of e-commerce firms becomes more established and stabilised, the level of unsystematic risk is expected to decrease while the riskiness of the stock is expected to reflect more the systematic risk or market risk. This can be explained by the fact that a firm's earnings become more stable and predictable as its business matures and it carves itself a niche in the market. It is consequently able to set clear objectives and direction for future growth. What then happens is that e-commerce firms become more like the traditional firms in the market that are sensitive and subject to market fundamentals. This characteristic is consistent with the mean reverting behaviour of stock returns, that is, higher than average returns are followed by lower returns in the future (Fama and French 1988a; Poterba and Summers 1988). Initial above average e-commerce stocks could be due to the low information content of a relatively new class of stock in a euphoric new market which as time progresses, and more information about the e-commerce firm, industry and market becomes available and the industry establishes itself, the stock returns will adjust accordingly. In their studies, Fama and French (1988a) and Poterba and Summers (1988) find mean reversion in stock return over long horizons, in excess of 18 months. The 'normalisation' or mean reversion of the e-commerce stocks is probably going to take longer as e-commerce is still evolving with the Internet, and to become fully developed and universally accepted as an established market structure, may still be a while yet.

The wide spread in actual return and the substantial difference compared to the required rate of return for the e-commerce stocks suggest the market for this class of stocks has not reached equilibrium.

Volatility

The first difference of *estockret(?PR)*$_t$ in the estimated equation (1) represents the change that occurs to the return of e-commerce equity returns as a covariation to the pervasive factors. This first-difference value of returns implies and measures the volatility of stock returns, and return volatility is a standard benchmark in risk-return relationship evaluation. Therefore the final estimated equation also implies and estimates the inherent risk profile for e-commerce returns.

The volatility of e-commerce stock returns appears to be consistent in terms of: the yield spreads, betas and standard deviations of the individual stocks; the systematic and unsystematic risk profile; and the EMH tests of the class of stocks examined in this study. Compared to the market, the yield spreads are excessively wide, while the standard deviations and betas are very much higher. The high degree of unsystematic risk profile together with the weak form efficiency of the stocks suggests a higher level of industry-specific information turnover reflecting the evolving nature and nascent stage of the e-commerce industry. This infers that e-commerce prices (hence returns) that alter by large amounts in the months of this study reflect the rapid changes in fundamentals of the industry. These changes may represent the opportunity sets for e-commerce firms and industry or more general structural market reform in response to Internet/ICT related developments. It is probably difficult at this stage to gauge whether the e-commerce market is excessively volatile relative to the general market, due to the lack of comparative and long-horizon earnings performance data for e-commerce firms, which could provide a yardstick against which to compare volatilities.

Lakonishok, Shleifer and Vishny (1994) suggest the return of growth stocks may be better explained by characteristics other than risk (volatility) and proposed an agency rationale, that, despite fund managers being aware of the expected returns of value stocks they still prefer growth stocks because they are easier to justify to investors. This explanation can equally apply to e-commerce stocks, which are considered growth stocks, and in the midst of Internet market euphoria, are driven partly by the surging NASDAQ composite index and heightened consumer confidence. It would be difficult for fund managers to ignore the noise and chance of higher returns despite knowing that the risk associated with these firms may be high by traditional standards and their earnings doubtful.

EMH and Predictability

The results of the weak-form EMH tests using the autocorrelation of returns data (by sectors) suggest the validity of that EMH for the returns of the e-commerce stocks in this study. This indicates the tests based on (*ex-post*) real returns cannot be used to predict excess returns. This essentially infers that e-commerce stock returns incorporate all relevant information immediately and price changes are a result of the arrival of new or unanticipated events.

Portfolio Selection and the Valuation of E-Commerce Stocks

The portfolio objectives of the investor, portfolio analyses conducted in this study on the e-commerce stocks are based on their risk-return behaviour between July 1999 and June 2000 tend to suggest a high degree of risk aversion towards these highly volatile stocks. The portfolio-choice analysis of the three-asset portfolio comprising of the e-commerce stock, market stock and cash, indicate that the efficient portfolios under different risk aversions would tend to minimise the holding of e-commerce stock. The study on financial optimisation here is confined strictly to the prevailing market conditions (i.e. pertaining to e-commerce stock return, r_f and market index return) during the study period and within the context of the specified risk parameters. This portfolio position is not expected to remain static given the changing market conditions and investor's risk profile.

References

[1] Arthur, W. B. 1996, 'Increasing Returns and the New World of Business', *Harvard Business Review*, July-August, HBS Press.

[2] Arrow, K. J. 1996, 'The Economics of Information: An Exposition', *Empirica*, vol. 23, pp. 119-128.

[3] Black, F. 1986, 'Noise', *The Journal of Finance*, vol. XLI, no. 3, July, pp. 529-543.

[4] Bontis, N. and Mills, J. 2000, 'Web-Based Metrics and Internet Stock Prices', DeGroote School of Business, McMaster University.

[5] Borland, J. and Garvey, G. 1994, 'Recent Developments in the Theory of the Firm', *The Australian Economic Review*, 1st Quarter.

[6] Campbell, J. Y., Lo, A. W. and MacKinlay, A. C. 1997, *The Econometrics of Financial Markets*, Princeton University Press, Princeton, New Jersey.

[7] Chen, Nai-Fu 1991, 'Financial Investment Opportunities and the Macroeconomy', *Journal of Finance*, vol. 46, pp. 529-54.

[8] Chew, D. H. 1997, 'Introduction: Financial Innovation in the 1980s and 1990s', *The New Corporate Finance*, McGraw-Hill Irwin.

[9] Coase, R. H. 1937, 'The Nature of the Firm', *Econometrica*, no. 4, pp. 386-405, repr. in Stigler, G.J. and Boulding, K.E. (eds.), 1952, *Readings in Price Theory*, Homewood, Ill.

[10] Cooper, R. G. 1984, 'New Product Strategies: What Distinguishes the Top Performers?', *Journal of Product Innovation Management*, 1 (3), pp. 151-164.

[11] Cuthbertson, K. 1997, *Quantitative Financial Economics, Stocks, Bonds and Foreign Exchange*, John Wiley and Sons Ltd., West Sussex.

[12] Dabek, R. A. 1999, 'Valuation of a Technology', Intellectual Property Licensing Seminar, University of Dayton, February, www.udayton.edu/~lawtech/cle99lic-dabek.html

[13] De Long, J. B. 1996, 'Is the Stock Market Too High?', *Slate* 20 December 1996, www.slate.com/gist/96-12-21/gist.asp

[14] DeBondt, W. F. M. and Thaler, R. H. 1985, 'Does Stock Market Overreact?', *Journal of Finance*, vol. 40, no. 3, pp. 793-805.

[15] Drummen, Martin, Zimmermann and Heinz 1992, 'The Structure of European Stock Returns,' *Financial Analysts Journal*, Charlottesville, Jul/Aug.

[16] Fama, E. F. 1970, 'Efficient Capital Markets: A Review of Theory and Empirical Work', *Journal of Finance*, vol. 25, no. 5, May, pp. 383-417.

[17] Fama, E. F. 1990, 'Stock Returns, Expected Returns, and Real Activity', *Journal of Finance*, vol. 45, pp. 1089-108.

[18] Fama, E. F. 1991, 'Efficient Capital Markets: II', *Journal of Finance*, 46, no. 5, December, pp. 1575-1621.

[19] Fama, E. F. and French, K. R. 1988a, ‘Permanent and Temporary Components of Stock Prices’, *Journal of Political Economy*, vol. 96, pp. 246-273.

[20] Fama, E. F. and French, K. R. 1989, ‘Business Conditions and Expected Returns on Stocks and Bonds’, *Journal of Financial Economics*, vol. 25, pp. 23-49.

[21] Firth, R. W. and Narayanan, V. K. 1996, ‘New Products Strategies of Large, Dominant Product Manufacturing Firms: An Exploratory Analysis’, *Journal of Product Innovation Management*, 13 (4), pp. 334-347.

[22] Huang, R. D. and Kracaw, W. A. 1984, ‘Stock Market returns and Real Activity: A Note’, *Journal of Finance*, vol. 39, pp. 267 – 273.

[23] Kindleberger C. P. 1989, *Manias, Panics and Crashes: A History of Financial Crises*, rev. edn, Basic, New York.

[24] King, R. and Levine, R. 1993, ‘Finance and Growth: Schumpeter Might be Right’, *Quarterly Journal of Economics*, no. 108: pp. 717-737.

[25] Lakonishok, J., Shleifer, A. and Vishny, R. W. 1994, ‘Contrarian Investment, Extrapolation, and Risk’, *Journal of Finance*, vol. 49, pp. 1541-1578.

[26] Laffort, J.J. 1989, ‘Economics of Information and Uncertainty’, MIT Press, Massachussets.

[27] Lintner, J. 1965a, ‘Security Prices, Risk and Maximal Gains from Diversification’, *Journal of Finance*, vol. 20, pp. 587-615.

[28] Lintner, J. 1965b, ‘The Valuation of Risky Assets and the Selection of Risky Investments in Stock Portfolios and Capital Budgets’, *Review of Economics and Statistics*,” vol. 47, pp.13-37.

[29] Merton, R. C. 1973, ‘An Inter-temporal Capital Asset Pricing Model’, *Econometrica*, vol. 41, pp. 867-887.

[30] Miller, M. and Modigliani, F. 1961, ‘Dividend Policy, Growth and the Valuation of Shares’, *Journal of Business*, vol. 34, no. 4, October, pp. 411-433.

[31] Mossin, J. 1966, ‘Equilibrium in a Capital Asset Market’, *Econometrica*, vol. 35, pp. 768-783.

[32] Oh, K. B. and Islam, S. M. N. 2001, ‘Empirical Finance of E-Commerce: A Quantitative Study of the Financial Issues of the Knowledge Economy’, CSES Research Monograph 2/2001, Victoria University, Melbourne.

[33] Pagano, M. 1992, ‘Financial Markets and Growth: An Overview’, Financial Markets Group Discussion Paper, 153, London School of Economics, London.

[34] Pearce. D. K. and Roley, V. V. 1988, ‘Firm Characteristics, Unanticipated Inflation and Stock Returns’, *Journal of Finance*, vol. 43, pp. 965–981.

[35] Porter, M. 1980, *Competitive Strategy*, Free Press, New York.

[36] Poterba, J. M. and Summers, L. H. 1986, ‘The Persistence of Volatility and Stock Market Fluctuations’, *American Economic Review*, no. 76, pp. 1142-1151.

[37] Rayport, J. F. and Sviokla, J. J. 1995 ‘Exploiting the Virtual Value Chain’, in ed. Don

Tapscott, *Creating Value in the Network Economy*, HBR Press (1999), p. 36.

[38] Roll, R. 1977, 'A Critique of the Asset Pricing Theory Tests: Part 1', *Journal of Financial Economics,* vol. 4, pp.129-176.

[39] Ross, S. 1976, 'The Arbitrage Theory of Capital Asset Pricing', *Journal of Economic Theory,* vol. 13, pp. 341-360.

[40] Samuelson, P. 1965, 'Proof that Properly Anticipated Prices Fluctuates Randomly', *Industrial Management Review*, vol. 6, pp.41-49.

[41] Schumpeter, J. 1934, *The Theory of Economic Development*, Cambridge, Harvard University Press, Cambridge.

[42] Schwert, G. W. 1990, 'Stock Return and Real Activity: A Century of Evidence', *Journal of Finance*, vol. 45, pp. 1237-1257.

[43] Sharpe, W. F. 1964, 'Capital Asset Prices: A Theory of Market Equilibrium Under Conditions of Risk', *Journal of Finance*, no. 19, pp. 425-42.

[44] Shiller, R. 1981, 'Do Stock Prices Move too Much to be Justified by Subsequent Changes in Dividends?', *American Economic Review*, vol. 71, pp. 421-436.Wei, K. C. J. and Wong, K. M. 1992, 'Tests of Inflation and Industry Portfolio Stock Returns', *Journal of Economic Business*, vol. 44, pp. 77–94.

[45] Thompson, G. L. and Thore, S. 1992, *Computational Economics: Economic Modelling with Optimisation Software*, The Scientific Press Series, International Thomson Publishing, Inc., New York.

Appendixes

Appendix 1 – MEAN AND STANDARD DEVIATION OF PORTFOLIO RETURN

Mean and Standard Deviation of Portfolio Returns (July 1999 to June 2000)

Month	Portfolio Returns	(x – x)	$(x – x)^2$
Jul-99	0.1040	-0.0056	0.0000
Aug-99	-0.0791	-0.1887	0.0356
Sep-99	-0.0032	-0.1128	0.0127
Oct-99	0.1048	-0.0048	0.0000
Nov-99	0.2074	0.0978	0.0096
Dec-99	0.1758	0.0662	0.0044
Jan-00	0.0310	-0.0786	0.0062
Feb-00	0.7858	0.6762	0.4572
Mar-00	1.4766	1.3670	1.8686

Apr-00	-0.2886	-0.3982	0.1586
May-00	-0.3101	-0.4197	0.1762
Jun-00	0.1466	0.0370	0.0014
			2.7304

Arithmatic mean:	13.06%
Geometric mean:	10.56%
Variance = s2	0.25
Standard Deviation	49.82%
Annualised SD	597.86%

Appendix 2 – MEAN AND STANDARD DEVIATION OF MARKET RETURN

Mean and Standard Deviation of Market Return

Year	Month	ASX 200	Returns	(x-x)	$(x-x)^2$
1999	Jul-99	3020	0.0172	0.0076	0.0001
	Aug-99	2952	-0.02252	-0.0321	0.0010
	Sep-99	2881	-0.02398	-0.0336	0.0011
	Oct-99	2885	0.0014	-0.0082	0.0001
	Nov-99	3044	0.0551	0.0455	0.0021
	Dec-99	3153	0.0356	0.0260	0.0007
2000	Jan-00	3096	-0.0179	-0.0275	0.0008
	Feb-00	3136	0.0128	0.0032	0.0000
	Mar-00	3133	-0.0008	-0.0104	0.0001
	Apr-00	3116	-0.0056	-0.0152	0.0002
	May-00	3081	-0.0112	-0.0208	0.0004
	Jun-00	3311	0.0747	0.0651	0.0042
					0.0108

Geometric Mean	0.0091	or	0.9137%
Annualised Geomean			10.96%
Variance = s2	0.000983		

Standard Deviation	3.13%	per mth.
Annualised SD	37.62%	per annum

Appendix 3: SUMMARY OF RESULTS FOR EFFICIENT MARKET HYPOTHESIS TESTS

Sector/$return_t$	?	$return_{t-1}$?	R^2
Casino & gaming	0.3080	-0.2154	0.0466
t-statistic	1.5486	-0.6992	
Computer & office services	0.0180	0.2540	0.0643
t-statistic	0.2358	0.8293	
Diversified media	0.0071	0.0832	0.0068
t-statistic	0.1055	0.2625	
Equipment & services	0.3048	-0.1128	0.0126
t-statistic	0.6745	-0.3579	
Health & medical services	2.5156	-0.1135	0.0129
t-statistic	1.0342	-0.3614	
High Technology	-0.0842	-0.1091	0.0121
t-statistic	-1.3801	-0.3505	
Miscellaneous financial services	-0.1039	-0.3255	0.1079
t-statistic	-1.7035	-1.0998	
Miscellaneous services	0.1416	0.2634	0.0621
t-statistic	1.1165	0.8137	
Other Telecommunications	0.0257	0.0573	0.0032
t-statistic	0.3802	0.1800	
Retail/retail investments	0.0599	0.1551	0.0169
t-statistic	0.7788	0.4149	
Portfolio	0.1658	0.1578	0.025
t-statistic	1.0487	0.5061	

End Notes

[i] Oversubsciption of Hong Kong's Tom.com by HK$144 billion and MelbourneIT.com are recent evidence of this phenomenon.

[ii] Example of recent mergers and acquisitions include the AOL-Time Warner merger in the US creating the largest firm in the world in terms of market capitalisation.

[iii] April 2000 when the market index dipped caused predominantly due to the fall of stocks in the e-commerce sector.

[iv] General Algebriac Modelling System (GAMS) software.

[v] Summarised from GAMS output.

Sustainable Globalization and Emerging Economies: The Impact of Foreign Direct Investment in Thailand

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Abstract

Foreign direct investment is often considered as simultaneously being one of the consequences and drivers of globalisation. In the process of opening up economies to participate in some of the positive impacts of globalisation, countries position themselves in respect of attracting foreign direct investment. In addition, the ability to attract foreign direct investment and its positive impact in growing economies is valued as an integral part of the road to successful economic growth and development.

The Asian economic crisis has highlighted the vulnerability and volatility of emerging economies especially in the financial sector and, in the case of Thailand, directly linked to foreign direct investment. The question that prevails is to what extent does foreign direct investment support or sabotage globalisation attempts by countries.

This paper considers the role and impact that foreign direct investment (FDI) has had in Thailand over the past decade. The first section identifies the nature and impact of FDI in general, followed by an explanation of the underlying reasons for the flow of funds. The nature and impact of FDI defines the concept and summarizes the consequences, both positive and negative, towards the recipient country. Different theories explaining why FDI takes place are also discussed here.

The second section briefly considers foreign direct investment in Asia. This section looks at tendencies in the flow of foreign direct investment in terms of target markets and industries. The role of FDI in Asia is analysed over the 1990 to 1998 period to show its behaviour before and during the Asian financial crisis.

The third section analyses the impact of foreign direct investment in Thailand by pointing out its nature and origin in terms of the major sources of FDI and the industries most affected by them. Also included in this part is the relationship between foreign direct investment and the export performance of Thailand and the transfer of technology impact thereof.

The last section discusses the current situation of foreign direct investment in Thailand and anticipates future trends. This is done by assessing the impact on FDI of the recent change in political leadership and its redefining of priorities. A brief comparison to other countries in the region and possible future trends conclude the paper.

The Nature and Impact of Foreign Direct Investment (FDI)

When considering cross border investment, it is important to distinguish between FDI, Foreign Portfolio Investment (FPI) and other types of foreign investment. The World Trade Organization (WTO) indicates that "FDI occurs when an investor based in one country (the home country) acquires an asset in another country (the host country) with the intent to manage that asset" (The South Centre, 1997: 1). Interpreting this definition from a more specific perspective means that ownership of 10 percent or more of ordinary shares or voting power represents a sufficient share to give the foreign investor a significant influence on the management of the enterprise (Framework for the Collection, Compilation and Dissemination of Foreign Direct Investment Statistics, 2000). In addition, FDI is considered to comprise three possible components; new equity from the parent company to the subsidiary; reinvested profits of the subsidiary; and long and short term net loans from the parent to the subsidiary (Salvatore, 2001).

Foreign Portfolio Investment (FPI), in turn, entails passive holdings of securities and other financial assets, which do not reflect active management or control of the security's issuer. FPI is positively influenced by high rates of return and reduction of risk through geographic diversification. The management dimension is what distinguishes FDI from FPI in foreign stocks, bonds and other financial instruments (Krugman and Obstfeld, 1997; Yarbrough and Yarbrough, 1997; Salvatore, 2001).

As a positive, FDI brings capital flows that improve the balance of payments, and other economic benefits such as employment, export markets, technology, management skill enhancement and spillover effects (Klein, Aaron and Hadjimichael, 2001). Potential negative consequences of FDI include inappropriate technology transfer and a deteriorating balance of payments in the longer run (Kumar, 1998; Chen, 2000).

Within FDI, there are often trade-offs between different benefits and objectives. Countries may, for instance, have to choose between investments that offer short as opposed to long-term benefits; foreign firm involvement may lead to static gains but not necessarily to dynamic ones, such as infrastructure and living standards. A large inflow of FDI can add to investment resources in a host economy but it may deter the development of local firms. The desire to generate employment may lead governments to favor labor intensive, low technology investments, while promotion of technology development may favor more sophisticated investors. Similarly, the desire to upgrade technology may call for a heavy reliance on technology transfer by foreign investors, while to promote local innovation may require more emphasis on arm's length transfers to local firms. There can be many such trade-off, and there is no universal answer to how they should be made. Thus, there is no ideal policy on FDI, which applies to all countries at all times (OECD, 1999b).

Rather than determining whether FDI is good or bad for economic development the focus should be on ensuring that it contributes in a balanced and sustainable way to the legitimate aspirations of host countries. Some foreign investors acknowledge that investment decisions and performance in host countries could have both positive and negative impacts on the local economy depending on policies of host countries (IFC, 1997). To examine motives of FDI makers, the following section reviews some theories.

Explaining Foreign Direct Investment flows

Theories explaining FDI assert that the basis for such investment lies in the transaction cost of transferring technical and other knowledge and market imperfections. Subsequently in a world of perfect markets, there would be no Multinational Enterprises (MNEs) and, thus no FDI as it is MNEs that make FDI (Goldar and Ishigami, 1999). The most important theories explaining FDI are the following:

Comparative Cost Advantage Theory

According to the theory of comparative cost advantage (explaining the nature of imperfect markets), "a country should produce and export those goods and services for which it is relatively more productive than other countries and import those goods and services for which other countries are relatively more productive than it is" (Krugman and Obstfeld, 1997: 168). This is, however, "not a sufficient condition for FDI since the significance of investment flows concerns other conditions such as technology transfer, tax incentives and explanations of trade flows, rather than country-based theories" (Griffin and Pustay, 1999: 89).

Product Life Cycle Theory

The Product Life Cycle Theory explains why MNEs undertake FDI at particular stages in the life cycle of a product they have pioneered. FDI will occur when the foreign market is large enough to support local production (Cullen, 1999; Griffin and Pustay, 1999). However, the theory does not identify clearly when it is profitable to invest in activities (Hill, 2001), and it also fails to explain why companies choose FDI over other forms of market entry, such as direct exporting (Wild, Wild and Han, 2000).

Internalization Theory

The Internalization theory, or market imperfection theory, states that "when an imperfection in the market makes a transaction less efficient than it could be, a company will undertake FDI to internationalize the transaction and thereby remove the imperfection" (Wild, Wild and Han, 2000: 230). The theory also explains why firms prefer FDI to licensing, as licensing has weaknesses, including exposing technological know-how to foreign competitors, absence of control over manufacturing, marketing, and strategy in a foreign country. In addition, a firm's uniqueness and competitive advantage may not be amenable for licensing (Foreign Direct Investment and Its Political Economy, 2000).

The Eclectic Paradigm Theory

The Eclectic Paradigm theory explains both the ways in which overseas markets are served by enterprises of different nationalities and the industrial and geographical composition of such activities (Wild, Wild and Han, 2000). According to this theory, a firm will make a direct investment in a foreign country if the following three conditions are satisfied. "First, the firm must have a product or a production process such that the firm enjoys some market power advantage in foreign markets. Second, the firm must have a reason to locate production abroad rather than concentrate it in the home country, especially if there are scale economies at the plant level. Third, the firm must have a reason to exploit its ownership advantage internally, rather than license or sell its process to a foreign firm" (Markusen, 2000: 3). The theory furthermore suggests that all forms of international production can be explained by reference to these conditions. Location or country specific advantages have an important bearing on FDI often rendering the location preferable to other potential host countries, and to domestic investment. Another determinant of FDI is the ability of the firm to generate ownership advantages, which are best exploited by the firm in a foreign rather than in a domestic location. In this way, the eclectic theory is able to provide an explanation for differences in the industrial pattern of outward FDI of different industrialized countries (Goldar and Ishigami, 1999; Wild, Wild and Han, 2000).

Market Power Theory

The Market Power Theory states that FDI will occur when a company tries to establish a dominant market presence in an industry. In this theory, the firm will get more profit because it is far better able to dictate the cost of its inputs and the price of its output. Companies that are able to achieve a great deal of market power can integrate forward to increase control over output (Wild, Wild and Han, 2000).

As has been reviewed in this section, there are a number of theories that attempt to explain the flow of FDI. The Eclectic Paradigm theory is the most useful for analyzing the implication of FDI in economic development. The next section will discuss the flow of FDI to Asian countries.

Foreign Direct Investment in Asia

The Asian countries most affected by the Asian financial crisis have ranked high among developing host countries in the attractiveness of their economies to foreign investors. In particular, they have substantially liberalized their FDI policies and taken steps to facilitate business. However, the financial crisis and economic consequences will affect FDI flows to these countries. Thus, the tendencies and role of FDI will be discussed as following.

Tendencies

The pattern of FDI flows into and within Asian countries has had some structural changes since 1990. The change is attributed to two reasons; globalization and mergers and acquisitions (M&A) (Wild, Wild and Han, 2000). Firstly, increased globalization and lower trade barriers cause a growing number of international companies to undertake FDI, as companies realize they can produce in a more efficient and productive location in the world, and simply export to a worldwide market. This set off another round of FDI flows into low-cost newly industrialized and emerging nations worldwide (Bishop, 1997).

Second, the number of M&A and their exploding values also underline the change in pattern of FDI flows. Many cross-border M&A deals are driven by the desire of companies to get a foothold in a new geographic market, to increase a firm's global competitiveness, to fill gaps in companies' product lines in a global industry and to reduce costs in such areas as R&D, production, or distribution (Cullen, 1999; Wild, Wild and Han, 2000). As a result, FDI in the primary sector continues to experience a declining share with a greater distribution of FDI flows to the manufacturing and the tertiary sector. FDI in finance and banking activities increased noticeably in the second half of the 1990s, particularly through M&A (Kaiser, Kirton and Daniels, 2000). The financial sector liberalization process undertaken by countries in the region facilitates this development. These structural changes are partly due to the industrial development policies of the countries in the region, which aim to diversify economies from over reliance on agriculture. The developmental progress made in the manufacturing and financial sector further facilitates this process (Overview of Foreign Direct Investment in ASEAN, 2000).

Role

FDI has contributed significantly to the economic and industrial development of the Asian countries over many years and is expected to continue to do so (Bottelier, 1998). Among the components of resource flows to Asian countries, FDI constitutes a considerable share, indicating the importance of FDI as a major source of finance for economic development. Moreover, most of the FDI flows played an important role in pushing the export sector of those countries (Asian Development Bank, 2001a). A large number of these, including Thailand, gave priority to export as a key mechanism for economic development (Suksiriserekul, 2000). Nevertheless, Taiwan and South Korea did not resort to FDI as the impetus for exports and instead relied on the promotion of entrepreneurs to develop products for sales abroad. The countries that relied on FDI and consequently grew, also experienced an increase in their trade deficits (Bangkok Bank, 2000).

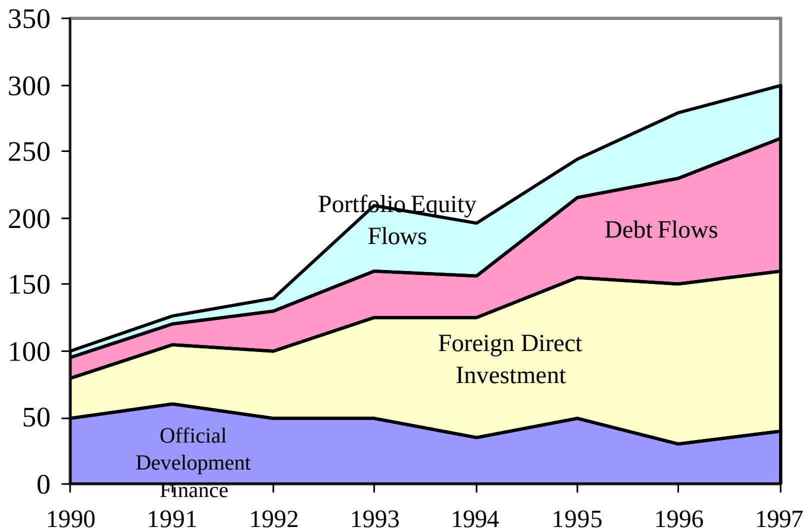
Between 1990 and 1997, FDI represented about an annual average of 40% of the net resource flows to the Asian countries (see Table 1, Figure 1). A high ratio of FDI to net private capital flows in the 1990s is the norm for most developing countries, and particularly Asian countries (Overview of Foreign Direct Investment in ASEAN, 2000). The Asian financial crisis has caused many countries to experience a severe shortage of funds and managing FDI has become a factor that governments have become more aware of. This is partly due to the role FDI played in bringing about an economic expansion in Asia (United Nations, 1999).

Table 1: PRIVATE FLOWS TO ASIAN COUNTRIES, BETWEEN 1990-1997 (US$ BILLION)

Type of Investment	**US$ (billion)**									**Percentage of net flow**
	1990	1991	1992	1993	1994	1995	1996	1997	Total (90-97)	
Official Development Finance	50	60	50	50	35	50	30	40	365	22.5
Foreign Direct Investment	**30**	**45**	**50**	**75**	**90**	**105**	**120**	**120**	**635**	**40**
Debt Flows	15	15	30	35	31	60	80	100	366	23
Portfolio Equity Flows	5	7	10	50	40	30	50	40	232	14.5

Source: Adapted from the World Bank, 1998.

Figure1: Private Flows to Asian Countries, between 1990-1997, (US$ billion)
Source: Adapted from the World Bank, 1998.



As part of the increased awareness governments changed laws and regulations to attract FDI. Previously protected business sectors for local entrepreneurs were opened up to foreign investors, particularly the financial institution sector (Singh, 1999). FDI is expected to continue to be a significant source of finance for development in the Asian countries, against the backdrop of the decline in official development assistance and difficult access to international debt markets and bank borrowing in recent times (Chen, 2000; Overview of Foreign Direct Investment in ASEAN, 2000).

An outstanding characteristic of FDI is that it is more stable than other kinds of international capital flows. This is confirmed by the flow of capital during the Asian financial crisis. In countries affected by the financial crisis, portfolio flows and other investment flows have shifted from highly positive to strongly negative, while FDI flows remained positive (see Table 2). The size and the suddenness of the reversal in non-FDI flows in some countries, as reflected in Table 3, has triggered and magnified the financial crisis in Asia (Bottelier, 1998). In addition, FDI has appeared to be an increasingly attractive alternative to long-term bank loans as a form of capital inflow for developing countries, and has been viewed by some as the remedy for declining domestic investment and higher costs of borrowing from abroad (Mbekeani, 1997).

Table 2: NET PRIVATE CAPITAL FLOWS TO FIVE AFFECTED ASIAN COUNTRIES
(Thailand, Philippines, Malaysia, Korea, Indonesia)

US$ billion	**1996**	**1997**	**1998**
Net Foreign direct investment	9.5	12.1	4.9
Net Portfolio investment	2.0	12.6	-6.5
Bank Loans and Other	32.9	-44.5	-44.5

Source: IMF cited in Bangkok Bank, 2000.

Table 3: GLOBAL NET FLOWS TO SELECTED ASIAN COUNTRIES AS A PROPORTION OF GDP

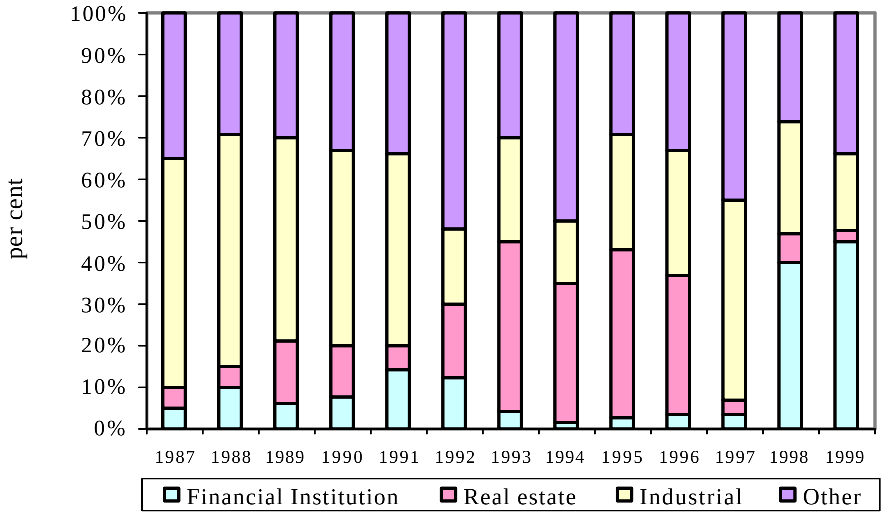
		1994	**1995**	**1996**	**1997**	**1998**
Indonesia	FDI	1.2	2.2	2.8	2.2	-0.2
	FPI	2.2	2.0	2.2	-1.2	-2.0
	OI	-0.9	1.2	0.1	-1.1	-4.7
Korea	FDI	0.2	0.4	0.5	0.6	1.7
	FPI	2.2	3.1	4.4	2.8	-0.1
	OI	3.6	4.7	5.1	-1.9	-5.0
Thailand	FDI	1.0	1.2	1.3	2.4	6.4
	FPI	1.7	2.4	2.0	3.1	0.3
	OI	6.9	11.6	6.5	-14.5	-16.8
Malaysia	FDI	6.1	4.9	5.1	5.2	NA
	FPI	-2.3	-0.5	-0.3	-0.3	NA
	OI	-2.7	5.5	4.6	-1.2	NA
TOTAL	FDI	1.1	1.4	1.6	1.8	2.1
	FPI	1.7	2.4	3.0	1.6	-2.0
	OI	2.6	5.3	4.2	-3.7	-8.3

Source: The International Financial Institutions and World Resources Institutions cited in Cailloux and Jones, 1999.

Foreign Direct Investment in Thailand

FDI in Thailand has been a major contributor to Thailand's economic growth since the mid-1980s (Indian Ocean Rim Network, 2000). In the late 1980s, about 50% of FDI inflow went to the manufacturing sector, especially in the area of labor intensive and export-oriented industries. Despite this Thai industry became less competitive during the 1990s, the real estate sector boomed and investment in private infrastructure increased in 1993. This structural change shifted FDI from manufacturing to real estate and infrastructure (Commonwealth of Australia, 2000). From 1993 to 1996, almost 40% of net FDI in Thailand went to real estate (Figure 2).

Figure 2: Major Sectors Distribution of FDI in Thailand



Source: Bank of Thailand cited in Commonwealth of Australia 2000 .

In 1997, when the Thai financial crisis started, the composition of inward FDI shifted significantly to the industrial sector. This was derived largely from foreign partners contributing more capital to existing companies faced with financial difficulties. Moreover, several Thai firms decided to sell off some of the non-core business activities to enhance their competitiveness, which in turn created opportunities for foreign partners to play a greater role. The FDI flow in 1998 was fuelled mainly by the acquisition of existing Thai and joint venture companies by foreign firms, especially in the banking sector (United Nations, 1998). The high level of investment in financial institutions in 1998 was principally due to liberalization measures taken in late 1997, allowing foreigners to hold a majority of shares in Thai financial institutions for up to 10 years. The following table shows FDI inflow by sector.

Source of Foreign Direct Investment in Thailand

FDI in Thailand is predominantly derived from five countries. The investment from some countries has remained relatively stable during the nineties while investment from Japan showed some fluctuation..

Japan has been the largest source of FDI since the late 1980s. High wages and a strong exchange rate forced many Japanese firms to relocate labor-intensive processes lower labor cost locations. This partly contributed to Japanese direct investment in Thailand, mostly involving joint ventures, being concentrated in the automotive and electronics industries (OECD, 1999a). Due to the economic recession in Japan in the early 1990s, the share of Japanese investment in Thailand fell to around 20% of total FDI, as shown in Figure 3. This decline resulted from the economic recession in Japan (Indian Ocean Rim Network, 2000), and Japanese companies exploiting lower labor costs in China, India and Mexico. In 1997 and 1998, Japanese investment in Thailand recovered based on new foreign investment guidelines allowing the buy-out of local partners. In 1999, as this activity decreased, Japan's share of FDI decreased again (Commonwealth of Australia, 2000).

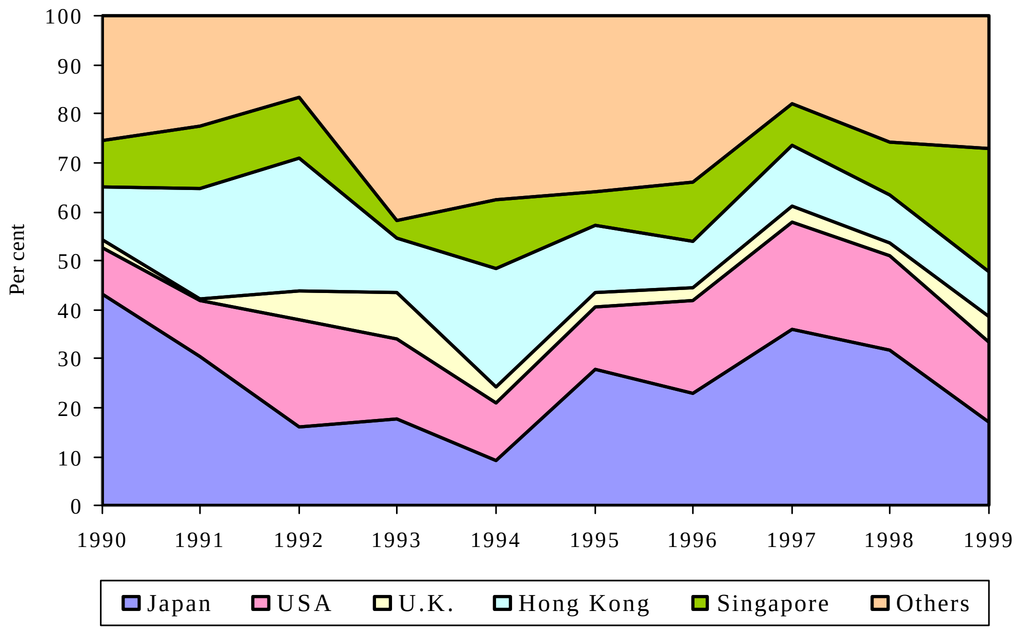
The US direct investment in Thailand was encouraged in part by the US-Thai Treaty of Amity of 1966, which accorded national treatment to US investors. Much of the investment involved fully foreign-owned affiliates in areas such as petroleum and chemicals (OECD, 1999a). The level of FDI inflow from the United States was steady during 1990 - 1996. The increase of US investment during 1997-1998 was partly the result of the devaluation of Thai currency. Moreover, the restructuring of firms faced with large debt repayments, rising interest rates and urgent need for funds, combined with a more liberal policy towards M&A, provided opportunities for US firms to undertake direct investments in Thailand through M&As (United Nations, 1998). The FDI flow from US peaked in late 1998 and started to decline in 1999.

Table 4: NET FLOWS OF FDI IN THAILAND, BY MAJOR COUNTRIES (US$ MILLION)

	1990	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**
Japan	**1,117**	**624**	**343**	**305**	**123**	**556**	**523**	**1,351**	**1,528**	**778**
USA	**246**	**237**	**472**	**286**	**155**	**260**	**429**	**824**	**913**	**749**
U.K.	45	10	129	161	44	55	57	118	134	230
Hong Kong	281	463	582	193	318	279	215	472	460	420
Singapore	**245**	**259**	**269**	**61**	**184**	**136**	**275**	**314**	**530**	**1,151**
Other	654	463	356	724	498	717	769	680	3,434	1973
Total	2,588	2,056	2,151	1,730	1,322	2,003	2,268	3,759	6,999	5,301

Source: Composed of Bank of Thailand and Board of Investment cited in Indian Oceans Rim Network, 2000 and Asian Development Bank 1999 .

Figure 3: Composition of FDI Inflows in percent, by Major Countries



Source: Composed of Bank of Thailand and Board of Investment cited in Indian Oceans Rim Network, 2000 and Asian Development Bank, 1999.

While FDI from Japan and the United States declined, FDI from Singapore increased to the value of US$ 1,151 million in 1999, up by 117% from the year before. This is attributed to the policy of the Singapore government to become the financial hub of the ASEAN region. The Government of Singapore Investment Corporation (GIC) made significant investment in Thailand, both in the financial institutions sector and the industry sector, particularly, in the fields of communications, electronics parts and equipment (Siam City Bank (SCB) Research Institute, 2000). Other important sources of FDI are listed in Table 4 and Figure 3.

Foreign Direct Investment and Thai's export performance

In Thailand, exports have been the main engine of economic growth, particularly since the late 1980s. Historically one of the world's leading rice exporters, it has become a major exporter of manufactured products, rising to over 80 percent of total export in 1999. This shift in exports is reflected in the structural transformation of the Thai economy from agriculture to industry in which FDI has played a leading role (Thomsen, 1999). FDI flows concentrated on manufacturing, (including automobiles, textiles and more recently electronics such as computers and parts), and have developed and diversified the economic structure, to the point where the manufacturing sector represented around two third of total Thai exports in the 1990s (Commonwealth of Australia, 2000). However, this high percentage of export comes primarily from foreign-owned firms. In 1997, the 125 most prominent BOI (Board of Investment) companies, which are mostly foreign-owned firms or Thai joint ventures, accounted for 90 per cent of total exports of electronic and electrical products. Foreign affiliates in Thailand have become more export-oriented over time, in response to both export promotion policies and to favorable exchange rates"(OECD, 1999a). Over 80 percent of Thailand's total exports are now in manufacturing, including computers and parts, electrical appliances, integrated circuits and parts, automotive parts and accessories, mostly produced by foreign investors or joint-ventures.

The potential impact of foreign firms' activities on the Thai balance of payments goes beyond the contribution to exports. Foreign affiliates also import goods and services, as well as attract capital and repatriate interest, income and royalties. FDI in Thailand is frequently accompanied by an increase in imports representing a large share of inputs from abroad. It is estimated that foreign investment activities account for 90 per cent of all machinery equipment and over 50 per cent of raw materials imports. This is particularly the case for export-oriented investment where investors must secure competitively priced and high quality inputs to compete effectively in global markets.

In the period of the crisis, the importance of FDI as a potential source of net capital inflows has been emphasized. At the same time, however, it is important to point out that the impact of FDI on the export performance of the economy is limited to specific sectors, which are dominated by foreign firms, rather than the whole.

Foreign Direct Investment, Technology Transfer and Industrial Upgrading

The overall export effect of inward investment is itself a substitute for technology transfer and industrial upgrading, which are at the heart of FDI (OECD, 1999a). Many developing countries, including Thailand, provide favorable investment incentives and even sometimes protection to attract FDI to high technology industries (electronics, automobile) with the expectation of mastering new technologies and skills eventually (United Nations, 1999). Various studies indicate that low value added product lines and downstream production technologies are located in Thailand (Tiralap, 1999). In some cases a large part of operational, maintenance and inspection activities of Japanese firms have been transferred to Thai affiliates. Yet sophisticated technologies, such as design and development of new products, have not been transferred (Urata, 1996). In general, the technology transfer process in Thailand is considered slow and inefficient by foreign investors, partly due to a lack of supply linkages and skilled labour force. To address the poor technology transfer, the Government has developed several schemes. An example of this is thet BOI (Board of Investment) Unit for Industrial Linkages Development (BUILD) with the objective of enhancing local sub-contracting through the provision of information and technical assistance (Doner and Brimble, 1998). In addition, new national initiatives have been launched to promote technology transfer as part of the goals of the 8th National Economic and Social Development Plan (1997-2001). Support is granted to foreign investment in production requiring advanced technology, research and development. These efforts, however, are limited by the weak absorptive capacity of local management (OECD, 1999a).

Another way of capturing any potential beneficial effect of FDI is to assess whether inflows have been accompanied by industrial upgrading in the relevant sectors (Kumar, 1998). In the case of Thailand, this is relevant in the electronics and automobile sectors, two of the most important recipients of FDI. The influx of new foreign investments has benefited the country in terms of industrial growth, including diversification and integration of the local industry (South Development News, 2000). Although export growth was concentrated in high technology products such as computer components, automobile components and electrical goods (accounting for two third of all exports in 1999), for most of these products Thailand was merely an assembly base (Busser, 2000).

In Thailand, high-technology production is not associated with high value-added production. Rather, the high-technology character of Thai exports is a reflection of high-technology imported inputs. Assembly activities in the automobile industry may be seen as a first step to develop more advanced capabilities, but this has been a slow process given the lack of sufficient research and development (R&D) and relevant human capital. Problems of upgrading technology include the slow development of most capital goods industries (such as iron and steel, non-electrical machinery, metal products and transport equipment), as well as a heavy reliance on imports of both capital and intermediate goods (Tiralap, 1999). As Thailand's comparative advantage in labor-intensive productions declines, the need to shift to production involving more skills and more capital becomes important.

The Asian financial crisis raised fundamental questions relating to the political sustainability of programs of trade and investment liberalization and domestic economic reforms. While Thailand was one of the most open economies, the crisis has greatly extended the role and impact of FDI in several major industries. A weakened baht, high levels of local debt and bankruptcy eventuated in increased involvement of foreign firms. In this context, legislative changes to permit 100% foreign equity in sectors previously reserved for Thais, enable foreign firms to participate more fully in the domestic economy. These legislative changes have raised public debate about the role of FDI in the Thai economy, and the degree to which domestic firms require and are entitled to special protection and support in a globalizing economy.

Aftermath

Whilst acknowledging the need for progressive liberalization of FDI regimes, most of the Asian countries felt that this process must continue to be adaptable to the individual host country's specific needs, level of economic development and resource base. The objectives of all government to achieve economic recovery through suitable policies toward FDI, included privatization, export-led growth and technological capacities and the development of local business. As yet, there have been no comprehensive policy approaches, which are extremely beneficial, nor which have been counterproductive (Moran, 1998).

Lessons from Other Asian Countries

FDI in Asian countries has traditionally been a driving force for economic development. As a result of different attitudes towards FDI, the ultimate impact and permanency of FDI varies significantly among countries in the region. Countries like South Korea and Singapore were able to develop FDI policies that enabled them top benefit significantly and are pointed out as examples for the Thai situation.

Before the Asian financial crisis, South Korean's policy toward economic growth relied heavily on borrowing from foreign countries, which largely was used to subsidize Korea's chaebol (Korean's local business network). Despite the fact that FDI could have been utilized to finance part of the South Korea's industrialization driven plan, the government preferred foreign borrowing to FDI because it wanted to maintain domestic ownership of its industries. Thus, many of the chaebol are protected by a number of entry-barriers, including restrictions on M&A (Petri, 2000; Yusuf and Stiglitz, 2001).

However, after the crisis, internal reform is intended to attract FDI into both capital and management expertise. Major FDI reform initiatives to make foreign investment easier and more attractive include; foreigners being able to hold up to 55% equity in a company on the South Korean stock exchange; expanding tax exemptions to include high-tech, and value-added service industries; and extending the tax concession period from the current 8 years to 10 years (United Nations, 1998). Restricted business areas are cultural industries (foreign ownership of cable TV program procedures will be limited to 30%). What makes South Korea distinct from Thailand is that it has a technologically up-to-date industrial base, efficient infrastructure and a large skilled workforce, thus South Korea has to satisfy a different set of needs by attracting FDI (Asia Pacific Foundation of Canada, 1998).

Singapore's greatest economic accomplishment is the integration and international orientation of its economy, which is mainly dependent on the performance of its electronic industry, all of whom are in one way or the other FDI. MNCs not only enabled Singapore to export but also to acquire technological knowledge by transferring technology to local subsidiaries, and training local employees. Singapore is an exceptional successful country in the way that it was able to attract MNCs in both manufacturing and services. The Singaporean state has shaped an attractive investment environment by providing a range of facilities, infrastructure, subsidies, and complementary public investment (Yusuf and Stiglitz, 2001). The current economic strategy aims to ensure that Singapore remains a highly attractive location for inward FDI and to continue assistance to local companies. The vision for the next phase of development is to encourage companies to continue undertaking innovation. (Industrial Policies in the ASEAN Economies, 2000).

Current Thai Foreign Direct Investment Developments

Instead of fostering domestic change by attracting more foreign technology and managerial know-how through FDI, the recently elected government (Thaksin's government) is choosing to protect the Thai economy from global competitive forces (Crispin, 2001). New policy approaches to economic recovery rely on SMEs utilizing locally embedded skills to create new products and services for consumers. According to Bide (2001) there are two main characteristics of the new development model.

Firstly, since Thailand's comparative advantage does not lie in abundant cheap generic labor that caters for mass-industrialization, the policy should accommodate a population and workforce accomplished with an aesthetic culture and tradition in industries such as food processing, textiles, and ceramic products. This tradition and these artistic skills, combined with a diverse geography, mean that Thailand's mass-tourism industry can also be transformed into a higher value-added sector (Bide, 2001). However, there are two major obstacles that restrict these industries from achieving full potential. First, the inability to blend fundamental local skills with international technology, such as knowledge on consumer tastes and marketing. Second, the lack of international brand names to secure pricing power. The present government is addressing both impediments.

The second characteristic of the model is that skill driven enterprises require no large industrial base, as optimum size dictates they are SMEs. Such enterprises organize workers who excel in their local skills and other inputs in a flexible manner. This approach results in an ability to adjust to shifting global demand and supply and excess capacity is thus no longer an issue. It is expected that these SMEs will bring new products and services to the international market on improving terms of trade and pricing power (Bide, 2001; Lian, 2001).

This new policy seems to have characteristics of being anti-FDI. Policy makers explained that this new policy would run parallel to MNC operations as long as these contribute to the Thai economy. The type of foreign investment that will be actively courted is those ensuring to forge synergies with local enterprises. Under this new policy, international food companies and foreign tour operators are more likely to be investors and partners. Thailand aims to reposition itself from supplying cheap labor to MNCs or industrial products at the lower end of global supply chains to capitalizing on sales of differentiated, branded products and services to global consumers (Lian, 2001).

Future Foreign Direct Investment Prospects

Thailand's FDI outlook depends on the successful implementation of domestic structural reforms, the external environment, including regional competition for foreign capital, the depth of future FDI regime liberalization and investment promotion restructuring. Apart from the economic recovery, the pace of deregulation and corporate and financial restructuring, three key factors will determine the level of foreign investor interest in Thailand. First, the speed with which remaining constraints to FDI is removed. Second, the tempo of state enterprise privatization and government regulatory streamlining. Third, the change of FDI promotion measures. Compared to regional competitors like the Republic of Korea, China and Malaysia, Thailand's FDI regime reform has been very slow and restrictions remain considerable (Commonwealth of Australia, 2000). Moreover, after an election in January 2001 and under the new government, public, media and political support given to nationalistic elements oppose further FDI reform and imply slow future liberalization.

As Prime Minister Thaksin announced "his government would not beg foreign investors to come to Thailand because the main economic development strategy under his government was based on the concept of self-reliance. He also emphasized that once the country's internal economic situation had improved, FDI would quickly follow without the need for attracting foreign investors" (Siripraiwan, 2001: 3-4). A practical example is where the Internal Trade Department in Thailand has initiated anti-competitive investigations against foreign owned retail stores by restricting operating times and tough new zoning laws. Further limitations to FDI in many sectors are heavily regulated domestic markets, including the insurance, non-banking financial sector and steel industry (Crispin, 2001). In addition, the government recently announced it would drastically reduce the tax and other privileges that were granted in the past under the Board of Investment and the Industrial Estate Authority laws and regulations to limit the dependency on FDI for domestic economic growth (Bruggen, 2001).

Conclusion

Thailand is in the process of economic recovery from the impact of the Asian financial crisis. During the crisis, non-FDI investments were shifted largely from the Thai economy although FDI flows into Thailand were higher after the crisis. FDI is deemed to play an important role in the recovery of the economy. Key drivers of the FDI increase include an increased focus on FDI resulting from fiscal pressure, a reduction in foreign investment restrictions, and the devaluation of asset prices. The majority of FDI into Thailand originates in Japan, the US and Singapore and is concentrated in export-oriented sectors such as electronics and automobile. The transfers of technology and industrial upgrading from FDI have been disappointing in Thailand. In addition, export performances are limited to sectors that are dominated by foreign firms and based heavily on import inputs, questioning the real role and contribution of FDI in the Thai economy.

Before the January 2001 election, the government adopted a flexible policy approach toward FDI, in line with the economic recovery program agreed with the International Monetary Fund (IMF). The program also aimed to promote local enterprises through attracting FDI. However, the current government, lead by Prime Minister Thaksin, has a vision of increased self-reliance. FDI policies are revised in terms of privileges given in the past and conversely, more benefits are expected to be given to local businesses. In reality, national resources are insufficient to restore economic health and Thailand needs FDI to bridge its saving gap. Thai policy makers may need to look at other Asian economies to assess how they used FDI as an instrument to economic recovery and to sustain long-term economic development.

References

[1] Asia Pacific Foundation of Canada. 1998, *Korea Flings Open the Door to Foreign Direct Investment*, Canada Asia Commentary, [Online], Available: http://www.asiapacific.ca/analysis/pubs/pdfs/cac1.pdf [2001, August 30].

[2] Asian Development Bank. 1999, *Key Indicators of Developing Asian and Pacific Countries*, [Online], Available: http://www.adb.org/Documents/Books/Key_Indicators/1999/tha.pdf [2001, August 29].

[3] Asian Development Bank. 2001a, *Asian Development Outlook 2001 - II: Economic Trends and Prospects in Developing Asia: Southeast Asia: Thailand*, [Online], Available: http://www.adb.org/Documents/Books/ADO/2001/tha.asp [2001, July 29].

[4] Bangkok Bank. 2000, *The Foreign Direct Investment Situation in The Asian Countries Which Have Faced Economic Problems*, [Online], Available: http://www.bbl.co.th/mreview/200003_fdi1.htm [2001, August 12].

[5] Bide, T. 2001, *Key Lessons from the Past Economic Crisis in Thailand*, [Online], Available: http://www1.worldbank.org/finance/assets/images/Dr.Thanong_speech.pdf [2001, August 30].

[6] Bishop, B. 1997, *Foreign Direct Investment in Korea: The Role of The State*, Athenaeum Press, Ltd., Sydney.

[7] Bottelier, P. 1998, *The Role of Foreign Direct Investment and Multinational Corporations in China's Development - China's Response to the Asian Crisis*, [Online], Available: http://www.worldbank.org/html/extdr/offrep/eap/pbsp090898.htm [2001, August 7].

[8] Bruggen, E. 2001, *A Different Approach Towards Foreign Direct Investment Will Thailand Remain Competitive?*, [Online], Available: http://www.businessinthailandmag.com/archive/june01/65.html [2001, September 2].

[9] Busser, R. 2000, *Technology Transfer Through Japanese Foreign Direct Investment in Thailand: The Case of the Automotive and Electronics Sector,* [Online], Available: http://www.aasianst.org/absts/2000abst/Inter/I-100.htm [2001, August 31].

[10] Cailloux, J. and Jones, S. 1999, *Global Capital Flows to East Asia, Surges and Reversals*, [Online], Available: http://www.ids.ac.uk/ids/global/pdfs/glocap.pdf [2001, August 29].

[11] Chen, J. 2000, *Foreign Direct Investment*, Macmillan Press Ltd., London. Commonwealth of Australia. 2000, *Transforming Thailand: Choices for the New Millennium*, Department of Foreign Affair and Trade, Australia.

[12] Crispin, S. W. 2001, *Thaksin Turns Back the Clock*, Far Eastern Economic Review, April 19, [Online], Available: http://www.feer.com/2001/0104_19/p046money.html [2001, August 30].

[13] Cullen, J.B. 1999, *Multinational Management: A Strategic Approach*, South-Western College Publishing, Ohio.

[14] Doner, R.F. and Brimble, P. 1998, *Thailand's Hard Disk Drive Industry*, [Online], Available: http://www-irps.ucsd.edu/~sloan/papers/sloanprop98.html [2001, August 31].

[15] *Foreign Direct Investment (FDI) and Its Political Economy*, [Online], 2000, Available: http://bell.mma.edu/~nshashik/HILL_67692.htm [2001, August 1].

[16] *Framework for The Collection, Compilation and Dissemination of Foreign Direct Investment Statistics*, [Online], 2000, Available: http://www.fias.net/services/datasyst.html [2001, August 1].

[17] Goldar, B. and Ishigami, E. 1999, *Foreign Direct Investment in Asia*, EPW Review of Industry and Management, [Online], Available: http://www.epw.org.in/34-22/rm1.htm [2001, August 1].

[18] Griffin, R.W. and Pustay, M.W. 1999, *International Business: A Managerial Perspective*, 2nd ed, Addison-Wesley Publishing Company, Inc., New York.

[19] Hill, C.W.L. 2001, *International Business: Competing in the Global Marketplace: Postscript 2001*, 3rd ed, Irwin McGraw-Hill, Boston.

[20] IFC (International Finance Corporation). 1997, *Foreign Direct Investment: Lessons of Experience*, International Finance Corporation and Foreign Investment Advisory Services, Washington, D.C.

[21] Indian Oceans Rim Network. 2000, *Country Profile of Thailand: Economic Growth and Foreign Direct Investment*, [Online], Available: http://www.iornet.org/newiornet/thiland5.htm [2001, August 7].

[22] *Industrial Policies in the ASEAN Economies*, [Online], 2000, Available: http://www.uwe.ac.uk/faculty/les/research/asean/WEBJOHSI.PDF [2001, August 30].

[23] Kaiser, K., Kirton, J.J. and Daniels, J.P. 2000, *Shaping a New International Financial System: Challenges of Governance in A Globalizing World*, Ashgate Publishing Ltd., Sydney.

[24] Klein, M., Aaron, C. and Hadjimichael, B. 2001, *Foreign Direct Investment and Poverty Reduction*, [Online], Available: http://econ.worldbank.org/files/2205_wps2613.pdf [2001, July 28].

[25] Krugman, P.R. and Obstfeld, M. 1997, *International Economics: Theory and Policy*, 4th ed, Addison-Wesley Longman, Inc., New York.

[26] Kumar, N. 1998, *Globalization, Foreign Direct Investment and Technology Transfers: Impacts on and Prospects for developing countries*, Routledge, New York.

[27] Lian, D. 2001, *Thailand: Understanding Mr. Thaksin's New Development Model*, [Online], Available: http://www.morganstanley.com/GEFdata/digests/20010801-wed.html [2001, September 1].

[28] Markusen, J.R. 2000, *Foreign Direct Investment and Trade*, Centre for International Economic Studies, Australia, [Online], Available: http://www.adelaide.edu.au/CIES/0019.pdf [2001, August 1].

[29] Mbekeani, K.K. 1997, *Foreign Direct Investment and Economic Growth*, [Online], Available: http://www.niep.org.za/resart23.htm [2001, August 1].

[30] Moran, T.H. 1998, *Foreign Direct Investment and Development: The New Policy Agenda for Developing Countries and Economies in Transition*, Institute for International Economics, Washington, DC.

[31] OECD (Organisation for Economic Co-operation and Development). 1999a, *Foreign Direct Investment and Recovery in Southeast Asia*, OECD Publications, France.

[32] OECD (Organisation for Economic Co-operation and Development). 1999b, *Foreign Direct Investment, Development and Corporate Responsibility*, OECD Publications, France.

[33] *Overview of Foreign Direct Investment in ASEAN*, [Online], 2000, Available: http://www.aseansec.org/ov_fd.htm [2001, August 2].

[34] Petri, P. 2000, *Regional Co-operation and Asian Recovery*, Institute of Southeast Asian Studies, Singapore.

[35] Salvatore, D. 2001, *International Economics*, 7th ed, John Willey & Sons, Inc., New York.

[36] Siam City Bank (SCB) Research Institute. 2000, *Economic Situation: January 2000: FDI in Thailand*, [Online], Available: http://www.scb.co.th/~scbri/eseng/es0001e.html [2001, August 7].

[37] Singh, K. 1999, *The Globalisation of Finance: A Citizen's Guide*, Madhyam Books, Delhi.

[38] Siripraiwan, S. 2001, *PM Calls for Focus on Self-Reliance*, Business Day, July 16, [Online], Available: http://www.bday.net/jul16/p01-161.htm [2001, September 8].

[39] South Development News. 2000, *FDI's Role in Industrial Competitiveness*, [Online], Available: http://www.southcentre.org/info/southbulletin/bulletin04/bulletin04-01.htm#P72_12629 [2001, August 31].

[40] Suksiriserekul, S. 2000, *Chapter Three: Thailand*, [Online], Available: http://www.iar.ubc.ca/centres/csear/SSN/ch3.pdf [2001, July 30].

[41] The South Centre. 1997, *Part II: Foreign Direct Investment: Facts, Conceptual Issues and Costs and Benefits for Developing Countries*, [Online], Available: http://www.southcentre.org/publications/fdi/fdifinaltrans-03.htm#P936_42024 [2001, July 29].

[42] The World Bank. 1998, *East Asia: The Road to Recovery*, The World Bank, Washington, D.C.

[43] Thomsen, S. 1999, *Southeast Asia: The Role of Foreign Direct Investment Policies in Development*, OECD Publication, [Online], Available: http://www.oecd.org/daf/investment/fdi/WP991.PDF [2001, August 25].

[44] Tiralap, A. 1999, *The Myths about The Sunrise Industry in Developing Countries: The Case of Electronics Industry in Thailand*, King Mongkut's Institute of Technology Ladkrabang, Thailand, [Online], Available: http://www2.ucsc.edu/cgirs/publications/cpapers/tiralap.pdf [2001, August 31].

[45] United Nations. 1998, *The Financial Crisis and Foreign Direct investment: An Assessment*, United Nations Publication, Geneva.

[46] United Nations. 1999, *World Investment Report 1999: FDI and the Challenge of Development*, United Nations Publication, Geneva.

[47] Urata, S. 1996, *Japanese Foreign Direct Investment and Technology Transfer in Asia*, [Online], Available: http://www.ap.harvard.edu/papers/RECOOP/Urata/Urata.pdf [2001, September 1].

[48] Wild, J.J., Wild, K.L. and Han, J.C.Y. 2000, *International Business: An integrated Approach*, Prentice-Hall of Australia Pty. Ltd., Sydney.

[49] Yarbrough, B.V. and Yarbrough, R.M. 1997, *The World Economy: Trade and Finance*, 4th ed, The Dryden Press Harcourt Brace College Publishers, New York.

[50] Yusuf, S. and Stiglitz, J. 2001, *Rethinking the East Asian Miracle,* Oxford University Press, New York.

The Effects of International Economic Integration on FDI Determinants: Japanese and US FDI in Europe

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Abstract

Regional economic integration is one of the most significant changes in international business environments during the past two decades. International economic integration accelerates the free movement of created production factors across national boundaries and ruins any theory of international trade based on immobile factors. The static and dynamic effects of economic integration modify the world production by providing new opportunities to MNEs. Empirical studies based on the Eclectic paradigm imply that European economic integration influences Japanese and US FDI determinants in Europe from the first (1975 (77)-1984) to the second period (1985-1996).

Introduction

Regional economic integration is one of the most significant changes in the international business environments during the past two decades. International economic integration accelerates the free movement of created production factors across national boundaries and makes a theory of international trade based on immobile factors irrelevant. The static and dynamic effects of economic integration modify world production by providing new opportunities to multinational enterprises (MNEs). The current international business environment could explain both different motivations and patterns for Japanese and US FDI to European countries in the past decades.

A Brief Review of Theory of Economic Integration and FDI

The theory of economic integration is based on the broad study of Balassa (1961) that has been elaborated by other scholars such as Robson (1987, 1993), El-Agraa (1997). The theory of economic integration is originally developed from traditional trade theory, which assumes the perfect competition and whose major concern is the location of production of different kinds of goods (Imbriani & Reganati, 1994). Mainstream trade theory addresses whether goods, within the integrated area, will be supplied by imports or by local production: it does not consider the characteristics of foreign owned production such as the nationality of ownership and MNEs' strategies (Dunning, 1997a). On the other hand, the theory of international production or MNEs introduces market imperfections in which a MNE as an organizational hierarchy internalizes the market for cross-border intermediate products to achieve efficient allocation of production (Dunning, 1993).

The major goals of economic integration are to avoid restrictions and government interventions within the bloc, to relieve cyclical fluctuations, and to increase national income (Balassa, 1961). The major goals of MNEs are to produce goods more efficiently and to advance their long-term profitability by undertaking foreign direct investment. The theory of FDI is concerned with the impact of international economic integration on the competitive advantages of firms of different nationalities, the location attractiveness associated with these competitive advantages, and the different ways to internalize these competitive advantages of firms and the location attractiveness (Dunning, 1997b).

Although the two theories are based on different assumptions and goals, researchers have tried to integrate the two theories to explain the inter-relationships between economic integration processes and MNE activities. One of the studies is OLI in which the theory of FDI is concerned with the impact of international economic integration on the competitive advantages of firms of different nationalities, the location attractiveness associated with theses competitive advantages, and the different ways to internalize these competitive advantages of firms and the location attractiveness (Dunning, 1997a). The impact of European economic integration on FDI by non-members in member countries can generally bring a considerable level of geographic and/or industrial restructuring through industrial specialization and the exploitation of comparative advantage within Europe. Firms tend to move to a single location to exploit any economies of scale derived from the expanded European market, which can be served by trade (Emerson et al., 1988). Firms tend to move to other places to take location specific advantages such as labor intensive industries to countries that have relatively lower real labor costs within Europe (Pain & Lansbury, 1997). As a result, the impacts of European economic integration on FDI determinants can be explained by the Eclectic paradigm, which is a framework of this study. According to Dunning (1993), the tendency of a firm to engage in foreign production depends on its OLI configuration in the target market. Even though there are many different modes to enter foreign production by a firm, FDI is the main mode to capture a foreign market if a firm has the capacity to exploit all OLI advantages. The paradigm helps especially to explain not only how regional integration changes location advantages, but also how it affects the distribution of ownership advantages between firms of different origins and the configuration of both ownership and location specific advantages.

Previous Literature

Most of the studies of economic integration and FDI have focused on the Europe or European Union (e.g. Scaperlanda & Mauer, 1969; Yannopoulos, 1990; Neven & Siotis, 1995; Yamada & Yamada, 1996; Dunning, 1997a, 1997b; Pain & Lansbury, 1997) and the North American Free Trade Area (NAFTA) (e.g. UNCTC, 1990; Eden, 1994; Dunning, 1994; Vernon, 1994). However, the lack of availability or reliability as well as the short time-span of data limits researchers' contributions to only a few advanced countries and regions. Clegg (1992), Wallis (1968), D'Arge (1969, 1971), Schmitz (1970), Goldberg (1972), Lunn (1980) investigated the relationships or effects between US FDI and EC. Scaperlanda & Mauer (1969) found that US FDI in the EEC was more motivated by market size, economic growth and tariff discrimination in the host country based on the data from 1952 through 1966. Dunning (1971), Mayer (1983), Grant (1983) studied consequences of EC on UK FDI pattern and UK industries. Dunning (1997b), Mody & Srinivasan (1998), Buigues & Jacquemin (1994) compared Japanese and US FDI into EC. Researchers have also examined the impact of the different integration states on US FDI (D'Arge, 1969; Schmitz, 1970; Scaperlanda & Reiling, 1971; Scaperlanda & Balough, 1983; Clegg, 1992).

When Japanese FDI in Europe became quantitatively important, researchers started to examine the impact of European integration on Japanese FDI (e.g. Balasubramanyam & Greenaway, 1992, 1993; Yamada & Yamada, 1996) and to compare the patterns of Japanese and US FDI in Europe (e.g. Buigues & Jacquemin, 1994; Neven & Siotis, 1996; Dunning, 1997b; Pain & Lansbury, 1997; Srinivasan & Mody, 1997).

Mody & Srinivasan (1998) based on data for Japanese and US FDI in ten EC countries from 1977 through 1992, found that host country variables (market size, cost of labor), agglomeration factors (previous level of FDI, infrastructure), the degree of openness of an economy, and country risk were significant variables in explaining Japanese and US FDI in the EC countries. Neven & Siotis (1996) found that a major determinant of Japanese and US FDI in four large EC countries (France, Italy, Germany and the UK) for the years 1984-1989 was the variable, technology sourcing that represented the difference in R&D intensity between Japan or the United States and the host county. In the study of Buigues & Jacquemin (1994) with the data including seven or nine manufacturing breakdowns from 1980 through 1990, the complementary relationships between FDI and trade were common for the both Japanese and US FDI. However, non-tariff barriers were a significant determinant for Japanese FDI in the EC, but a minor one for US FDI in the EC.

Hypothesis

The Impact of Economic Integration on Japanese and US FDI Determinants in Europe

MNEs, which are major actors in the process of international resource allocation, reorganize the regional division of labor within an economic integrated area by moving production locations within the area based on the distribution of comparative advantage (Andres, 1996).

The static effects of the removal of trade barriers achieved by economic integration could be divided into production and consumer effects, which relate to a shift in the demand for goods produced by member and nonmember that modify world production and trade patterns (Balassa, 1961; UNCTC, 1990). The process of economic integration can enhance the location advantages of the markets of member countries by the distribution of location advantages across the markets, and then this enhanced location advantages can provide new opportunities to make more income through the production within the integrated area. However, it does not mean that all member countries and/or all MNEs can earn more rents to produce within the integrated area because the advantages by integration are relative. According to Eden (1994) and Vernon (1994), the choice of location to produce will be determined by different characteristics of the products, firms, industries, countries, movements of rival firms or suppliers.

Dynamic effects of economic integration such as economies of scale, cost-reduction effect, trade-suppression effect, and product efficiency increase competitiveness of member nations derived from larger market size, more opportunities, and larger scale economies. These effects result in higher level of income and more investments in R&D, and consequently improve ownership specific advantages of regional firms (UNCTC, 1990).

Major parts of the benefits derived from an economic integration are also derived from cost reduction and efficiency gains from the regrouping of production facilities in fewer locations within member countries, in which more favorable costs are found. Thus, FDI by non-members will examine the integrated area seeking those advantages. Baldwin (1989) argues that X-efficiency gains from reorganization investment with concentration in fewer plants would attract rationalized investment because the costs of intermediate inputs become relatively cheaper inside the integrated regime. Foreign subsidiaries within the integrated countries, which were initially motivated to escape from existing or prospective import restrictions, tended to be smaller than the optimal scale of production. These subsidiaries can be stimulated to reorganize their locations of production within the member countries especially according to the expansion of the integrated area. It means that foreign subsidiaries that are only for local markets in member countries will be closed, and make a cluster of rival firms in a common location (increasing levels of concentration) to exploit economies of scale. In addition, the decreased risks for FDI in new member countries will be a part of reasons to encourage the reorganization FDI within the integrated area (Vernon, 1994).

In addition, according to Dunning's theory of international production, the dynamic effects of international economic integration improve competitive advantages of MNEs established within the area by expanding market size, creating opportunities for scale economies, and increasingly high levels of innovation activities. These effects can add more O advantages to those inside MNEs, which obtain newly created L advantages compared to other MNEs outside of the integrated area. The improved advantages would be main attractiveness to foreign investors (1993).

Industrial allocations of Japanese and US FDI in Europe will be determined with some other factors derived from European integration processes. Different industrial characteristics of each country's FDI in Europe will be the major reason for different industrial patterns to develop. Dunning (1997b) argues that integration effects are industry specific. He classifies five industrial characteristics, which stimulate further the industrial concentration within Europe. The industrial characteristics are high levels of R&D relative to sales, technically advanced intermediate products, highly differentiated products, information sensitive, and lower coordination costs in intra-firm transaction within Europe. In addition, the difference between manufacturing and non-manufacturing provides an explanation of the different industrial patterns. Because non-manufacturing sectors, especially service sectors, are less easily tradable than manufacturing goods, FDI should be used as an entry mode instead of export. The composition of FDI and trade in the commercial relationship with Europe is another determinant for the industrial patterns because there are different patterns between trade-based and investment-based commercial relationship in the European integration processes (UNCTC, 1990).

Because the United States has a long investment history in the European market, most of US FDI flows in Europe in the early 1960s were characterized as defensive import-substituting investments based on transaction cost theory and oligopolistic power theory, to supply local markets. However, at the end of the 1980s, 85 percent of the market for US goods and services in the EU is accounted for by the US affiliates in the EU, and exports from the United States took care of the rest of them (UNTCMD, 1993). As a result, the economic integration processes in Europe have turned the type of US FDIs into rationalized investments and offensive export substituting investments. The former is to specialize one or a reduced range of product with reduced production locations to supply all European markets and the latter is for strategic asset seeking (Dunning, 1988, 1993; UNCTC, 1990).

On the contrary, Japan is a latecomer. Therefore, Japanese FDI in Europe aimed at exploiting the European market as a whole beginning from the early 1970s (Dunning, 1994). In addition, Japanese MNEs had trade-based rather than investment-based commercial relationship with the EU. At the end of the 1980s, 20 percent of the market for Japanese goods and services in the EU is accounted for by the Japanese affiliates in the EU and 80 percent is exported from Japan. In consequence, the economic integration processes in the EU have turned the type of Japanese FDIs into defensive export substituting investments in industries where Japan has already O and L advantages such as automobile, electric and electronic equipment and offensive export substituting investments to upgrade and rationalize operations in the EU (UNCTC, 1990). These impacts of European economic integration on Japanese and US FDI lay the bases for the following hypotheses.

H1. The differences on the determinants of Japanese and US manufacturing FDI in Europe are smaller by the impacts of European Economic Integration.

H2. The determinants of Japanese manufacturing FDI in Europe has been more influenced by its changed overall manufacturing FDI in the world, from resource seeking to market, efficiency or strategic asset seeking than by European integration *per se* because the effects of European economic integration on Japanese manufacturing FDI is not significant.

H3. The determinants of US manufacturing FDI in Europe has been more influenced by European integration *per se* rather than its changed overall manufacturing FDI in the world, from market seeking to efficiency or strategic asset seeking because the effects of European economic integration on US manufacturing FDI is significant.

Data and Methodology

Dependent Variables

Dependent variables in this study are the shares of 5 industrial sectors to the total manufacturing FDI stocks in the world by Japan and the United States from the year 1975 to 1996. The major reason to use the share of FDI stocks instead of FDI flows is that the distributions of FDI stocks are less volatile than the distributions of FDI flows. This study matches Japanese and US FDI data using International Standard Industrial Classification (ISIC). Table 1 describes the names of 5 industrial classifications and the code numbers of Japanese and US data, which are included in ISIC. Because this study expects some possible restructuring of the patterns of Japanese and US FDI according to the expansion of the integrated area, and Ireland and UK became members in the 1973 before Spain in 1986, two time periods, 1975-1984 and 1985-1996, are employed. The rationales for this are not only the limited number of observations, but also because the Internal Market Programme (IMP) was initiated in 1985 and the large appreciation of yen after the G-5 meeting in 1985.

Table 1: INDUSTRIAL CLASSIFICATION

OECD (ISIC)	JAPAN	USA
Food products **31**	Foodstuffs Country Code: 12, 13 ISIC: 31	Food and kindred products ISI - 20 ISIC: 311.2, 313
Petroleum, chemical, rubber and Plastic products and **Pharmaceuticals** **35**	Chemicals Country Code: 20-25 ISIC: 35	Petroleum & coal products / Chemical & allied Products/ Rubber products / Miscellaneous Plastic products ISI - 28 ISIC: 351, 352
Metal and mechanical products **37, 381, 3829**	Iron and nonferrous metals / Machinery Country Code: 26-29, 32, 34 ISIC: 37, 381, 3829	Primary & fabricated metals / Industrial Machinery & equipment ISI - 33, 34, 35 ISIC: 37, 381, 3829
Office machinery, computers, radio, TV and communication equipment **383, 3825**	Electric appliances Country Code: 30 ISIC: 383, 3825	Electric & other electric equipment ISI – 36 ISIC: 383, 3825
Vehicles and other transport **Equipment** **384**	Transport equipment 31, 33 ISIC: 384	Transportation equipment ISI - 37 ISIC: 384

For the United States, various issues of Survey of Current Business published by the US Department of Commerce are major sources. For Japan, all data were obtained from various issues of Financial Statistics of Japan published by the Department of Finance in Japan and various issues of EXIM Review by the Export-Import Bank of Japan.

Independent Variables

Explanatory variables include ownership, internalization, and location advantages in Table 2 with the interaction between home and host characteristics, and are classified into natural resource, market, efficiency, and strategic asset seeking. One important point is that because there is no clear cut to distinguish variables especially between L and I or between market and strategic asset seeking, some variables are used for more than one advantage or motivation.

Table 2. THE DEFINITIONS OF INDEPENDENT VARIABLES AND EXPECTED SIGNS

Name of Variables	**Expected 1975-84**		**Sign 1985-96**		**Data Description**
	Japan	**USA**	**Japan**	**USA**	
Export Intensity (EXINT)	+	+	+	++	This variable is used for economic integration effect. The variable indicates the relative importance of international trade between home countries and economically integrated areas. Because international linkage by economic integration seems to have proceeded faster through FDI than trade (UN, 1998), the more negative relationship between FDI and EXINT represents the more integration effect. This measure is the ratios of the export shares to FDI shares of the home countries and obtained from International Financial Statistics, IMF.
Globalization (GLOB)	+	+	++	++	Many researchers have studied the positive impact of the multinationality of firms on FDI because multinationality may represent lower internal organizational obstacles to create new FDI. For example, higher involvement or higher levels of firms' capabilities to deal with overseas markets are broadly accepted as a major means of increasing their performance in the deeply inter and intra-active world competition (Wolf, 1975; Rugman, 1979; Thompson, 1985; Michel & Shaked, 1988; Morck & Yeung, 1989). This study assumes that the globalization variable, which is measured by the ratios of FDI outward stock to GDP of the home countries, can represent the multinationality of all MNEs in a home country.
Market size (GDP)	–	++	+	+	The possible correlation between the market size of a host country or region and the volume of inward investment has supported in most empirical studies (Dunning, 1974; Agarwal, 1980; Davison 1980; Nigh, 1985; Yu & Ito, 1988; Jalillian, 1996; Kumar, 1998). In this study, GDP in US dollars of the host is used as the proxy of market size. Because both of Japan and the United States are included as a host country in each data set, the GDP of Japan or the United States is subtracted from the total GDP of the host countries for Japanese or US FDI. This measure is the sum of total gross domestic production of the host countries, and represents location specific advantage of the host.

Labor costs (LC)	+	_	+	- -	Labor cost is one of the major indicators of location specific advantages. The higher levels of labor cost in the home country stimulate FDI outflows to look for lower labor cost sites for production (Lall, 1980; Kravis & Lipsey, 1982; Meredith, 1983; Huang, 1997; Mody and Srinivasan, 1998). The variable for labor costs is a measure of the ratio of the average labor costs of host countries to those in home country for 5 industrial sectors in which labor costs are measured by wages and salaries paid to employees in US $ divided by number of employees. According to Pain and Lansbury (1997), the relative labor costs also provide the influence of the real exchange rate and differentials in productivity.
Tax Rate (TAX)	++	_	+	++	The differences of tax rates between home and host countries are one of the well-known determinants of FDI. Because taxes are directly affecting MNEs profits, a place that has lower corporate tax rates could be the first location for all MNEs (Loree and Guisinger, 1995; Mody and Srinivasan, 1998). TAXs are measured by total tax revenue divided by GDP.
Infrastructure (GFIGDP)	+	++	++	+	The quality of infrastructure of a host country enhances the productivity of investments undertaken and becomes an important determinant of FDI (Mody and Srinivasan, 1998). GFIGDP is measured by the average ratio of the gross fixed domestic investment to GDP of host countries.
Inflation Rates (INF)	+	_	_	+	The volatility of inflation rates in the host countries is concerned as one of the risk factors.

Statistical Methodology

To test the hypotheses the following steps are employed. First, we use a two-stage estimation process (generalized linear regression). In this generalized linear regression model, there are a few assumptions. First, all MNEs are motivated by the same set of location specific advantages. Second, all MNEs are equally influenced by the world and/or regional economic environment. Third, MNEs decide on the extent of FDI at first (Barrell & Pain, 1996) and then on the distribution of the FDI across regions and/or countries (Mody & Srinivasan, 1998). The major reason for using that estimation process is to correct for heteroscedasticity and autocorrelation derived from the pooled time-series and cross-section data. The coefficient of correlation does not have a clear-cut meaning when weighted least squares are employed (Neter et. al., 1989) because variables are transformed by the estimated variance-covariance matrix. Based on the outcomes from the two-stage estimation process, I employ a standard test of the equality of coefficients by a Chow-test [(1)] for the Japanese and US equations.

Statistical Results

Table 3 and 4 report correlations among the variables in the analyses and variance inflation factors. Some correlations are higher than 0.5, and the variance inflation factors (VIF [(2)]) are a little high to raise concern about multicollinearity. TAX in Japanese data, and GDP and TAX in the US data could be problematic; however, because of the theoretical importance of the two variables, we decide to include them.

Table 3: CORRELATION MATRIX FOR JAPANESE MANUFACTURING DISTRIBUTION IN EUROPE

	TAX	GFDI	EXFDI	GLOB	LC	INF	GDP	VIF
TAX	1.000							**10.007**
GFDI	-.042	1.000						**1.073**
EXFDI	.087	-.108	1.000					**1.633**
GLOB	-.165	.081	.066	1.000				**2.461**
LC	-.169	.070	.423	.553	1.000			**3.431**
INF	.312	-.070	-.092	-.404	-.513	1.000		**3.734**
GDP	-.716	.062	.124	-.213	.068	.178	1.000	**7.148**

Table 4: CORRELATION MATRIX FOR US MANUFACTURING DISTRIBUTION IN EUROPE

	TAX	EXFDI	GLOB	GFDI	INF	LC	GDP	VIF
TAX	1.000							**10.752**
EXFDI	-.069	1.000						**2.251**
GLOB	.240	.227	1.000					**1.290**
GFDI	-.031	.160	.183	1.000				**4.128**
INF	.298	.121	.198	.056	1.000			**3.737**
LC	-.096	.742	.324	.223	.117	1.000		**4.563**
GDP	-.554	-.166	-.174	.529	.151	-.248	1.000	**11.269**

Table 5 presents the results of FDI determinants for Japanese and US manufacturing FDI in Europe. In the case of Japanese manufacturing FDI, the estimated coefficient for GDP, GFDI and TAX are significant at 1 or 5 percent significance level in the first period, and all coefficients except for GDP and TAX are significant at 1 or 5 percent significance level in the second period. The changing patterns on the coefficients for LC, INF and TAX during the two time periods simply support that the industrial distribution of Japanese manufacturing FDI in Europe has been changed to look for lower labor costs and more favorable business environment within Europe. In addition, even though EXPFDI becomes a more important determinant in the second period, the changes in GDP are the most noticeable.

Table 5: DETERMINANTS OF MANUFACTURING FDI IN EUROPE BY GENERALIZED LINEAR REGRESSION

	Japan		**The United**	**States**
	1977-1985	**1986-1996**	**1975-1985**	**1986-1996**
Intercept	2.12	14.27***	2.76	6.65
	(1.20)	(9.61)	(0.71)	(1.48)
LC	0.39	0.15**	-0.34**	-0.41***
	(0.88)	(2.67)	(-2.39)	(-3.91)
GDP	-4.40**	-0.31	3.89***	0.22
	(-2.37)	(-1.02)	(5.71)	(1.59)
GFDI	0.53***	0.15**	-2.34***	-0.03
	(3.43)	(2.63)	(-7.41)	(-0.74)
GLOB	0.07	1.40***	0.31***	0.15***
	(0.33)	(14.50)	(6.86)	(3.26)
INF	0.17	-0.27***	0.52***	-0.001
	(1.23)	(-4.35)	(5.10)	(-0.04)
TAX	4.26**	0.007	-0.93	0.47***
	(2.41)	(0.03)	(-1.29)	(3.61)

EXPFDI	-0.09	-0.62***	0.01	-0.65***
	(-1.24)	(-7.05)	(0.11)	(-14.83)
Observations	40	55	46	55
Adj. R^2	0.90	0.93	0.94	0.98
F	52.87***	95.84***	104.54***	649.75***
DW	1.74	2.11	1.39	2.12

*: $p < 0.1$, **: $p < 0.05$, ***: $p < 0.01$

Dependent Variables: Manufacturing FDI shares for five industrial sectors in which maximum annual observations are 5 and the first observation (1975 or 1977) is reduced from each industrial sector during the autocorrelation treatment (Actual observations are vary).

GLOB (Globalization rates): The ratios of FDI out stock to GDP of home country for 5 industrial sectors.

LC (Labor cost): The ratio of the average labor costs of host countries to those in home country for 5 industrial sectors in which labor costs are measured by wages and salaries paid to employees in US $ divided by number of employees.

GDP: The average gross domestic productions of host countries.

GFDI (Gross fixed domestic investment): The ratio of average gross fixed domestic investments to GDP of host countries.

INF (Inflation rates): The averages inflation rates of host countries.

TAX (Tax rates): The averages corporate tax rates of host countries.

EXFDI (Export intensity): The averages corporate export intensity of home countries in which export intensities are measured by home country's exports divided by FDI outflows to host countries.

Especially, the significantly increased coefficient for GDP represents the similar patterns of the overall distributions of Japanese FDI, which are from resource seeking to market seeking. It seems to prove that because not only Japan is a latecomer, and Japanese MNEs have trade-based rather than investment-based commercial relationship with the EU (UN, 1990), but also its FDI in Europe has aimed at exploiting the European market as a whole beginning from the early 1970s (Dunning, 1994), the integration effect, EXPFDI, could be less important determinant compared to other variables in the second period. In other words, the results of this test can predict that the economic integration processes in the EU have turned the type of Japanese FDIs into defensive export substituting investments in industries where Japan has already O and L advantages such as automobile, electric and electronic equipment and offensive export substituting investments to upgrade and rationalize operations in the EU.

As a result, hypothesis H2, which expects that the determinants of Japanese manufacturing FDI in Europe has been more influenced by its changed overall manufacturing FDI in the world, from resource seeking to market, efficiency or strategic asset seeking than by European integration *per se* because the effects of European economic integration on Japanese manufacturing FDI is not significant, is supported by our test.

In the case of US manufacturing FDI in Europe, all coefficients except for TAX and EXPFDI are statistically significant in the first period, which represent that US MNEs motive to invest in Europe was market seeking based on its ownership specific advantages. However, in the second period the degree of importance for GDP remarkably decreases and those of TAX and LC increases with the 1 percent significance level, which show that the motive for US MNEs changes to efficiency and/or strategic asset seeking. However, the major interesting change is that the integration effect, EXPFDI was not a significant variable in the first period, but it becomes the most important explanatory variable in the second period compared to other variables. It seems to prove that because the United States has a long investment history in the European market in which most of US FDI flows in Europe in the early 1960s were characterized as defensive import-substituting investments based on transaction cost theory and oligopolistic power theory, to supply local markets (UN, 1990), the economic integration processes in Europe have turned the type of US FDIs into rationalized investments and offensive export substituting investments (Dunning, 1988; UN, 1990).

As a result, hypothesis H3, which expects that the determinants of US manufacturing FDI in Europe has been more influenced by European integration per se rather than its changed overall manufacturing FDI in the world, from market seeking to efficiency or strategic asset seeking because the effects of European economic integration on US manufacturing FDI is significant, is supported by our test.

Table 6 reports the standard tests of the equality of the coefficients for Japanese and US equations. Statistically, all cases: Japanese and determinants between the first period (1975 or1977-1984) and the second period (1985-1996) and between Japanese and US determinants in the two periods, can reject the null hypotheses that determinants between the two periods and between the two countries are the same at the 1 percent significance level. However, the significant decreases of the F-values from 583 in the first to 274 in the second period indicate that the differences of Japanese and US manufacturing FDI in Europe have been smaller.

Table 6: STANDARD TEST OF THE EQUALITY (CHOW TEST)

Japan	**USA**	**Japan & USA**	**Japan & USA**
77-85&86-96	**75-85&86-96**	**1975(1977) - 1985**	**1986 - 1996**
16.63***	18.24***	582.92***	273.66***

***: $p < 0.01$

As a result, hypothesis 1, which expects that the differences on the determinants of Japanese and US manufacturing FDI in Europe are smaller by the impacts of European Economic Integration, is supported by our test.

Conclusion

European economic integration significantly increased its location and internalization advantages by providing new opportunities for economies of scale and scope and cross-border activities among members. In the Japanese case, the variables of location characteristics such as market size, infrastructure and tax rates are statistically significant in the first period, but in the second period all kinds of variables, which are related to O, L, I, are significant. The United States has somewhat different trends during the two periods. The importance of market size and inflation rates is remarkably decreased from the first to the second period. It seems to indicate that market seeking is no longer the major motivation of US manufacturing FDI in Europe. The influence of European economic integration (EXPFDI) on Japanese and US manufacturing FDI is the important determinant only in the second period. It clearly represents that European economic integration influences on the determinants of Japanese and US manufacturing FDI in Europe from the first (1975 (77)-1984) to the second period (1985-1996). However, the influence of the integration variable, EXPFDI compared to that of other variables is more critical in the case of US FDI rather than in the Japanese case in the second period. It could imply that because the United States has a long history of investment in Europe, European economic integration might have a greater influence on restructuring pre-existing FDI within Europe rather than on stimulating new FDI in the first period. On the contrary, because Japanese FDI in Europe began from the early 1970s and its FDI had aimed to exploit Europe as a whole from the beginning, the effect of European economic integration on Japanese manufacturing FDI was not significant in the first period, but in the second period.

The similar patterns of Japanese and US manufacturing FDI determinants in Europe in the second (1985-1996) compared to those of the first period (1975-1984) could be explained by not only European economic integration, but also many other changed international economic environments since the mid 1980s. First, economic entities (countries and firms) have become involved in globalization processes to be competitive in the global market. These globalization processes encouraged more economic ties and interdependence, which were further stimulated by the liberalization and deregulation of markets and by new technologies such as communication technology. Second, the increased multinationality of Japanese multinational enterprises (MNEs) could be another reason. Because MNEs have been major actors in the exploitation of ownership advantages in outside of their national boundaries, the similar degree of international involvement of MNEs could make similar FDI determinants. According to the restructuring or reengineering of Japanese MNEs and the Japanese yen appreciation in the 1980s, Japanese MNEs caught up with the degree of US MNEs' multinationality. Third, the trends of macroeconomic convergence among developed countries could also be considered as one of the reasons to make similar patterns of FDI determinants. Similar macroeconomic conditions such as living standards, working conditions, and income patterns can provide new and/or similar opportunities by creating global customers and products to Japan and the United States.

Limitation of this study rather than the availability of data is that it is difficult to test the influence of economic integration on FDI determinants. The major impacts of economic integration on FDI determinants is industry specific and could be derived from other economic and socio-political factors such as market size, level of economic development, political stability, and intra-firm trade among member countries or between member and non-member countries, rather than from integration itself. Considering all possible factors should help us to gain a better understanding of the influence of economic integration on FDI determinants.

References

[1] Andres, Javier, R. Domenech & C. Molinas. 1996. Macroeconomic performance and convergence in OECD countries. *European Economic Review*, 40: 1683-1704.

[2] Balassa, Bela. 1961. *The theory of economic integration*. Homewood, IL: Irwin Inc.

[3] Balasubramanyam, V. N. & David Greenaway. 1992. Economic integration and foreign direct investment: Japanese investment in the EC. *Journal of Common Market Studies*, 30(2): 175-193.

[4] Baldwin, Richard. 1989. The growth effects of 1992. Economic Policy, October: 248-281.

[5] Barrell, R. & N. Pain. 1996. An econometric analysis of US foreign direct investment. *Review of Economics & Statistics*, 78(2): 200-207.

[6] Buigues, P. & A. Jacquemin. 1994. Foreign direct investment and export to the European Community. In Mason, M. and Encarnation, D. (ed), *Does ownership matter – Japanese multinationals in Europe*. Oxford: Clarendom Press.

[7] Clegg, Jeremy. 1992. Explaining foreign direct investment. In Buckley P. & Casson M. (eds), *Multinational enterprises in the world economy: essays in honor of John Dunning*. Aldershot: Edward Elgar.

[8] D'Arge R. C. 1969. Notes on custom unions and foreign direct investment. *Economic Journal*, 79, June: 324-33.

[9] D'Arge R. C. 1971. Customs unions and direct foreign investment: a correction and further thoughts. *Economic Journal*, 81, June: 352-355 and 357-360.

[10] Dunning, John H. 1971. *The Multinational Enterprise*. London: Allen & Unwin.

[11] Dunning, John H.1988. *Explaining international production*. London: Unwin Hyman.

[12] Dunning, John H. 1993. *Multinational enterprises and the global economy*, Workingham, England: Addison Wesley.

[13] Dunning, John H. 1994. MNE activity: Comparing the NAFTA and the European Community. In Eden L. (ed), *Multinationals in North America*, Calgary: University of Calgary Press.

[14] Dunning, John H.1997a. The European internal market programme and inbound foreign direct investment. *Journal of Common Market Studies*, 35(1): 1-30.

[15] Dunning, John H.1997b. The European internal market programme and inbound foreign direct investment. *Journal of Common Market Studies*, 35(2): 189-223

[16] Eden, Lorraine. 1994. Who does what after NAFTA? Location strategies of US multinationals. In Eden L. (ed), *Multinationals in North America*, Calgary: University of Calgary Press.

[17] El-Agraa, Ali M. 1997. *Economic integration worldwide*. New York: St. Martin's Press.

[18] Emerson, M. et al. 1988. *The Economics of 1992*. Oxford: Oxford University Press.

[19] Goldberg, M.A. 1972. The determinants of US direct investment in the EEC: a comment. *American Economic Review*, 62: 692-699.

[20] Grant, R. M. 1983. The impact of EEC membership upon the United Kingdom's industrial performance. In Jenkins (ed.), *Britain and the EEC, Proceedings of Section F. (Economics) of the British Association for the Advancement of Science*. London: Macmillan.

[21] Imbriani, Cesare & Reganati F. 1994. International production and economic integration: Toward economic convergence. *Economia Internazionale*, 47(4): 333-349.

[22] Lunn, J. L. 1980. Determinants of US direct investment in the EEC. *European Economic Review*, 21, May: 391-193.

[23] Mayers, D. G. 1983. EC trade effects and factor mobility. In El-Agraa, A. M. (ed.), *Britain within the European Community: the way forward*. London: Macmillan.

[24] Mody & Srinivasan. 1998. Japanese and US firms as foreign investors: Do they march to the same tune? *Canadian Journal of Economics*, 31(4): 778-799.

[25] Neter, J., M. H. Kutner, C. J. Nachtshemim & w. Wasserman. 1989. *Applied Linear Statistical Models*. 4th ed. Londom, Irwin.

[26] Neven, D. & G. Siotis. 1996. Technology sourcing and FDI in the EC: An empirical evaluation. *International Journal of Industrial Organization*, 14(5): 543-560.

[27] Pain, Nigel & Melanie Lansbury. 1997. Regional economic integration and foreign direct investment: The case of German investment in Europe. *National Institute Economic Review*, 160: 87-99.

[28] Robson, P. 1987. *The Economics of International Integration*. London: George Allen & Unwin.

[29] Robson, P. 1993. *Transnational Corporations and Economic Integration*. United Nations Library on Transnational Corporations. London: Routledge.

[30] Scaperlanda A. & Reiling E. 1971. A comment on a note on customs unions and direct foreign investment. Economic Journal, 355-357.

[31] Scaperlanda, A. & Balough R. 1983. Determinants of the US direct investment in the EEC revisited. *European Economic Review*, 21:381-390.

[32] Schmitz, A. 1970. The impact of trading blocs on foreign direct investment. *Economic Journal*, 80: 724-731

[33] UN. 1998. *World Investment Report 1998: Trends and Determinants*. New York and Geneva: United Nations.

[34] UNCTC. 1990. *Regional economic integration and transnational corporations in the 1990s: Europe 1992, North America, and Developing Countries.* New York: United Nations.

[35] United Nations Transnational Corporations and Management Division (UNTCMD). 1993. *From the Common Market to EC 92: Regional Economic Integration in the European Community and Transnational Corporations*. Department of Economic and Social Development, New York: United Nations.

[36] Vernon, Raymond. 1994. Multinationals and governments: Key actors in the NAFTA. In Eden, L., *Multinationals in North America*. Calgary: University of Calgary Press.

[37] Wallis, K. F. 1968. The EEC and United States foreign investment: some empirical evidence re-examined. *Economic Journal*, 78: 717-719.

[38] Yamada, Tadashi & Tetsuji Yamada. 1996. EC integration and Japanese foreign direct investment in the EC. *Contemporary Economic Policy*, 14:48-57.

[39] Yannopoulos, G.N.1990. Foreign direct investment and European integration: The evidence from the formative years of the European Community. *Journal of Common Market Studies*, 28(3): 235-259.

End Notes

1) Chow-Test: $((ESS_R - ESS_{UR}) / K) / (ESS_{UR} / (N+M-2K))$. $ESS_{UR} = ESS_1 + ESS_2$. ESS_1 and ESS_2 : Error sum of squares of regression 1 and 2. ESS_R : Error sum of square of the combined model of regression 1 and 2. N and M: Number of observations in 1 and 2. K: Number of parameters.

2)" A maximum VIF value in excess of 10 is frequently taken as an indication that multicollinearity may be unduly influencing the least square estimates" (Neter, et. al., 1990, p. 387)

The Impact of Intent on Public/Private Sector Partnership

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Abstract

This paper compares the literature on public and private sector collaboration and considers the implications for success in collaborative relationships between the sectors. It highlights key comparative drivers of intent for both types of organisation, considers the relationship between these and proposes an initial framework for primary investigation based on the relationship between the key areas of competitive positioning and level of risk.

Introduction

The use of collaboration as a form of international business operation has grown rapidly over recent years as organisations find themselves increasingly challenged by the need to expand in terms of both scale and scope [6], [49], [29], [9]. Estimates of the annual growth of the use of partnerships vary depending on how these are classified, but have been estimated at up to 30 per cent for industrialised countries [3], [8]. Fuelled by the emergence of new markets, technological innovation, increasing competition, and the homogenisation of consumer demands, the popularity of partnership operation continues unabated throughout the industrialised world as companies drive to achieve critical mass and international presence in this increasingly global and competitive environment [15].

Within this new and turbulent arena the idea of collaboration can be seductive. Partnership offers a relatively rapid, low-cost and flexible opportunity for an organisation to maintain or improve its competitive position. Collaboration can enable companies to leap-frog regulatory boundaries, enter new markets, acquire new skill sets, develop complex new product/service offerings, and facilitate multiple options to be explored relatively easily, as opposed to the high cost and restrictive requirements of an acquisition or merger [14], [15], [52].

However, an increasing amount of evidence has shown that collaborative partnerships also suffer from a dramatically high failure rate and are usually inherently far less stable than more traditional forms of operation [15], [4]. With failure rates of anything between 50% and 80% regularly reported from research projects studying this phenomenon, the recent history of collaboration is haunted by the skeletons in its cupboard. Potential differences in each partners' external environmental influences, customer demands, aims, culture, processes, transparency, language, power balance, trust and accountability, in addition to the increased complexity and time involved in managing the relationship can all compound to mitigate against success [25]. How organisations respond to these factors will ultimately influence the intent with which each partner enters and operates within a collaborative relationship, whether they pursue a competitive or collaborative approach to the relationship, and ultimately how successful that relationship is likely to be [52].

Focus for the research

Differences in intent between partners can therefore vary and may contribute towards failure of the relationship if these differences do not prove to be complementary or compatible over time. Other research indicates that public/private partnerships are also part of the general growth in forms of inter-organisational co-operation. Collaboration between these sectors has recently burgeoned across all the main policy areas including health and social care [31], [50], [36], [5], social exclusion [20], urban regeneration [23], crime and community safety, and education. Yet it may be argued that an even greater potential exists for differences, and consequently lack of compatibility, to occur between public and private sector organisations than between firms operating solely within the private sector. Many government agencies have supported the development of partnership agreements to help to reduce the problems that can arise in this context [19], [39].

This paper therefore considers the impact of intent on public/private partnerships on the success or failure of the relationship. Initially the authors review existing research to identify the key drivers of intent in both sectors. From this a framework for investigation into how these can influence the success or failure of a collaborative relationship between the two sectors is proposed. Investigation of the public sector literature was restricted to the UK for the purposes of this initial paper in an attempt to simplify the comparison and to extract the key issues in the most straightforward way. Additionally it was recognised that most public sector organisations still retain a national focus and operate on a national basis. It was argued that initial findings on this basis can then be tested in a broader geographical context if appropriate in future research. Literature on private sector included an international reference as most organisations of this type are operating increasingly in an international arena. Thus it was considered that this reflected the most realistic approach to the investigation.

Theory and Framework Development

This section aims to place the study in the context of existing theoretical and empirical research on collaboration in both private and public sector contexts and develop a framework for investigation.

Private sector drivers of intent

Existing literature in the field has identified a number of factors driving inter-organisational co-operation within the private sector. These stem from the need for private sector firms to respond to the dynamics occurring in the increasingly competitive environment they find themselves now operating in, and fight to achieve or maintain their market position as industry sector boundaries continue to merge, and customer expectations are driven higher by new technological developments.

Traditionally alliances tended to be viewed as a means of combining resources in order to benefit from the synergies that such ventures could produce [7], [8], [40]. For many ventures this is still a key aspect driving entry into the relationship as shareholders push for increasing returns on their investment. Where successful, combining resources can help to generate economies of scale and increased efficiency of operation, thus reducing each partner's overall relative costs and, therefore, improving the bottom line returns and boosting profitability [21], [38]. A reduction in transaction costs can also develop and be used to benefit the partners, thus enabling competitive advantage through an increase in economic efficiency [55], [30]. However, the extent to which each partner may benefit is not pre-defined. Much will depend upon the equity of distribution of the benefits between the partners, a factor that may be influenced in turn by the symmetry of the relationship and how this develops [8]. Profit growth through economies of scale or reduced transaction costs also takes time to achieve and is often disappointing in the first two years of a partnership [15]. Initially diseconomies can even occur as the partnership suffers from duplication of functions, or time lags on agreements between the parties involved. Thus the profit motivation though widely recognised as being a key driver and an expectation for shareholder returns is not always easily achieved in a collaborative arrangement.

The need to grow market share as a defensive mechanism against growing competition in the market place is also behind many organisations' drive to collaborate. One type of response to this is to enter partnerships that can enable access into new or uncertain overseas markets with high potential. Joint ventures with local firms in these types of economies are commonly used as a way for multinational organisations to enter and operate within these uncertain yet high-potential transitioning markets [51]. This can enable the foreign firm to establish a presence within a new region through a partner whilst benefiting from the specific local knowledge of national policy, laws and customs the partner can supply and can be highly successful. Indeed, previous research suggests that international joint ventures of this type are frequently more profitable than the state-owned local enterprises and can provide a stabilising influence in transitioning economies. However cultural dissimilarities, which can occur in any collaborative venture, but more frequently with relationships of this type, can cause significant problems within the relationship if not addressed early on and have been cited as one of the fundamental reasons for collaborative failure [4]. The risk of loss of assets or returns to the foreign partner can also increase in economies where stability is fragile or the economy in transition and the local situation moves into economic crisis or a closure of borders.

The need for more rapid product development, or resource acquisition and skills transfer have also been recognised as key drivers in the growth of partnerships as firms try to respond to increasingly aggressive competition entering into their traditional markets, or try to maintain a lead in a consolidating industry. Small firms particularly are often constrained in terms of resources, and therefore take time to develop ideas into innovative solutions. Collaboration with a larger firm can enable these types of organisations with innovative idea generation capability to realise their full potential within the market-place much more rapidly [12], [48]. As shortening product life cycles and complex product requirements put increasing pressure particularly on high technology sectors, even larger firms are also finding that the challenge of maintaining the lead in a field is becoming more problematic [16]. Consequently the attraction of partnership to share costs, research intellect or to bring together different technologies in providing an increasingly complex solution rapidly to market has significant benefits. However this need for resource sharing and skill building can also present a risk to participating firms. Where particular skills or technology capabilities are found to be transferable one partner may suffer from a loss of its core competence or capabilities and, ultimately, a loss of market position as the acquiring partner ends the collaboration and continues to compete independently. Indeed, Ahuja [1] argues that this is a key objective for some players as "Firms (will) seek to obtain control over those factors of production that can provide them with a competitive edge over their closest rivals". Consequently the need for each partner to protect its strategic resources needs to be recognised [28], [33], [35].

In summary collaboration by private sector organisations appears to be driven by the need to compete and provide shareholder returns within an increasingly international, competitive and uncertain environment where customer expectations of products are becoming ever more complex and sophisticated. The collaborative option is therefore pursued in an effort to respond to this challenge through anticipated gains in cost, efficiency, market size and/or access to competitive resources or capabilities. However the recognised benefits are also accompanied by potential risks which organisations need to manage or control to be successful.

Public sector drivers of intent

The planning and delivery of public services in the U.K. has, until fairly recently, been organised around a model of public sector monopolies – large, highly functionally differentiated and task-orientated bureaucracies, often statutorily prescribed, designed to deliver public and welfare services autonomously. Such organisations were driven by the virtues and values of a public service ethos, and legitimised and accountable to a democratically elected body of representatives. The defining challenge to the supremacy of this model was delivered by successive Conservative administrations in the 1980's and 1990's as a response to problems of quality and efficiency in many public services Major concerns were expressed about the way in which they were planned, organised and delivered particularly in relation to their producer as opposed to customer focus, inadequate or absent performance management regimes and general poor value for money. An alternative model was informed by two predominant philosophies. The first was 'New Public Management' [45], [53] with its strong belief in the merits of private sector values, methods and working practices as an antidote to public service inefficiencies. The second was 'New Institutional Economics' [11] with its intention to introduce competition into the public sector by the creation of markets and opportunities for the private sector to compete for business within them. These philosophies were subsequently translated into public policy through a variety of policy instruments and interventions including compulsory competitive tendering in local government, the creation of quasi markets and purchaser/provider splits in the NHS, and the establishment of forms of non-departmental public bodies and next steps agencies.

Although there has been a change in the political persuasion of national government since 1997, it has not heralded a radical reversal in the approach to involving the private sector in the provision of public services. The language has changed – the talk is now of partnership (Public Private Partnerships and Private Finance Initiative) not privatisation – but the intent remains the same. It is an example of the 'Third Way' approach [26], [41] and a key plank of the Government's 'modernisation agenda'. The rationale for such partnerships is highly contested territory.

The government argues that the private sector is intrinsically more innovative and efficient than the public sector; its managers are more skilled and deliver better value for money; and public private partnerships inject greater resources into the public sector and can absorb different types of risk. Opponents of the model point to the weakening of democratic accountability and the dangers of the profit motive gaining ascendancy over the public interest.

A second major stream to influence intent in the public sector is informed through concepts of holistic government [43], [44], [54] and network governance [46], [27] [18]. Both take their starting point from the notion of 'wicked issues' [47] that are conceived as a special class of complex and interdependent policy problem afflicting contemporary societies – social exclusion, crime, heal the inequalities and so on. These problems are cross boundary in nature, intractable, socially constructed by virtue of being framed through the lens of multiple stakeholders, not amenable to optimal solutions, non-linear in construction, and most importantly, not resolvable by single agencies or sectors acting autonomously. The policy consequences of these theoretical influences are evidenced in the inter-organisational hegemony that predicates many of the interventions across the whole of the policy spectrum. These include the placing of statutory duties on particular bodies such as local councils and health authorities to work in partnership, and the proliferation of various forms of inter-organisational working – networks, strategic alliances, joint ventures – stimulated in particular by government initiatives, programmes and pilots. Forms of partnership working are made a condition of access to funding opportunities.

So, intent and motivation in the public sector to forms of partnership working including the private sector is heavily mandated and influenced by national government. It is not voluntary but enforced and prescribed by a higher authority [42], [37]. In addition to these external drivers, there are a number of other motivations and forces, more internal to public organisations, that impinge on the nature of public/private partnership formation [10], [13]. In a period of scarce resources and ever-increasing expectations on the quality and range of their services, public authorities are driven to forms of co-operation in order to achieve their own individual goals and objectives. This can take the form of a voluntary exchange of resources (finance, information, status or whatever) and a working consensus around goals, functions, cultures and outcomes. This can be explained through a simple exchange perspective [34]. However, the reality is that there is competition for scarce resources including power and territory, and that one or more organisations are inducing others to interact within a particular domain, and bargaining and conflict are more commonplace as is suggested by power/resource dependency perspectives [2]. The result is often an enlightened self-interest, but motivations are often multiple and conflicting in nature and 'true' motivations difficult to detect. Higher level or value based intentions and drivers are apt to confuse inter-organisational relationships. Notions of 'the public interest' and 'public sector ethos' can exert a significant influence, and certain professional cultures such as social workers or health professionals that are very client focused, are driven towards methods of working that value integration and co-ordination between organisations.

In summary, the key public sector drivers of public/private partnerships are very much a function of mandated co-operation directed by national government; a rational/altruistic perspective grounded in concepts of holism and wicked issues; and a practical need to unlock resources through forms of co-operation that are rooted in exchange and resource dependency perspectives.

Towards a Framework for Comparison

The task of linking the motivation or intent of an organisation to engage in forms of inter-organisational working with that of the ultimate outcome or effectiveness of that relationship is recognised to be considerable. Evaluation in this respect can be a difficult issue to manage within intra-organisational settings and it assumes added complexity in partnership arenas [22]. Huxham [24] also notes that the expectations and motivations of organisational actors may change over the course of the relationship as a result of on-going performance, additional information on partner abilities, intentions or reliability, and changing environmental conditions. Ebers [17] further argues that an understanding of the conditions/context that lead to organisations with particular motivations to choose the partnership route, and the processes that lead up to a particular arrangement is also necessary.

In dealing with these issues, Lawrence et al [32] have developed a discursive model of the process to be generated based on antecedents, dynamics and outcomes. However for the purposes of this study it was argued that Oliver's [42] critical contingencies for inter-organisational relationship forming presents the most useful typology of causes and motivations, and provides a relevant basis for theorising about linkages to performance and outcomes. These contingencies include necessity, asymmetry, reciprocity, efficiency, stability and legitimacy. The typology suggests that necessity be mandated, with the remainder being all voluntary interactions. Additionally, although each determinant is separate, the contingencies may interact or be multiple in particular circumstances.

Discussion and Conclusions

Using the above framework, initial analysis of the existing theoretical and empirical research on collaboration suggested that a number of factors can be influential in driving intent within both private and public sector organisations. Similarities and differences between the different sector drivers are also apparent and will therefore have an influence upon the compatibility of intents in inter-sectoral partnerships of this type.

Necessity for collaboration in both sectors appears to be driven by the need to respond to stakeholder demands. In the private sector this is in the form of shareholder expectations which drive the company to seek increasing returns, fight for market share and defend market position in an increasingly competitive environment. In comparison, public sector organisations are also driven by necessity which is instigated by the government as a key stakeholder, and operationalised through mandate in an effort to improve the efficiency and effectiveness of service delivery. Both sector organisations are also striving to up-skill and seeking increasingly complex solutions in rapid timescales. Although both motivated towards collaboration by necessity therefore, it may be considered that the drivers operating in the private domain may stimulate a higher level of risk-taking as organisations strive for higher profits. In comparison within the public sector organisations one aim is risk transfer through partnership opportunity.

Oliver [42] defines ***asymmetry*** as "the potential to exercise power or control over another organisation or its resources". In this context private sector organisations operating within highly competitive or consolidating environments may be more likely under the right circumstances to pursue this approach as they pursue profit motivation to retain access over specific resources, or to gain or defend market share. Additionally many private sector organisations have the resources and/or financial capability to dominate a partner organisation. In contrast public sector organisations may be in a more vulnerable position. The objectives in this sector are not generally competitive, and as partnerships are frequently driven by mandate, the motivation to dominate may be less. Additionally, financial capability is often limited, thus reducing the potential to exercise power through financial clout.

The ***reciprocity*** contingency can be identified in the need for up-skilling and development of more complex offerings, which was reflected in both private and public sector literature. For both types of organisation this aspect can be highly beneficial to the organisations involved. However it can also represent a risk of de-skilling or loss of core competence/market to a stronger partner. Political and legal restrictions can provide some protection in this respect for some public sector areas. In contrast, private sector firms may be highly vulnerable to an aggressive partner and can suffer from a competitive acquisition. Reciprocity between the two sector partners may also prove problematic as the basis for this may lie in profit returns for the private sector organisation, but driven by social values in the public sector. This differential could impact compatibility of goals or objectives of the partnership, or compromise the initial aims of one or other partner organisation.

Efficiency issues also have some similarities for driving partnership between the sectors. Efficiency in private sector terms drives bottom-line returns through transaction cost reductions, economies of scale and rapid product/service development. In contrast public sector efficiencies, although also aimed at cost reduction and rationalisation, may compromise its overall objectives if undertaken on a purely profit-driven motivation, thus there is a need to consider social value and contribution in addition to a more effective process/cost objective. However in both sectors anticipated efficiencies are not always guaranteed and can also take some considerable time to achieve. Additionally, in the initial stages inefficiencies can occur as the two parties operate with duplicate resources or processes, or invest time in clarifying and gaining key agreements.

Stability in organisations is driven by a need to reduce environmental uncertainty which, in itself "is generated by resource scarcity and by a lack of perfect knowledge about environmental fluctuations, availability of exchange partners, and available rates of exchange in an inter-organisational field" [42]. This occurs as organisations attempt to forestall or absorb uncertainty in resource flows and exchanges and can be seen in the collaborative initiatives of both private and public sector organisations. Within private sector firms stability helps to ensure development of increasingly complex customer offerings, thus assisting in both new product development and related competitive advantage in the market place. Equally, public sector organisations will pursue stability through partnership often with a private sector organisation in an effort to reduce public service inefficiencies and ensure reliable access to resources which these forms frequently offer, in addition to facilitating the absorption of risk which this can provide. However in doing so public sector organisations may have to comply to a profit driven partner and may therefore be faced with the dichotomy of pursuing profit over public interest. Additionally it may be argued that public sector organisations may have additional complexity to deal with, as they have to respond to political dictates as well as economic uncertainties.

The ***legitimacy*** contingency which Oliver [42] identifies may be viewed in terms of the organisations" needs to either improve or demonstrate its reputation, image, prestige or congruence with prevailing norms in its institutional environment". This form of response can be identified in different contexts in private/public sector operations. For private sector firms legitimacy may be sought in order to enhance a company's image whilst pursuing a profit-driven motive and may be a key factor in these type of firms seeking out a public sector partner. However, for public sector organisations, the social legitimacy factor is more central to the organisation's business, as it seeks to add social value as its main purpose. However legitimacy in terms of having the skill and prestige to provide increasingly complex service offerings, or funding to do so is a key driver that can be identified in this sector. Thus legitimacy may be applied to both sectors but must be interpreted differently according the different characteristics of the sectors.

Thus it can be seen from the secondary data considered that public/private sector collaboration can be subject to a highly complex number of drivers which can influence either success or ultimate failure of the relationship if the interface between these is not managed effectively. Although both driven towards collaboration, the benefits of allaying risk via up-skilling and improved access to resources for public sector firms must be seen in the context of a potential compromise in terms of control and of the social objectives these firms pursue. Further the direction these companies pursue is often directed rather than calculated, thus any competitive objective would appear more secondary and tactical than strategic in these cases. In contrast the private partner will generally continue to pursue competitive objectives for collaboration, either via increased potential profit, access to resources or control over the marketplace as a primary course of action. Further they are more likely to seek out risk in collaboration in order to compete in this environment. This variance in key motivations is illustrated in Fig.1 below:

Further investigation of primary data is proposed as a next step in the research to validate these initial findings.

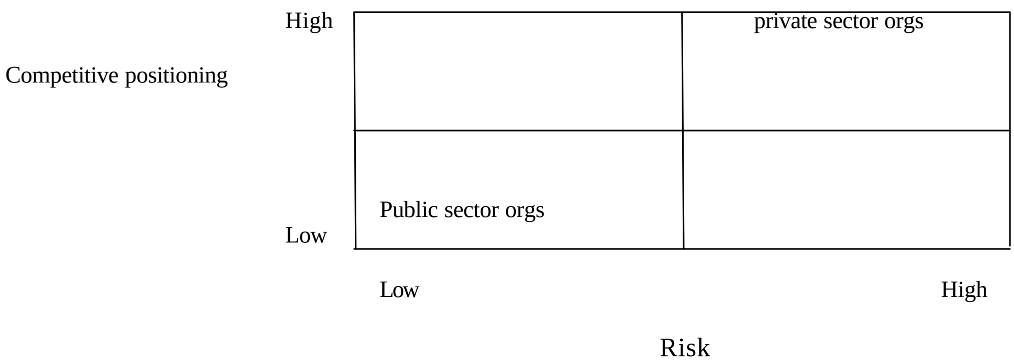

FIG. 1 COMPETITIVE POSITIONING/RISK DRIVERS

References

[1] Ahuja, G (2000) The Duality of Collaboration: Inducements and Opportunities in the Formation of Interfirm Linkages, *Strategic Management Journal*, 21 pp 317 – 343

[2] Aldrich, H.E. (1979) *Organizations and Environments* Englewood Cliffs, N.J. Prentice Hall.

[3] Anderson E (1990) Two firms, One Frontier: on Assessing Joint Venture Performance, *Sloan Management Review*, 31 (2) pp 19-30

[4] Anand B and Khanna T (2000) Do Firms Learn to Create Value? The Case of Alliances, *Strategic Management Journal* 21 pp 295-315

[5] Bartlett W, Propper C , Wilson D and Grand J (1994) *Quasi-Markets in the Welfare State*, Bristol: SAUS

[6] Barrett F (1999), Multiparty Collaboration as Transitional Space in Schruijer S (ed) *Multi-organisational partnerships and Co-operative Strategy*, Holland: Dutch University Press

[7] Berg S V and Friedman P (1982) *Venture Strategies and Corporate Innovation* Oelgeschlager, Gunn and Hian, Cambridge

[8] Bleeke J and Ernst D (1991) The Way to Win in Cross-Border Alliances, *Harvard Business Review* Nov/Dec 69 pp 127-130

[9] Butler R and Gill J (2001) Knowledge and Trust in Partnership Formation in Genefke J and McDonald F (eds) *Effective Collaboration*, New York; Palgrave

[10] Clarke M and Stewart J (1997*) Handling the wicked Issues – a Challenge for Government*, Birmingham: University of Birmingham

[11] Clarke J and Newman J (1997) *The Managerial State*, London; Sage

[12] Cooper S (2001) Interorganisational Relationships and Firm Size in Tayeb M (ed) *International Business Partnership*, Hants: Palgrove

[13] DETR (2001) *Mapping Partnerships in Eleven Local Authorities*, London: DETR

[14] Doz Y (1992) The Role of Partnership and Alliances in The European Industrial Restructuring in Cool K, Nevan D and Walters I (eds) *European Industrial Restructuring and the 1990s*, London; Macmillan

[15] Doz Y and Hamel G (1998), *Alliance Advantage*, Boston; Harvard Business School Press

[16] Duysters G, Kok G and Vaandranger M (1999) Crafting Successful Strategic Technology Partnerships, *R&D Management* vol 29 (4) pp 343-51

[17] Ebers, M. (1997) "Explaining Inter-Organizational Network Formation", in Ebers, M. (ed) *The Formation of Inter-Organizational Networks* Oxford: Oxford University Press.

[18] Ebers M (2001) Explaining Inter-Organisational Network Formation in Ebers M (ed) *The Formation of Inter-Organisational Networks*, Oxford; Oxford University Press

[19] European Commission (1991) *Pan-European Forum on subcontracting* SEC (91) 1286 Final Brussels

[20] Geddes, M. (1998) *Local Partnership: A Successful Strategy for Social Cohesion?* Luxembourg: Office for Official Publications of the European Communities

[21] Grant R M, (1991) The Resource-Based Theory of Competitive Advantage: Implications for Strategy Formulation, *California Management Review,* vol 33, No 3, pp 114-135

[22] Hallett, C. (1995) *Interagency co-ordination in child protection* London: HMSO

[23] Harrison, T. (2000) "Urban Policy: addressing wicked problems", in Davies, T.O. Nutley, S.M. and Smith P.C. (eds) *What Works?* Bristol: Policy Press

[24] Huxham, C. (1996) "Collaboration and collaborative advantage", in Huxham, C. (ed) *Creating Collaborative Advantage* London: Sage

[25] Huxham C and Vangen S (2001) What Makes Practitioners Tick? Understanding Collaborative Practice and Practising Collaborative Understanding in Genefke J and McDonald F (eds) *Effective Collaboration*, New York; Palgrave

[26] Institute of Public Policy Research (2001) *Building Better Partnerships*, London: IPPR

[27] Jessop, B. (1997) "The governance of complexity and the complexity of governance: preliminary remarks on some problems and limits of economic guidance", in Amin, A. and Hausner, J. (eds) *Beyond Market and Hierarchy* Cheltenham: Edward Elgar

[28] Jones K and Shill W E, (1991), Allying for Advantage, *McKinsey Quarterly*, no 3, pp 73-101

[29] Kale P, Singh, H and Perlmutter, H (2000) Learning and Protection of Proprietary Assets in Strategic Alliances: Building Relational Capital in *Strategic Management Journal*, 21 pp 217-237

[30] Kogut B, (1988), Joint Ventures: Theoretical and Empirical Perspectives, *Strategic management Journal,* vol 9, pp319-332

[31] Labonte R (1993) Community Development and Partnerships, *Canadian Journal of Public Health*, 84 (4) pp 237-240

[32] Lawrence, T.B. Phillips, N. and Hardy, C. (1999) "Watching Whale Watching: Exploring the Discursive Foundations of Collaborative Relationships", *The Journal of Applied Behavioural Science*, Vol. 35 No.4 pp. 479-502

[33] Lei, D and Slocum D (1992) Global Strategy, competence Building and Strategic Alliances in California Management Review; Fall, vol 35 pp 81 - 92

[34] Levine, S. and White, P.E. (1961) "Exchange as a conceptual framework for the study of interorganisational relationships", *Administrative Science Quarterly*, Vol. 4 pp. 583-601

[35] Lorange P and Roos J, (1992) Building Successful Strategic Alliances, *Long Range Planning*, vol 25, no 6, December, pp 10-18

[36] Loxley, A. (1997) *Collaboration in Health and Welfare* Bristol: Jessica Kingsley

[37] Mackintosh, M. (1995) "Partnership: issues of policy and negotiation", *Local Economy*, Vol. 17 No.3 pp.210-224

[38] Mahoney J T and Pandian J R, (1992) The resource-based View Within the Conversation of Strategic Management, *Strategic Management Journal,* vol 13, pp 363-380

[39] McDonald F (2001) The role of Power Relationships in Partnership Agreements Between small suppliers and Large Buyers in Genefke J and McDonald F (eds) *Effective Collaboration*, New York; Palgrave

[40] Mohr J and Spekman R, (1994), Characteristics of Partnership Success: Partnership Attributes, Communication Behaviour and Conflict Resolution Techniques, *Strategic Management Journal*, vol 15, pp 135-152

[41] Office of Public Services Reform (2002) *Reforming our Public Services,* London: Office of Public Services Reform

[42] Oliver, C. (1990) "Determinants of Interorganisational Relationships: Integration and Future Directions", *Academy of Management Review*, 15, pp. 241-265

[43] 6, P. (1997) *Holistic government, London*: Demos

[44] 6, P. Leat, D. Seltzer, K. and Stoker, G. (1999) *Governing in the round*, London: Demos

[45] Pollitt, C. (1990) *Managerialism and the Public Services* Oxford: Blackwell

[46] Rhodes, R.A.W. (1996) "The New Governance: Governing without Government", *Political Studies*, Vol.44 pp.652-667

[47] Rittel, H. and Webber, M. (1973) "Dilemmas in a General Theory of Planning", *Political Sciences*, 4, pp. 155-169

[48] Rothwell R and Dodgson M (1991) External Linkages and Innovation in Small and Medium-Sized Firms, R&D Management, vol 21, pp 125-37

[49] Schruijer S (1999) Introduction in Schruijer S (ed) *Multi-organisational partnerships and Co-operative Strategy*, Holland; Dutch University Press

[50] Scott C and Thurston W (1999) Interorganisational Partnerships to Improve Health: A Framework and Process Model in Schruijer S (ed) *Multi-organisational partnerships and Co-operative Strategy*, Holland; Dutch University Press

[51] Steensma H K and Lyles M A (2000) Explaining IJV Survival in a Transitional Economy Through Social Exchange and Knowledge-Based Perspectives in *Strategic Management Journal* 21 pp 831-851

[52] Stiles J (2001) Managing Strategic Alliances' Success; Determining the Influencing Factors of Intent Within Partnerships in Genefke J and McDonald F (eds) *Effective Collaboration*, New York; Palgrave

[53] Walsh, K. (1995) *Public Services and Market Mechanisms* London: Macmillan

[54] Wilkinson, D. and Appelbee, E. (1999) *Implementing Holistic Government,* Bristol: Policy Press

[55] Williamson O E (1975), *Markets and Hierarchies: Analysis and Antitrust Implications*, Basic Books, New York

The Influence of Globalization Process on Restructuring FDI Strategy

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Abstract

Globalization has been one of the major impetuses to restructure the geographic and industrial allocations of FDI during the past decades. Major determinants of FDI have been changed from factors to create competitiveness to factors to create, sustain, and/or augment competitiveness by MNEs. This study investigates the major determinants of Japanese and US manufacturing FDI and similarities and/or differences between them in the 1990s compared to those of the 1970s. Empirical studies show that all three factors of the Eclectic paradigm become major determinants and the major determinants of Japanese and US manufacturing FDI are similar in the 1990s.

Introduction

Globalization, which is defined as a process to build up tight economic linkages and interdependence with other economic entities throughout the world, has been one of the most critical research topics in international business because the process has promoted the structural transformation of firms and nations derived from newly created interrelationships (Gray 2001, Dunning 1994b). Clear evidences are the increased movements of production factors across national boundaries by multinational enterprises (MNEs) to create, sustain, and augment their competitiveness at the global level, and liberalization and/or deregulation by governments to upgrade competitiveness of their domestic MNEs and/or to make their locations more attractive for mobile investments especially in the 1980s (Casey 1998, Huang 1997).

This study focuses on the impact of globalization on FDI determinants by Japanese and US MNEs. Through the 1980s defined as globalization period in this study, there have been some changes in terms of geographic and industrial allocations of Japanese and US FDI. Geographic emphasis on developing countries by Japanese FDI has been changed to developed countries since the 1980s, which ends up with over 69 percent of Japanese FDI stocks are in developed countries in 1996. However, there are not many changes in US FDI except some movement to developing countries (see Table 1). However, the industrial allocations of Japanese and US manufacturing FDI from 1975 to 1996 are different compared to the geographic allocations of them. Japanese manufacturing FDI has kept its emphasis on the metal & mechanical products and office machinery & computers since the year 1975. On the contrary, the focus of US FDI on metal & mechanical products in the 1970s has been lessened, and relatively equal distribution among industrial sectors are shown in the US FDI stocks of 1996 (see Table 2).

Table 1: GEOGRAPHIC PATTERNS OF JAPANESE AND US FDI FROM 1977 TO 1996

In US $ and percent

		1977-1979		**1979**		**1980-1989**		**1989**		**1990-1996**		**1996**	
		Ave. Flows	**%**	**Stocks**	**%**	**Ave. Flows**	**%**	**Stocks**	**%**	**Ave. Flows**	**%**	**Stocks**	%
Japanese	Developed Countries	1854	45	14173	45	15370	69	167899	66	31395	70	387665	68
FDI	Developing Countries	2280	55	17630	55	6837	31	85996	34	13196	30	178371	32
United States	Developed Countries	12506	71	138668	76	13590	74	274563	75	41711	69	566537	72
FDI	Developing	5158	29	44525	24	4757	26	92098	25	19072	31	225604	28

	Countries														

SOURCE: Various issues of Financial Statistics of Japan published by the Department of Finance in Japan and various issues of EXIM Review by the Export-Import Bank of Japan. Various issues of Survey of Current Business published by the US Department of Commerce

TABLE 2: COMPARISON OF INDUSTRIAL COMPOSITION OF JAPANESE AND US FDI FROM 1975 TO 1996

In US$ millions and percent

	1975-	1979	Aver.	Flows	1979		Stocks		1980-	1989	Aver.	Flows	1989		Stocks		1990-	1996	Aver.	Flows	1996		Stocks	
	Japan	%	USA	%	Japan	%	USA	%	JAPAN %		USA	%	Japan	%	USA	%	Japan	%	USA	%	Japan	%	USA	%
Manufacturing (ISIC)	**1351**	**100**	**5494**	**100**	**10896**	**100**	**78640**	**100**	**5523**	**100**	**7060**	**100**	**66126**	**100**	**147944**	**100**	**14703**	**100**	**17618**	**100**	**169048**	**100**	**272244**	**100**
Food products (31)	60	4	596	11	532	5	9164	12	273	5	612	9	3265	5	13464	9	813	6	3245	18	8954	5	36179	13
Metal & mechanical products (37, 381, 3829)	377	28	497	9	2918	27	19888	25	1282	23	1425	20	15740	24	34134	23	2685	18	2070	12	34536	20	48623	18
Office machinery, computers, radio TV, communication equipment (383, 3825)	169	13	NA	NA	1272	12	6542	8	1340	24	520	7	14676	22	11738	8	3930	27	2540	14	42186	25	29519	11
Vehicles & other transport Equipment (384)	109	8	535	10	831	8	10427	13	818	15	1253	18	9009	14	22959	16	2026	14	1512	9	23193	14	33543	12
Other Manufacturing	636	47	NA	NA	5343	49	32619	41	1810	33	3250	46	23436	35	65649	44	5249	36	8251	47	60179	36	124380	46

SOURCE: Various issues of Financial Statistics of Japan published by the Department of Finance in Japan and various issues of EXIM Review by the Export-Import

Bank of Japan. Various issues of Survey of Current Business published by the US Department of Commerce

Literature Review

A substantial body of literature on FDI has focused on comparative studies on FDI determinants. In general, researchers have examined FDI determinants by emphasizing firm-specific factors, in which ownership specific advantages of MNEs such as technological superiority induce market failures, and the market failures prevent arm's-length transactions. Consequently, firm-specific factors create FDI (e.g. DuBois et al. 1993, Morck/Yeung 1991, Grubaugh 1987, Caves/Mehra 1986, Caves 1982, Pugel 1981, Rugman 1980, Lall 1980, Bergsten et al. 1978, Buckley/Casson 1976, Caves 1974, Horst 1971). Researchers have also investigated the macro economic factors in home and/or host countries, in which location specific advantages are exchange rates, tax rates, and industrial growth rates. (e.g. Yamawaki 1998, 1991, Mody/Srinivasan 1998, Blonigen 1997, Loree/Guisinger 1995, Woodward/Rolfe 1993, Lecraw 1991, Yoshida 1987, Burton/Saelens1986). Some researchers added strategic issues to MNEs decisions to invest abroad based on oligopolistic competitions. (e.g. Yu/Ito 1988, Yoshida 1987, Graham 1985, Tsurami 1976, Flowers 1976, Knickerbocker 1973). Other researchers have examined the FDI determinants by employing more than one factor in the Dunning's eclectic paradigm: ownership (O), location (L), and internalization (I) advantages (e.g. Huang 1997, Kogut/Chang 1996, 1991, Tan/Verkinsky 1996, Loree/Guisinger 1995, Hennart/Park 1994).

There are some comparative studies, which exclusively examined Japanese and US FDI decision. Hiemenz (1987) found that the focus of US FDI moved from market access to local market to export-oriented industries in the early 1980s while the opposite trends were detected for Japanese FDI. Chou (1988) investigated Japanese and US FDI in Taiwan by 15 different industries for the years, 1953-1985, and concluded that the determinants of the two countries in Taiwan were different. First, he compared some characteristics of Japanese and US firms in Taiwan based on the categories: market orientation (export intensity), firm size, and the scale of production (capital, sales, total assets, net assets and employees), ownership control (ownership share) and factor-intensity (capital, labor, R&D expenditure and intermediate goods imported). He found that Japanese and US firms in Taiwan were different each other in all categories except in market orientation. It indicated that both Japanese and US firms in Taiwan were export-oriented. However, he explained the similarities in market orientation were not derived from the similar strategies by Japanese and US firms, but from the requirement of the export ratio to obtain approval for a foreign investment project from the Taiwan government. Chou (1988) also found that the determinants of profitability between Japanese and US firms in Taiwan differed from each other by employing the F-ratio for the Chow-test.

Mody and Srinivasan (1998) conducted a generalized least squares (GLS) to find out the determinants of Japanese and US FDI within and between 36 host countries, and concluded that the factors to attract US and Japanese FDI in the second half of the 1980s were converged in certain respects. The dependent variable was the host country share of foreign investment outflow by Japanese and US MNEs in two time periods, 1981-1985 and 1986-1990. Comparison of the determinants of Japanese and US FDI between the two time periods with some explanatory variables (home and host characteristics), they found some changes and stability in the determinants of Japanese and US FDI respectively from the first period to the second period induced similar patterns in the determinants of Japanese and US FDI in the second period. Although they could not find equality of coefficients for the two countries by an F-test, some similarity in the signs of the coefficients was detected. Generally, Japanese and US FDI in the 1980s were attracted not only by some similar host country characteristics such as low wage, low country risk, good infrastructure, and an high educated work force, but also by past investment records in host countries.

Based on the empirical studies reviewed briefly above, the factors to determine Japanese and US FDI have become multidimensional and varied from country to country and/or from industry to industry (Casey 1998).

Hypotheses

Motivations of Japanese and US FDI

In the 1970s, Japanese FDI focused predominantly on local countries such as Asian countries within its sphere of influence and was characterized as "*natural resource seeking*" or "*efficiency seeking*" in part. Japanese FDI was largely characterized as labor resource oriented and natural resource oriented to reduce production costs and then to maximize outputs by using foreign factor endowments (Kojima/Ozawa 1984). It means that abundant natural resource deposit and/or cheaper labor cost were the major determinants for Japanese FDI in the 1970s. On the contrary, most of US FDI was concentrated in European countries, which was characterized as "*market seeking*" during the same period. Shorter psychic distance and/or market size in a host country were the major determinants for US FDI. It means that Japanese FDI patterns had different characteristics compared to those of US FDI. However, there have been many changes since the 1980s.

The world business environments in the 1980s could be represented by globalization, which is defined as a process to build up tight economic linkages and interdependence in terms of international trade in goods and services, FDI, and other economic activities with other economic entities throughout the world (Gray 2001). In addition, the process promotes the structural transformation of firms and nations derived from newly created interrelationships (Dunning 1994b). Clear evidences are the increased movements of production factors across national boundaries by MNEs to sustain and increase their competitiveness at the global level, and liberalization and/or deregulation by governments to upgrade competitiveness of their domestic MNEs and/or to make their locations more attractive for mobile investments. For example, more concentration in developing countries and low-technologies, export-oriented, across industries and overtime, which had been articulated by Japanese government until 1980, has been relaxed by the government's deregulation to compete in the global market economy since the early 1980s (Casey 1998, Huang 1997). One more impetus to change the global business environments in the 1980s is the roles of supranational institutions. For instance, GATT (the General Agreement on Tariffs and Trade) and WTO (the World Trade Organization) in trade, and IMF (the International Monetary Fund) in financial markets encourage and/or enforce economic liberalization (Garrett 2001, Rajan 2001, Solinger 2001).

Coming through the globalization period the traditional importance of factor endowments, which were the critical determinants of FDI in the 1970s, does not so much influence current FDI decision, but more favorable business environments such as created competence, capabilities, supporting industries, local market conditions, macro-organization and micro policies to create and/or augment MNEs' competitiveness (Dunning 1997a). In addition, not only the development of communication technology, but also the process of globalization gave more opportunities to integrate trans-border economic activities such as strategic alliances and mergers and acquisitions by MNEs. As a result, determinants of Japanese and US FDI no longer heavily rely on the historical differences between the two countries.

H1) Japanese manufacturing FDI was more determined by variables of resource seeking in the 1970s, and that in the 1990s by variables of market, efficiency or strategic asset seeking.

H2) US manufacturing FDI was more determined by variables of market seeking in the 1970s, and that in the 1990s by variables of efficiency or strategic asset seeking.

Comparisons of Japanese and US FDI Determinants

Dunning's eclectic paradigm (1997a, 1993a, 1981) assumes that at any given time, the stocks of foreign assets, owned and controlled by MNEs, are determined by the interaction of the OLI factors. Comparing the OLI configurations of Japan and the United States between the 1970s and 1990s could show the possibility of the different or similar patterns of Japanese and US FDI determinants. Ownership specific and internalization advantages represent the sum of MNEs' advantages of Japan and the United States. In the 1970s, each country's OLI configurations were based on historical differences and asymmetric sources of competitiveness such as the ownership specific advantages in labor or capital-intensive industries, location specific advantages in low real labor costs or abundant natural resources, and internalization advantages in government intervention or advanced infrastructure. However, these configurations have been changed since the 1980s, which could be characterized as the liberalization and /or globalization period. Because the movements of production factors were relatively relaxed by liberalization, the importance of FDI determinants did not have to rely heavily on traditional forces such as the importance of factor endowments (UNCTC 1996). In short, in the 1970s, Japanese and US MNEs had different kinds of OLI configurations. However, in the 1990s both countries' FDIs were based on similar kinds of location specific and ownership advantages with internalization advantages. As a result, the OLI configurations of Japanese and US MNEs in the 1990s placed an emphasis on gaining greater access to technological information and specialized management skills, on creating new technologies, and on the harmonizing macro and micro policies of governments (Dunning 1993b). These developments support the following hypothesis.

H3) Japanese and US manufacturing FDI were more determined by the variables of ownership or location specific advantages of their MNEs in the 1970s, and that in the 1990s by the variables of not only ownership and location specific advantages but also internalization advantages of countries and/or their MNEs.

Methodology

Dependent Variable

Dependent variables in this study are the shares of Japanese and US FDI stocks in six host regions with five industrial sectors from 1975 to 1996. Industrial classifications are matched based on International Standard Industrial Code (ISIC) (see Table 2). The major reason to use the share of FDI stocks instead of FDI flows is that the distributions of FDI stocks are less volatile than the distributions of FDI flows.

Independent Variables

To employ the eclectic paradigm, which is a most comprehensive explanation of FDI determinants (Urata 1991), explanatory variables include ownership, internalization, and location advantages with the interaction between home and host characteristics, and are classified into natural resource, market, efficiency, and strategic asset seeking in Table 3. One important point is that because there is no clear cut to distinguish variables especially between L and I or between market and strategic asset seeking, some variables are used for more than one advantage or motivation.

Table 3: SOME VARIABLES INFLUENCING MOTIVATIONS FOR FDI IN THE 1970S AND 1990S

Type of FDI	In the 1970s	In the 1990s	Variables
Natural Resource Seeking	1. Supplies of cheap and unskilled or semi-skilled labor 2. Natural resources (Oil, rubber, tin, copper etc)	1. Supplies of cheap and unskilled or semi-skilled labor 2. Natural resources (Oil, rubber, tin, copper etc)	1. Wage 2. Natural resource capacity
Market Seeking	1. Domestic & adjacent markets 2. Real wage costs, material costs 3. Transport cost, tariff & non-tariff trade barriers	1. Large & growing, and adjacent market 2. Availability & price of skilled & professional labor 3. Presence & competitiveness of related firms 4. Quality of national & local infrastructure and institutions 5. Less spatially related market distortions, but increased role of agglomerative spatial	1. Market size 2. Growth rate 3. Real labor costs 4. Infrastructure 5. Skill content of employment 6. Skilled employment ratio

		economies & local service support facilities 6. The macro-economic & macro-organizational policies pursued by host governments 7. Increased need for close presence to users in knowledge intensive sectors 8. The growing importance of actions by regional or local development agencies	
Efficiency Seeking	1. Production cost related 2. Freedom to engage in trade in intermediate and final products 3. Presence of agglomerative economies 4. Investment incentives	1. Availability & price of skilled & professional labor 2. Presence & competitiveness of related firms 3. Quality of national & local infrastructure and institutions 4. Less spatially related market distortions, but increased role of agglomerative spatial economies & local service support facilities 5. Increased need for close presence to users in knowledge intensive sectors 6. Increased role of governments in removing obstacles to restructuring economic activity & encouraging the upgrading of human resources by appropriate educational and training programs 7. Opportunities for dynamic improvement of investing firms, an entrepreneurial environment and one which encourages competitiveness enhancing cooperation within and between firms	1. Real labor cost 2. Host government policies toward FDI 3. Skill content of employment 4. Technical capability 5. Technical intensity 6. Labor productivity 7. Skilled employment ratio 8. Infrastructure 9. Intra-firm trade 10. Multinationality of firms
Strategic Asset Seeking	1. Availability of knowledge related asset & markets necessary to protect or enhance O of investing firms at the right price. 2. Institutional and other variables influencing ease or difficulty at which such assets can be acquires by foreign firms.	1. Geographical dispersion of knowledge based assets. 2. 'Synergistic' assets to foreign investors 3. Interactive learning 4. Access to different cultures, institutions and systems; and different consumer demands and preferences.	1. Host government policies toward FDI 2. Technical capability 3. Technical intensity 4. Infrastructure 5. Intra-firm trade 6. Multinationality of firms

Globalization (GLOB)**:** Many researchers have studied the positive impact of the multinationality of firms on FDI because multinationality may represent less internal organizational obstacles to create new FDI. For example, higher involvement or higher levels of firms' capabilities to deal with overseas markets are broadly accepted as a major means of increasing their performance in the deeply inter and intra-active world competition (Morck/Yeung 1991, Michel/Shaked 1988, Wolf 1975). In this study, the globalization variable, which is measured by the ratios of FDI outward stock to GDP of the home countries, can represent the multinationality of all MNEs in a home country.

Market size (GDP)*:* The possible correlation between the market size of a host country or region and the volume of inward investment has supported in most empirical studies (Kumar 1998, Jalillian 1996, Yu/Ito 1988, Davison 1980). In this study, GDP in US dollar of the host is used as the proxy of market size. Because each of Japan and the United States is included as a host country in each data set, GDP of Japan or the United States is subtracted from the total GDP of the host countries for Japanese or US FDI. This measure is the sum of total gross domestic production of the host countries or regions, and represents location specific advantage of the host.

Labor costs (LC): Labor cost is one of the major indicators of location specific advantages. The higher levels of labor cost in the home country stimulate FDI outflows to look for lower labor cost sites for production (Mody/Srinivasan 1998, Huang 1997, Meredith 1983, Kravis/Lipsey 1982, Lall 1980). The variable for labor costs is a measure of the ratio of the average labor costs of host countries to those in home country for 5 industrial sectors in 6 regions in which labor costs are measured by wages and salaries paid to employees in US $ divided by number of employees. According to Pain and Lansbury (1997) the relative labor costs also provide the influence of the real exchange rate and differentials in productivity.

Tax Rate (TAX)*:* The differences of tax rates between home and host countries are one of the well-known determinants of FDI. Because taxes are directly affecting MNEs profits, a place that has lower corporate tax rates could be the first location for all MNEs (Mody/Srinivasan 1998, Loree/Guisinger, 1995). The average tax rates of host countries are measured by total tax revenue.

Infrastructure (GFIGDP): The quality of infrastructure of a host country is a factor to enhance productivity of the investment undertaken and becomes more important determinants of FDI. Mody and Srinivasan (1998) find that Japanese FDI was more related to host country's infrastructure than US FDI was. This study used the average ratio of the gross fixed domestic investment to GDP of host regions.

Inflation Rates (INF): The volatility of inflation rates in the host countries is concerned as one of the risk factors. This study measured the inflation rates by the average inflation rates of the host regions.

Statistical Methodology

To test the hypotheses the following steps are employed. First, I use a two-stage estimation process (generalized linear regression [(1)]). In this generalized linear regression model, there are a few assumptions. First, all MNEs are motivated by the same set of location specific advantages. Second, all MNEs are equally influenced by the world and/or regional economic environment. Third, MNEs decide on the extent of FDI at first (Barrell & Pain, 1996) and then on the distribution of the FDI across regions and/or countries (Mody & Srinivasan, 1998). The major reason for using that estimation process is to correct for heteroscedasticity and autocorrelation derived from the pooled time-series and cross-section data. The coefficient of correlation does not have a clear-cut meaning when weighted least squares are employed (Neter et. al., 1990) because variables are transformed by the estimated variance-covariance matrix. Based on the outcomes from the two-stage estimation process, I employ a standard test of the equality of coefficients by a Chow-test [(2)] for the Japanese and US equations.

Results

Table 4 and 5 report correlations among the variables in the analyses and the variance inflation factors. Some correlations are higher than 0.5; however, the variance inflation factors [(3)] (VIF) are low enough not to raise concern about multicollinearity.

Table 4: CORRELATION MATRIX FOR THE OVERALL DISTRIBUTION OF JAPANESE FDI

	TAX	GLOB	INF	GFDI	LC	GDP	VIF*
TAX	1.000						**2.063**
GLOB	.181	1.000					**1.315**
INF	.014	-.093	1.000				**1.195**
GFDI	-.373	.188	.057	1.000			**1.913**
LC	-.069	.164	.217	-.064	1.000		**1.282**
GDP	-.575	-.188	.122	.558	-.232	1.000	**2.304**

*: VIF: Variance Inflation Factor

Table 5: CORRELATION MATRIX FOR THE OVERALL DISTRIBUTION OF US FDI

	TAX	GLOB	GFDI	LC	INF	GDP	VIF*
TAX	1.000						**2.044**
GLOB	.022	1.000					**1.020**
GFDI	.123	-.121	1.000				**1.851**
LC	-.085	-.035	-.010	1.000			**1.209**
INF	.169	.007	.097	.318	1.000		**1.226**
GDP	-.456	-.091	.378	-.152	-.131	1.000	**5.833**

*: VIF: Variance Inflation Factor

Determinants of Japanese FDI

Table 6 presents the results of statistical analysis of the FDI determinants of Japanese and US manufacturing FDI. In the case of Japanese manufacturing FDI, the estimated coefficient for GDP is a significant variable at the 1 percent significance level in the 1970s. However, in the 1990s the coefficients for LC, GDP, GLOB, and INF are significant at the 1 or 5 percent significance level. Generally, the changing patterns of the estimated coefficients seem to demonstrate that significant determinants to attract Japanese MNEs were mostly location-specific advantages in the 1970s, but ownership, location-specific and international advantages in the 1990s. Especially, the coefficients for LC, GDP, INF and TAX in the two time periods clearly represent that the major focus of Japanese FDI have been changed from developing countries in the 1970s to developed countries in the 1990s. The coefficient for INF should be interpreted carefully given that the positive correlation between GDP and INF in the Japanese sample (see Table 4). The ownership-specific variable, GLOB, negatively related in the 1970s, but positive and significant in the 1990s. It surely shows that the degree of Japanese firms' multinationality increased considerably between 1970s and 1990s.

In addition, the location-specific variable, LC, which was detailed in the previous section, indicates not only relative labor costs, but also relative productivity and real exchange rates. It is derived from the measurement of LC, which is the ratio of the average labor costs of host countries to those in home country in which labor costs are measured by wages and salaries paid to employees in US dollar divided by number of employees. The changes in LC can be interpreted as in the 1970s the important factors for Japanese MNE in foreign locations were relatively lower labor costs, lower productivity and/or lower real exchange rates compared to its domestic market conditions; however, the degree of the importance has been declined in the 1990s.

As a result, hypothesis 1, which expects Japanese manufacturing FDI was more determined by variables of resource seeking in the 1970s, and that in the 1990s by variables of market, efficiency or strategic asset seeking, is statistically supported.

Table 6: DETERMINANTS OF THE OVERALL DISTRIBUTIONS

	Japan		**The United**	**States**
	1977-1979	**1990-1996**	**1975-1979**	**1990-1996**
Intercept	-0.89	0.11	-1.01	5.47***
	(-1.30)	(0.68)	(-0.27)	(7.08)
LC	-0.33	-0.14***	0.88***	0.21***
	(-1.36)	(-4.51)	(23.36)	(9.88)
GDP	0.54***	1.03***	0.05**	1.22***
	(3.13)	(17.27)	(2.01)	(58.37)
GFDI	0.54	0.14	0.08	-0.23***
	(1.02)	(0.85)	(1.51)	(-16.71)
GLOB	-0.03	0.20**	-0.08**	0.06***
	(-0.17)	(2.25)	(-2.40)	(4.13)
INF	-0.11	0.08**	-0.17***	0.03***
	(-0.80)	(2.35)	(-5.15)	(4.89)
TAX	-0.07	-0.28	-0.01	-0.17***
	(-0.18)	(-1.59)	(-0.05)	(-6.86)
Observations	58	203	84	187
Adj. R^2	0.23	0.86	0.96	0.99
F	3.91***	215.49***	416.81***	5704.02***
DW	1.24	1.46	1.24	1.92

*: $p < 0.1$, **: $p < 0.05$, ***: $p < 0.01$

Dependent Variables: Manufacturing FDI shares for five industrial sectors in six regions in which maximum annual observations are 30, and the first year observation (1975 or 1977) is deleted from each industrial sector in each region during the autocorrelation treatment (Actual observations vary).

GLOB (Globalization rates): The ratios of FDI out stock to GDP of home country for 5 industrial sectors.

LC (Labor cost): The ratio of the average labor costs of host countries to those in home country for 5 industrial sectors in 6 regions in which labor costs are measured by wages and salaries paid to employees in US $ divided by number of employees.

GDP: The average gross domestic productions of host countries in 6 regions.

GFDI (Gross fixed domestic investment): The ratio of average gross fixed domestic investments to GDP of host countries in 6 regions.

INF (Inflation rates): The average inflation rates of host countries in 6 regions.

TAX (Tax rates): The average tax rates of host countries in 6 regions in which tax rates are measured by total tax revenue divided by GDP.

T-statistics are reported in parentheses.

Determinants of US FDI

In the case of US manufacturing FDI, LC, GDP, GLOB, and INF are significant variables at the 1 or 5 percent significance level in the 1970s. However, in the 1990s, all variables are significant at the 1 percent significance level. The changing patterns show that ownership and location-specific factors were more important determinants of US FDI in the 1970s, but all of OLI variables are significant in the 1990s. The importance of GDP during the two time periods demonstrates that market seeking has been the most motivation of US FDI, and the estimated coefficients for LC, INF, and TAX represent that the focus of US FDI has been changed from developed countries in the 1970s to developing countries in the 1990s. The interpretations of the location-specific variable, LC, are exactly opposite to those in the case of Japanese FDI. The result of high adjusted R^2 typical of the US case is similar to that in Mody and Shrinivasan (1998), Huang (1997), Pain and Lansbury (1997), UNTCMD (1993), which are reviewed in the previous section.

As a result, hypothesis 2, which expects US manufacturing FDI, was more determined by variables of market seeking in the 1970s, and that in the 1990s by variables of efficiency or strategic asset seeking, is statistically supported.

Comparison of the Determinants of Japanese and US FDI

Table 7 reports the standard tests of the equality of the coefficients for Japanese and US equations between the 1970s and 1990s. Statistically, three out of four cases; US determinants between the 1970s and 1990s and the differences between Japanese and US determinants in the 1970s and 1990s, can reject the null hypothesis that determinants between the two periods and between the two countries are same, at the 1 percent significance level. However, the null hypothesis in the case of Japanese FDI between the 1970s and 1990s cannot be rejected. In addition, the F-ratios for the differences between Japanese and US determinants have dropped remarkably while FDI determinants have been stable in Japanese case, but significantly changed in US case, between the 1970s and 1990s

Consequently, there are three findings. First, the major determinants of the distributions of Japanese and US manufacturing FDI have been changed from variables of location and/or ownership-specific advantages in the 1970s to variables of all OLI factors in the 1990s. Second, the changing directions of all determinants of Japanese and US FDI except for LC are same from the 1970s to 1990s. Third, the differences of the determinants between Japanese and US FDI have been smaller in the 1990s than those in the 1970s.

As a result, hypothesis 3, which expects the similar trends in determinants for the distributions of Japanese and US manufacturing FDI in the 1990s, is statistically supported.

Table 7: STANDARD TEST OF THE EQUALITY (CHOW TEST)

Japan 70&90	USA 70&90	Japan & USA 1970s	Japan & USA 1990s
1.89	3437.44***	468.46***	139.53***

***: $p < 0.01$

Conclusion

The changed determinants from the 1970s to the 1990s and the similar determinants in the 1990s compared to those in the 1970s of Japanese and US manufacturing FDI could be explained by the changed concepts of O, L, I factors through the globalization period, 1980s.

The concept of ownership specific advantages in the 1990s is broadened especially by the emergence and growth of inter-firm relationships such as strategic business alliances. The characteristics of technology innovation have been changed from the improvement of existing competitive advantages, based upon production costs in the 1970s to the reorganization of existing market structure in the 1980s and 1990s. It means that new characteristics of technology innovation provide more profit opportunities. Other factors to increase inter-firm relationships are the erosion of the boundary of technology by the introduction of new products, derived from the combining importance of innovation technologies across a wide range of disciplines and globalization processes. These factors require firms to face heavy R&D expenditures, uncertainty, and risks, which are shared with other firms by the establishments of inter-firm relationships. Consequently, in the 1970s, ownership advantages represented a firm's possession or privileged access to a unique asset (Oa or static O), but in the 1990s, a firm's capabilities (Ot or dynamic O) to organize and/or increase created assets internally and externally were more important because of the emergence and growth of inter-firm relationships such as strategic business alliances. The high average shares of Japanese FDI in developing countries in the 1970s represent the superiority of Japanese static ownership advantages compared to that of developing countries, but the increased shares of Japanese FDI in developed countries in the 1990s imply that Japanese MNEs consider dynamic ownership advantages as well as static ownership advantages.

In considering location specific advantages, the dominance of natural comparative advantages such as wages and raw material costs was over, and created comparative advantages such as the availability of skilled manpower, industrial relations legislation, facilities for R&D, the protection of property rights, competition policy, and employment legislation became more important factors to determine locations by firms in the 1990s. It also meant that the economic prosperity of a country or a region was determined not only by its possessed natural resources, but also by its accumulated knowledge, level of education and the capability and/or infrastructure to coordinate those assets. Because of the changed international business environments especially the growth of inter-firm relationships, which are detailed above, location specific advantages should be considered on the ground of the interaction with ownership specific and internalization advantages done by the eclectic paradigm. However, most FDI theories ignore the interaction and cannot explain different motives for FDI such as strategic asset seeking to protect or augment competitive advantages. Table 6 shows that the different relationships of location specific variables with Japanese and US manufacturing FDI on the ground of the interaction with ownership specific and internalization advantages over the two periods. The motives for Japanese manufacturing FDI have been changed from resource seeking in the 1970s to market, efficient, or strategic asset seeking in the 1990s, and host countries' market size (GDP) and ownership specific advantage (GLOB) became more important variables to determine its FDI. In the case of US manufacturing FDI, host countries' GDP, tax, and inflation rates appeared more important in the 1990s compared to those in the 1970s. These estimated coefficients clearly demonstrate that location specific advantages should be considered on the ground of the interaction with ownership specific and internalization advantages.

Given ownership and location specific advantages, internalization advantages are firms' capabilities to circumvent or exploit market failure. These are how much firms can internalize their foreign productions and how much benefits firms can get from internalizing intermediate products compared to using arm's length transactions. Although the theory of internalization has dominated explanation of why firms choose FDI instead of other modalities in the past two decades, it needs some modification to explain contemporary business activities such as the growth of strategic business alliances. The major focus of internalization theory is to explain why cross-border transactions of intermediate products are organized by internal hierarchies rather than by other market related agreements. This theory concludes that firms will arrange value-added activities across national boundaries whenever the cost of organizing internal hierarchies is lower than that of using contractual agreements. However, because internalization theory focuses on the problems of appropriability and coordination in the exchange of knowledge through external markets, which is the perspective of technology transfer and not technology creation, it can be difficult to explain FDI to sustain and/or augment competitiveness over a period of time. In addition, even though inter-firm agreements can provide incentives to lessen market failure where FDI is impractical, internalization theory cannot explain these kinds of activities. As a result, the concept of internalization needs to be widened to encompass other goals, which are embraced by the eclectic paradigm.

In summary, this study contributes not only to decision makers in MNEs, but also to policy makers in governments to understand the impact of globalization on FDI. Decision makers in MNEs should consider the interaction of the OLI factors to determine the level and pattern of foreign value-added activities of firms to create, sustain, and increase their competitiveness in the world marketplace. To be more attractive FDI locations for foreign MNEs policy makers should provide better economic structure to coordinate all O, L, I factors by foreign MNEs within their national boundaries rather than just providing their national factor endowments.

References

[1] Bergsten, C.F./Horst, T/Moran, T., *American Multinationals and American Interests*. Washington, D.C.: Brookings Institution, 1978.

[2] Blonigen, B. A., Firm-specific assets and the link between exchange rates and foreign direct investment, *American Economic Review*, 87(3), 1997, pp. 447-465.

[3] Buckley, P. J. /Casson, M., *The future of the multinational enterprises*, London: Macmillan, 1976.

[4] Burton, F. /Saelens, F., The European investment of Japanese financial institutions. *Columbia Journal of World Business*, 21, 1986, pp. 27-33.

[5] Casey, W. L., Beyond the Numbers: Foreign Direct Investment in the United States, Greenwich, Connecticut, JAL Press, 1998.

[6] Caves, R. E., *Multinational Enterprises and Economic Analysis*, Cambridge, New York: Cambridge University Press, 1982.

[7] Caves, R. E., Causes of direct investment: Foreign firm's share in Canadian and United Kingdom manufacturing industries, *Review of Economics and Statistics*, 56, 1974, pp. 272-293.

[8] Caves, R. E./Mehra, S., Entry of foreign multinational into U.S. manufacturing industries. In Porter, M., (ed.), *Competition in Global Industries*. Boston: Harvard Business School Press, 1986.

[9] Chou, T.C., American and Japanese direct foreign investment in Taiwan: a comparative study. *Hitotsubashi Journal of Economics*, 29, 1988, pp. 1165-1179.

[10] Davidson, W., The location of foreign direct investment activity: country characteristics and experience effects. *Journal of International Business Studies*, 11, 1980, pp. 9-22.

[11] DuBois, F. L./Toyne, B. /Oliff, M., International manufacturing strategies of US multinationals: A conceptual framework based on a four-industry study, *Journal of International Business Studies*, 23(2), 1983, pp. 307-333.

[12] Dunning, J. H., The eclectic paradigm as an envelope for economic and business theories of MNE activity, *International Business Review*, 9, 2000, pp. 163-190.

[13] Dunning, John H., The European internal market programme and inbound foreign direct investment, *Journal of Common Market Studies*, 35(1), 1997a, pp. 1-30.

[14] Dunning, John H., The European internal market programme and inbound foreign direct investment, *Journal of Common Market Studies*, 35(2), 1997b, pp. 189-223.

[15] Dunning, J. H., The strategy of Japanese and US manufacturing investment in Europe. In Mason, M. /Encarnation, D. (eds.), *Does ownership matter – Japanese multinationals in Europe*, Oxford: Clarendom Press, 1994a.

[16] Dunning, J. H., MNE activity: Comparing the NAFTA and the European Community. In Eden, L. (ed), *Multinationals in North America*, Calgary: University of Calgary Press, 1994b.

[17] Dunning, J. H., *Multinational enterprises and the global economy*, Workingham, England: Addison Wesley, 1993a.

[18] Dunning, J. H., *Globalization of business*, London and New York: Routledge, 1993b.

[19] Dunning, J. H., *International production and the multinational enterprises*, London: Allen & Unwin, 1981.

[20] Flowers, E., Oligopolistic reactions in European and Canadian direct investment in the United States. *Journal of International Business Studies*, 7, 1976, pp.43-55.

[21] Garrett, G., Globalization and Government Spending around the World, *Studies in Comparative International Development*, 35(4), 2001, pp. 3-29.

[22] Graham, E., Intra-industry direct investment, market structure, firm rivalry and technological performance, in Erdilek (ed), *Multinationals as mutual invaders*, London: Croom Helm, 1985.

[23] Gray, H. P., The Concept of "Globalization," *Global Economic Quarterly*, 2, 2001, pp. 99-116.

[24] Grubaugh, S. G., Determinants of direct investment, *The Review of Economics and Statistics*, 69(1), 1987, pp. 149-152.

[25] Hennart, J. /Park, Y., Location, governance, and strategic determinants of Japanese manufacturing investment in the United States, *Strategic Management Journal*, 15(6), 1994, pp. 419-436.

[26] Hiemenz, U., Foreign direct investment and industrialization in ASEAN countries, *Weltwirtschaftliches Archiv* Bd. 123, 1987, pp. 1121-1139.

[27] Horst, T., The industrial composition of US exports and subsidiary sales to the Canadian market, *American Economic Review*, 62, 1971, pp. 37-45.

[28] Huang, G., *Determinants of United States – Japanese Foreign Direct Investment: A comparison across countries and industries*, New York; Garland Publishing, 1997.

[29] Jalilian, H. A theory of foreign investment: Possibility, modes and timing, *Managerial and Decision Economics*, 17, 1996, pp. 331-337.

[30] Knicherbocker, F. T., *Oligopolistic Reaction and the Multinational Enterprise*, Cambridge, MA: Harvard University Press, 1973.

[31] Kogut, B. /Chang S. J., Technological capabilities and Japanese direst investment in the United States, *Review of Economics & Statistics*, 73,1991, pp. 401-413.

[32] Kogut, B. /Chang S. J., Platform investments and volatile exchange rates: direct investment in the US by Japanese electronic companies, *Review of Economics and Statistics*, *78, 1996, pp.* 221-231.

[33] Kravis, L.L./Lipsey, R. E., The location of oversea production and production for export by US multinational firms, *Journal of International Economics*, 12, 1982, pp. 201-223.

[34] Kumar, N., Multinational enterprises, regional integration, and export-platform production in the host countries: An empirical analysis for the US and Japanese corporation, *Weltwirtschaftliches Archiv*,
[35] 134(3), 1998, pp. 450-483.

[36] Lall, S., Monopolistic advantages and foreign investment by US manufacturing industry, *Oxford Economic Papers*, 32, 1980, pp.102-122

[37] Lecraw, D. J., Transnational corporations in host developing countries; preliminary report. In Buckley P. J. /Clegg J. (eds.), *Multinational Enterprises in Less Developed Countries*, London: Croom Helm,
[38] 1991.

[39] Loree, D. W. /Guisinger, S. E., Policy and non-policy determinants of U.S. equity foreign direct investment, *Journal of International Business Studies*, 26(2), 1995, pp. 289-299.

[40] Meredith, L., US multinational investment in Canadian manufacturing industries, *Review of Economics & Statistics*, 65, 1983, pp. 111-119.

[41] Michel A. /Shaked I., Multinational corporations versus Domestic corporations financial performance and characteristics, *Journal of International Business Studies*, 16, 1986, pp. 89-106.

[42] Mody, A. /Srinivasan, K., Japanese and US firms as foreign investors: Do they march to the same tune? *Canadian Journal of Economics*, 31(4), 1998, pp. 778-799.

[43] Morck, R. /Yeung, B., Why investors value multinationality, *The Journal of Business*, 64(2), 1991, pp. 165-187.

[44] Neter, J. /Kutner, M.K./Nachtshemim, C.J./Wasserman, W., *Applied Linear Statistical Models*. 4th edn. London, Irwin, 1989.

[45] Pain, N. /Lansbury, M., Regional economic integration and foreign direct investment: The case of German investment in Europe, *National Institute Economic Review*, 160, 1997, pp. 87-99.

[46] Pugel, T. A., Government intervention in less developed countries: the experience of multinational companies, *Journal of International Business Studies*, 2, 1981, pp. 220-228.

[47] Rajan, R.S., Economic Globalization and Asia, *ASEAN Economic Bulletin*, 18(1), 2001, pp. 1-11.

[48] Rugman, A, M., Internalization as a general theory of foreign direct investment: a re-appraisal of the literature, *Weltwirtschaftliches Archiv*, 116, 1980, pp. 365-379.

[49] Solinger, D.J., Globalization and Paradox of Participation: The Chinese Case. *Global Governance*, April-June, 7(2), 2001, pp. 173-196.

[50] Tan, B./Vertinsky, I., Foreign direct investment by Japanese electronics firms in the United States and Canada: Modeling the timing of entry, *Journal of International Business Studies*, 27(4), 1996, pp. 655-681.

[51] Tsurami, Y., *The Japanese are coming: A multinational spread of Japanese firms*, Cambridge, Mass: Ballinger, 1976.

[52] UNCTC. Foreign direct investment and trade: Interlinkage and policy implications, In *World Investment Report 1996*. Geneva & New York: UN, 1996.

[53] United Nations Transnational Corporations and Management Division (UNTCMD), *From the Common Market to EC 92: Regional Economic Integration in the European Community and Transnational Corporation,* Department of Economic and Social Development, New York: United Nations, 1993.

[54] Urata, S., The rapid increase of direct investment abroad and structural change in Japan, in Ramstetter (ed), *Direct Foreign Investment in Asia's Developing Economies and Structural Change in the Asia Pacific Region*, Boulder, Colorado: Westview Press, 1991.

[55] Wolf, B.M., Industrial diversification and internationalization: Some empirical evidence, *Journal of Industrial Economics*, 26, 1977, pp. 177-191.

[56] Woodward, D. /Robert J. R., The location of export-oriented foreign direct investment in the Caribbean basin, *Journal of International Business Studies*, 24(1), 1993, pp. 121-144.

[57] Yamawaki, H., Exports and foreign distributional activities: Evidence on Japanese firms in the United States, *Review of Economics & Statistics,* 73, 1991, pp. 294-300.

[58] Yamawaki, H., Bunching in foreign direct investment: Evidence on Japanese firms in US manufacturing industries, CIBER Working Paper, No. 98-20, UCLA, 1998.

[59] Yoshida, M., Macro-micro analyses of Japanese manufacturing investment in the United States. *Management International Review*, 27(4), 1987, pp. 19-31.

[60] Yu, C.M./Ito, K., Oligopolistic reaction and foreign direct investment: The case of the U.S. tire and textiles industries, *Journal of International Business Studies*, 19, 1988, pp. 449-460.

End Notes

(1) I use the error component model, which is one of models using pooled cross-sectional and time series data. The basic assumption in a error component model is that the stochastic disturbance is consist of three independent components: one component is associated with a particular cross-sectional unit (host countries and/or industries in our study), the second with time and the final one varies with both cross-sectional unit and time. Each separate component is also assumed to have the properties of the disturbance term in the classical linear regression model, nor are the components correlated with each other (Neter et al., 1989). Specifically,

$$u_{it} = v_i + w_t + z_{it} \quad (i = 1, 2, \ldots, N;\ t = 1, 2, \ldots, T)$$

Where u_{it} represents the disturbance for the ith unit at time t, vi is a cross section error component, w_t is a time series error component, z_{it} is a combined error component.
with

$v_i \sim N(0, s^2_v)$
$w_t \sim N(0, s^2_w)$
$z_{it} \sim N(0, s^2_z)$

and

$$E(v_i, w_t) = E(v_i, z_{it}) = E(w_t, z_{it}) = 0$$

$$\boldsymbol{E(v_{i,}, v_j) = 0 \quad (i\ ?\ j)}$$
$$\boldsymbol{E(w_{t,}\, w_s) = 0 \quad (t\ ?\ s)}$$
$$\boldsymbol{E(z_{it,}\, z_{is}) = E(z_{it,}\, z_{jt}) = E(z_{it,}\, z_{js}) = 0 \quad (i\ ?\ j,\ t\ ?\ s)}$$

Based on the above assumptions, the disturbance u_{it} is homoscedastic with variance

$$\boldsymbol{Var\ (u_{it}) = s^2 = s^2_v + s^2_w + s^2_z}$$

Because error variances, s^2_v , s^2_w , and s^2_z , are unknown, there are some processes to estimate regression coefficients. We first fit the regression model by unweighted least squares (ordinary least square) and analyze the residuals. Second, the variance function is estimated by regressing the absolute residuals on the appropriate predictors. Third, the fitted values from the estimated variance function are used to obtain weights. Finally, we estimate the regression coefficients using these weights.

(2) Chow-Test: $((ESS_R – ESS_{UR}) / K) / (ESS_{UR} / (N+M-2K))$. $ESS_{UR} = ESS_1 + ESS_2$. ESS_1 and ESS_2 : Error sum of squares of regression 1 and 2. ESS_R : Error sum of square of the combined model of regression 1 and 2. N and M: Number of observations in 1 and 2. K: Number of parameters.

(3) " A maximum VIF value in excess of 10 is frequently taken as an indication that multicollinearity may be unduly influencing the least square estimates" (Neter, et. al., 1990, p. 387)

The Role of Hedge Funds and Other Factors During the 1997 Financial Crisis in Thailand

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Abstract

Hedge funds are often blamed for a number of worldwide financial crises, most notably the Asian crisis in 1997, where the sudden and dramatic plunge of several economies in Asia brought the role of hedge funds into the world's spotlight. This paper first uses a regression analysis to examine the effect of hedge funds on Thailand's currency from 1994 to 1997. The results of the analysis show that hedge funds played a relatively small and statistically insignificant role in the currency crisis in Thailand. The paper then discusses a number of other factors such as the role of financial deregulations, lack of transparency, lax accounting standards, impact of overconfidence, the absence of proper risk analysis and the cultural influence on the collapse of the Thai economy in 1997.

Introduction

The relatively high rate of growth in the economies of a number of Asian countries in the 1980s and the first half of the 1990s was nothing less than remarkable. These countries were able to build high-quality manufacturing industries ranging from textiles to computers. A high rate of economic growth, as well as political and economic stability during this period encouraged large-scale capital inflows into South Korea, Hong Kong, Taiwan, Singapore and Thailand. Macroeconomic indicators for this group of countries were quite favorable and did not provide any signal about the arrival of a significant financial crisis in the region. In fact, between 1996 and 1997, reputable credit rating agencies such as Moody and Standard and Poor had favorable ratings for Thailand, South Korea, Malaysia, the Philippines and Indonesia. [1]

Despite the appearance of financial strength and economic stability among the East Asian countries in the first half of the 1990s, these economic tigers faced a sudden collapse in the second half of 1997. As a result, currencies of these countries experienced substantial depreciation and their stock markets fell sharply.

Soon after the beginning of the Asian Crisis, many researchers, politicians and others started to identify and analyze the causes of the Asian currency and financial crisis. These causes ranged from macroeconomic factors to micro-level problems.[2] Among the factors being blamed for the crisis was the role of hedge funds' managers who were portrayed as currency speculators that ravaged Asia only to make a profit.

The main purpose of this paper is to use a regression analysis to examine the role of hedge funds on Thailand's currency during the financial crisis in 1997. This study will then analyze the impact of several other financial and non-financial factors during the crisis in Thailand.

Review of Literature

Hedge funds are investment pools usually located offshore. This fact, along with the restrictions hedge funds place on shareholders limits the regulatory and disclosure laws that most financial institutions must follow. This characteristic, according to Eichengreen and Mathieson [1999], leaves little, if any, factual data about the investments and positions taken by hedge funds' managers during the Asian Crisis.

However, there have been many studies on hedge funds and the role they play in international financial markets. Each uses its own methodology and draws different conclusions on the impact hedge funds had on the currency crisis in Asia. For example, Eichengreen and Mathieson [1999] suggest that the role of hedge funds in the Asian Crisis was very minimal. Hedge funds held only $7 billion of the Central Bank of Thailand's $28 billion forward position. They also claim that most hedge forward contracts were transacted in May, well after the beginning of the Asian Crisis. Since speculators were not the leaders, the widespread notion that investors follow popular trends --the herding effect-- was not supported empirically. They conclude that commercial and investment banks were the primary cause of the Asian Crisis, and that hedge funds played a minimal role in the collapse.

In an article by Willett, Budiman, Denzau, Jo, Ramos and Thomas [2001], the authors identify four popular theories of what caused the Asian Crisis. One of the views was popularized by Mohamad Mahathir, Prime Minister of Malaysia, as he publicly claimed in *The Wall Street Journal* that currency speculators and hedge fund managers, like George Soros, caused the depreciation of the Malaysian Ringgit. This view, named the Mahathir hypothesis, seeks to prove that hedge funds were the primary cause of the Asian Crisis. The study found no evidence of hedge fund positions against Asian currencies or of herding behavior. To justify this conclusion, the article claims that only a few funds took a modest position in the Ringgit. These funds actually lost money on the currency depreciation instead of capitalizing on the situation as Mahathir suggested. This research paper also indicates that the bulk of hedge forward sales occurred in May; again providing contrasting evidence to the theory of herding by showing that speculators were not leaders but followers. The article goes on further to disclose that George Soros took a few short positions on the Ringgit early in 1997 (ranging from six months to a year in duration), therefore he was actually required to buy the Ringgit during the large scale depreciation, in effect upholding the currency's value.

In addition to papers that focus directly on the Asian Crisis, other researchers have studied the effect of hedge funds on Non-Asian countries. For example, Bob Rankin [1999], has focused his study on the impact of hedge funds on the Australian currency crisis of 1998. Rankin combines estimations, behavior assumptions, and actual events to describe the experience of Australia. By May of 1998, hedge funds had built up short positions of about A$12 billion, expecting future depreciation of the Australian Dollar. Rankin's paper suggests that speculators gestured that they would force the value down by extreme selling, and the Central Bank would be unable to stop them due to the size of funds and leverage that speculators possessed. The hedge funds' managers condensed their action into periods of sparse trading (Sydney Lunchtime and in-between Sydney and London trading times) to incur little market resistance. A repercussion of this was Australian exporters started to sell Australian Dollars in expectation of further depreciation, an action which Rankin attributes to herding. This is when the Central Bank stepped in and bought nearly A$2.6 billion, which successfully stopped the short selling of speculators and stabilized currency value. Once speculators stopped their attack, investor behavior became more normal, but the Australian Dollar remained depressed until the fulfillment of the short positions in October. Rankin's study concludes that speculators caused herding behavior and had a significant impact on the value of the Australian Dollar in the middle of 1998.

Rankin then differentiates between banks, mutual funds, and hedge funds to determine why speculators have such a great influence on currency markets. He concludes that it is the action of 'position taking', which banks do not partake in and mutual funds' managers who take positions that are subject to constraints, that leads to this advantage. According to Rankin [1999], it is position taking, along with some off-balance sheet maneuvers that allow hedge funds' managers to have greater influence on markets over other financial institutions.

In another related paper, published by the Japanese Ministry of Finance, Nakao [1999] broadly discusses the hedge funds issue. The paper recognizes that hedge funds perform an invaluable role by assuming risk and providing liquidity to the market, but also realizes the potential harm they can cause, especially in emerging markets. "In small economies adopting a fixed exchange rate regime, for example, a massive short-selling of the country's currency in expectation of a shift from the fixed exchange rate regime could cause a plunge in the value of the currency, first on the futures market and then on the spot market."[3] The author expresses concern that hedge funds can exert great influence over small markets through herding. He presents three arguments to justify his conclusion. The first explanation is the "Profit Externality Model" which suggests that the more investors who perform a similar action, the greater the return will be from that maneuver. The "Principal Agent Model" is a cultural explanation in which the performance of managers is compared to other funds managers, rather than the return from the fund. Not wanting to look bad, the fund manager operates in a similar fashion to others, encouraging herding behavior. Finally, the "Information Cascade Model" claims that investors make decisions based on the actions of previous investors, feeling that those investors must have had better information. All investors acting on the same information encourages herd behavior. Based on his findings, the author recommends the regulation of hedge funds to protect investors and soundness and stability of the market.

Finally, an empirical study of exchange rates and hedge funds by Brown, Goetzmann and Park [1998] uses a regression analysis to examine the impact of hedge funds on currency values. More specifically, the authors regressed monthly hedge fund returns on the percentage change in Ringgit value to obtain a per dollar exposure of the fund to the Malaysian Ringgit. Next, they multiplied the amount of exposure by the total assets of the fund to determine the net Dollar exposure. The authors then regressed the monthly percentage change in the currency on the net Dollar exposure to determine the effect of a fund or group of funds on a currency. The study found no evidence that hedge funds caused any depreciation of the Ringgit. Furthermore, the study applied the regression model to ten Asian economies, using an equal-weighted currency index of all countries in the study. This analysis showed a possible geographic correlation between currencies, but no link between hedge funds and the Asian Crisis.

In brief, the results of earlier empirical studies on the role of hedge funds on the Asian financial crisis are mixed. The conflicting results are partially due to the different techniques used, as well as the inclusion of several countries in most of the previous studies.

Methodology

The primary purpose of this study is to examine the effect of hedge funds on the value of one currency, namely the Thai Baht before the financial crisis of 1997. The focus of this study is on Thailand mainly because it was the first country that faced the dramatic change in its financial structure. Furthermore, compared to other Asian countries in 1997, herding was somewhat negligible in Thailand at the initial phases of the crisis. If the results of this study find that hedge funds did not play a significant role in the depreciation of the Baht, we then need to identify and analyze other relevant factors which played significant roles in Thailand during the 1997 financial crisis.

In the first step, this paper uses a regression analysis to examine the effect of hedge funds on financial stability of Thailand by using monthly data, from January 1994 to December 1997. This study uses Macro Index data from the Hedge Fund Research Indices [2001] as the measure of hedge funds performance in Thailand during the duration of the study. The Macro Index is composed of a number of hedge funds that invest in all major markets including equities, currencies, bonds and commodities. This study uses the monthly returns starting in January 1994 and ending in December 1997 and regresses them against the percentage change of the Thai Baht during the corresponding periods. The source of data for the Baht was the Federal Reserve's Public Record.[4] This study estimates the following equation:

$$R_t = ? + ?_1 (BAHT)_t + ? \qquad (1)$$

Where R_t is the monthly return of the Macro Index, BAHT is the percent change in the monthly value of the Thai Baht and $?_t$ is the error term with zero expectations. The $?_1$ coefficient measures the sensitivity of the monthly return of the hedge funds index to changes in the value of Baht. If $?_1$ is statistically significant, it provides a strong indication that hedge funds contributed to currency depreciation in Thailand during the financial crisis in 1997.

Results of the Regression Model

The use of the Ordinary Least Squares (OLS) technique provided the following results for the equation model:

$$R_t = .77 + .40\,(BAHT)_t + ?_t \qquad (2)$$

Where the t-value for the $?_1$ coefficient is 1.60. This value implies that there is an insufficient statistical relationship between the return of the hedge funds, as measured by the Macro Index, and the monthly changes in the value of Baht. The R-Square statistic suggests that about 5 percent of the variation in the value of the Baht is explained by net exposure of the currency to the Macro Index. The low value of the R-Square is supportive of the notion that the hedge funds' returns were not the primary explanatory variables in influencing the changes in the value of Baht during the period under study.

Despite the finding of a low correlation between the funds included in the Macro Index and the percentage change in the value of the Thai Baht, this study does not discount the possibility that hedge funds were partially accountable for the decline of the Thai economy, and then later the Asian Crisis. It is important to note that the regression model focuses on funds returns as the main explanatory factor for depreciation of the Baht. In reality, a number of other factors may have had significant influence over the currency value. Furthermore, the use of weekly or daily data may have improved the results. It is also possible that this study, if conducted with a different index for hedge funds or a different currency would have produced a different result.

In addition, there is another potential factor that may have diminished the apparent role of hedge funds in Thailand during the financial crisis. During this time, the Central Bank of Thailand intervened and bought almost 20 Billion Baht in an attempt to stabilize the currency. This would have drastically affected the returns achieved by hedges that bet strongly against the Baht by taking out large short positions. It would also be seen as a signal to all investors that the Thai government would not tolerate a raid on its economy by speculators.

Another way to interpret the conclusion is suggested by Brown, Goetzmann and Park [1997]. They discuss that it is often enticing to look for a scapegoat in any major adverse situation. However, this study concludes that even hedge funds' managers bet wrong sometimes; and so they are not a viable source of blame. They state that the global markets can engulf enormous positions taken by major currency funds without enduring serious negative effects.

The Role of Other Factors During the Asian Crisis

Soon after the Asian Crisis, both government officials in several Asian countries and the public openly blamed hedge funds for raiding and plundering Asia. The results of this study, as summarized above, showed that hedge funds did not solely cause the collapse of the Thai Economy. Thus the question remains: What caused a seemingly robust Thai economy to implode and spread its contagion to the rest of Asia? Many explanations have been put forth since 1997 and it is the synthesis of these ideas that best explains the Asian meltdown.

From 1990-96, liberalization and deregulation of the banking industry exposed Thailand to financial possibilities it could not properly manage. It was a period characterized by over borrowing from foreign banks, poor investment decisions, inefficient government regulation and policies, and a total lack of transparency that hid the truth from investors.[5]

High interest rates, coupled with an established political environment and a seemingly stable currency that was pegged to the US Dollar, encouraged a great deal of foreign direct investment and international loans to flow into Thailand. Due to weak equity markets, the Thai banking system controlled much of the capital flow. While commercial banks had credit limitations imposed on them by the government, a trend of liberalization brought about other financial institutions with fewer limitations. These finance companies, benefiting from Thai offshore borrowing tax incentives, engaged in billions of dollars of short-term foreign denominated loans. The majority of this money funneled down to local banks that borrowed short-term from Thai financial trusts, and then gave out their borrowed funds as long-term loans denominated in local currency to domestic investors. A slight devaluation in local currency, as Corsetti, Pesenti and Roubini [1998] have argued, left local banks vulnerable to liquidity problems.

Rahman [1998] found that many of these loans were given out to finance a surge in the real estate market and for investment activities. A rapidly growing economy and demand for new homes, office space, and parks resulted in rising property values and a false sense of security among builders and lenders. In 1995, as a surplus of residential and commercial buildings started to reduce demand and lower property values, large sums of money were still being invested. By 1996-97, the oversupply reached a critical level and the real estate market collapsed. Companies and individuals were unable to pay back the loans they had received from local banks, which in turn were sent scrambling to cover interest payments and repay loans they owed foreign banks.

This task was virtually impossible for most banks in Thailand to accomplish. For at the same time the real estate bubble began to burst, an over invested stock market began to recede as well, further increasing the bank's number of non-performing loans. According to Rahman [1998], property exposure was 30-40% of Thai bank's assets, which led to a staggering 15% of all loans to be considered non-performing.

Empirical analysis done by Corsetti, Pesenti and Roubini [1998] paints an even more startling portrait of the condition of Thailand. Another complication associated with the excessive borrowing of foreign funds was the formation of a large current account deficit. Thailand's current account was running a deficit which averaged roughly 6% of GDP during the 90's, and rose to almost 9% of GDP in 1995-96. The impact of such a large deficit must be weighed using two factors, solvency and sustainability. A good sign of a country's solvency is a stable foreign debt to GDP ratio. However in Asia, this ratio was constantly increasing for many countries so that a better estimation of Thailand's solvency, as suggested by Corsetti, Pesenti and Roubini [1998], can be obtained by finding the country's resource balance gap. This is found by taking the difference between the current account deficit and the amount of trade surplus it would take to stabilize a long run outlook of a debt to GDP ratio. By 1996, Thailand's resource gap was 6.9% of GDP, the highest in Asia. With this increasing current account deficit and a widening resource balance gap, an examination of how sustainable these trends were is in order. While there is no exact measure of a country's solvency, it is safe to assume that "a country could run very large and persistent current account deficits and remain solvent, as long as it can generate trade surpluses (of the appropriate size) at some time in the future". [6]

Ultimately, sustainability can be reduced into two features, a country's inclination to pay and its creditor's willingness to lend. It is generally assumed that creditors will continue to grant loans; however, this assumption must be re-evaluated or dismissed altogether when creditors feel a country may default on its loans. Putting faith in this information, lenders will become more defensive and raise interest premiums or discontinue lending altogether.

Since a current account balance is derived from the difference between national savings and investment, a deficit can be traced back to either a sharp rise in foreign investment or a lack of savings. Thai savings data does not appear to indicate any periods of private dissavings or of any budget deficits created by the public sector. Instead, the numbers show a steady savings rate that was consistently over 30% of GDP throughout the 90's.[7] Foreign investment, on the other hand, experienced a sharp increase during this same time period. A current account deficit induced by an increase in investment, such as what happened in Thailand, is generally not seen as a cause for concern and thus received little attention from investors and creditors. Funds raised from foreign investment are normally used to increase the productive capacity of a country, which leads to increased exports and an improved trade balance. Generating funds in this manner is preferred over financing received through consumption that leads to reduced savings. This rationale concludes that a current account deficit caused by shrinking savings rates is worse than a deficit caused by increasing foreign investment. However, this logic is based on two assumptions that must hold true to justify the current account deficit. One that the return on investment achieved is greater than the cost of borrowing and two, that investments increase the trading and exporting capabilities of a country. These basic assumptions both failed in the case of Thailand. Much of the investment went into commercial and residential real estate projects, not manufacturing. After the real estate bubble burst, Thailand was left with a multitude of non-performing loans and lacked the ability to balance its foreign assets with its foreign reserves.

The trend of increased investment that yielded little gain in productivity created a serious hazard to the Thai economy. According to Rahman [1998], net foreign liabilities increased USD 61 billion in just a four year period. Over 80% of this new investment was channeled into the economy through the questionable practices of the banking system. Foreign liabilities compared to Thai assets in Bureau of International Settlements (BIS) banks peaked at an unfathomable 1,103% in 1996.

These large foreign debts can only be supported and financed in the presence of a large amount of foreign exchange reserves. Furthermore, sizeable reserve funds are also required to maintain a fixed exchange rate system. Otherwise investors and speculators may pull out their investments from the country, as they lose confidence in government's ability to maintain the currency value at its pegged rate. A good measure of sufficient foreign reserves is the ratio of a country's M2 to its foreign reserves. Data shows that this ratio was abnormally high in countries across Asia. Another indication of insufficient reserves was the fact that Thailand had accumulated a short-term foreign debt (owed to BIS banks) 1.69 times its own foreign reserves.[8] This meant if a liquidity crunch were to occur, and BIS banks would not continue to grant short-term credit, the Thai banking system did not have the funds required to cover their short-term liabilities. They would also be unable to make principal or interest payment on any long-term maturing loans.

Exacerbating the problem of Thailand's foreign reserve shortage was the deterioration of many financial institutions while, at the same time, currency speculators and investors started to sell their Asian investments. A tremendous capital outflow put severe downward pressure on the Thai Baht, thereby raising the cost of repaying foreign loans. Many banks, already undercapitalized and carrying an abundance of non-performing loans, were facing bankruptcy. However, the banking system had been assured that the government in times of difficulty would provide support and bailout packages. Many researchers including Rose [1998] refer to the issue of moral hazard and argue that it was a major contributing factor during the crisis in Asia.[9] These critics claim that much of the basis of the Asian Crisis involved banks, corporations and foreign investors, urged by governments' incentives, seeking to profit by building, financing or servicing targeted industries, while believing that they were protected from loss.

The Asian Crisis has highlighted two types of moral hazard: global and domestic. On a global scale, lending by the IMF or individual countries, intended to assist a nation through crisis, instead encourages potential borrowers to engage in policies that make them more vulnerable to currency runs and other financial difficulties. For instance, a number of international banks had provided large amounts of loans to the region's domestic financial institutions, without conducting a comprehensive risk/return assessment. These banks granted substantial credits behind the assumption that their loans would be effectively guaranteed by either a direct government intervention or an IMF bailout.

Another aspect of moral hazard is more directly related to actions and cultures within countries, which may lead to exceptionally risky behavior. In Thailand, for example, government policies encouraged banks to borrow excessively abroad and lend markedly at home, often in marginally profitable or unprofitable projects. Hubert Neiss, director of the IMF's Asia and Pacific Department, has noted that weakness in the financial sector "accumulated over the years as a result of political interference in lending decisions and lax banking supervision."[10] This obvious problem was compounded because Thailand, Malaysia and several other Eastern Asian countries employed fixed exchange rates. As a result, their currencies appreciated in real terms because inflation was higher in these countries relative to their trading partners. This overvaluation caused very large trade deficits and consequently depreciation was needed to get the exchange rate back in line.

There are some who argue that financial markets are almost completely efficient and the Asian Crisis would not have occurred if moral hazard was not present. Willett, Budiman, Denzau, Jo, Ramos and Thomas [2001] conclude that moral hazard cannot be used as a sole explanation of the crisis. They point to evidence showing that commercial bank outflows were much greater than those of portfolio investment; if moral hazard was a dominant factor, then banks should have felt assured of bailout packages and had no reason to leave the market. In addition, they found that portfolio investors did not foresee the coming Asian meltdown, providing evidence that moral hazard was not the only cause of the crisis; it also shows that markets may not be fully efficient.

Another important factor to better understand the Asian crisis is the importance of culture in the region. Asia, according to Hitchcock [1998] was a place "where indirectness is an art, public embarrassments are to be avoided, and dirty laundry isn't aired in public". In a society that is quite different from the western culture, it is uncommon to ask for a lot of details and insist on accountability. In other words, transparency was not a priority of Thailand and other Asian countries. Furthermore, Rahman [1998] makes the case that the financial statements produced by Thai banks and corporations did not meet or follow international accounting standards and therefore did not allow investors to properly assess their risk exposure. These financial statements lacked information on related-party lending and borrowing, foreign currency debt, use of derivative financial statements, segment information and disclosures in bank financial statements. According to Rahman [1998], lax accounting principles dictated by Thailand's Central Bank allowed companies to conceal information in these key areas.

Close relationships among corporations and conglomerate structures made shuffling and hiding debt relatively easy. Most conglomerates had their own financial division; this allowed them to receive new loans even if they were not making payments or had defaulted on previous loans. The large number of short-term foreign currency loans was not accurately reported. The fact that these loans were being concentrated mainly into the real estate sector was also rarely mentioned. Loans that had not received interest payments on them for long periods of time were still considered 'performing', skewing the actual value of a banks loan portfolio. Finally, the use and risk of financial derivatives was not fully reported. Many companies entered into complex and risky derivative contracts such as currency swaps. Since derivatives were not required to be reported on the balance sheet, they allowed companies to amass a large and discretely hidden off balance sheet debt. The lack of transparency only served to add more investments into a market that should have been shrinking.[11] However, the failure to follow the international accounting standards is not the only cause of the financial crisis in Thailand. Instead, it is the fusion of policies and events discussed in this paper that result in a more accurate account of how the Asian Meltdown occurred.

Conclusion

The first purpose of this study was to provide an empirical test on the importance of hedge funds in the collapse of the Thai Baht during the 1997 financial crisis. The results of the regression analysis show that hedge funds played a smaller role in the fall of the Thai economy than was initially anticipated. Given this finding, this paper then identified and analyzed a number of other factors which caused the decline in the Thai economy.

The drastic meltdown in Thailand and the rest of the Asian region in 1997 came as a surprise to most market participants. Available data in Thailand showed high and steady growth rates, large yields on investments, a stable monetary system and an all-round healthy economy. The relevant question then is why a global financial market, which is expected to be relatively efficient, failed to anticipate a widespread crisis? The answer, partially at least, is that only a small number of people knew the true state of affairs in Thailand. Overconfidence in the peg system, the expected bailout by government and a lack of transparency gave investors the impression that the economy was strong. A feeling that the 'Asian Tiger' would replace the 'Bull of Wall Street' as the symbol of financial strength in the world led investors to further believe there was little risk involved. Many foreign loans and investments were not properly hedged, and corporations were not using risk-assessment techniques. By the same token, Thai banks were lowering credit standards, not hedging their sizeable debts, or assessing their own risks.

The government's efforts in Thailand were designed to extend 'guarantees' to businesses and undertake their own projects to expand the economy. This led investors, lenders, and corporations to believe that the economy could not and would not fail. Billions of unhedged dollars flowed into Thailand with businesses forgoing proper risk management and private individual investors knowing little of the risks they were taking. This money was invested in areas highly sensitive to speculative pressure such as the real estate and stock markets. As these investments began to fail, the banking system started to accumulate a sizable amount of non-performing loans. Continuing to grant excessive amounts of loans, financial institutions hardly reported their bad debts or foreign currency exposure. If the banks were to become insolvent, potential bailout packages would require a large amount of funds, straining the budget of the country.

Currency speculators and some hedge funds' managers began to notice poor macro-economic variables such as the large current account deficit and the first signs of political instability as a reshuffling of the Thai government was taking place. They saw these as signs of beginning weakness and began to sell. An indication of a possible Japanese interest rate rise also sparked concerns about future currency stability [Fuerbringer, 1997]. Worries began to spread among corporate and individual investors, leading to mass selling. At first, the government neutralized the selling of Baht as it used foreign reserves to maintain the 'peg' with the U.S. Dollar. While the exchange rate was held constant, the large trend of capital inflow was reversing. East Asia experienced a $12.1 Billion outflow in 1997, compared to a $93 Billion inflow in 1996 [Rahman,1998]. This led to an unexpected liquidity crunch in Thai banks, resulting in many bankruptcies. The government announced it would bailout the troubled institutions; however, it soon realized that the majority of its available funds were already tied-up in forward contracts to support the Baht. Not having the resources to sustain both the country's currency and sagging companies, the government was forced to rescind its promised financial aid. Another public display of weakness, it led to further selling and pressure on the Baht. On July 2, 1997, the peg was abandoned and the Baht plunged immediately.

What began as speculative selling, spiraled into a massive sell-off lead by corporations and investors who had large unhedged positions. Companies who had receivables in Baht, also began to take out forward contracts hedging against further devaluations [Fuerbringer, 1997]. With a failing currency, local businesses and even private citizens exchanged their volatile Baht for more stable yen and dollars. Once the signs of the crisis became clear in Thailand, the currency continued to depreciate, raising repayment costs of foreign loans and leading to more corporate bankruptcies.

The economic structure of Thailand was similar to many countries of Southeast Asia allowing the Asian Contagion to spread rapidly across the region. Once the weaknesses of Thailand were exposed, investors were able to recognize corresponding problems in other Asian countries. Whether hedge funds initiated this mass selling or just followed the herd is uncertain; however, one thing is clear, hedge funds' managers main goal is to make money. As profit maximizers, they would, and should, sell their holdings when they expect lower values for their holdings. Therefore, their actions to dump Baht when all underlying economic and financial evidence in Thailand were worsening, should be considered rational.

In brief, the magnitude of the financial crisis faced in Thailand and other Asian countries in 1997, was large enough that blaming it on only one or two factors is an over-simplification. Such an event can only be understood if a number of inter-related economic, financial, cultural, governmental, internal and external factors are analyzed. Even with such a comprehensive analysis of the events, policies, and practices previously discussed in this paper, it may be difficult to prevent another financial crisis.

References

[1] Brown, S.J., Goetzmann, W.N., Park, J.M. (1998). Hedge Funds and the Asian Currency Crisis of 1997. National Bureau of Economic Research Working Paper No. W6427, February.

[2] Corsetti, G. , Pesenti, P., Roubini, N. (1998). What Caused the Asian Currency and Financial Crisis? Part I: A Macroeconomic Overview. National Bureau of Economic Research Working Paper No. W6833, December.

[3] Corsetti, G., Pesenti, P., Roubini, N. (1998). What Caused the Asian Currency and Financial Crisis? Part II: The Policy Debate. National Bureau of Economic Research Working Paper No. W6834, December.

[4] Eichengreen, B., Mathieson, D. (1999). Hedge Funds: What do we Really Know? International Monetary Fund, September 1999.

[5] Federal Reserve. [Historical Exchange Rates] Retrieved October 15, 2001 from http://www.federalreserve.gov/releases/H10/hist/dat96_th.txt

[6] Friedland, D. (2001). About Hedge Fund Strategies. *Hedge Fund Association*. Retrieved October 11, 2001 from http://www.thehfa.org/AboutUs.cfm

[7] Fuerbringer, J. (December 10, 1997). How Asian Currencies Tumbles so Quickly. *The New York Times*. Retrieved July 17, 2002 from: www.nytimes.com/library/review/archive/1210asia-currency.html

[8] *Hedge Fund Research Performance Indices*. (October 2001). Retrieved October 24, 2001 from http://www.hft.com

[9] Hitchcock, D.I. (April 10, 1998). Asian Crisis is Cultural as well as Economic. *Pacific Forum CSIS PacNet No. 15*. Retrieved July 17, 2002 from: www.nyu.edu/globalbeat/asia/hitchcock041098.html

[10] Nakao, T. (1999). Hedge Funds and International Financial Markets. *Japanese Ministry of Finance.* Retrieved September 23, 2001 from www.mof.go.jp/english/if/if006.htm

[11] Rahman, M.Z., (1998). The Role of Accounting in the East Asian Financial Crisis: Lessons Learned? In K.P. Sauvant, (Ed.), Transnational Corporations (pp 1-52). Switzerland: United Nations Publications.

[12] Rankin, B. [1999]. The Impact of Hedge Funds on Financial Markets: Lessons from the Experience of Australia. Reserve Bank of Australia. Retrieved October 12, 2001 from www.rba.gov.au/PublicationsAndResearch/Conferences/1999/Rankin.pdf

[13] Rose, W. [1998]. Managed Development, Moral Hazard Led Global Financial Crisis. US Consulate: Restoring Global Financial Stability. Retrieved July 23, 2002 from www.usconsulate.org.hk/gf/1998/1125.htm

[14] Taylor, J.B. [2001]. *Index of John Taylor Power Point Lectures*. Retrieved July 23, 2002 from www.stanford.edu/~johntayl/PptLectures/

[15] Willet, T.D., Budiman, A., Denzau, A., Jo, G., Ramos, C., and Thomas, J. (2001). The Falsification of Four Popular Hypotheses about International Financial Behavior during the Asian Crisis. Claremont Institute For Economic Policy Studies. Retrieved October 21, 2001 from econ.claremontmckenna.edu/papers/2001-06.pdf

Endnotes

1. For further discussion, see Rahman [1998].
2. To review some of the underlying causes of the Asian financial crisis, See Corsetti, Pesenti and Roubini [1998] or Willett, Budiman, Denzau, Jo, Ramos and Thomas [2001].
3. Nakao [1999]
4. The entire data set is available from the authors by request.
5. For more details see Rahman [1998] and Corsetti, Pesenti and Roubini [1998].
6. Corsetti, Pesenti and Roubini [1998].
7. ibid.
8. ibid.
9. The problem of moral hazard occurs when an outside authority (such as the domestic government or the IMF) provides a guarantee against losses, but is unable to specify or monitor the type of investments. Knowing that their losses are limited, the investor is likely to invest in a project that is riskier than what they would have taken on devoid the added insurance.
10. Friedland, D. [2001].
11. See Rahman [1998] for further discussion about the lack of accounting standards in Thailand prior to the crisis.

Time Series Financial Econometrics of the Thai Stock Market: A Multivariate Error Correction and Valuation Model

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Abstract

Undoubtedly, stock market plays a major role in the Thai financial system. The performance of the stock market determines wealth and performance of the Thai economy. This paper provides researchers an examination of contemporary quantitative financial economic issues of the Thai stock market in particularly stock valuation. This paper provides financial econometrics analysis of the valuation of the Thai stock market. Many contemporary techniques, approaches and models such as unit root test, augmented Dickey Fuller, augmented Engle-Granger, cointegration, and multi-factor model are developed in order to identify long run relationship between macroeconomic factors and stock price. The empirical characteristics of the Stock Exchange of Thailand (SET) related to market index prices reveal that interest rate, foreign exchange rate, bond rate, market capitalization, P/E ratios and CPI are the significant factors which affect stock price in both short and long run.

Introduction

There are many different emerging and enduring financial issues in the financial sector in developing countries, however one important issue is the valuation of stocks. There are various models for valuating stocks in developing countries such as the discounted cash flows model (DCFM), the capital asset pricing model (CAPM), and the arbitrage pricing model (APM). In recent years multi-factor modeling has become prominent (Islam and Oh 2000; Dabek 1999; Mishkin 1997). Limitations of the existing models are based on the concept of market equilibrium and the existence of a perfect market. In many developing countries, there are market imperfections and other market characteristics which make the existing models unsuitable for developing countries especially Thailand. Therefore, there is a need to develop a suitable approach to valuation of stocks trading on the Stock Exchange of Thailand.

According to the existing literature, Fama (1981) found a positive relationship between stock returns and economic activities such as GNP, money supply, capital expenditure, industrial production and interest rate. Chen, Roll and Ross (1986) also found the correlation between stock market returns and macroeconomic factors such as inflation, industrial production, money supply, the exchange rate, and interest rate by using APT model.

Other recent studies that focus on the relationship between stock prices or returns and macroeconomic and/or microeconomic factors in different countries include the study of Dhakal, Kandil and Sharma (1993) and Abdullah and Hayworth (1993), which they study the US stock market. Cheng (1995) studies U.K. stock price returns and macroeconomic factors; Fung and Lie (1990) investigate the Taiwanese stock market and macroeconomic factors; Sukhamongkhon (1994) studies the relationship between Thai stock returns and microeconomic factors; Brown and Otsuki (1990) study on the Japan stock returns and macroeconomic factors; and Kwon, Shin and Bacon (1997) examine the Korean stock market and macroeconomic factors. Wongbangpo and Sharma (2002), Nasseh and Strauss (2000), and Kiranand (1999) study the relationship between stock returns and macroeconomic factors on five or more Asian countries. Finally, Islam and Oh (2000) and Oh (2001) studied the relationship between return of e-commerce stocks and macroeconomic factors.

Methodology and Data

Economic Factors

We hypothesized a new stock valuation model is interrelated among different markets which are subsets of the Thai financial system. These markets are financial market, money and capital market, foreign exchange market and stock market. In addition, since we expect our model to operate in an open economy at the international level, the national account such as goods, gold and commodities market, along with government investment have been added to the analysis. These factors are identified under separate category as in table 1.

Table 1: FACTORS CATEGORIES

a) Financial Market Factors	*Regressor Code*
Bank Deposit	BD
Bank Loan	BL
Interest Rate	IR

b) Money and Capital Market Factors	*Regressor Code*
Money Market Instruments	MMI
Bonds	BND

c) Foreign Exchange Market Factors	*Regressor Code*
Exchange Rate	FX

d) Stock Market Factors	*Regressor Code*
Stock Market Index	SMI
Price Earning Ratio	PE
Dividend Yield	DY
Market Capitalization	MC

e) Goods, Gold and Commodities Market Factors	*Regressor Code*
Gross Domestic Product	GDP
Export	EX
Import	IM
Gold Reserve Value	GLD
Consumer Price Index	CPI

f) Government Investment Factors	*Regressor Code*
Government Expenditure	GE

Multi-Factor Mode l

The advent of the valuation model makes a valuable contribution to our understanding of the effects of the internal and external factors that influence stock prices, return and volatility. The multiple regression technique is developed to identify the significant factors/variables that influence the value of the stock. Hypothesis testing will be conducted to find a basis for making a probability statement about the true values of population regression coefficients (Islam and Watanapalachaikul 2001; 2002).

We argue that the standard valuation models of DCFM and CAPM are based on a perfect financial market. However, as we have discussed, there are market imperfections in the Thai financial system. A valuation model for the Thai stocks will be developed based on the multiple-factor modeling approach incorporating key factors/variables. Factor model provides identification conditions, propose an estimator of the key factors and variables and prove the time convergence at an appropriate rate by model simulation as well as identifying the relationship between an exogenous variable and multiple endogenous factors. Mathematically, a multiple factor model can be expressed as follows:

$$R_{it} = ?_i + (?_1)_i (F_1)_t + (?_2)_i (F_2)_t + \dots + (?_n)_i (F_n)_t + ?_{it}$$

where R_{it} = the return of stock *i* in period *t*, $?_i$ = the expect value if each factor as a value of zero, $(F_1)_t$ & $(F_2)_t$ = the values of factors 1 & 2 with pervasive influence in period *t*, $(F_n)_t$ = the value of factor *n*, $(?_1)_i$ & $(?_2)_i$ = the price of factor 1 & 2 (the risk premium) for stock *i*, $(?_n)_i$ = the price of factor n (the risk premium) for stock *i*, and $?_{it}$ = the stock specific return.

Prior to the development of a new model, correlation coefficient, unit root and cointegration were tested by using Islam and Oh's (2001) process. If macroeconomic variables are significant and consistently priced on the index, they should be cointegrated. This cointegration relation between index price and the underlying factc (1) necessary condition of the equilibrium model of stock market price and return. The cointegration analysis is in two stages: the unit root test to determine their non-stationarity and, when the results indicate that the first differenced series of each variable are stationary, a subsequent test to determine whether these two variables are cointegrated. The test for unit root is done by using the augmented Dickey Fuller (ADF) test.

Data

Monthly data for closing SET index from 1992 to 2001 is used in this study. The choice of time period corresponds to the pre- and post-crisis periods. These stock price indexes are obtained from the Stock Exchange of Thailand CD-ROMs and SET Data Service Department; and economic factors gathered from the Bank of Thailand, United Nation – Research Department, and International Monetary Funds – International Financial Statistics CD-ROM.

Results and Findings

Unit Root and Cointegration Test

According to Islam and Watanapalachaikul (2001), the factors need to be tested to determine the relevance. This method can be done by examing the correlation coffefficient and cointegration of the each factor. Table 2 summarizes the estimation of correlation coefficient of the stock prices and macroeconomic factors, numbers in bold are regarded as high correlation coefficient.

In addition, we use augmented Dickey-Fuller (ADF) test to identify the stationary of each factor. Using the following regression, we can distinguish unit root as:

$$?y_t ? ?_o ? ? ?_j(?y_{t?j}) ? ?t ? ?(y_{t?}) ? ?_t \quad (2)$$

where $?_t$ is a pure white noise error term (model 1), the proposition is defined as:

$$y_t ? ? ? ?_t \quad (3)$$

and trend stationary (model 2) is defined as:

$$y_t ? ? ? ?(t) ? ?_t \quad (4)$$

The result of unit test for macroeconomic factors is shown in table 3.

Table 2: SUMMARY OF CORRELATION COEFFICIENT FOR THE STUDIED PERIOD

	1992-2001	**Pre-Crisis**	**Post-Crisis**
PE	93%	91%	48%
DY	4%	-95%	40%
MC	85%	88%	79%
BD	-64%	68%	-66%
BL	22%	51%	72%
IR	39%	-65%	36%
MMI	-76%	49%	-34%
BND	-64%	52%	-75%
FX	-84%	-47%	-73%
EX	-75%	56%	-70%
IM	-55%	52%	-45%
GLD	86%	62%	78%
GDP	-19%	36%	-14%
CPI	-77%	46%	-88%
GE	-51%	35%	-14%

Model 1 is the model with non-zero mean and with white noise stationary, while model 2 represents the model with non-zero mean and with trend stationary, test statistics are shown in parentheses. The optimal lag length for each of the autoregressive process of ADF test is settled by Schwert (1987) formula: $L=Int[4(n/100)]^{2/9}$, where n is the number of the observations in the series.

Table 3: UNIT ROOT TEST FOR STOCK PRICES AND MACROECONOMIC FACTORS

Augmented Dickey Fuller (ADF) test							
	ADF test (Model 1)			**ADF test (Model 2)**			
Factors	? $_t$	? $_{t-1}$	***F***	(? $_t$)$^{\sim}$	(? $_{t-1}$)$^{\sim}$	(y_{t-1})~	***F***
BD	192.98	-0.01	0.37	247.71	-0.09	11.90	5.21
	(1.49)	(0.01)		(1.90)	(-2.28)	(2.20)	
BL	220.54	-0.01	0.88	1051.56	-0.002	-15.89	0.13
	(1.02)	(-0.94)		(4.34)	(-0.36)	(-5.61)	
IR	-0.29	-0.01	0.29	0.39	-0.03	-0.002	1.75
	(0.17)	(-0.54)		(1.28)	(-1.32)	(-1.43)	
MMI	5.23	-0.02	1.28	2.11	-0.03	0.08	1.55
	(1.25)	(-1.13)		(0.32)	(-1.24)	(0.62)	
BND	3.08	-0.01	4.08	3.15	-0.02	0.01	0.53
	(3.43)	(-2.02)		(2.90)	(-0.73)	(0.12)	
FX	0.78	-0.02	0.85	2.06	-0.10	0.02	6.60
	(1.12)	(-0.92)		(2.40)	(-2.57)	(2.43)	
SMI	7.18	-0.01	0.61	81.30	-0.01	-0.70	4.45
	(0.45)	(-0.78)		(2.17)	(-2.13)	(-2.19)	
PE	0.44	-0.04	1.84	2.64	-0.12	-0.02	7.81
	(1.03)	(-1.36)		(2.71)	(-2.78)	(-2.50)	
DY	0.13	-0.06	3.83	0.17	-0.06	-0.001	3.84
	(1.65)	(-1.96)		(1.39)	(-1.96)	(-0.42)	

MC	80.22	-0.04	2.46	17.04	-0.05	-11.02	4.04
	(1.52)	(-1.57)		(2.32)	(-2.01)	(-1.74)	
GDP	11.03	-0.94	1.02	66.20	-1.02	8.36	1.18
	(7.43)	(-1.03)		(3.21)	(-1.09)	(2.99)	
EX	4.92	-0.02	1.21	13.53	-0.28	0.48	18.99
	(1.46)	(-1.10)		(3.60)	(-4.35)	(4.20)	
IM	8.96	-0.05	2.89	21.91	-0.26	0.31	17.34
	(1.90)	(-1.70)		(3.88)	(-4.16)	(3.76)	
GLD	13.30	-0.02	0.87	56.42	-0.06	-0.18	3.71
	(0.81)	(-0.93)		(1.89)	(-1.92)	(-1.73)	
CPI	0.92	-0.01	2.63	-0.04	-0.01	-0.004	0.12
	(2.53)	(-1.62)		(-0.02)	(0.34)	(-0.66)	
GE	18.63	-0.30	2.10	29.01	-0.74	2.96	6.71
	(4.52)	(-4.58)		(7.37)	(-8.19)	(6.26)	

The results show that all the ADF tests, model 1 with white noise stationary, fail to rejuect the null hypothesis of the existence of a unit root in log levels except GE, since the test statistics in $?_{t-1}$ is greater than (-3.33). However, the correct proceduer is then take first differences of *y* before using it in a regression. Therefore, according to ADF tests, model 2 with trend stationary, we can reject the null of a unit root for all factors except EX and IM (since most of the factors yield *F* statistics which are less than 7.24, where as EX and IM yield 18.99 and 17.34 respectively). As a result, EX and IM are discarded in the further analysis.

According to Watsham and Parramore (1997) conintegration is used in analysing relationship between groups of economic factors over time in a manner that give a more conceptually and empirically valid measure of that relationship in the light of nonstationarity of the time series. Applying ordinary least square (OLS) regression in the following model, we now have the cointegration regression.

$$y_t \; ? \; ?_0 \; ? \; ?x_t \; ? \; ?_y$$

To obtain *error correction model*, we need to estimate residuals of the long-run relationship; where $?_y \; ? \; y_t \; ? \; ?_0 \; ? \; ?x_t$. This ADF tests in the present context are known as *augmented Engle-Granger* (AEG) tests. Then we repeat the unit root process over again on the residuals. (5)

Table 4: UNIT ROOT TEST FOR MACROECONOMIC FACTORS RESIDUALS

Augmented Engle-Granger (AEG) test			
	AEG test (Model 1)		
Factors	$?_t$	$?_{t-1}$	***F***
BD	2.69	-0.05	3.16
	(0.32)	(-1.77)	
BL	-4.13	-0.02	0.86
	(-0.54)	(-1.93)	
IR	-0.72	-0.04*	1.40
	(-0.09)	(-2.18)	
MMI	-0.05	-0.08*	4.47
	(-0.01)	(-2.11)	
BND	2.98	-0.05**	3.50
	(0.38)	(-2.82)	
FX	2.92	-0.13**	8.83
	(0.28)	(-2.97)	
PE	2.01	-0.19**	11.75

	(0.25)	(-3.43)	
DY	-3.67	-0.02	0.72
	(-0.46)	(-0.85)	
MC	-5.59	-0.02*	2.46
	(-2.17)	(-2.07)	
GDP	-3.35	-0.05	1.02
	(-0.28)	(-1.60)	
GLD	1.48	-0.11**	6.92
	(0.17)	(-2.631)	
CPI	3.89	-0.06*	2.63
	(0.52)	(-2.25)	
GE	1.84	-2.85**	2.10
	(0.12)	(-4.58)	

Note: (*) indicates rejection of the null hypothesis at 5% significant level and (**) indicates rejection of the null at 1% significant level.

Next, we choose the error corrected factors with statistical significance between 1 to 5 per cent to be regressed. As a result, BD, BL, DY, and GDP were dropped in the conintegration regression. Therefore, *the cointegration regression* of the remaining variables can be expressed as:

Interest Rate (IR)

$$?\hat{y}_t \; ? \; 297 \; ? \; 52.9 ? x_t \; ? \; 0.04 e_{t?1} \qquad R^2 = 15.1\%$$

Money Market Instrument (MMI)

$$?\hat{y}_t \; ? \; 1048 \; ? \; 172 ? x_t \; ? \; 0.08 e_{t?1} \qquad R^2 = 57.8\%$$

Bonds (BND)

$$?\hat{y}_t \; ? \; 1409 \; ? \; 4.83 ? x_t \; ? \; 0.05 e_{t?1} \qquad R^2 = 41\%$$

Foreign Exchange Rate (FX)

$$?\hat{y}_t \; ? \; 2172 \; ? \; 43.7 ? x_t \; ? \; 0.13 e_{t?1} \qquad R^2 = 70.5\%$$

Price Earning Ratio (PE)

$$?\hat{y}_t \; ? \; ?119 \; ? \; 64.6 ? x_t \; ? \; 0.19 e_{t?1} \qquad R^2 = 86.5\%$$

Market Capitalisation (MC)

$$?\hat{y}_t \; ? \; ?49 \; ? \; 0.001 ? x_t \; ? \; 0.02 e_{t?1} \qquad R^2 = 71.7\%$$

Gold (GLD)

$$?\hat{y}_t \; ? \; ?1639 \; ? \; 2.92 ? x_t \; ? \; 0.11 e_{t?1} \qquad R^2 = 73.7\%$$

Consumer Price Index (CPI)

$$?\hat{y}_t \; ? \; 3269 \; ? \; 23.19 ? x_t \; ? \; 0.06 e_{t?1} \qquad R^2 = 58.5\%$$

Government Expenditure (GE)

$$?\hat{y}_t \; ? \; 1566 \; ? \; 0.01 ? x_t \; ? \; 2.85 e_{t?1} \qquad R^2 = 26.3\%$$

The Thai Stock Market Multi-Factor Model

A new stock valuation model is based on a generic six-factors model, the factors were selected from the significant results from cointegration test. The new valuation model, named the Thai Stock Market Multi-Factor Model (TSMM), is described as follows:

$$Y = ? + (?_1)\,(IR) + (?_2)\,(BND) + (?_3)\,(FX) + (?_4)\,(PE) + (?_5)\,(MC) + (?_6)\,(CPI) + ?_t$$

All six factors in the estimated equation are the highest factors which are significant at the 5 per cent significance level. The result shows the $\overline{R}^2$ of 0.987 which is regarded as very significant. It is interesting to see that TSMM includes at least one factor from different markets which could be identified as follows.

Table 5: CLASSIFICATION OF SIGNIFICANT FACTORS

Markets in Financial System		*Significant Factors*
1. Financial Market	$\Rightarrow$	Interest Rate (IR)
2. Money and Capital Market	$\Rightarrow$	Bonds (BND)
3. Foreign Exchange Market	$\Rightarrow$	Exchange Rate (FX)
4. Stock Market	$\Rightarrow$	Price Earning Ratio (PE) Market Capitalisation (MC)
5. Goods, Gold and Commodities Market	$\Rightarrow$	Consumer Price Index (CPI)

According to the regression result, the systematic risk measured by the multi-factors model explains 98.7 per cent of the Thai stock market index. The estimated equation of the TSMM model is shown below (tests statistics are shown in parentheses):

$$\underset{(2.953)}{Y = 760.18} + \underset{(3.894)}{8.58(IR)} - \underset{(-3.156)}{2.24(BND)} + \underset{(4.301)}{6.49(FX)} + \underset{(3.711)}{7.548(PE)} + \underset{(22.734)}{0.0003(MC)} - \underset{(-2.245)}{7.11(CPI)} + ?_t$$

All six factors in the estimated equation are statistically significant at the 10% significance level and this confirms the evidence of their pervasiveness on the stock price. The TSMM model is consistent with the macroeconomic theories established by the classical, Keynesian and real business school of thought that financial market, money and capital market, foreign exchange market and goods, gold and commodities market are determinants of stock price value.

Conclusion

The results of TSMM shows a strong, significant long-run relationship between stock prices and macroeconomic factors during 1992-2001, which are interest rate, bonds price, foreign exchange rate, price-earning ratio, market capitalization, and consumer price index. It is very interesting to see that each factor represents individual market that sums up to the whole Thailand financial system. In addition, these factors explain 98.7 per cent of the stock price, which is regarding as very significant. We observe that in the long-run, the stock index prices are positively related to interest rate, foreign exchange rate, price-earning ratio, and market capitalization, while the negative long-run relationship is present for bonds price and consumer price index. The unit root, augmented Dickey Fuller and augmented Engle Granger tests detect the causal relationships from the selected factors to the stock index prices.

References

[1] Abdullah, D. A. and Hayworth, S. C. 1993, "Macroeconometrics of Stock Price Fluctuations", *Quarterly Journal of Business and Economics*, vol. 32, no. 1, pp. 49-63.

[2] Brown, S. J. and Otsuki, T. 1990, "Macroeconomic Factors and the Japanese Equity Markets: The CAPMD Project", *Japanese Capital Markets*, New York.

[3] Chen, N. F., Roll, R. and Ross, S. 1986, "Economic Forces and the Stock Market", *Journal of Business*, July, pp. 383-403.

[4] Cheng, A. C. S. 1995, "The U.K. Stock Market and Economic Factors: A New Approach", *Journal of Business Finance and Accounting*, vol. 22, no. 1, pp. 129-142.

[5] Dabek, R. A. 1999, "Valuation of a Technology", Intellectual Property Licensing Seminar: University of Dayton School of Law, http://www.udayton.edu/~lawtech/cle99lic-dabek

[6] Dhakal, D., Kandil, M. and Sharma, S. C. 1993, "Causality between the Money Supply and Share Prices: a VAR Investigation", *Quarterly Journal of Business and Economics*, vol. 32, no. 3, pp. 52-74.

[7] Fama, E. F. 1981, "Stock Returns, Real Activity, Inflation, and Money", *American Economic Review*, vol. 71, pp. 545-565.

[8] Fung, H. G. and Lie, C. J. 1990, "Stock Market and Economic Activities: A Causal Analysis", *Pacific-Basin Capital Markets Research*, Amsterdam.

[9] Islam, S. and Oh, K. B. 2000, "Econometric Analyses of E-Commerce Stocks: Valuation, Volatility and Predictability", Seminar paper, CSES, Victoria University, Melbourne.

[10] Islam, S. and Watanapalachaikul, S. 2002, "Financial Issues in the Developing Economy: An Empirical Investigation of the Thai Telecommunications Sector", International Conference, International Trade and Finance Association, Ramkumhang University, May, Bangkok.

[11] Islam, S. and Watanapalachaikul, S. 2002, "Financial Market and Reform Strategies in Developing Countries: A Case Study of the Thai Telecommunications Sector", International Conference, at International Conference on Economic Recovery and Reforms, Thammasat University, October, Bangkok.

[12] Islam, S. and Watanapalachaikul, S. 2002, "Stock Valuation in a Developing Economy: A Case Study of Thai Telecommunications Stocks", International Conference, Asia Pacific Economics and Business Conference, October, Sarawak.

[13] Islam, S. and Watanapalachaikul, S. 2002, "Time Series Financial Econometrics of the Thai Stock Market: Results and Applications", Seminar paper, September, Victoria University, Melbourne.

[14] Islam, S., Oh, K. B. and Watanapalachaikul, S. 2001, "Empirical Characterization and Financial Issues of the Thai Telecommunication Industry", Seminar paper, November, Victoria University, Melbourne.

[15] Islam, S., Oh, K. B. and Watanapalachaikul, S. 2001, "Stock Valuation: A Case Study of the Thai Telecommunication Industry", Seminar paper, July, Victoria University, Melbourne.

[16] Kiranand, S. 1999, “An Investigation of Asian Stock Markets Integration”, Dissertation, Chulalongkorn University, Bangkok.

[17] Kwon, C. S., Shin, T. S. and Bacon, F. W. 1997, “The Effect of Macroeconomic Variables on Stock Market Returns in Developing Markets”, *Multinational Business Review*, vol. 5, no. 2, pp. 63-70.

[18] Mishkin, F. S. 1997, “Understanding Financial Crises: A developing country perspective”, The International Bank for Reconstruction and Development, The World Bank.

[19] Nasseh, A., Strauss, J. 2000, “Stock Prices and Domestic and International Macroeconomic Activity: A Cointegration Approach”, *The Quarterly Review of Economics and Finance*, vol. 40, pp. 229-245.

[20] Oh, K. B. 2001, “An Empirical Analysis of Financial Issues in The Australian Electronic Commerce Sector”, Dissertation, Victoria University, Melbourne.

[21] Schwert, W. G. 1987, “Effects of Model Specification on Tests for Unit Roots in Macroeconomic Data”, *Journal of Monetary Economics*, vol. 20, no. 1, pp. 73-103.

[22] Sukhamongkhon, S. 1994, “A Test of Microeconomic Factors on the Stock Exchange of Thailand Using the APT Model”, Dissertation, University of Birmingham.

[23] Watsham, T. J. and Parramore, K. 1997, *Quantitative Methods in Finance*, Thomson Learning, London.

[24] Wongbangpo, P. and Sharma, S. 2002, “Stock Market and Macroeconomic Fundamental Dynamic Interactions: ASEAN-5 Countries”, *Journal of Asia Economics*, vol. 13, pp. 27-51.

TTODM Strategy in China: A Policy Review

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Abstract

China implemented Technology Transfer from Opening Domestic Markets (TTODM) Strategy to attract FDI and obtain spillover effects to domestic economy since mid-1980s. An important source of foreign investment is from large international corporations, especially from MNCs, whose investment decisions always have strategic perspective. The share of investment from MNCs is increasing and received more intention in recent year since government believes that MNCs can promote technology transfer and management skill spillover into China's economy. The last decade witnessed the implementation of the strategy and its weakness. This paper explores the nature of the strategy, the reactions of foreign investors and domestic barriers to the strategy. The main findings demonstrate that TTODM strategy makes great contributions to upgrading China's economic structure as whole. But the original objectives are not satisfied as expected due to MNCs' technology transfer policy, domestic partners' capability and domestic market barrier. In last part of the paper, policy modifications are suggested to make TTODM more effective with China's accession to WTO.

Introduction and Literature Review

Briefing of China's open door policy to attract FDI

There is a misunderstanding that China started to carry out open–door policy to outside world since 1978.As a matter of fact, China was not an autarky economy even before 1978. China begun to open its door in early 1950s to Soviet Union and had made great achievements before 1978.With the capital inflow and technology transfer from Soviet Union before mid-1960s, China established its own infrastructure industry and heavy industry structure. Unfortunately, this process was abandoned by the ideological conflict and jeopardized diplomatic relationship between two countries since mid-1960s.

In early 1970s, China tried to upgrade its industry by importing advanced equipments from western countries and building new factories. The key projects were in steal, chemical and textile industries. This plan was implemented between 1972 and 1975 and was suspended when Mr. Deng Xiaoping lost his power again in 1976.

In 1978, China officially announced its open-door policy and encouraged inflow of foreign capital and technology transfer. Aiming at catch up with advanced economy, China lunched lots of laws and regulations to attract foreign investment with foreign direct investment (FDI) taking superiority. Since early 1980s, the inflow of foreign capital has been increasing steadily and China keeps its position as a second largest destination country to absorb FDI in the world for more than 8 years, only next to the States.

The inflow of foreign capital can be classified into two categories. The source of majority of investment is from Hong Kang, Taiwan, Macao and overseas Chinese. This kind of investment usually focuses on labor-intensive industries and its contribution to China's economic structure upgrading and technology transfer is limited. Another source of foreign investment is from large international corporations, especially from MNCs, whose investment decisions always have strategic perspective. The share of investment from MNCs is increasing and received more intention in recent year since government believes that MNCs can promote technology transfer and management skill spillover into China's economy. A strategy of technology transfer from opening domestic markets (TTODM) is one of the measures to attract foreign investment.[i]

It is necessary for the assessment of the TTODM strategy and insights of the strategy are valuable for modification of the strategy. That is what this paper focuses on.

Policy objectives of technology transfer from opening domestic markets

Numerous things happened at the aid of foreign investment during the past two decades have demonstrated that "Stones from other hills may serve to polish the jade of this one". China has greatly developed her comprehensive national power and productivity, also with the people's living standard improved to which foreign investments are a great help.

In the mid-late 80's, China introduced the TTODM strategy to attract foreign direct investment by opening domestic markets to foreign investors. The objectives are to gain advanced foreign technology and managerial skills that were scarce in China. This strategy has attracted huge foreign investment successfully and played an important role in China's economy growth.

However, the Strategy is not as effective as expected because of its huge cost and poor efficiency. Many problems directly related with the efficiency occurred when we attract foreign direct investment. Among all these problems, the most prominent one is the deviation of the outcome and our original intention of technology transfer from opening domestic markets

Strategy results review

As a matter of fact, the strategy of *TTODM* was not effective as expected by the policymakers. The following points consolidate the findings.

Cost of market

Foreign investors begin to show great interests toward China when the market is gradually opening up. Especially in 90's, there is a dramatic increase of the foreign direct investment. Foreign invested companies have great comparative advantages with capital budgets; advanced technology and China's favorable policy environment so that they cover a large part of domestic market mainly in many industrial sectors, following the strategy "Market first, profit second."

(1) Telecommunication

Equipments in Chinese telecommunication market are supplied almost by the large multinational companies in the world. Motorola, Ericsson, NEC have already accounted for more than 90% market share, while Motorola covers 70%.[ii]

(2) Beverage

At present, Coco-cola Co., and PepsiCo, Inc. have accounted for more than 20% of the beverage market share, 40%of carbonic beverage. In the beer market, 70% of top 60 companies are joint ventures using foreign brands with annual output of more than 50 thousand tons. Among about 800 domestic beer manufacturers, none covers more than 3% domestic beer market.

(3) Detergent

Four international civil detergent companies, i.e. US owned "P&G", UN owned "Uniliver", Germany owned "Henkel", Japan owned "Kao", have acquired 7 out of 8 biggest Chinese washing powder manufacturers whose annual output are above 80 thousand tons. Among them, P&G is the leading one and has established five detergent companies, including Guangzhou P&G, Guangzhou LangQi P&G, Beijing Panda P&G, Chengdu P&G and Tianjing P&G. At present, washing powder with foreign brands accounts for more than 60% of the total domestic sales volume. While domestic brands like "White Cat", "Power 28" begins to shrink.[iii]

(4) Medicine

15 out of the world top 20 medicine manufacturers have built up their own factories or established joint venture in China till now, a large number of domestic medicine manufacturers have been merged. Imported medicines have congested the whole Chinese market and are widely used in all kinds of hospitals. According to the survey of some big hospitals in Beijing, imported and joint venture products are up to 40% of the total sales volume.

(5) Elevator

Chinese elevator industry is the pioneering industry to attract foreign direct investment. Oltis, an American brand, accounts for 25% of domestic elevator market share and Japan owned "Mitsubishi" and Switzerland owned "Shunda" has the same market share. Thus, these three foreign companies account 75% of market share. Presently, five Chinese biggest elevator companies are all foreign held whose prominent products are using foreign brands, accounting for 60% of the total Chinese annual output.

(6) Bicycle

At present, bicycles from foreign companies account for more than 25% of the total domestic market share. Bicycles with foreign brands account for more than 30% of market shares. 8 out of 15 biggest domestic brands are foreign.

Besides these, rubber, glasses and color kinescopes are under the same situation.

Actual Effect of the Strategy

We have carried out the Strategy at huge cost. From what we have practiced, foreign investment have brought China new technology and developed the domestic technology. However, compared with the huge cost, the benefits are low imbalanced

(1) International competence is still limited with the imported technology.

Some technologies have helped many enterprises access the world market when we begin to attract foreign investment. But these imported technology and equipments are not as prominent as expected especially in daily use articles industry and durable goods industry. Products with brand image, advanced technology and competitive edge are few in China. Most products exported are not those in principal mover industries. Their export is extensive at low price aiming at gaining foreign exchange. But with the opening up of domestic market, extensive export is gradually losing its edge. For many years, we have been occupying international market products with low labor cost. But increasing antidumping measurements in exported countries restrict the expansion of this volume. In sum, the goal to increase technical level and global competitiveness is not fulfilled through capital infusion.

(2)Types of Industries invested limit the effect of technology import and diffusion.

One motivation of foreign investors is to surpass the trade barriers (including tariff barrier and non-tariff barrier) and set up companies to make profits. Most of these investors are MNCs with manufacturing and processing systems all over the world. The enterprises they set up in China are almost labor-intensive which can't easily adapt new technology. Moreover, some key parts are manufactured in home countries thus we can't get the thorough technology or form our own manufacturing and processing system.

(3)Imported technology is limited and unsystematic.

According to statistics, of the total amount of foreign enterprises in China, those importing technologies of 80's accounts for no more than 1/3, and those of 70's accounts for approximately 1/3, while those importing technologies of 90's accounts for a marginal percent. At the end of 1995, only 1,000 enterprises are qualified as 'Technologically Advanced Enterprises', a marginal 0.8% of foreign invested enterprises in corresponding period. Domestic partners find difficult to obtain systematic technical materials. In automobile industry and telecom equipment industry, foreign sides transfer non-core technologies while keep core technologies confidential. For example, in Shanghai-Volkswagen Auto Co, Ltd, spillover effect in technology transfer is limited. The techniques in manufacturing *Santana* are studied and achieved through cooperation among domestic scientific and technical personnel. In some industries, we are technologically dependent on foreign technologies. Since some technologies in foreign invested enterprises cannot be adapted without core tech, some production material and spare parts are to be imported. Foreign investors control on key technology has limited the technical development in domestic enterprises.

Research literature review

Although China's rapid economic growth and progress in absorbing FDI draw the attentions both from industry and academic society, and numerous researches have been conducted in this area, very few researches has focused on the assessment of absorbing foreign investment.

Among the few researchers, Pei (1997), Wang (1999) make the pioneering research, followed by Wang (1999). Pei's research concentrated on FDI and domestic industry competitiveness and his conclusion showed positive relationship between them. Wang demonstrated the problems concerning technology transfer from lifting domestic market access barriers. In the area of FDI research, the research center for international investment at

CASS plays a key role in China. The center's annual report is a good reference.

Methodology

In my research, I try to integrate research literature and first hand investigations by government agencies. Some data draw from reports to Ministry of Science and Technology.

Since my thesis is in the style of research report, I employ qualitative research method in economics and case study method in managerial research. Raw data and statistics are used to support my findings.

Strategic Analysis of the TTODM

Relationship between opening domestic markets and technology transfer

Market is the external condition for an enterprise without which one can't survive. While technology is the internal condition without which enterprise can't continue to run. Market and technology are both necessary. The strategy is to strengthen technology by sacrificing part of market.

Considering the whole society's benefits, sacrifice of domestic market will harm the benefits of domestic enterprises so that the whole society's benefits will be decreased. While importing new technology will strengthen domestic technology so that the whole society's benefits will be increased. It's clear that the balance of these two sides is important to the whole society's benefits.

Before the reforming and opening up, China imported new technology by means of technology trade, including buying whole sets of equipment, key equipment, patents, technology license, and technology service. The purpose is to change the imported technology into our own. However, we encountered many problems when we trade for technology, for example, lack of foreign exchange, debt crisis, focusing on hardware but ignoring management skills, etc .After the reforming and opening up, China focuses on attracting foreign direct investment which is better than trading for technology because we can import new technology together with advanced management skills. Thus the Strategy has been put forward. The Strategy implies that foreign direct investment can transfer advanced technology which can be assimilated and absorbed in China.

Policy definitions and effects

Full understanding of the Strategy is the key point to successfully carry it into execution. In my opinion, we should do this from the following three aspects.

Technology spreading effect

Most people accept this point. However, imported technology is not surly more advanced and we can't assimilate and absorb it into our own technology so that the technology spreading effect is limited.

Technology-affecting effect

The second point of the Strategy is to develop our related industry by attract direct investment; we call it technology affecting effect. Internalized investment can help to develop our domestic technology in an indirect way although we can't assimilate some technology. We have to admit from the whole, this technology affecting effect is quite limited because a key factor to the success is that the products manufactured must be intermediate-products.

MNCs make its division within its global network. their product value chain almost covers every part form product concept, R&D to the final product because of their advanced technology and finance advantage. Final products have weak industrial linkage effect since the investing country provides key intermediate-products. Thus technology-affecting effect is quite limited.

Technology innovation effect

The third point of the Strategy lies in the opening up of domestic markets and the infusion of foreign capital. They are likely to boost effective competition and hasten technical innovation in domestic enterprises, which is the main purpose to 'exchange market for technologies'.

From above, opening market doesn't ensure gaining new technology. Only through efficient competition can we gain needed technology and create new ones so that we can upgrade the whole society's economy structure.

For a long time, domestic enterprises face no pressure of competition or innovation because of unhealthy market environment. The real purpose of attracting foreign investment is to create a new environment to strengthen competition to motivate domestic enterprises. Only in this way can they find more efficient ways to run their business, to put more efforts in research and development, to create new products, to improve manufacturing process, to improve the product quality, to survive in this fiercely competitive market. In short, we should carry it into execution in the following step:

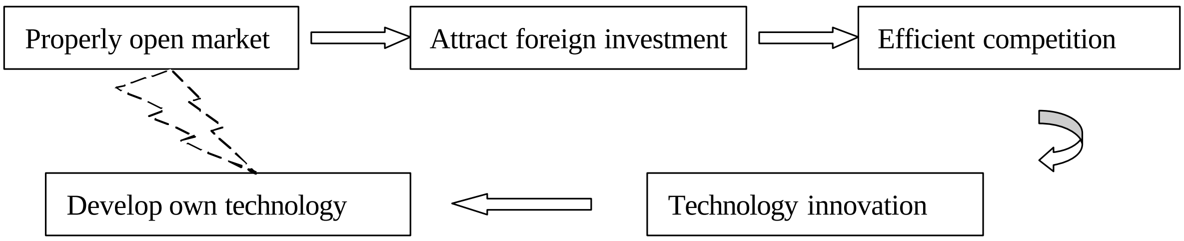

Figure 1: Execution of TTODM

The Strategy doesn't simply mean technology spreading effect or technology affecting effect; instead, it means technology innovation effect.

Domestic markets share declining: evidence and reasons

As stated above, foreign invested companies due to external and internal factors occupy most of domestic markets and market share for domestic firms is declining. Foreign investors seize domestic market shares by technology internalization in invested enterprises. Their approaches to control invested enterprises are as following.

Foreign Share Holding in Foreign Enterprises

Laws and rules don't have definite principles or regulations on share holding. They only stipulate a minimum foreign holding of 25% without regulating upper limit. It's stipulated in internal documents that joint venture in retailing industry.

Backbone industries should be domestic holding. Whereas many domestic investors, hasty to infuse capital, admit foreign sides' share holding or take laissez- faire attitude on foreign sides measures to illegally control joint ventures.

In the early stage of establishing a joint venture, foreign holding are mainly dominated (foreign sides holds over 51% of share) or relatively dominated. To realize control power without large capital input, foreign investors often overvalue their machinery assets, industrial property rights and specialized technologies, while at the same time undervalue state-owned capital stock..

Increase shares in venture

It's very common for multinational corporations to expand their investment voting power in China. A survey indicated that from Sep., 1995 to July, 1996 27 out of 83 famous multinational corporations had increased there shares in the venture. Three companies had decided to do so and several others had prepared to practice the same way. 30 corporations with the average of 375 billion US dollars have added 1.126 billion US dollars which is equal to half of the original capital. Foreign investors always expand their investment holding to control joint venture with their capital advantage. Following measures are usually used:

- ✍ A large number of multinational corporations had only a small portion of the whole investment holding at the beginning because of China's special regulations or their poor faith in China's development. However, when joint ventures have developed into a large scale with successful brand name, they try to expand their equity. According to product life cycle, joint venture will experience three stages: growth, maturation and decreasing. In the first stage, lots of money and proper equipment are needed; moreover, in order to create a success brand name, advertisement, promotion expenses are also very huge. Comparing to maturation stage, in growth stage, all the parties bear quite a risk. When joint venture steps into the second stage, most of the investments have been paid off, a successful brand name has made great profits, it is a harvest stage. Foreign sides expand their portion of investment for more shares of profit gain.

- ✍ Most foreign investors are multinational corporations with rich marketing experience and powerful capital support. They establish and strengthen their own brand name and company image through numerous marketing campaigns. However, a survey (Hu, 1999) on joint venture's financial statement indicates that promotion and advertisement expenses are limited. Some joint venture restricted their business period shortly on purpose in order that the joint venture can quickly and easily be approved and established at the beginning. When the period is going to expire, while Chinese party strongly hope to continue the cooperation, foreign investors ask for expand the investment holding at this point.

Technology reasons

Foreign technology is mainly used in some joint ventures. Chinese party is afraid of violating other company's intellectual property rights so that they give up control power in order escape from too many responsibilities.

Market Penetrations and Market Defense

After foreign sides control joint ventures, they occupy markets and fiercely attack state-own and private-run enterprises. In a research on 14 multinationals' goals on domestic investment by Mckinsey in 1994, many of these multinationals described their goals as rapid expansion of the scale of Chinese investment, gaining dominant market share and, if possible, setting barriers to avoid existing competitors' market entry. To achieve the above goals, foreign investors adopt different approaches.

✍ *Extension of Market Channels.* According to a research carried out by "EIU Consumer Market Research", foreign enterprises regard the extension of scales Channels the highest barrier to enter Chinese market where products placed in retailing stores on the best shelf being practically crucial to market success. Since the1990's, Chinese distribution channels have seen dramatically change, especially in the whole-retail system, where the number of new supermarkets and train stores are soaring. The two are gradually becoming a main part of channel system.

Many barriers have made it difficult for foreign capital to enter into wholesale-retail channels. Fixed sales channel and distribution system resulted from plan economy is an invisible asset of domestic enterprises. To utilize the advantage, foreign sectors compete to control joint ventures through various measures mentioned above. Gaining the control of joint ventures, they distribute their brands through existing domestic channels, and thus, gradually establish their own sales matrix. Domestic enterprises are likely to lose edge because of comparatively a lack of capital and brand image.

Foreign investors encourage channel members' boycott to competitors' products by signing exclusive agreements with intermediaries and retailers, selectively holding promotion activities and providing financial rewards to channel members; They also compete for shelf space by paying higher shelf fee and carrying out constant promotion activities; They may even establish integrated series of relative product lines to squeeze shelf place of competitors. For example, shampoo products of P&G includes a list of brands, each of which targeting a specific group of consumers. These items have squeeze shelf place of many home brands in supermarkets and stores.

✍ *Target Market Strategy as an Early Entrant.* Market strategy as an early entrant is a positive way. It is useful to seize market shares and set barriers before competitor' invasion into the target market.

Target markets may be geographically divided or important segments in an industry. Since uptown and downtown areas present vast difference, multinationals may gradually expand markets heart cities including Shanghai, Beijing and Guangzhou to other cities and finally to rural areas.

Failure of technology transfer: evidence and reasons

Quality analysis of overseas investors' technology export

Technologies introduced via foreign capital are largely targeted on multinationals. Markets in developing countries including China are new profit grow points for multinational corporations which make profits by firstly transferring products and then capital, and finally brands. Technology transfer is based on not lonely the efforts of both transferor's and receiver's, but also the will of the former.

✍ *Motives of multinational corporations' technology export*. The most influential theory on foreign direct investment is John Dunning.'s Eclectic Theory of International Production (John Dunning, 1977). According OLI paradigm, foreign direct investment requires their possession of three advantages, e.g.(a)Ownership specific advantages, namely "competitive advantage" or "monopoly advantage", including technology advantages, managerial advantages, scale economy advantages and relative market power advantages.(b) Location specific advantages, i.e. immobile factor advantages in a host country, such as specific geographical location, abundant natural resources, potential market capacity, economic policies, legal system and investment climate. Technology advantage is crucial that multinational companies prefer the internalization of advanced technologies to ensure the maintenance of monopoly position and profit maximization. (c)Internalization specific advantages. International competitiveness for multinational firms lies in the internalization of technology advantages. Technologies resources exchanged in internal environment are distributed according to multinational firm's strategic goals so that monopoly advantages can be maintained.

As a core advantage for multinationals to gain long-term benefits, technologies are not to be exchanged in market. For multinational companies, technologies are more important since the transfer and diffusion of advanced technologies is likely to boost a forceful competitor in market. To avoid this situation and maintain a technological leading position, multinationals' technology transfer is based on the product life cycle, i.e. technologies after and in the stage of standardization are to be transferred, while those in and before the stage of growing are not to be transferred. In practice, two approaches are considered in foreign direct investment.

✍ *Reluctant to Internalization of technology advantages* .The internalization is in fact the transfer of productivity rather than technology. Multinational companies generally establish Research and Development facilities in home country. For example, Research and Development expense in American multinational companies totaled 41 billion US dollars in 1982 with local companies accounting for 91.9%, subsidiaries in other developed countries 8.2% and relating operations in developing countries a mere 0.6%.

Moreover, internalization often requires a secure intellectual property rights protection system in host countries to prevent the diffusion of technologies without interests. In this way, technologies are kept within foreign firms from a host country. That is reason why High-Tec foreign companies tend to establish wholly owned subsidiary in China rather than joint ventures.

✍ *Host country's capability to adopt new technology.* The contribution of technology transfer to the development in China is often reflected in two aspects: the quality of and the rate of the diffusion of technology. Although technologies imported by internalization are advanced, they cannot be well adopted by our country. The diffusion rate is very low, even equals to zero. Such investment does not allow effective transmission of knowledge or make any sense to the technology development in our country.

.Non-internalization of inferior technologies

Multinational companies often adopt the approach of non-internalization for technologies gradually losing edge, i.e. they gain profit, which would not be gained by internalization through weak control on non-core technologies at the final stage of product life cycle, presenting no value to be confidential. For example, technology license or technology holding present low or even zero cost to fully realize residual value besides occupying market in host countries and increasing sales volume. Although the diffusion rate of these technologies is comparatively high, their gold content is unfortunately low. And the effect of diffusion turns out to be unsatisfactory. Moreover, capital assets as the mean of FDI in some coastal regions in China accounts for more than 70%.

Some foreign investors present no interest in controlling the operation of invested items. Some of the capital assets invested are obsolete. Managerial and technical transfer in this way is limited. Many foreign investments in developing countries are driven by the theory of 'Technology Gap'. According to the theory, technology gap is prerequisite for international technology transfer and typical of all gaps between developed and developing countries. Developing countries are supposed to be technologically backward, or they may threat developed countries. Whereas we regard technology imported advanced and adaptable without analysis of their true quality. As a matter of fact, technologies are generated, transferred and utilized under the co-efforts of social system, value system, technology system and natural conditions of a country. Proper technology is those adaptable to social environments and effective to meet social demands in a right way. Not all technologies transferred are suitable for us.

Restrictions from home countries

In order to hold competitive edge of their own, home countries often adopt encouraging or restricting measure to domestic or local companies engaged in foreign investment. On one hand, to meet the need of industry upgrading, they encourage local industry unsuitable to survive such as heavy-polluting industries and some other declining industries to engage in foreign investment; on the other hand, they restrict the technical transfer of enterprises to maintain comparative advantage. For example, the US government has divided host countries into seven groups according to their degree of export requirements, i.e., Z, S, Y, W, Q, T, and V. China falls in group V. America has imposed many discriminatory technology export control measures to China. We can conclude that the will of home countries often go against our original intension to import technology.

Factor analysis of competition environment

As is known to all, competition is one of the major features in market economy. However, in a long period, China has adopted the super-national treatment to attract foreign investment, i.e. the government provides treatment more favorable to foreign direct investment than to domestic one.

Super-national treatment is, after all, a policy stimulating investment in an imperfect market mechanism. Admittedly, it has played a positive role in importing foreign capital, expanding the scale of foreign capital and providing job opportunities. However, it is in fact an unbalanced growth strategy, a second-best choice to achieve efficiency at the cost of partial fairness in specific economies. Unbalanced growth, second-best choice and constantly dynamic economic environments contribute to a poor benefit to the policy.

From the point of technology exchange, an internal contradiction is between providing overseas investors favorable treatment and the TTODM. Special favored treatment hurt fair competition environment, which is a base for the Strategy. Socialistic market economy requires fair play, which super-national treatment and the resulted discriminative policies among regions and between domestic and foreign companies have, in fact, become operational advantages for foreign companies and hurt the interests of local ones. This is contradictive to the principle of fair competition. State-owned enterprises are major resource of the governments' financial revenue, heavy social responsibilities, which add to their inferior position in competition with foreign enterprises because of less preferential treatment.

Foreign enterprise with advantages in technology, management, financial capacity and light tax burden, compete with domestic ones with backward technology and poor capital accumulation. Foreign capital flows more to the east because preferential policies are focused on east coastal regions. The economic influence of coastal regions to the middle and east part is weak and has backwash effect. That is to say, production factors as capital, labor, human and natural resources in comparatively backward regions are largely attracted by some highly developed ones. According to statistics, the east accounts for 86.7% of total foreign direct investment in 1996 and the middle part 9.6% while the west a mere 3.1%. Imbalanced import of capital makes it hard to adjust industrial policies in our country.

General speaking, preferential policies seem more likely to attract capital with small amount and short perspective. Foreign capital flows into labor-intensive industries rather than capital and technology-intensive ones. Such import of investment focusing on capital rather than knowledge does not accord with the principle of the government's industrial polices. To some extent, preferential measurements to foreign enterprises reflect the principle of industrial policies. But the rules are general because they are not specific to a certain industry or product. Thus, they can't guide foreign capital effectively.

Even if actual strengths of competition entitles are matched, obviously unfair environment is likely to cause failure of competition and distortion of market, which cannot boost technical development in entities. At the same time, super national treatment has other disadvantages. For example, to attract more foreign capital, some local governments implement reduction and exemption of taxes. They result in the nation's large amount of tax drain. In order to realize local economic growth in spite of the tight fiscal budget of the nation, some local governments, driven by local interests, implement preferential policies rather than construction of good investment environment. The instability and non-transparency of policies are other factors hindering the effective utilization of foreign capital.

A case study: Uniliver's marketing strategy

Many state-own and privately run enterprises conventionally increase market expansion by improving product quality. Specific strategy for market expansion and invasion is scarce, let alone anti-attack to competitors. After multinationals analyze and forecast domestic competitors' possible target markets and distribution channels, they vie to be first to put similar products into the target markets. They often carry out a large scale of advertising activities and distribute sample products to establish a brand image as an early entrant into the markets. In 1993, when Uniliver negotiated with Shanghai Washing Powder Chemical Co. on joint production of washing powder, allegedly P&G and Henkel were planning to enter the market in Shanghai. Uniliver resolutely decided to dominate the market by implementing target marketing as an early entrant. They imported the products with high cost and extensively input marketing efforts on *Omio* powder? To meet the resulted market demand, they import the product by air. Their marketing strategy turns out to be a success. In 1995, *Omio* accounts for a leading 30% of the domestic market shares. Many multinationals with rich marketing experience could not parry blows from Uniliver's marketing strategy as an early entrant, needless to say many domestic state-own and privately run enterprises

Main findings and policy implication

Main findings

The past two decades has witnessed the rapid growth of China and its achievement in attracting FDI.TTODM strategy makes great contributions to upgrading China's economic structure as whole. But the policy original objectives were not satisfied as expected since MNCs' Technology transfer policy and domestic partners' capability.

Policy modification is suggested to make TTODM more effective with China's accession to WTO.

Adjustment towards WTO regime and realizing two basic transformations

Adjustment towards WTO regime

China has access into WTO and is bound to WTO regime. WTO agreements do not prohibit members from using some investment measures. For example, host countries may require foreign investors to transfer the latest technology and carry out R&D activities in host countries. Local investment may hold a certain percentage of shares. According to protocol for China accession to WTO, we still may firmly require foreign investors to provide advanced technology without violating relative principles of the WTO. Besides, we may insist on domestic sides' share holding in some dominant industries. The prohibition of foreign share holding also completely complies with the WTO regime in foreign investment.

Realize 'Two Transformations', Adapt the Import of Foreign Investment with the upgrading of National Industries Structure

The Government is suggested to realize two fundamental adjustments in improving the quality of foreign investment.

- ✍ *Shift from 'Capital Import' towards 'Technology Diffusion'*. TTODM was previously a guidance to import foreign direct investment, but the technical effect is trivial. The effect is mainly on infusion of capital. Large scale of foreign capital inflow speeds the increase of foreign exchange reserve. And it plays a positive role in enlarging production scale and providing more job opportunities. Its positive role in economy of shortage is obvious. As we can see that advanced technologies transferred are few, but its contribution to productivity is great.
- ✍ *Improve Global Competitiveness Rather Than Increase Domestic Supply.* Foreign investment focused on the domestic market coverage. In recent years, products by foreign invested enterprises are mainly distributed in domestic markets. The direct effect is the increase of domestic supply. With domestic markets saturated and regional competition excessive, demands are insufficient. The only way to reserve sustainable growth of national economy is to encourage foreign invested enterprises to compete in global markets

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Fare competition policy

National treatment is a basic principle in the WTO rules on international trade, and it has been formed as an international custom and usage. After China's entry into the WTO, national treatment to foreign investment is unavoidably urged.

Perfect Market System and Amplify Domestic Legal System.

Perfect market system and ample legal system are prerequisites of national treatment. Practice demonstrates that international capital often flows to countries or regions providing higher protection to foreign investors and investments other than countries that appear to promise national treatments. We should speed the construction of the structure of foreign investment law and regulations, improve the efficiency of administration. In this way, we may provide a fair competition market for domestic and foreign sectors.

Gradually Abolish Preferential Tax Policies.

Preferential policies for foreign investor are mainly tax reduction and exemption policies. In fact, foreign investors are becoming more and more fair competition and market potential oriented. The attraction of favorable tax is relatively low. During the transform of tax structure, the central government has abolished Business Consolidated Tax and Integrate domestic flowing taxes. However, at present, foreign enterprises still enjoy a large amount of tax reduction and exemption. The abolition of such preferential policies is urged to realize equality between the tax burden of domestic enterprises and that of foreign ones.

Substitute Regional Policies for Industrial Policies.

The infusion of capital through regional and favorable tax policies does not comply with the principle of national treatment. The implementation of national treatment may include the substitution of regional policies for industrial ones. Industrial policies should be integrated with the development of foreign invested enterprises. Domestic and foreign enterprises should be treated fairly. For example, the government should gradually abolish favorable policies for enterprises, domestic or foreign, engaged in service trade, heavy polluted &low value added industries and repeated imported industries. We need not only industries catalog but also relative mechanism to stimulate foreign investment.

Legal framework

Foreign holding is becoming an issue. Many foreign investments have hurt home brands and occupied domestic market illegally by share holding. We have to attach great importance to the foreign share holding issue.

Clarify the Principle of Foreign Share Holding.

Whether to permit foreign holding and in which industry or section to permit is a complex issue, so we need a clear criteria. Following factors should be considered.

- ✍ *Importance of industries.* Industries involving national sovereignty and security, infant industries and dominant industries are not allowed for foreign holding.
- ✍ *Advantages of technologies*. Industries present large gap with international advanced level and those prefer the technology infusion to import should be allowed for foreign holding tentatively.
- ✍ *Market share.* Industries aiming at the extension of international market share (more than 60%) should be allowed for foreign holding.
- ✍ *Specific cases* .For industries aiming at the increase of domestic sales volume, policies varies with specific cases, i.e. those occupying vacant domestic market or cultivating new market are allowed for foreign holding. Those rapidly extend the market capacity are suggested to foreign holding. Those with saturated domestic market aiming at occupying existing market are not allowed for foreign holding.
- ✍ *Anti-monopoly.* Industries or products with large profit gain, low technology barrier, are likely to result in monopoly, thus they are prohibited from foreign holding.

Regulate years and portion of foreign holding

For joint ventures permitted for foreign holding, the government may regulate the length of operation years, no more than 20 years in principle. If the prohibition of foreign wholly owned enterprise and that of foreign holding present no difference, the government is suggested to regulate the two into the prohibition of foreign holding. Or we may regulate an up-line of foreign holding, 70%, for example, in case foreign investors hold more than 90%

of the whole share.

Market access to all domestic players

With the development national market economy, the portion of domestic enterprises is gradually increasing. Domestic holding should not be confined in state-owned. We should allow other domestic economic units for share holding or comparatively leading position.

Strengthen industrial administrative agencies' guidance

Industrial administrative agencies should engage in not only the making and amending of industry policies, but also the auditing and approving of foreign holding in joint ventures. In some cases, they should have the right to object. However, their make of industry policies should base on the central government's guidance on industry policy and catalog rather than on local or sector interests. Central government's guidance should be amended according to economy development.

Perfect legal environment protect domestic legal rights and fair competition

Concerning the infusion of technology, the government has made a series of laws and regulations. We basically realize that we have laws to observe on the infusion of technology. However, with the variation of foreign investment and the innovation of financial tools, laws and regulations should be amended further.

- ✍ *Protect the legal rights of shareholder, object abnormal transfer price*. Many countries in Common Law and Continental Law system, have paid great attention on the protection of the legal rights of Minority of shareholders by amending relative laws and regulations. We should amend relative laws to ensure that venture partner can be able to protect their own rights in the occasion of foreign holding. To tackle with abnormal transfer pricing, we should perfect tax laws.
- ✍ *Oppose monopoly, oligopoly and unfair competition.* Monopoly is the characteristics of multinationals. With powerful capacity and share holding, they occupy markets, defeat competitors and even control market price. Ill now, foreign investments have concentrated on several industries including detergent accounting for 35% of market share, cosmetics 34%, beer 20%, electronics 30%, automobile 20%, mechanical products 13%. We should avoid their monopoly and oligopoly of domestic markets by share holding. Thus, we should speed up the implementation of Antitrust Law, we may combine industry policies with competition policies, regulate the maximum market shares in specific industries for foreign investors and restrict pricing deal, market dividing, production restriction, price discrimination and monopoly, Merger and Acquisition, restrict and avoid unfair competition such as antidumping, restrictive purchasing agreement, export agreement and discretionary technology import agreement, while at the same time strengthen the operation of Laws to protect fair competition.
- ✍ *Laws and regulations on Merger and Acquisition, protect domestic legal rights and fair competition.* Domestic laws on Merger and Acquisition are not specific. We may learn from the foreign experience in this area. American Laws have firm regulations on enterprises' Merger and Acquisition. The

13D and 14D clauses in U.S. Security Act announced in 1993 and the Williams Act announced in 1968 have clear regulations on enterprises behaviors in monopoly which block fair competition. We should learn from experiences of western countries especially the America to make M&A Laws adaptable to Chinese enterprises.

Domestic enterprise core competitiveness

Facing ferocious competition for market shares, many domestic enterprises will have to increase competitiveness to maintain or extend market shares.

.Speed the Construction of Conglomerates

Most domestic enterprises are small scale, lack of capital and R&D facilities, while multinationals are financially powerful and competitive after several decades' capital accumulation and global operation. Domestic enterprises have such great gap with foreign counterparts that they are inferior in market competition. Conglomerates constructed across regions, industries and equity structures or countries possess the advantages of domestic industries, policies and regions in macro environments and those in microenvironments including production, technology, management, human resource and internalization. Forming conglomerates enables domestic enterprises to countervail foreign sectors in market. The construction of conglomerates should be market oriented rather than administration oriented.

Strategic Alliance

Global competition is becoming more and more ferocious. In order to minimize financial risk and share huge amount of R&D expenses, multinationals' strategic alliance across industries is essential. 'Strategic Alliance' of multinationals is defined as a cooperative relationship on mutual benefits to achieve a strategic goal. Strategic Alliance is different from 'joint venture' or "cooperative venture" in that it is a joint effort of R&D, market and franchise rather than a construction of entities. By joint R&D, shared information and joint market access, mutual international competitiveness is enhanced. Strategic Alliance is not only with large-scale multinational, but also with domestic enterprises with comparative advantages.

Cross –boarder Operation

Home enterprises engaged in cross-national operation may realize the best allocation of resources by establishing global production and marketing system. In regions with low labor cost or other external advantages, joint venture, cooperative and single-venture may be adopted. In industries with ferocious competition, Strategic Alliance may help to lower operation risk. Enterprises with global view may establish global production or marketing facilities to extensively participate in worldwide operation.

Inspection and audit

To undertake thorough commodity inspection and surveying of foreign invested assets

Sets of equipment and technology brought by foreign investors should be thoroughly valued because they are directly related with foreign investor's share holding which demonstrate their capacity to control the joint venture. Commodity inspection authorities and related technology administrative departments should undertake commodity inspection and surveying work and issue inspection certificates in all cases as a proof to the foreign investor's invested capital.

To those invested commodities, commodity inspection authorities should check whether the real value equals to the price given, the specification conforms to the trade contract. At the same time, all the import and export commodities through foreign merchants should be inspected and surveyed to ensure the conformation of value and price (ensure whether imported commodities, raw materials and parts are up to standard, whether exported commodities and parts are not up to standard). For those commodities, equipments, raw materials and daily use articles (most of which are large commodities such as automobiles), customs should not only undertake inspection but also trace for detailed survey to ensure these goods are not be bought in and out at a profit by foreign merchants.

Strengthen the government's internal auditing in enterprises

Foreign invested enterprises should not only be audited by auditing authorities but also be rechecked by national auditing bureau to prevent the illegal profit transfer, capital withdraw, tax mitigation and evasion.

Reference

[1] Buckley, P.J. *International Business*, 1998, London: Macmillan.

[2] -----and Casson, Mark C. *The future of the Multinational Enterprise*, 1976 London: Macmillan.

[3] ----and-------,The Optimal timing of a foreign Direct Investment, *Economic Journal*, 91 75-87

[4] Dunning, John H, 1977, Trade, Location of Economic Activity and the Multinational Enterprise: A Search for an Eclectic Approach. In B. Ohlin, P.O. Hesselborn & P.M. Wikman, eds, *The International Allocation of Economic Activity*.395-418, London: Macmillan.

[5] DONG Dezhi, Rethinking of Objectives for Foreign Investment Policy, *Journal of International trade*, Vol.4.

[6] GU Shugui, 2001,"New Firm Concept and Competition Advantage in LDCs", *Journal of International trade*, Vol.1.

[7] HU Jingyan, *Best way to absorbing Foreign Investment*, CITIC Press, 1995.

[8] HU Lifa, *Empirical Study and Policy Choice on the Optimal Scale of Utilizing Foreign Capital in China*, Research on International Business, June, 1999.

[9] Jan Selmer, 1999,"Effects of Copying Strategies on Socioculture and Psychological Adjustment of Western Expatriate managers in the PRC", *Journal of World Business* 34(1), 41-51.

[10] JIANG Xiaojuan,"R&D in China from MNCs", *Science and Technology Review*, 9, 2000.

[11] Khan Zafar Sheh, Patterns of Direct Foreign Investment in China, *World Bank Discussion Paper*, China and Mongolia Department Series, Washington,1991.

[12] LI Lisheng, SHAO Dongya, and PANG Long, *M& A in China by Foreign Capital*, China Economic Press, 1997.

[13] LIU Haiyun, *MNCs Theory and Practice*, Huazhong Institute of Technology Press, 1998.

[14] LIU Zhong, Case Study on Foreign Equity Holding in Tianjin, *Foreign Capital in China* June,1996

[15] LU Shengliang, *International Experience and China's Practice for Utilizing Foreign Capital*, Jilin People Press, 1997.

[16] MA Yu, Realizing Second Strategic Transformation, *International Trade Journal*, September, 1999.

[17] PEI Changhong, Utilizing *Foreign Capital in Developing Economies*, Workers Press, Beijing, 1996.

[18] --------, *Utilizing Foreign Capital and Industrial Competitiveness*, Social Science Press, Beijing, 1997.

[19] WU Yuetao, *Can Foreign Capital Takeover China*, Beijing Enterprise Management press, 1997.

[20] WANG Jun, On Technology Transfer from FDI, *Economic Forum,* May, 1999.

[21] WANG Luolin,eds, *Annual Report on Foreign Investment in China*, Economics & Management Press,Beijing,1997,1998,1999,2000,.

[22] WANG Nianzu, and TENG Weizao, *TNCs and China's Open-door Policy*, Nankai University Press, 1990.

[23] --------, 2000, Trends for MNCs and Competition Strategy for Chinese's Enterprises", *Nankai Economic Research,* Vol.4.

[24] WANG Weifang, Features, Problem and Policy Modification for FDI in China, *Journal of International Trade Studies,* October, 1999.

[25] WEI Xinjiang, ZHANG Jianhong and ZHANG Shuhan, 2001, Investment Environment and Foreign Capital Policy, *Journal of International trade*, Vol.3.

[26] YANG Dexin, *Transnational Operations and MNCs,* China Statistics Press,1996

[27] YANG Xia, 2001, Price Transfer Strategy for MNCs in China, *Journal of International trade,* Vol.1.

[28] YANG Danhui, Competition Advantage for Foreign Invested Enterprises, *Journal of International trade*, Vol.1.

[29] ZHANG Chuanzhong, Business Management for MNCs, Jinan University Press, 1996.

[30] ZHANG Fangfang, Relationship between FDI and International Trade, *Economic Review.*March, 1999.

End Notes

[i] Initiated in the mid-1980s after new round urban economic restructuring.

[ii] Telecommunication equipment industry is a model for spillover effect in China according to many scholars. But some industrial experts doubt the arguments.

[iii] In 1997, a dispute over the FDI effects to that industry arose. See Pei (1997).

Section 3
Business Risks, Quality & Supply Chain Management

A Case Study on the Role of Public Sector in Advancing Logistics Management in China
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Tadayuki Miyamoto and Richard Grainger, *Curtin University of Technology, Australia*

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Comparative Speed of Recovery of the Asian Economic Crisis Driven Countries
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The Impact of Cultural Values on the Successful Implementation of Total Quality Management: A Comparison between the Australian and Thai Models
Charunya Parncharoen, Antonia Girardi and Lanny Entrekin, *Murdoch University, Thailand*

A Case Study on the Role of Public Sector in Advancing Logistics Management in China

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Abstract

Logistics management has experienced almost half a century in some western countries. For a lot of Chinese people, however, "logistics" is as fresh as the new century. It is receiving more and more attention from different entities. The last 10 years has witnessed a speedy spread of the concept of logistics management.

In China, government always plays an active role in economic development. Therefore, both central and local authorities are eager to make efforts to promote the application of this new concept. As time passed, more and more problems emerged. Should the public sector rushing in investing warehouses or so-called "Logistics Centers"? Or are there any other options that public sectors can choose to be involved in the evolution process of Logistics Management in China?

This paper attempts to find answers in this respect. In our opinion, the role of the public sectors is more of a catalyst and facilitation nature, together with a stress on assistance to public statutory duties. We will focus our analysis on a case study concerning dangerous goods transportation with particular attention devoted to transport safety and environment protection.

Introduction

Logistics management has experienced almost half a century in some western countries. For a lot of Chinese people, however, "logistics" is as fresh as the new century. It is receiving more and more attention from different entities. The last 10 years has witnessed a speedy spread of the concept of logistics management.

In China, government always plays an active role in economic development. Both central and local authorities are eager to make efforts to promote the application of this new concept. In the Tenth-Five-Year Plan central government has made it a focal point. From south to north, from coastal cities to inland provinces, local governments are considering the rationality of setting Logistics Industry Park, an zone in which many logistics service providers get together to achieve *agglomeration effects*[i]. Others are rushing to invest warehouses or so-called "Logistics Centers", public warehouses focusing on distribution function. Is it a right way to facilitate the development of logistics? Or are there any other options that public sectors can choose to be involved in the evolution process of Logistics Management in China? This paper attempts to find answers in this respect.

Case study

B is a multi-nation company specialized in producing industrial chemicals. Till now B has 2 production facilities in China, including one that is under construction. M, a kind of liquefied dangerous chemical, is a main product in

B’s product line. By National Standard in China, it is grouped as ***tempered*** dangerous goods 6.1, and different from its UN No.-2489. Shelf life of M is 2 weeks if it is kept above 50 or 2-3 months if it is kept below -20 . M can be shipped in bulk by temperature controlled (cold/warm) bulk containers or tank trucks/tank cars/tank vessels, or in drums on standard chemical pallets by temperature controlled container trucks or rail cars.

To determine an optimized logistics strategy of product M in China, managers of Company B do an investigation on current logistics facilities and providers in China, and find they are confronting the following problems:

Regulatory constraints

In China, several departments are involved in regulating and licensing logistics activities. Take transportation as an example, Ministry of Communications is responsible for road transportation and water transportation, Ministry of Railway is responsible for railway transportation, CAAC (Civil Aviation Administration of China) is responsible for air transportation. Each sector sets rules and regulations on their own account. Lack of coordination results in conflicts between different regulations on logistics operations. As we know, Multi-mode transportation can always take advantages of different modes of transportation. However, to use multi-mode transportation means the operators have to comply with different operational requirements. As to M, it is classified as toxic goods by Ministry of Communications. However, according to latest regulations issued by the Ministry of Railway in Feb 2002[ii], it is classified as very toxic goods, which are exerted more and stricter constraints in handling. For example, very toxic goods are required to be handled under real time monitor throughout carriage and are not allowed use inland water transportation.

Local market protectionism

B will distribute its products to more than 10 provinces of China. Certain provincial governments apply local market protectionism policy to some extent. These policies tend to segment the uniform national market. For example, a truck licensed by Beijing local traffic authority is prohibited to operate in Shanghai urban area from early morning till late evening. Only trucks registered in Shanghai can perform deliveries during the day. Thus, costs and delivery lead-time (using truck transportation) between these two cities increase.

Infrastructure constraints

It is difficult for Company B to find competent terminals, tank farms and vehicles to handle its product M. Among 130 open ports and more than 500 berths in China[iii], only ports of Dalian, Rizhao, Ningbo, Xiamen and Tianjin have tank farm or/and specialized storage equipments for liquid dangerous chemicals[iv]. Investment will be needed if Company B locates distribution center in ports other than these four. In terms of railway station, only dedicated stations are allowed to handle dispatch/receipt operations of dangerous goods. That means rail transportation may be unavailable for some destinations. Most trucks running on road have 10 tons of payloads. Trailers that can carry 20’ containers are not available in some area. Therefore, managers find it is difficult to obtain economies of scale in transportation and reduce costs without investing on new high-volume trucks or trailers.

Toll fees for road transportation becomes heavy burden

Form 1996 to 2000 (the ninth-five-year plan period in China), the highway construction has mushroomed. At present, cargoes can be delivered to almost all counties and villages in China. An investigation also implies that road transportation has many advantages in terms of lead time, flexibility, and reliance comparing to other modes. However, one disadvantage cannot be ignored. It is costs. In some instances, total costs of truck transportation can be 2-3 times of that of railway[v]. Many elements contribute to the high cost of truck transportation. One of the key points is toll fee. Many highways are funded by local governments. They usually recover investments by collecting toll fees. Generally, toll fee consists of 20%[vi] of total transportation costs (including handling charges at terminals and local delivery). For example, to transport dangerous cargo by a truck with 10-tons of payload shippers have to pay 3200RMB toll fee from Shanghai to Shenzhen. That accounts to about 20% of total transportation costs, which is about 16200RMB.[vii] Furthermore, because different investors have different policy on toll fee collection, fees drivers actually paid vary greatly. Charges collected by different local governments along highways make cost evaluation an even tougher task.

Qualified service providers scarce

Company B has ever inquire its potential logistics service providers, including domestic providers and foreign providers. Though a lot of providers claim to be able to provide logistics service for dangerous chemicals such as B’s product M, only a few are qualified by current capacities. Many foreign providers have good reputation on dangerous chemicals operation in other parts of the world; however, they have to subcontract business to their Chinese counterparts because of regulation constraints in China. With China’s entry into WTO, they will gradually be allowed to begin their operation in domestic market. But coverage of their networks is still limited. In terms of domestic providers, several giants like COSCO, SINOTRANS have licence to provide nation-wide transportation and warehouse service for dangerous chemicals. But general trucks represent a rather high proportion of existing fleet. Few vehicles can satisfy temperature requirement set by Company B. Meanwhile, though some of them have attempted to provide more value-added integrated logistics service 2 or 3 years ago, it seems that company B may have to wait some time before their performance improved. Besides, there are service providers offering local transportation or warehousing services. Their limited network coverage and/or capacity confine the role they can play.

Absence of safety and environmental protection laws

B is always proud of its environmental friendly operations around the world. In Europe or North America, B complies with strict regulations governing transportation and storage of dangerous goods, recycling or disposing of dangerous goods packages. But in China there are no rules or laws regulating on these disposal measures right now. Since the public give more and more concerns about environmental protection, B hope to keep its image, but do not know what to operate in accordance to Chinese laws.

Recently, B's manager heard such a story. A company located in Tianjin produces metal power with flammable nature, which is grouped as class 4.1 and with UN No. 3089. Chinese inspection bureau regard it as no dangerous goods. They even suggest to ship by passenger/cargo-combined aircrafts. However, IATA and International Maritime Bureau grouped it as dangerous goods because it is a weak explosive hazard when suspended in air in the presence of an ignition source. Its contact with human body is prone to cause skin sensitization. Therefore, its packages should satisfy certain requirements and LCL or boarding on passenger aircraft is forbidden. After put into production, company B's firm in China will also produce this kind product and is planning to export them to South Asia or other overseas markets. Requirement differences in domestic transportation and international transportation will result in variant packaging design as well as cost increase.

What a government can do to facilitate logistics development

Nowadays, integrated logistics management pays more attention on inter-organization co-operations and the role of third party logistics (3PL) service providers. Logistics service functions to bridge production and consumption in a more productive and cost effective way. In Europe or other parts of the world, logistics is always regarded as facilitator for economic development as it helps producers or distributors gaining competitive advantages, contributes to the growth of GDP and employment rate. Thus, governments in different countries are finding ways to speed up its development. What role government should play to take use of this "Facilitator of Economy"? Based on the above case study, we will develop our discussion as follow:

Coordinate different departments of central government to facilitate integrated regulation on logistics operations

As exhibit 1 show, there are five central governmental departments (Ministry of Communications, CAAC, Ministry of Railway, Committee of Economic and Trade, MOFTEC) involved in regulating and licensing logistics operations. Lack of coordination and interest conflict among different sections give rise to inefficiency, even contradiction, of rules and regulations.

Exhibit 1: REGULATORY FRAMEWORK OF CHINA LOGISTICS OPERATIONS

Logistics activity	Related authority
Railway transportation	Ministry of Railway
Road transportation	Ministry of Communications
Water transportation	Ministry of Communications
Air transportation	Civil Aviation Administration of China (CAAC)
Container Transportation	Committee of National Economy and Trade
Freight forwarding (Domestic)	CAAC, Ministry of Communications
Freight forwarding (International)	CAAC, Ministry of Communications, Ministry of Foreign Trade and Economic Cooperation (MOFTEC)

Logistics /warehouses	center	Ministry of Communications, MOFTEC

To make improvement, policies or rules applied by different authorities should be on the same foundation. As mentioned above, presently Ministry of Communications and Ministry of Railway are implementing different standards on classification of dangerous goods. It has caused some confusion. A uniform rule harmonizes such conflicts is particularly needed. Besides, domestic rules and standards concerning logistics operation should be in accordance with relative rules and standards applied by international organizations. Thus, the logistics operation can be more efficient and cost effective, and the domestic operators will get more competitive advantages in the global market.

Remove obstacles from local markets

Local market protectionism is not difficult to find in China. It blocks flow of economic resources and exchanges among different regions in the country. As mentioned earlier, coverage of service network of most logistics service providers or carriers are rather limited in China. Moreover, highway toll fees vary with the different policy implemented by local governments. With the growth of Chinese economy, demand for value-added logistics service will increase and market will boom. However, local market protectionism has become obstacles for evolution of integrated national market. It is right time that central government take measures to speed up openness of local markets. Any regulations resulting in local protectionism should be abolished. Gap of toll charges between different regions has caused difficulties in evaluation of costs/revenues of different transportation service mix. Both suppliers and customers call for the issuance of uniform rules to regulate the toll-collection processes and charge levels. Unauthorized charges should be banned.

Foster good environment for logistics infrastructure investment

By the end of 2000, the network of transportation infrastructure has achieved many improvements[viii]. However, bottlenecks exist in some areas. As we point out, capacity constraints, especially specialized facilities, have become infrastructure bottleneck in China logistics development. When materials flow across the processes of a supply chain, various logistics activities and facilities will be involved. One bottleneck in a process will cause the inefficiency of the whole supply chain. In terms of the basic construction of logistics operation such as transportation infrastructure, government can finance or attract investors by incentive measures. For other facilities, the government should avoid to become direct investor.

Strengthen safety & environmental protection

Public safety is always primary concern of any government. Till now, China does not have laws governing recycling of dangerous goods packages. That means theoretically operators can dispose of packages in any way they happened to choose. However, as people care more about "clean" environment, companies without environment concerns on their logistics operation are doomed to incur antipathy of the public. Thus, certain laws on environmental protection during the logistics operation process should come out as soon as possible. On the other hand, no doubt that logistics is an industry that is closely related to public safety. In China today a lot of trucks running on road are overload, drivers work over hour, and vehicles are over used. Poor condition of vehicles and drivers contribute to high rate of traffic accidents. To guarantee public safety and protect environment, government need to strengthen supervising mechanism. Overload and overuse of vehicles and overwork of drivers should be prohibited strictly.

Conclusion

The continuous development of logistics industry has compelled people around the world to re-think its function in facilitating economic growth. China, too, hope to speed up its evolution in order to accelerate economic development. However, certain constraints, such as regulatory constrains, infrastructure constraints and so on, exist. Therefore, government is needed to play an active role in cultivating friendly conditions. Based on case study about logistics management of dangerous goods, we point out some main areas for public sector intervention may be displayed as follows:

- To coordinate conflicts among different authorities to achieve uniform regulation;
- To remove obstacles resulting in local market protectionism;
- To encourage investment on basic infrastructures;
- To ensure that logistics operation will not affect public safety
- To monitor the application of environmental protection policy.

End Notes

[i] " " 2000

[ii] *Comments on Enhance the Safety of Dangerous Goods Transportation (*Railway Transport Decree [2002] No.21), issued by the Ministry of Railway in Feb. 28th, 2002.

[iii] See "China Navigation Development Report, 2000".

[iv] By author's investigation.

[v] Adapted from the investigate data by authors.

[vi] Ibid.

[vii] Ibid.

[viii] See "China "

An Interaction Pattern between Australian Manufacturers and the Suppliers

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Abstract

This study investigates an interaction pattern between Australian manufacturers and their preferred suppliers of operationally and/or strategically important inputs in different exchange contexts. In the light of a Supplier Adaptation Strategy Matrix (SASM) proposed by Rexha and Miyamoto (2000), it examined procurement attribute-specificities of a supplier's three relationship building behaviors (responding, alerting, and initiating) in a structural equation modelling framework with data collected from 123 Australian manufacturers. The study found a unique pattern of procurement attribute-specificities of the relationship-building behaviors different from those prescribed by the SASM model. Drawing from on the findings, discussions are presented on two major issues concerning Australian manufacturers' supplier management.

Introduction

Not all exchanges warrant a pursuit of cooperative buyer-supplier relationships (CBSRs). It becomes viable only when the required extra management time and efforts are justified by the associated operational and/or strategic gains. For this reason, past scholars have proposed some conceptual frameworks to guide business practitioners on the *when's* of a CBSR pursuit (i.e., Spekman 1988; Olsen and Ellram 1997; Wilson 1995). For instance, Olsen and Ellram (1997) offer a portfolio framework built on two procurement attributes, namely supply market characteristics (i.e., resource dependence and the criticality of the item) and environmental characteristics (i.e., market and technical uncertainty). In the model, a firm's CBSR pursuit is warranted when the procurement situation is signified by high difficulty and high strategic importance.

Extant literature provides some operational insights into management of resource-demanding but productive buyer-supplier relationships in the category. The Interaction Model (Hakansson 1982), built on the Inter-Organisational Theories, Social Exchange Theory and Transaction Cost Theory, explains that the character of interactions in the relationship is conditioned by the characteristics of the product exchanged and the degree of dynamism in the exchange market. Procurement situations characterised by the exchange of a complex product and/or by uncertainty necessitate undertakings of substantial adaptations between exchange parties to facilitate successful exchanges (Hallen, Johanson, and Mohamed, 1987). From a supplier's perspective, adaptation-making is viewed as a relationship-building tool because the action not only determines the productivity of the exchange but also signals its relationship commitment, allowing it to influence the development of the relationship (Brennan and Turnbull 1996; Ford 1980). It is through such cooperative interaction behaviors that competent suppliers aim to manage a successful development of CBSRs (Hakansson 1982).

Despite the importance of adaptation-making as a relationship-building tool, extant literature is largely limited. That is, past study of a supplier's adaptation-making has focused primarily on its *what's* and *when's* (i.e., Ford 1980; Hakansson 1982; Hallen, Johanson, and Mohamed, 1987; Hallen, Johanson, and Seyed-Mohamed 1991; Turnbull and Valla 1986), overlooking the critical relationship-marketing management problem, the *how's* of adaptation-making. Taxonomies of the *what's* and *when's* of adaptation-making provide a foundation for the study and understanding of patterns of supplier adaptation-making. But, neither of those outcome-based frameworks provides insights into the dynamic interaction process prior to eventual adaptation-makings. Some suppliers promote a cooperative atmosphere successfully through their willingness and proactiveness for adaptation-making in the relationship, whereas others fail to do so, or may even project a conflictive atmosphere by their initial reluctance and resistance to adaptation-making (c.f., Hakansson & Lundgren 1996; Ganesan 1994).

In this respect, Rexha and Miyamoto's (2000) contribution is unique. Drawing on findings from the case study research with renowned CBSR best practitioners, leading Japanese manufacturers, they identify three types of supplier relationship-building behaviors in which preferred suppliers outperform competing suppliers, namely responding, alerting, and initiating behaviors. And they proposed a Supplier Adaptation Strategy Matrix (SASM) using the three principal procurement objectives, namely uninterrupted in-flow of purchased inputs, continuous cost reduction and quality improvement of the inputs, and access to new technologies relating to the inputs, to highlight procurement attribute-specificity of each of the behaviors.

This study examines an interaction pattern between Australian suppliers and their preferred suppliers in the light of the SASM model. It investigates the procurement attribute-specifitiy of the three supplier behaviors in a structural equation modelling framework with the data collected from 123 Australian sample manufacturers. In the study, we operationalised the three procurement attributes with customer supply market uncertainty associated with procurement of the focal product, a procurement volume of the product relative to that of other sourced products at sample firms, and customer perceived complexity of the product. In addition, it should also be noted that we employed the data on preferred suppliers of those procurements defined as operationally and/or strategically important at the sample firms. Given that the preferred supplier is the one that outperforms competing suppliers of the focal procurement, we believed that our findings would enable us to draw some prescriptive managerial guideline.

Theoretical Framework

In the SASM model, Rexha and Miyamoto (2000) suggest that unique combinations of three procurement characteristics dictate different patterns of desired supplier relationship-building behaviors. Figure 1 presents the SASM.

Characteristics of Customer Purchasing Situation			**Relationship Building Behaviors**		
Operational Focus		*Strategic Focus*	**Alerting Behavior**	**Responding Behavior**	**Initiating Behavior**
Supply Uncertainty	**Operational Opportunity**	**Strategic Value**			
HIGH	LOW	LOW	✓		
LOW	LOW	LOW			
HIGH	**HIGH**	LOW	✓	✓	
LOW	**HIGH**	LOW		✓	
HIGH	LOW	**HIGH**	✓		✓
LOW	LOW	**HIGH**			✓
HIGH	**HIGH**	**HIGH**	✓	✓	✓
LOW	**HIGH**	**HIGH**		✓	✓

Fig 1: SUPPLIER ADAPTATION STRATEGY MATRIX

The model explains that the need for each of supplier responding, alerting, and initiating behaviors arises when the customer perceives greater operational opportunity, supply market uncertainty, and strategic value with procurement of the focal product, respectively. In the exchange where the customer associates procurement of the focal product with low operational opportunity but high supply market uncertainty and strategic value, the model dictates the need for more active supplier alerting and initiating behaviors, but not responding behavior. This framework is in line with theories on inter-firm relationships (i.e., the Transaction Cost and Interaction Model Theories) that stress a need for cooperative interactions for enhanced economic efficiency (i.e., economisation of the exchange and superior value creation) in the exchange characterised by those procurement attributes. It provides a guideline to business practitioners as to key relationship-marketing tools across different exchange relationships.

In this study, we adopted Miyamoto's (2001) definitions of the three supplier relationship-building behaviors to better reflect growing customer expectation on the supplier's more active role in joint value creation in the relationship.

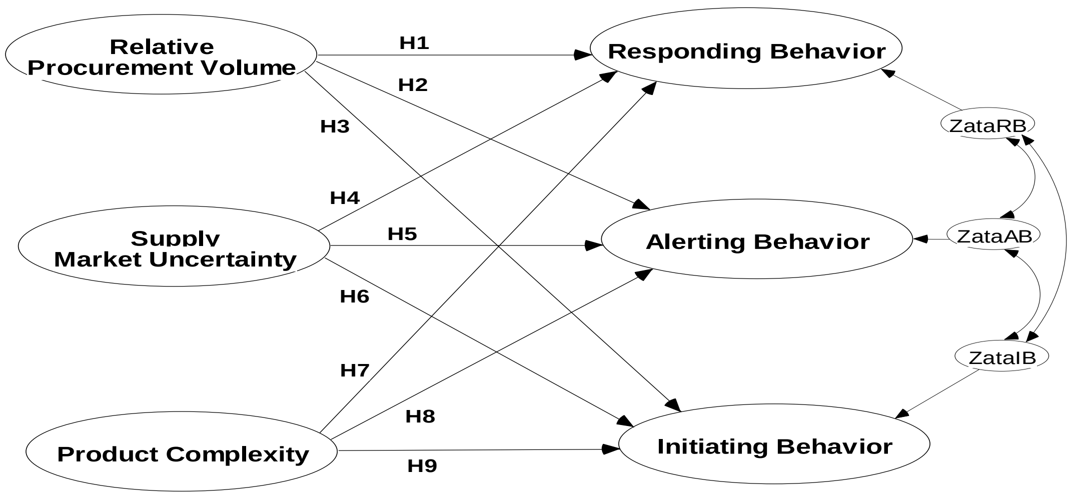
- Responding Behavior as an interaction behavior to accommodate the customer's operational and/or strategic needs, requirements, in response to the customer's request,
- Alerting behavior as a supplier behavior to keep the customer informed of supply market conditions and alert the customer of any possible sign of supply distraction as soon as it detects such an indication, and
- Initiating behavior as an interaction behavior to initiate realisation of the customer's operational and/or strategic wants, opportunities, to make the customer more competitive.

To explore relationships between the three procurement attribute variables and the three supplier relationship-building behaviors, we submit the following nine tentative hypotheses:

The larger a procurement volume of the focal product relative to that of others at the customer firm, the greater need for supplier responding (H1), alerting (H2), and initiating behaviors (H3).
The greater the customer's perceived supply market uncertainty associated with the product, the greater need for supplier responding (H4), alerting (H5), and initiating behaviors (H6).
The more complex the customer views the product, the greater need for supplier responding (H7), alerting (H8), and initiating behaviors (H9).

Figure 2 depicts our research framework with the hypotheses.

Fig 2: RESEARCH MODEL ON PROCUREMENT SITUATION SPECIFICITIES OF 3 SUPPLIER RELATIONSHIP-BUILDING BEHAVIORS



Methodology

Sample Firms and Data Collection

A sampling frame was initially defined as the top 150 manufacturers, in terms of annual turnover, across six sectors found in the *Dun & Bradstreet Marketing Database*, namely 1) food and kindred products, 2) chemicals and allied products, 3) industrial and commercial machinery and computer equipment, 4) electronic and other electrical equipment and components, 5) transportation equipment, and 6) measuring, analyzing, controlling instruments. These sectors were selected on the basis that changes in product and process technologies are more dynamic than in other sectors, and thus, manufacturers in these sectors were expected to practise more active CLBSR with selected suppliers. However, sample firms in the two sectors were found to be less than 150 (i.e., 119 firms in the transportation equipment sector and 149 firms in the measuring, analysing, controlling instruments: photographic, medical & optical goods; watches & clocks sector). To resolve this problem, the top 158, instead of the top 150, firms were drawn from another four sectors so that the total sample totalled 900 firms.

For data collection, we employed a mail survey and single key informant method defining a purchasing manager as a key informant. Prior to a follow-up reminder, we received 79 usable, and 6 non-usable responses. Follow-up reminders were mailed to 752 firms (as 24 had declined participation and 41 had reported the inappropriateness of their firms for the research while 83 survey packages had been returned as undeliverable) and generated a further 44 usable and 4 non-usable responses. Thus, the mail survey achieved a 16.4 per cent response rate (i.e., 123 usable responses from the effective sample size of 752). A nonresponse analysis was conducted by comparing responses returned prior to and after the follow-up reminders for sample firm demographics characteristics and research variables, following the procedure recommended by Armstrong and Overton (1977). The finding of no significant group differences suggested an unlikely non-response bias in the data. The final sample firm-sector distribution was as follows: 28, 27, 27, 20, 13, and 7 in the aforementioned sector order and one firm without the sector identity.

In the questionnaire, informants were first asked to select an operationally and/or strategically important input purchased from at least two suppliers, and, then to provide information on their firms' business relationships with and attitudes towards the two competing suppliers of the input (i.e., the largest and the third largest business share suppliers, or the second largest supplier when there were only two suppliers). In this study to ensure independence of sample data, we employed only sample firms' ratings given to those suppliers that were reported to work more collaboratively with the sample firms, i.e., preferred suppliers.

Measures and Measure Validation

All measurement scales in this research were measured on seven-point Likert scales. Scales of customer perceived supply market uncertainty (five items) and product complexity (three items) were adopted with some modifications from Han (1991) and Bello and Gilliland (1977) respectively. For the remaining, we adopted Miyamoto's (2001) scales, such as a single-item relative procurement volume scale and a four-item scale of each of the three relationship-building behaviors.

Prior to a confirmatory factor analysis (CFA) for the examination of internal consistency of each construct, we conducted an analysis of item intercorrelations, item-total correlations, and exploratory factor analysis to assess internal consistency of item scales for each construct. This produced consistent supporting findings. A CFA was performed with the maximum likelihood estimation (MLE) method, using the structural equation modeling program EQS 5.7b which facilitates the following two attractive features: 1) a *robust* χ^2 *statistic* (i.e., the Satorra-Bentler scaled statistics, SCALEDχ^2, and comparative fit index (CFI) corrected by the χ^2, Robust CFI) (Satorra and Bentler 1994) that incorporates a scaling correction for the χ^2 statistic when distributional assumptions are violated and 2) *robust standard errors* (Bentler and Dijkstra 1985) that are correct in large samples even in absence of multivariate normality. When the data is multivariate normal, the scaling correction exerts no effect (Bentler 1995). This makes robust statistics universally applicable model evaluation statistics. We employed the statistics for our model evaluation.

For the 'relative procurement volume' construct that was measured by a single item, we set the construct reliability at .95 in our model evaluation. After scale cleaning by discarding four items one at a time in light of the multivariate Lagrange Multiplier test statistics, a final measurement model was obtained with seventeen items. Inspection of the statistical property of input data and fit of internal structure indicated a satisfactory model fit: SCALEDχ^2(105, N= 123) = 79.44, *p*> .97; non-normed fit index (NNFI)=1.00, robust CFI (RCFI)=1.00, root mean square error of approximation (RMSEA)=.00. Standardized pattern coefficients and scale reliabilities supported convergent validity and reliability of all model constructs. All factors were also found to be distinct from one another. Table 1 presents estimated inter-factor correlations among the six model constructs.

Table 1: INTER-FACTOR CORRELATIONS

	RPV	**SMU**	**PC**	**RB**	**AB**	**IB**
RPV		.12	.10	.09	.09	.10
SMU	.11		.12	.10	.09	.10
PC	-.12	-.11		.10	.10	.11
RB	-.03	.19*	-.04		.08	.05
AB	.23*	.24**	.13	.58**		.07
IB	.10	.31**	.05	.70**	.61**	

Notes: Entries below the diagonal show estimates of inter-factor correlation between respective factors. Those above the diagonal show their estimated standard errors.
*p< .05; **p<.01
RPV= Relative Procurement Volume; SMU= Supply Market Uncertainty; PC= Product Complexity; RB= Responding Behavior; AB= Alerting Behavior, and IB= Initiating Behavior

Findings And Discussion

The measurement model was transformed into a structural model (Figure 2) by incorporating nine hypothesized paths and allowing errors of three supplier behaviors (i.e., ζ_{RB}, ζ_{AB}, and ζ_{IB}) to correlate freely. The decision to correlate the three errors in the equations was made based on the notion that those constructs share a higher-order factor called 'relationship specific interaction competence' (Miyamoto and Rexha, in press). The model estimation produced the following satisfactory model fit statistics: SCALEDχ^2(108, N= 123) = 84.83, *p*>.97; NNFI= 1.00; RCFI= 1.00; RMSEA= .00. Table 2 presents a summary of standardized estimates of the model parameters.

Table 2: TESTS OF HYPOTHESIZED RELATIONSHIPS

Endogenous Constructs	**RPV**	**SMU**	**PC**	R^2
		Exogenous Constructs		
RB	H1: -.03	*H4: 20*	H7: -.05	.04
AB	*H2: .17*	*H5: .24**	*H8: .22***	.14
IB	H3: .09	*H6: .32***	H9: .08	.11

Notes: $\psi_{RB,AB}$= .60**, $\psi_{RB,IB}$= .70**, and $\psi_{AB,IB}$= .58**
*p<.05; ** p<.01
For labels, please refer to Table 1.

Our data supported three of the nine hypotheses. When the customer perceives greater uncertainty associated with the supply market of the product exchanged, the supplier needs to engage in alerting (H5: β= .24, t= 2.41) and initiating behavior (H6: β= .32, t= 2.90) more actively. Furthermore, the supplier is also required to perform more active alerting behavior when the customer's perceived product complexity increases (H8: β= .22, t= 2.83).

Interestingly these research findings (an interaction pattern between procurement context variables and supplier relationship-building behaviors) are largely different from that prescribed by the SASM (see Figure 1). Our data failed to support the positive impact of the relative procurement volume and customer perceived product complexity on supplier responding (H1: β= -.03, t= -.24) and initiating behavior (H9: β= .07, t= .85), respectively. Instead a statistical support was obtained to another two paths not prescribed by the SAS: customer perceived product complexity to supplier alerting behavior (H6) and customer perceived supply market uncertainty to supplier initiating behavior (H8).

These study findings seem to be a reflection of the current state of Australian manufactures' supplier management and their unique operational environment. Given that the SASM model was developed based on the supplier management practices of renowned CBSR best practitioners, the observed disparities between the SASM model and the research findings appear to underscore the limitation in Australian manufacturers' supplier management. Australian manufacturers need to direct serious attention to their supplier management in the absence of appropriate supplier behaviors (more active supplier responding and initiating behavior in the rise of a procurement volume relative to others and customer perceived product complexity, respectively). Without such supplier cooperative behaviors, few manufacturers can manage unexpected operational problems and/or strategic challenges cost-effectively. On the other hand, the highlighted importance of supplier alerting behavior ('alerting the customer as soon as the supplier detect a sign of possible problems in the customer's sourcing practice of the focal product') appears to signify a common problem among Australian manufactures which often have to deal with distant suppliers beyond state and national boundaries (c.f., Rexha and Miyamoto 2000b). Additional analysis of our data submits strong support to this notion (of the 123 preferred suppliers 35 were overseas suppliers, and less than a half of sample firms rated the location of their preferred suppliers as advantageous compared to competing suppliers). Ensuring a continuous in-flow of sourced inputs is itself already challenging, requiring timely coordination across various value-adding processes. Yet when a customer and a supplier are separated by a larger physical distance, the task becomes extremely challenging. It is for this reason that Australian manufacturers value and require supplier alerting behavior so highly. The early warning from the supplier affords them a valuable time for any necessary adjustments in procurement and production operations.

Limitations And Future Research

This study is no exception to any other cross-sectional research inherited with potential limitations. Some limitations are associated with our data collection method using a single key informant on only one side of the dyad and in a cross-sectional design. The possibility of a common method bias (i.e., the selection problem and perceptual agreement problem) resulting from this method is not eliminated. On the other hand, as conventional knowledge, for stronger inferences of causality model research with the cross-sectional design like the present research, longitudinal studies are needed. This sort of research problem can be tested only with longitudinal research. Secondly, our findings were drawn from a relatively small sample size. A small sample size is often associated with instability of model parameter estimates. While our sample size meets the conventionally recommended minimum sample size of 100 to 150 for the appropriate use of the MLE method in structural equation modeling, it does not give as much confidence in model parameter estimates if the sample sizes were much larger. Though our data supported construct reliability and validity of our own scales, they should be examined further and improved in future studies. Furthermore, we employed the data on preferred suppliers only. While serving our purpose, this has most likely minimized variations in the data, diminishing our ability to reflect diversity in supplier interaction behaviors in reality.

Conclusion

This study investigated an interaction pattern between Australian manufacturers and their preferred suppliers of operationally and/or strategically important inputs in different exchange contexts. Using Rexha and Miyamoto's (2000) Supplier Adaptation Strategy Matrix (SASM) as a framework, it examined procurement attribute specificities of a supplier's three relationship building behaviors (responding, alerting, and initiating) in a structural equation modelling framework with data collected from 123 Australian manufacturers. The study findings highlighted two important issues concerning Australian manufacturers: 1) under-utilised CBSR potentials in their supplier management and 2) their unique operational challenges signified by a 'tyranny of distance' in the procurement operations and supplier management.

References

[1] Armstrong, J. Scott and Terry S. Overton (1977), "Estimating Nonresponse Bias in Mail Surveys," *Journal of Marketing*, 14 (August), 396-402.

[2] Bello, D.C. and Gilliland, D.I. (1977), "The effect of output controls, process controls, and flexibility on export channel performance," *Journal of Marketing*, 61 (January), 22-38.

[3] Bentler, Peter M. (1995), *EQS Structural Equations Program Manual, Multivariate*, Software, Inc., Encino, CA.

[4] ______ and Dijkstra, T. 1985, 'Efficient Estimation via Linearization in Structural Models', In *Multivariate Analysis VI*, ed. P.R. Krishnaiah, North Holland, Amsterdam, pp. 9-42.

[5] Brennan, Ross and Peter W. Turnbull (1997), "Adapt or Die? The Management of Customer Relationships in Business Markets," *Proceedings of Conference at the International Conference "Marketing Across Boarders"*, Manchester, U.K. 7 July, pp. 65-78.

[6] Ford David (1980), "The development of buyer-seller relationships in industrial markets," *European Journal of Marketing*, 14 (5/6), 339-353.

[7] Ganesan, Sankar (1994), "Determinants of Long-Term Orientation in Buyer-Seller Relationships," *Journal of Marketing*, 58 (April), 1-19.

[8] Hakansson, Hakan. ed. (1982), *International Marketing and Purchasing of Industrial Goods: an Interaction Approach, John*, Wiley & Sons Ltd, USA.

[9] ______ and Lundgren, A. (1996), "Industrial Networks and Technological Innovation," in *Business Marketing: An Interaction and Network Perspective*, eds. K. Moller & D. Wilson, Kluwer Academic Publishers, Boston, USA, 291-320.

[10] Hallen, L., J. Johanson, and N. S. Mohamed (1987), "Relationship strength and stability in international and domestic industrial marketing," *Industrial Marketing and Purchasing*, 2 (3), 22-37.

[11] ____________. (1991), "Inter-firm Adaptation in Business Relationships," *Journal of Marketing*, 55 (April), 29-37.

[12] Han, Sang-Lin (1991), *Antecedents of Buyer-Seller Long-Term Relationships: An Exploratory Model of Structural Bonding and Social Bonding*, The Graduate School & The Smeal College of Business Administration, The Pennsylvania State University.

[13] Lyons, Thomas F., A. Richard Krachenberg, and John W. Henke, Jr. (1990), "Mixed motive marriages: what's next for buyer-supplier relations?," *Sloan Management Review*, 31, (Spring), 29-36.

[14] Miyamoto, Tadayuki (2001), *Engineering of Cooperative Long-Term Buyer-Supplier Relationships: Japanese and Australian Perspectives*. Ph.D. Dissertation. WA, Australia: Curtin University of Technology.

[15] Miyamoto, Tadayuki and Nexhmi Rexha (Accepted), "Determinants of Three Facets of Customer Trust: A Marketing Model of Japanese Buyer-Supplier Relationship," *Journal of Business Research*: Special Issue on Marketing in Japan.

[16] Olsen, Rasmus Fariis and Lisa M. Ellram (1997), "A Portfolio Approach to Supplier Relationships," *Industrial Marketing Management*, 26 (2), 101-113.

[17] Rexha, Nexhmi and Tadayuki Miyamoto (2000), “Relationship-Building Supplier Behaviors for Winning Customer Trust,” in *Developments in Australasian Marketing*, ed. Rod B. McNaughton, JAI Press Inc., USA, 77-94.

[18] Rexha, Nexhmi and Tadayuki Miyamoto (2000b), ‘International Sourcing: An Australian Perspective’, *The Journal of Supply Chain Management*, Vol. 36, no. 1, pp. 27-34.

[19] Rindfleisch, Aric and Jan B. Heide (1997), “Transaction cost analysis: past, present, and future applications,” Journal of Marketing, 61 (October), 30-54.

[20] Satorra, A. and Peter M. Bentler (1994), “Corrections to Test Statistics and Standard Errors in Covariance Structure Analysis,” in *Latent Variables Analysis: Applications for Development Research*, eds. A von Eye & C.C. Clogg, Sage, Thousand Oaks, CA, pp. 399-419.

[21] Spekman, Robert E. (1988), “Strategic Supplier Selection: Understanding Long-Term Buyer Relationships,” *Business Horizon*, (July/August), 75-81.

[22] Teikoku Databank (1999), *Zenkoku Kigyou Arekore Ranking*, Teikoku Data Bank, Ltd., Tokyo Japan.

[23] Turnbull, Peter W. and Jean Paul Valla (1986), “Strategic Planning in Industrial Marketing: An Interaction Approach,” *European Journal of Marketing*, 20 (7), 5-20.

[24] Wilson, David T. (1995), “An integrated Model of Buyer-Seller Relationships,” *Journal of the Academy of Marketing Science*, 23 (Fall), 335-345.

Asian Monetary Fund (Amf): Is It Feasible?

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Abstract

The conception of an Asian Monetary Fund (AMF) has attracted much attention ever since it was proposed after the Asian Financial Crisis in 1997. The notion of AMF was very well-received by many East Asian leaders and financial architectures since then, seeing as the current monetary institutions has proved to be ineffective in bailing their countries out of the crisis. However, these leaders have yet to address the question of whether AMF is feasible. As such this triggered us to explore the viability of AMF in this research paper.

In our study, we have analyzed the prospects and feasibility of AMF. We explored the political and cultural conditions of the potential members of AMF, and performed econometric analysis to test its feasibility. We have found that although the East Asian countries are diverse in their political and cultural conditions, the results from the econometric testing show that they are economically co-integrated. With the advancement of information technology and globalization, political and cultural convergence in the East Asian countries could be possible over time. Therefore it seems that AMF is feasible in the future.

Introduction

The Asian countries enjoyed an extended period of "miraculous growth" which spanned the period between 1965 and 1990. The most successful economies included Hong Kong, the Republic of Korea, Taiwan and Singapore, sometimes referred to as the "four little dragons", and Indonesia, Malaysia and Thailand, which have come to be counted among the "emerging market economies" of Southeast Asia. These countries were also generally successful in distributing the fruits of their growth and were thus able to effectively lower domestic levels of inequality, which at the outset was already lower than that of other developing countries[i]. Factors contributing to the region's outstanding growth record include a diligent and high-quality labor force, high savings ratios, and direct investments from Japan and other advanced economies.

A major reversal in the fortune of these economies began in 1997 when Thailand was struck by a currency crisis and widespread economic troubles. In a very short period of time, the crises spawned in Thailand spread throughout a vast region from Indonesia in the south to South Korea in the north. At the same time, this crisis exposed the inadequacies of current monetary institutions in saving the collapsing Asian currencies then. This prompted Asia to look inward for financial solutions.

Several prominent figures [refer to the News Papers Articles], had advocated the need for a new financial architecture to establish control over the Asia region. Eisuke Sakakibara, a former Japanese vice-minister for finance, said that the reforms undertaken have been far from being sufficient to prevent another financial crisis. Mr. Sakakibara also stated that Asia's best bet for being able to tackle the next crisis was to form an AMF that could act as a regional lender of last resort to countries in trouble[ii]. Another noteworthy figure reiterated, "The proposed AMF is necessary because it will create a financial safety net in the region, which will particularly benefit countries that have liberalized their markets." The Thai Deputy Prime Minister and Commerce Minister Supachai Panitchpakdi also quoted that the proposed AMF was believed to understand problems facing Asian countries more properly and could introduce more precise and efficient measures to address the problems[iii].

There had been many papers [e.g. Andrew (1999), Backman (2000), Benson (1998), Lewis (2000), Rowley (1997) among others] criticizing the role of IMF and at the same time, advocating for an AMF that will be more responsive to Asia in the event of another crisis. However, few have attempted to conduct empirical research in exploring the feasibility of an AMF. This thus gives us the impetus to embark on this research to cover this dimension, which has been neglected. Hence, the objectives of this study revolve around the following dimensions of the AMF:

To ascertain the importance and relevance of an AMF.

To address the feasibility of having an AMF.

To come up with a suggested framework for the organization of the AMF.
To delineate promising areas for future research.

In this paper, we will examine and review various issues in the literature pertaining to the prospects and feasibility of an AMF. In the following section, an insight on the Asian Currency Crisis of 1997 and the effectiveness of current monetary institutions is reviewed. This will lead us to evaluate the prospects of an AMF in section three. Section four aims to highlight the importance and relevance of an AMF. The bulk of our discussion will be centered on testing the feasibility of having an AMF, which include exploring the costs and benefits of an AMF, and the political and cultural conditions that will permit the potential members of the AMF to work together. This is supported by an econometric time series analysis to verify the degree of economic integration between the potential members. Finally, a summary and the policy implications from our findings are presented. Potential future research areas are also listed for the further development of our topic.

The Asian Currency Crisis

The Asian countries had experienced amazing growth for an extensive period from 1965 to 1990. However, a major reversal in the fortune of the ASEAN economies began in 1997 when Thailand was struck by a currency crisis and it spread like wild fire to Indonesia, Philippines, Malaysia and South Korea. The Asian Currency Crisis was brought about a flurry of bad news such as the export slow-down in the region, which began to shaken the investors' confidence. This precipitated speculative attacks against regional currencies, and once the baht was devalued, the process quickly unraveled. During 1997 and 1998, these countries experienced various degrees of financial and economies collapse. Many banks and corporations had gone bankrupt, per capita income had plunged and billions in savings had evaporated, millions of workers had lost their jobs and some have taken to the streets.

The financial turmoil was a predictable consequence of structural weaknesses in the region's economies. These weaknesses were mainly: first, low productivity and declining competitiveness, especially vis-a-vis other regions of the world; and second, weaknesses in the financial sector, particularly inadequate supervision of financial institution and lack of disclosure.

According to the data compiled by the World Economic forum, majority of the East Asian economies had indeed lost competitiveness in their exports. The result was a tremendous erosion of East Asian's share in the export markets and subsequently persistent large current account deficits for the past decade. This is clearly shown in Table 1, which shows that South Korea, Thailand and Indonesia experienced very large current account deficits, especially between 1995 and 1997.

Table1: CURRENT ACCOUNT BALANCE IN US$ BILLION (1985-2000)

Country	**Current Account Balance**													
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Indonesia	-1.8	-3.8	-2.1	-1.4	-1.1	-3.0	-4.3	-2.8	-2.1	-2.8	-6.4	-7.7	-4.9	4.1
Malaysia	-0.6	-0.1	2.6	1.9	0.3	-0.9	-4.2	-2.2	-3.0	-4.5	-8.5	-4.6	-4.8	9.4
Philippines	-0.7	0.3	-0.4	-0.4	-1.5	-2.7	-1.0	-1.0	-3.0	-3.0	-2.0	-4.0	-4.4	1.3
Thailand	-2.3	-0.5	-0.4	-1.7	-2.5	-7.3	-7.6	-6.3	-6.4	-8.1	-14	-15	-3.0	14.2
Korea	-0.8	4.7	10.1	14.5	5.4	-2.0	-8.3	-3.9	1.0	-3.9	-8.5	-23.0	-8.2	40.6
Hong Kong	3.3	3.4	4.9	5.1	7.7	6.3	5.7	5.4	8.2	1.6	-6.1	-2.2	-6.8	2.3
Singapore	0.0	0.3	-0.1	1.9	3.0	3.1	4.9	5.9	4.2	11.4	14.4	14.5	15.0	17.6

Notes: e = forecasted figures
Sources: Datastream and Asian Development Report (1999): [Lim, 2000].

Weaknesses in the financial sector had definitely contributed to the currency crisis. Foremost among analysts' concerns had been poor regulation of financial systems. The rapid expansion of credit and the resultant accumulation of assets of poor quality had been taken as important confirmation of the region's poor regulation of financial institutions.

The policy of fixing the exchange rate of the local currency to the dollar also aggravated the problem. Table 2, depicts the exchange rate collapse of the East Asian countries. Thailand, Indonesia, Korea and Philippines had pegged their national currencies to the dollar before the Asian Currency Crisis in 1997. These countries, however, had experienced a sharp depreciation of their currency during the crisis.

Table 2: EXCHANGE RATE CRISIS IN ASIA (PER US$)

Crisis Countries	**Indonesia (Rupiah)**	**Thailand (Baht)**	**South Korea (Won)**	**Malaysia (Ringgit)**	**Singapore (S$)**
Jun-97	2427.9	24.318	887.03	2.5157	1.4264
Lowest Rate (period)	13,995.9 (Jul 98)	52.551 (Jan 98)	1693.65 (Jan 98)	4.1941 (Aug 98)	1.7566 (Aug 98)
Depreciation	-83%	-54%	-48%	-40%	-19%

Source: Derived from [Lim, 2000]

In addition, ASEAN countries typically have higher interest rates than the international interest rate. The lending rates for Thailand, Indonesia and Philippines, which were much higher than the world interest rate of about 3%. With the exchange rate risk absorbed by the central banks, the interest rate differential induced more foreign short-term borrowings as it was cheaper to borrow from offshore markets rather that from the domestic financial system. As a result, there was unsustainable accumulation of short-term foreign indebtedness. Furthermore, there was a lack of proper financial disclosure and transparency in the ASEAN countries. Hence, making it difficult for regulators to monitor properly the level of risk incurred by these countries.

As a consequence of these weaknesses, the East Asian countries, particularly Thailand, Indonesia, Philippines and South Korea, were caught in the vicious circles of currency depreciation, massive foreign debt and ensuing collapse of domestic financial system. As such, these countries had to seek IMF for emergency credits.

Effectiveness of Current Monetary Institutions During the Crisis

Effectiveness of IMF

During the crisis, the IMF acted as a global lender of last resort, offered macroeconomic policy advice to regain investor confidence, and promoted microeconomic reform that might otherwise be politically unacceptable. These three roles were absolutely crucial to resolving the crisis and averting future ones. In exchange for the loans, IMF imposed programs requiring governments to reform their financial institutions and to make substantial changes in their economic structures and political behavior [Lewis, 2000]. These IMF prescriptions were directed at long-term reform as well as immediate needs.

The measures implemented were:
1. Raising recapitalization of banks;
2. Reducing GDP growth rates;
3. Maintaining relatively high short-term interest rates;
4. Keeping inflation low;
5. Cutting government budgets; and
6. Opening up of financial markets to more foreign investors.

However, these actions sparked off a hot debate on the effectiveness of IMF in solving the crisis. It is clear that IMF has missed or misunderstood many of the essential differences between East Asia's financial problems and those it had dealt with elsewhere in the past. Asian's financial stress had arisen not as a result of large fiscal deficits and high inflation, which was experienced in Latin America. It was due to imprudent and excessive foreign borrowing by the East Asian countries' private sector. The IMF failed to recognize this basic causal difference and it, therefore, had responded by applying the traditional remedy to resolve the currency crisis. The IMF's prescription for budget surpluses and higher interest rates reinforced the contractionary forces at work in these countries when they should have done the opposite. Since the problem initially involved liquidity and confidence, the IMF should have abandoned its usual carrot-and-stick approach and instead, it should have provided the financial support without any delay. In this case, confidence in these countries' currencies and economies might well have been restored before too much damage was done. As a result of IMF being too convinced of its own analyses and prescriptions, the overall effectiveness of the IMF has eroded. [Katz, 1999]

Effectiveness of Asian Development Bank (ADB)

ADB is a multilateral development finance institution that was established in 1966. It owned by 59 members, mostly from Asia and the Pacific. Its lending volume was US$5 billion in 1999. Technical assistance grants, amounting to US$173 million in 1999, were provided for preparing and executing projects and supporting advisory activities.

ADB's principal goal is to reduce poverty. Its related objectives are to foster economic growth, support human development, improve the status of women, and protect the environment. The principal tools are loans and technical assistance, which it provides to governments for specific projects and programs.

Since the outbreak of the crisis in 1997, ADB has provided emergency assistance to Thailand, the Republic of Korea, and Indonesia, in close collaboration with the IMF, the World Bank, and various bilateral institutions.

During the crisis, ADB had extended sizable support to improve financial and corporate governance through the strengthening of accounting and auditing practices, information disclosure and legal recourse mechanism.

However, there had been scandals of ADB spreading. The bank had admitted to investigating 55 allegations of corruption involving its staff and executing agencies in the Asia Pacific region as of December 1999. An example is the case of wholesale bribery of the Philippines House of Representatives to push through the privatization of the National Power Corporation (Napocor).

Based on a survey on how various Asian countries rate the effectiveness of the international and regional institutions in their responses to the financial crisis, ADB had an average score of 5.72. Table 3 shows an extract of the results of the survey[iv]. As indicated in the score, ADB has been criticized for its ineffectiveness.

Table 3: EFFECTIVENESS OF ADB IN RESPONSE TO THE ASIAN CRISIS

Country	ADB's Score	Country	ADB's Score
China	6.00	Philippines	6.50
Hong Kong	5.52	Singapore	4.45
India	5.89	South Korea	5.89
Indonesia	5.55	Taiwan	6.27
Japan	5.83	Thailand	5.14
Malaysia	6.33	Vietnam	6.75
Average			5.72

Note: Grades are scaled from zero to 10, with zero being the best and 10 the worst.
Source: Asian Intelligence, May 1999.

Although ADB is made up of various representatives from the different countries in Asia and the Pacific, Japan and US are the dominant countries in the committee. The US speaks the loudest when it comes to good governance and transparency. However, she has locked up the position of the General Counsel of the bank for years. This leads to much criticism from the Board for "lack of transparency".

Japan, on the other hand, controls the institution. In this case, it is the Japan's Ministry of Finance (MOF). Comments cited that the MOF is probably the most conservative of Japan's economic agencies.

As a result of "lack of transparency" and "conservatism" in ADB, it has reproduced an over centralized, hierarchical structure that may hinder or delay policies and decisions making, thereby leading to ineffectiveness of ADB.

Two main arguments on why ADB could not be transformed into AMF have been brought forward during last year's annual ADB meeting. Firstly, ADB is a development bank that has its constituency rooted in Asia. The principles that govern the ADB could not be easily transformed into a more aggressive regional financial force. Secondly, both the ADB and the AMF have a different focus. The ADB is a micro-oriented multilateral financial institution, while the AMF would be a macro-oriented one that is responsible for stabilizing Asian financial markets.

Perhaps, the most common argument for AMF is that ADB and the rest of the monetary institutions have too many conditions attached to each project funding. An internal review of ADB's program lending revealed that the average number of conditions per program loan is 32, in contrast to the AMF proposed framework of no conditions. As such, it would be difficult for the AMF to be created from the restructuring of ADB.

Prospects Of Amf

As discussed in the previous section, it is not advisable for the ADB to reconstruct itself to fulfill the functions of an AMF. Nevertheless, the failure of the IMF in responding efficiently and effectively to the problems of its Asian members during the crisis has resulted in an urgent call for an AMF that is well received by most of its potential members, as examined in this section.

The Idea of an AMF

As a solution to the Asian Currency Crisis, Japan mooted the idea of an AMF at the Group of Seven industrialized nations' finance ministers and central bankers meeting in September 1997 at Hong Kong. The rationale behind such a fund is to mirroring the one underlying the IMF. Participating central banks would pool part of their foreign reserves in a fund which could be used to defend the currency of a member economy should it face sudden, unexpected outflows of capital. The difference from the latter is that AMF assistance would not come with conditions attached and that it would serve the region quicker and more effectively than the IMF.

The idea, however, was quickly shot down by the United States and Europe. The IMF contended that by providing an alternative source of funding, the AMF would undermine its role and reduce its leverage to effect change. Furthermore, there exists an implicit concern that the AMF would diminish US leadership in the global economy - often exercised through the influence of IMF[v].

In the face of such opposition, Japan was forced to shelve the AMF plan. In its place, a new policy response was formulated, which focused on a more traditional Japanese role: as a provider of financial aid.

In October 1998, Finance Minister Kiichi Miyazawa unveiled a $30 billion East Asian aid package during the meeting in Washington, represented by finance ministers and central bankers from the Group of Seven major industrial nations. This plan was structured to provide protection against near-term speculative attacks and financing for medium to long-term reform. The framework resembled an IMF-styled approach with one difference - there were no explicit conditions attached to the disbursement of funds. It was basically the functional equivalent of a scaled-down AMF.

In May 2000, the AMF idea seemed to have gained momentum at the Asian Development Bank Meet in Chiang Mai, Thailand. Dubbed as the Chiang Mai Initiative, the idea involved expanding the ASEAN Swap Arrangement (which is currently restricted to a few hundred million US dollars pledged by Indonesia, Malaysia, the Philippines, Singapore and Thailand} to include other ASEAN states, Japan, China, and Korea. Under the scheme, a member whose currency is weak can swap official dollar reserves with another member in times of financial crisis. Collectively, these will lay the groundwork for the kind of cooperation, which could lead to establishment of a regional fund, exchange rate stabilization mechanisms and possibly monetary union and a common currency[vi].

Eventually, under its managing director Horst Kohler, the IMF is sharply reversing its attitude towards the idea of regional monetary cooperation, and this is expected to boost current efforts to revive the plan for an AMF[vii].

Stand of Various Potential Participants of AMF

As mentioned in the above section, the idea of AMF was first proposed by Japan. This proposal was well received by most ASEAN plus three countries, namely, China, Korea, Indonesia, Malaysia, Thailand, and Philippines. The followings are the reasons cited in favor of AMF:

1. Both IMF and ADB were ineffective in their loans programs.
2. There is a lack of formalized monetary co-operation in East Asia.
3. AMF could help in preventing any future regional crisis, impede the risk of high volatility in currency, and attract foreign investment, thereby enhancing economic growth.

On the other hand, both Hong Kong and Singapore were against the proposition. Hong Kong suggested reforming ADB rather than establishing AMF, while Brigade Lee Hsien Loong argued that the AMF might not be feasible as issues such as who is going to lead and do Asian countries have the capabilities to manage the new institution arises. He also pointed out that there are doubts on whether the AMF can do a better job than IMF.

Although the overall responses of the various potential members of AMF seem to be supportive of the idea, except for Singapore and Hong Kong, the setting up of AMF does pose several concerns. The issue of feasibility will be elaborated in the following section.

Feasibility Of Amf

There are a huge number of issues that are related to the feasibility of an AMF. However, given the temporal limits of our research, the following dimensions: benefits and costs of AMF, political issues, cultural issues, and the co-integration of the economies, have been uncovered and analyzed for implications to gain a more in depth understanding of the affiliated issues.

Costs and Benefits of an AMF

There are at least four areas in which an AMF may contribute to financial stability in the region. Firstly, with the ineffectiveness of the IMF in attending to Asia's needs, an AMF would be in a better position to act as a regional think-tank, analyzing regional financial and economic situations, and providing in-depth advice to members. After all, people in the region certainly have a far better understanding of their own region and its needs. That would allow the governors of such a fund to respond speedily to an incipient crisis with macro and micro economic advice that is more appropriate for Asian economies, rather than prescriptions from a one-size-fits-all manual in Washington.

In the long run, the AMF could become a quasi-coordinator of external financial policies for member countries, such as regional arrangements for exchange rates, the establishment of a common currency and other links between financial markets and financial institutions. Compared with Europe and America, this is weak in Asia. There is almost no independent organization producing consistent and disinterested macro policy suggestions to Asian governments.

Second, the fund could be a watchdog, ensuring that international standards are met in information disclosure, corporation accounting and financial supervision. This role may create an external pressure promoting transparent and better-regulated Asian economies.

Third, it can function as a regional co-operative, pooling members' international reserves and accessing global market funds to arrange sufficient liquidity for emergency use, ensuring the sustainability of the region's recovery from the 1997 - 99 crisis. This also helps to remove the asymmetric position between the donor and the beneficiary by channeling aid neutrally.

Finally, we must take into consideration that the financial resources of IMF are quite limited, while the institution has to be ready to support countries all over the world. Hence, there is a need for a regional monetary fund that could provide additional funds, bolstering the IMF's role as a lender of last resort.

However, opponents believed that if an AMF was a bad idea in 1997, it remains one now. Indeed, given the poor track record of Asian nations at regional institution building, an AMF would most likely undercut the very reforms crucial to long-term economic health. Firstly, one of the objectives of the proposed AMF is to ensure Social Safety Nets (SSN). This is a positive aspect of the proposal, and we should support demands for social protection and social welfare. However, we should also be critical of the context within which this is advanced. For a start, SSN are designed to “catch” those who fall too far into poverty. The causes of this impoverishment – the loss of jobs and declining incomes under restructuring and labor market deregulation, rising living costs under privatization, etc. - seemed to be ignored. Accepting the logic of economic liberalization then “catching” workers after they fall is hardly an adequate strategy.

It is extremely important to note that throughout Asia, social insurance, pension funds, medical insurance and other forms of social protection and social services are being ruthlessly privatized. Therefore, the AMF that will finance SSN in the region must be clear that this will not result in subsidizing the private sector provision of these services[viii].

Secondly, people fear that the AMF would prop up currencies that should not have been supported in any case as crisis-affected countries would seek a quick fix to go on trying to peg their currencies while also holding down interest rates. This only drains national resources while putting off far-reaching reforms[ix].

Thirdly, there is the argument that the AMF would have crippled the IMF’s ability to apply pressure on countries dragging their feet on reform. However, WTO director general, Dr Supachai, has countered that if there can be regional development banks such as the ADB and the Latin American Development Bank, which are not deemed to be undermining the World Bank, there is no reason why a regional monetary fund cannot exist. The AMF will in fact complement the work of the IMF at the regional level.

In addition, as far as the Japanese government is concerned, it was seeking to extend its influence over economic policy in the region, advancing the Japanese' interests through the AMF. Hence, the AMF would increase the power and control of the Japanese.

Finally, as AMF assistance would not come with conditions attached, there exists a moral hazard worry that defaulting countries would be bailed out without accepting responsibility for defaulting on debt. Looking at it from another perspective, an AMF would help prevent social chaos and subsequent regional and global crisis.

Political And Cultural Issues

Proceeding from cost-benefits of AMF, the next facet is the political structure and issues on the countries involved. Vast differences in political systems occur in different countries. Countries like China are trying to maintain highly authoritarian regimes even while they embrace market economics. By contrast, Japan has been practicing democracy for 50 years. Most of the other East Asians come somewhere in between, tilting towards the democratic end of the spectrum but sometimes with relatively weak variants and usually without the development yet of deep roots. These systemic political differences, at minimum, would complicate any Asian integration efforts. Hence, this creates more problems in the implementation of AMF.

There have been significant political changes recently in countries like China, Japan, South Korea, Malaysia, Indonesia, Thailand and the Philippines. In China, political instability prevails as it attempts to modernize its economy. It is under pressure to reform the industrial and banking sectors in order to maintain the pace of the World Trade Organization. As a result, there has been an intensification of competition from imports and from the output of local subsidiaries of multinationals. In addition, the ruling Chinese Communist Party (CCP) has continued to struggle against corruption and the stamping out of threats against its monopoly power.

The political scene in Japan has remained unstable too. This is especially so after the death of the Prime Minister, Keizo Obuchi, in early April 2000. In case of Korea, the uncertain political scene is largely due to the still-recent transition from authoritarian to democratic government. South Korea's political problems are exacerbated by the recent inter-Korean rapprochement. This widens the already bitter divide between the government, which supports closer relations with the North; and the opposition, which advocates a more cautious approach.

Malaysia's political stability has become more fragile in recent years. The threats to stability are numerous and varied but many are attributable to the announcement of the retirement of the Prime Minister, Mahathir Mohamad, who has been in the office for almost 20 years.

In Indonesia, the fledging democracy remains tenuous. The new government of President Megawatti has been distracted by factional and religious infighting and has threatens the political stability of Indonesia.

While Thailand lacks the separatist and sectarian tensions that disfigure Indonesia politics, the outlook for its political scene remains uncertain. The real progress in democratic reform has been stalled by the persistence of money politics and corruption. Vested interests are so deeply entrenched in both the public and private sectors that they continue to resist implementation of all the reforms that are needed.

In Philippines, the political environment remains profoundly compromised by the political scandal of the president, Joseph Estrada, who had been ousted in January, and was replaced by Ms Gloria Manapagal Arroyo. The separatist movement continues political instability.

All these uncertainties in the political scenes in East Asia have cast doubts on whether AMF is feasible. If these potential participants of AMF could not even manage their domestic fronts effectively, it would be almost impossible for them to talk about regional co-operation for the implementation of AMF.

Political rivalries pose an even more daunting barrier to effective co-operation. At the highest level of geopolitics, China and Japan are now clearly competing for the leadership of Asia. Japan is still a larger and much richer economy but the time when it could have seized leadership may now have passed and China is clearly on the rise. At a more microeconomic level, Hong Kong and Singapore are vying to become the financial hub of East Asia. Competition among the rest of the Asian countries is heating up as global trade is liberalized.

Relations with countries outside the region add further complications to regional integration efforts. Some Asian countries, such as Korea and Singapore would not want such initiatives to undermine their relations with the United States and might therefore insist on including it in APEC. China, for all its hostility with the United States, might again come to take a more global perspective than its other Asian neighbors do and thus resist excessive "Asianization".

Cultural Issues

Another important avenue in the consideration of the practicability of an AMF would be the degree of diversity in the values, traits and customs of the countries involved. Asia is a diverse region that has yet to resolve a number of deep-rooted conflicts and historical legacies. Even if region-specific cultural conditions do exist, it does not mean that these countries can effectively ward off a financial collapse. Cultural factors unique to Asia: collectivism, authoritarianism, and power distance (status and hierarchical considerations) were the morally hazardous antecedent conditions that led to the Asian Currency Crisis [Alon & Kellerman, 1999].

One of the ways cultures differ from each other is in its orientation towards the collective good and the individual. North Americans tend to view the world as individuals creating their own path while Asians tend to sublimate the individual personality for the common good of the group.

The tendency to ignore bankruptcy laws as a leading cause of the crisis was reified in collectivism. The modern business practice of debt protection, liquidation, and bankruptcy so commonly utilized in the West were largely unused in Asia. Walker (1998) pointed out that Asians tend to favour reconstruction and compromise in line with Confucian tradition that can stave off insolvency for only so long. According to Hitchcock (1998), to confront an insolvency issue head-on is a Western concept, yet the Asian collectivist practice of indirectness, avoiding public embarrassments, and the moral hazard relating to bailouts contributed to the crisis. On top of that, these practices could lead to coordination problems in the potential AMF.

Asian cultural philosophy is heavily devoted to strong authority (government, social, familial, or societal), paternalism, collectivism, and the desire for group harmony. Authoritarianism, in particular, creates a false sense of stability and security. Authoritarians that promote "forced" harmony often produce lax oversight. The respect for status in a hierarchy ensures that even outrageous allegations against entrenched interests go unheeded. Prior to the economic crisis, dire predictions and warnings of financial turmoil often brought accusations of promoting disharmony and seditious attempts at destabilization.

Authoritarianism often presents a double-edged sword. The same paternalistic belief in correctness of authority's actions brings the tendency of those in power to stick to that perception and to avoid accountability by any means necessary. When economies start to fail, efforts to find scapegoats become a dominant public theme, whether or not anyone outside those countries believes even the most outrageous claims. Serious reform efforts rarely succeed in authoritarian administrations.

When faced with questions involving transparency on insolvency issues, the aforementioned Asian tendency of (1) respect for people in powerful positions, (2) not confronting directly, and (3) going carefully around to local press outlets, friends and associates of the target, do not lend themselves to the full and accurate disclosure necessary to correct hazardous situations.

In general, an AMF would require from diverse members, a coordinated approach to economic reform and a coordinated response to any regional economic turmoil. The 1997 crisis, however, revealed the inability of the two institutions most responsible for promoting economic cooperation in Asia: ASEAN and the Asian Pacific Economic Cooperation (APEC) Group - to do either.

Based on the principle of non-interference, ASEAN members loath to take each other to task over economic policies. Meanwhile, APEC has failed miserably to promote economic reforms or lower trade barriers since it is committed to a "concerted unilateralism" by which members undertake agreements unilaterally, rather than negotiate formally and sign treaties.

These practices run counter to the very idea of a regional fund, whose function would be precisely to interfere, perhaps massively, in the economic policies of a beleaguered country. Such a fund might ask Malaysia to remove its capital controls, Thailand to sell its assets faster, Indonesia to allow failed banks to collapse, South Korea to unravel its conglomerates, and even Japan to stimulate domestic demand. But an Asian fund that eschews conflict and avoids making its clients lose face would be not only redundant, but also possibly a threat to global economic stability. Particularly, if it means countries would try the AMF first, and turn later to IMF, it could cause a crisis to spread more widely and so require greater international support.

Econometric Analysis

To ensure a meaningful study on the feasibility of an AMF, an econometric analysis on the selected indicators was performed. The long-run co-movement between several economic and financial series can be looked upon from the viewpoint of Engle-Granger (1987) two-step co-integration procedure. By definition, cointegration necessitates that the variables be integrated of the same order, and their linear combination is stationary. If they are not cointegrated, the variables will diverge over time. This analysis would help us to assess the feasibility of AMF based on econometric point of view.

Quarterly economic data of ten key indicators of ASEAN plus three for the period 1980-1999 was collected from the International Financial Statistics database. Unit root tests are conducted to test the order of integration of the selected variables: GDP, Balance of payements, average exchange rate, total reserve and deposit rate, Lending rate, CPI, balance of trade for the countries. There are evidence showing that the variables do not appear to be of the same order of integration.

In view of the above discussions, substantial reasons exist to justify Asia's need and desire for an AMF. However, even if there may be hundred and one reasons on why an AMF is beneficial to Asia, we must also consider if the idea is workable. Our econometric analysis had shown that the idea of AMF is feasible while the political and cultural aspects showed otherwise.

Table 4: COINTEGRATION RESULTS USING ADF AND PP TESTS

Variable	Test	Statistics Value	Variable	Test	Statistics Value
GDP	ADF	-3.4476[b]	**Balance of Payments**	ADF	-2.2854
	PP	-3.6891[b]		PP	-4.9341[a]
Average Exchange Rate	ADF	-2.4443	**CPI**	ADF	-1.7953
	PP	-3.9757[a]		PP	-3.0770[b]
Total Reserves	ADF	-3.4159[b]	**Exports**	ADF	-5.1800[a]
	PP	-4.3336[b]		PP	-5.6780[a]
Deposit Rate	ADF	-1.6146	**Imports**	ADF	-4.0491[a]
	PP	-2.7684[c]		PP	-6.9484[a]
Lending Rate	ADF	-1.7934	**Balance of Trade**	ADF	-1.6406
	PP	-2.8476[c]		PP	-6.8266[a]

Notes: [a] and [b] and [c] indicate significance at the 1% , 5% and 10% levels respectively.

Formation and Institutional Role of AMF?

As illustrated in our discussion, it is not advisable for the proposed AMF to be constructed from the ADB. Hence, in the following, we will examine whether the European Monetary Union (EMU) would be an appropriate model for the proposed AMF and highlight some theoretical ideas about the institutional design of an AMF.

The EMU, consisting of 12 European states, has taken Europe close to half a century before establishing a unified currency: the Euro. The primary objective of EMU is to maintain price stability in the European states. When there is stability in prices due to lower volatility in exchange rates of currencies among the European states, it can encourage more cross-border trading, thereby leading to higher economic growth rates in the region. Other benefits such as a fall in transaction costs and price transparency can also be yielded from establishing EMU.

On the other hand, EMU may lead to higher inflation in the low inflation EU-countries. In addition, the existence of euro has also eliminated the exchange rate policy of the EU-member countries. Therefore, monetary policy can no longer be used as a shock absorption mechanism to fine-tune the economy. The European Central Bank (ECB) now maintains fiscal discipline and the needs for structural reforms through the growth and stability pact.

With the introduction of EMU and common currency, there have been suggestions (e.g. Benson 1998) of using the EMU as a model for the Asia in the setting of the AMF or the Asian Monetary System. Taking into consideration that Asia is still large and diverse, this idea of modeling EMU does not appear to be feasible, at least in the near future.

Firstly, Asia's economies exhibit large structural differences. Some countries like China and Indonesia are very agriculturally oriented while others like Japan and Korea are highly industrialized. Secondly, even though our econometric analysis shows that the economic and financial variables are co-integrated, general economic policies still seem to diverge markedly. In addition, the political and cultural conditions in these countries are diverse, unlike that of the member countries of the EMU.

Nonetheless, the EMU model could be some guide to closer monetary co-operation within the smaller Asian groupings, notably ASEAN. This would call for closer political co-operation within ASEAN.

The following constitutes a suggested framework for an AMF, should it be really be carried out. Foremost, in order for a monetary institution to be successful, economic[x] and political independence[xi] of such institutions and of the incentive structures of the decision responsible for monetary policy are very important [Grilli, Masciandaro and Tabellini, 1991].

Another main precondition for an efficient conduct of monetary policy is a well functioning market-based banking system. Deregulation and privatization of the banking institutions might sometimes be necessary to enable them to function effectively. A weak and inefficient banking system, as in the case of the Asian countries before 1997, has contributed much to the Asian Currency Crisis. Therefore, AMF should be tasked to provide institutional innovations such as specific supervisory policies and bank restructuring schemes.

A stable, legal and administrative framework has to be established too. Private investments are regarded as very risky by potential investors. Therefore during the transition period, AMF can help to install confidence for domestic and foreign firms to invest in these “crises” countries with a reliable monetary policy, which brings back monetary stability.

As for which type of exchange rate policy to adopt, an optimal solution could be using managed float. This means that the currency is allowed to move within a band with its center targeted to a basket of currencies, which takes the Euro, the yen and the dollar as reference currencies.

Any move towards rapid and formal development of AMF is unlikely as the research in this area is still in the infant age and as pointed out by IMF’s managing director, Horst Kohler, Europe achieved monetary union only through five decades of painstaking forging of trade, economic and political ties.

Conclusion

The purpose of our project is to explore the feasibility of an Asian Monetary Fund. In view of the substantial benefits to be reaped from the proposed AMF, the idea was rather well received by Asia. On top of that, the results of co-integration tests have shown that the potential member economies are co-integrated. This implies that it is feasible to establish an AMF on econometric point of view. However, the political and cultural conditions of these countries do not seem favourable.

Nevertheless, the might of information technology is propelling the emergence of a borderless world. This world of a new mainstream socio-economic and political order affects every country. It is a world that seeks a new balance between global and local values, thoughts and ways of life amidst existing cultural diversity. Truly, the impact of globalization is a convergence towards one common culture, and countries securing a peaceful and productive co-existence in the international community. Therefore, in the long run, establishment of AMF is feasible as the political and cultural conditions converge over time.

Generally, we believe that it is feasible to establish an AMF. After all, the ASEAN ten, together with China, Japan and South Korea, have foreign reserves in excess of US$800 billion. So participating countries can overcome a liquidity crisis without U.S. help. On top of that, there are also sufficiently qualified and trained personnel capable of drawing up, monitoring and implementing policies best-suited to the peculiar needs of the Asian economies.

However, an "Asia only" grouping would risk dividing rather than uniting the two sides of the Pacific. It would be especially foolhardy to risk dividing Asia and the America at a time of global crisis, given the desperate need for leadership leadership from the United States[xii]. Perhaps, for the proposed AMF to be successful in preempting and handling future crisis, it should serve as a complement, not a substitute to the IMF.

This research is limited to ASEAN plus three, which include most ASEAN countries, China, Japan and South Korea. These are the countries that will most likely be involved in the start-up of the AMF. We do not discarding the possibility of other countries joining the AMF later, but this is beyond our scope of discussion. For the countries selected for this study, few economic and financial variables have complete data sets from 1980-1999. Consequently, the ten variables chosen were deemed most ideal for our study. To widen the scope of this study, more rigorous cost-benefit and welfare analysis could be performed.

References

[1] AP, “Thailand DPM Proposes common Asian Currency”, Business Times, 20 September 2000.

[2] Agence France-Presse, “Sakakibara Sees Support for Asian Monetary Fund”, South China Morning Post, 3 March 1999.

[3] Agence France-Presse, “Supachai Resurrects Asian Crisis Fund Bid”, South China Morning Post, 21 July 1999.

[4] Agence France-Presse,"Mr Yen in Asian Monetary Fund Call", South China Morning Post, 4 May 2000.

[5] Alan, I. and Kellerman, E.A., "Internal Antecedents of the 1997 Asian Economic Crisis", Multinational Business Review, Fall 1999

[6] Andrew, K.R., "Is There A Case for an Asian Monetary Fund?", FRBSF Economic Letter 99-37, 17 December 1999.

[7] Backman, M., "A Monetary Fund for Asia", Asia Inc, September 2000.

[8] Bani, E., “Beijing Supports Setting up of AMF”, Business Times, 24 November 1999

[9] Benson, K., "EMU: Model for Asia?", European Monetary Union -- Implications for Asia, 1998, pp.47-52.

[10] Bergsten, C.F., "The New Asian Challenge", Institute for International Economics Working Paper 2000, 4 March 2000.

[11] Bernama, "IMF will co-operate with AMF", The New Straits Times, 24 March 2000.

[12] Dickey, D.A and Fuller, W.A., “Distribution of the Estimators for Autoregressive Time Series with a Unit Root”, Journal of the American Statistical Association, 1979, pp.427-431.

[13] EIU Limited, "Asia & Australasia: Regional Overview", EIU Country Forecast, September 2000, pp. 23-25.

[14] EIU Limited, "Asia: Political Risks Perspectives 2000", EIU Business Asia, 20 March 2000.

[15] EIU Limited, "Indonesia", EIU Country Report, January 2001, pp. 1-2.

[16] EIU Limited, "Malaysia", EIU Country Risk Service, January 2001, pp. 2-3.

[17] EIU Limited, "Philippines", EIU Country Risk Service, January 2001, pp. 2-3.

[18] EIU Limited, "Thailand", EIU Country Risk Service, January 2001, pp. 2-3.

[19] Ismail, F., "East Asian Unity Vital for Economic Recovery, Growth", Business Times, 21 October 1999.

[20] James, K. and Gillian, T., "Asian Monetary Fund Debate Hots Up", Financial Times, 14 November 1997.

[21] Jeffrey, L., "Asian vs. International: Structuring an Asian Monetary Fund", 4 February 2000.

[22] Katz, S.S. " The Asian crisis, the IMF and the critics", Eastern Economic Journal, Fall 1999.

[23] Kwan W. K., "SM Lee Not Against an Asian Monetary Fund", The Straits Times, 10 June 2000.

[24] Fisher, S., " The Asian crisis and the changing role of the IMF", Finance Development, Jun 1998

[25] Manila, dpa, "ADB Breathes Life into Asian Fund Proposal", Bangkok Post, 20 April 1999.

[26] Matthew Saltmarsh, "Japan Official Downplays Talk of Transforming ADB Into AMF", Market News Service, 5 May 2000.

[27] Marc, C., "Two Years On: Evaluating Tokyo's Response to the East Asian Financial Crisis", Japan Economic Institute (JEI) Report No.30A, 6 August 1999.

[28] Maricris C.C., "Euro's Birth – Lessons for Asian Currency", Business World (Philippines), 24 April 2000.

[29] Mehta, H., "IMF Sees Complementary role for AMF", Business Times, 2 June 2000.

[30] Michael, R.S., "Euro Supporters Face A Tough Struggle: problems Still Remain for Common Currency", The Asian Wall Street Journal, 27 September 2000.

[31] Moses, R., "Asian Monetary Fund Idea gains Pace at ADB Meet", Times of India, 6 May 2000.

[32] Patrick, M.,"Asian Nations Agree to Currency plan to Prevent Future Crises", State Journal Register, 7 May 2000.

[33] Peter, M., "Asia Agrees Plan to Prevent Repeat of Economic Crisis" The Straits Times, 7 May 2000.

[34] Phillips, P. and Perron, P., "Testing for a Unit Root in Time Series Regression", Biometrica #75, June 1988, pp.335-336.

[35] Pierre G., "Asian Monetary Fund Reborn", Far Eastern Economic Review, 18 May 2000.

[36] Porter, B., "ADB Front-Runner to Manage Asia Fund", South China Morning Post, 19 November 1997.

[37] Reuters, "Currency Safety Plan Coming Together", South China Morning Post, 9 August 2000.

[38] Reuters, "Panel unveils Asian Self-help Measures", Bangkok Post, 25 January 1998.

[39] Richard, B., "Mathathir States Case for East Asian Fund, but IMF's Fischer Remains Cool to Idea", The Wall Street Journal, 19 October 1999.

[40] Rowley, A., "Internatiional Finance: Asian Fund, R.I.P.", Capital Trends, 5 December 1997.

[41] Rowley, A., "Asean Seeks ADB Early Warning System", Business Times, 29 April 1998.

[42] Rowley, A., "Asian Monetary Fund Plan to be Revived this Week", Business Times, 1 May 2000.

[43] Rowley, A., "Wary Regional Quest for a Financial Bulwark", Business Times, 11 May 2000.

[44] Rowley, A.,"SM Lee Doubts Efficacy of an Asian Monetary Fund", Business Times, 9 June 2000.

[45] Rowley, A., "IMF Policy Shift May Revive AMF Idea", Business Times, 2 October 2000.

[46] Rowley, A., "Exploring Alternative Asian Currency Regimes", Business Times, 18 January 2001.

[47] Sapsford, J. and Wessel, D., "Japan's Asia Fund Support Spurs Concern", The Asian Wall Street Journal, 6 November 1997.

[48] Schneider, F., "The Role of a New International Monetary Institution after the EMU and after the Asian Crises", Proceedings of 1999 Annual US-Public Choice Meetings, August 2000.

[49] Sheel, K., "Yam Backs Stronger Safety Net Role for ADB in Crisis", South China Morning Post, 30 April 1998.

[50] Sirithaveeporn, W., "Asean Plans Early Warning System to Head off Crises", Bangkok Post, 21 July 1998.

[51] Tripathi, S., "Watch Out, the AMF Rises Again", Asian Wall Street Journal, 26 September 2000.

[52] Walden B., "Asian Development Bank", Bangkok Post, 5 May 2000, pp.8.

[53] Wheatley, A., "Support Grows for Plan on Asian Monetary Ties", Asian Economics, 5 May 2000.

[54] Yu Qiao, "Asians Need Their Own Monetary Fund", Business Times, 13 May 1999.

[55] Zitner, A., "At Storm's Center In wake of Asia Crisis, Debate Rages Over Effectiveness of IMF,", Boston Globe, 14 April 2000.

End Notes

[i] "The East Asian Miracle", The World Bank, August 1993
[ii] The Straits Times, July 28 2000
[iii] Bernama Daily Malaysian News, June 10 2000
[iv] Asian Intelligence, May 1999
[v] Japan Economic Institute Report, August 6 1999
[vi] The Business Times, May 11 2000
[vii] The Business Times, Oct 2 2000
[viii] Global Intelligence Update Red Alert, September 29 1998
[ix] Asian Wall Street Journal, September 26 2000
[x] Economic independence is defined as the ability of the monetary institution to determine the use and choice of its monetary (and if necessary other) policy instruments to act autonomously and without from national governments or national organizations.
[xi] Political independence is defined as the ability of the monetary institution to choose monetary policy goals autonomously and without the interference from the government.
[xii] The International Economy, Nov/Dec 1998

Comparative Speed of Recovery of the Asian Economic Crisis Driven Countries

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Abstract

The Asian Economic Crisis (AEC) started in Thailand and subsequently spread to the rest of the Asia due to contagion effects. Most of the articles and reports covering the AEC found are mainly about the causes of the crisis, policy responses and the lessons to be learnt from the crisis. There are very few articles that cover the responsiveness of the recovery. The main objective of this paper is to analyze the comparative speed of the recovery of the Asian Economic Crisis affected countries, utilizing an econometric analysis. We analyze responsiveness based on comparison of the speed of adjustment from the Error Correction Model. Of the three countries that turned to IMF for help, Indonesia is found to be the least responsive.

Introduction

Thailand's economic problems result from an inflexible exchange rate system and deteriorating economic fundamentals, including a sharp downturn in exports, an over-extended financial sector, and a slump in the property market. The Asian economic crisis started in Thailand, when the Bank of Thailand put the baht on a managed float on 2nd July 1997. This decision to float the baht came after nearly one year of fending off speculative attacks on the currency. Consequently, the Philippine peso, Malaysian ringgit, and Indonesian rupiah were subject to massive speculative attacks even though these countries were considered to be in a relatively sounder economic condition than Thailand at the time of the crisis. The peso and rupiah were floated in 1997 and August 1997 respectively. Depreciation of the Malaysian ringgit and Singapore dollar against the US dollar took place as well. The regional stock markets plunged. It is apparent that the crisis started in Thailand and subsequently spread to the rest of East Asia due to contagion effects (Reside, et.al, 1999), engulfing first Hong Kong and Taiwan from mid-October 1997, and then South Korea (henceforth Korea).

Although there are many articles and reports on the AEC [e.g. Golstein (1998), Fisher (1999), Lin (1999), Stiglitz (1999), Lim (2000), Various IMF reports], few actually cover the responsiveness of the recovery. Most of them are mainly about the causes of the crisis, policy responses and the lessons to be learnt from the crisis. Few of them analyzed the recovery in detail. Much less carry out econometric analysis to determine the movement of the variables together. In this research, an error correction mechanism is used to analyze this recovery.

The paper is organized as follows. Section 2 seeks to give a chronological review of the crisis so that the readers will have a clearer picture of the events that took place during the crisis. Section 3 covers the economic recovery response of the affected countries. In Section 4, the speed of recovery is calculated based on the econometric error correction mechanism. Finally, Section 5 concluded all the findings.

Review of the Asian Economic Crisis

Origin of the Crisis

Economic crises are seldom generated by one or two isolated factors. The Asian Economic Crisis is no exception. According to Goldstein (1998), there are three main interrelated origins: financial-sector weaknesses; serious fundamental dis-equilibrium in the balance of payments; and contagion from Thailand.

Financial-Sector Weaknesses

The financial sector weakness was aggravated by two factors; the credit boom and the liquidity and currency mismatches. The 1990s witnessed a credit boom[i] in Asia. Large net private capital inflows directed to real estate and equities, contributed in part to the credit boom. Table: 1 shows approximately 25 to 40 percent of total bank loans went to the property sector in Indonesia, Malaysia, Singapore, and Thailand; and even more in Hong Kong. Goldstein (1998) noted that the ratio of stock market credit to GDP in Malaysia was rising. Equities holdings by South Korean banks have too increased in large-scale. These together with the over-extension and concentration of credit left the Asian economies vulnerable to a shift in credit and cyclical conditions.

TABLE: 1 INTERVAL ESTIMATES OF THE SHARE OF BANK LENDING TO THE PROPERTY SECTOR

	end-1997
Hong Kong	40-55
Singapore	30-40
Thailand	30-40
Malaysia	30-40
Indonesia	25-30
South Korea	15-25
Philippines	15-20

Sources: Bank for International Settlements (1997); Goldstein, (1998).

Indeed, that shift came when the economies tried to control overheating and to defend exchange rates with high interest rates against strong market pressures. Property prices fell and the shares of Non-Performing Loans (NPL) to total bank loans reached at 15 to 35 percent range in Indonesia, South Korea and Thailand, indicating extreme banking difficulties. The vulnerability intensified in Indonesia and Thailand. Banks and corporate customers over-borrowed[ii] at short maturities denominated in foreign currency.

The credit booms and liquidity and currency mismatches problems were aggravated by the long-standing weaknesses[iii] in banking and financial-sector supervision. Goldstein (1998) commented that in most of these economies, with the exceptions of Hong Kong and Singapore, bank capital was inadequate relative to the riskiness of banks' operating environment. Based on past behavior, there was a strong expectation that depositors and creditors would get bailed out if the banks get into trouble. Therefore bank supervisors lack the mandate to counter strong political pressures for regulatory forbearance. This thus led to the fall of the financial sector, fuelling the crisis.

Serious Fundamental Disequilibrium

Disequilibrium reflects the chronic current account balance deficits (see Table: 2). Many of the countries exist seven years or more of disequilibrium before the outbreak of the crisis; namely Indonesia, Malaysia, Philippines, Thailand and South Korea. Hong Kong and Singapore, however, have been enjoying balance of payments surpluses. They were affected by the crisis mainly due to the third factor i.e. contagion effects.

According to Lim (2000), exchange rate was bound to fall with the supply of domestic currency every year exceeding the demand for it, for transaction purposes only. Coupled with the fixed exchange rate regimes in several of these countries, foreign exchange reserves will fall or foreign debts will accumulate or both. The free substitutability of the domestic currency of Gresham's Law[iv] caused the balance of payments crisis to develop into an exchange rate crisis.

TABLE: 2 CURRENT ACCOUNT BALANCE IN US$ BILLION (1985-2000)

Country	**Pre-Crisis and Crisis**														**Post-Crisis**	
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000e
Indonesia	-1.8	-3.8	-2.1	-1.4	-1.1	-3.0	-4.3	-2.8	-2.1	-2.8	-6.4	-7.7	-4.9	4.1	5.0	4.4
Malaysia	-0.6	-0.1	2.6	1.9	0.3	-0.9	-4.2	-2.2	-3.0	-4.5	-8.5	-4.6	-4.8	9.4	12.5	8.4
Philippines	-0.7	0.3	-0.4	-0.4	-1.5	-2.7	-1.0	-1.0	-3.0	-3.0	-2.0	-4.0	-4.4	1.3	5.2	3.2
Thailand	-2.3	-0.5	-0.4	-1.7	-2.5	-7.3	-7.6	-6.3	-6.4	-8.1	-14	-15	-3.0	14.2	11.4	11.6
Korea	-0.8	4.7	10.1	14.5	5.4	-2.0	-8.3	-3.9	1.0	-3.9	-8.5	-23.0	-8.2	40.6	25.1	6.5
Hong Kong	3.3	3.4	4.9	5.1	7.7	6.3	5.7	5.4	8.2	1.6	-6.1	-2.2	-6.8	2.3	6.4	5.3
Singapore	0.0	0.3	-0.1	1.9	3.0	3.1	4.9	5.9	4.2	11.4	14.4	14.5	15.0	17.6	17.2	17.2

Notes: e = forecasted figures
Sources: Datastream and Asian Development Report (1999): [Lim, 2000].

<u>Contagion</u>
There were at least two aspects to these contagion effects. First, it was argued that the values of other regional currencies could not be sustained in the face of the large baht depreciation. Other Southeast Asian countries must at least partially depreciate to remain competitive. Second, the spread of the contagion reflected "panic" among foreign investors to limit downside risks, and among domestic corporate to hedge foreign currency exposure and domestic residents to protect their savings.

Impacts of the Crisis

Financial Impact

If recession is defined, as is widely done, as at least two consecutive negative quarterly GDP growth rates, then all the countries under examination (Hong Kong, Indonesia, Korea, Malaysia, Singapore and Thailand) were in recession in 1998 [Lim, 2000]. To summarise the performance of these countries in 1998, GDP had fallen by 5.3% in Hong Kong, 13% in Indonesia, 6.7% in Korea, 7.4% in Malaysia and 10.2% in Thailand, while increasing by only 0.5% in Singapore (refer to Table: 3).

TABLE 3: GROWTH RATES OF THE SELECTED EAST ASIAN ECONOMIES 1996 – 1999

Period	**Indonesia**	**Thailand**	**Malaysia**	**South Korea**	**Hong Kong**	**Singapore**
1996	7.8	5.9	10.0	6.8	4.5	7.5
1997	4.7	-1.7	7.3	5.0	5.0	8.4
1998	-13.0	-10.2	-7.4	-6.7	-5.3	0.5
1999	0.3	4.2	5.8	10.7	3.1	5.4

Sources: Asia Recovery Reports (Asian Development Bank), CEIC Database, and IFS Statistics.

The crisis witnessed the collapse of the exchange rate of the regional countries sparked off by the speculative attacks on their exchange rates. Between June 1997 and January 1998, the baht declined by 54% and the won by 48%. In Indonesia, the exchange rate depreciated 83% by July 1998. By August 1998, the Malaysian Ringgit fell by 40% (see Table 4).

TABLE 4: EXCHANGE RATE CRISIS IN ASIA
(PER US$)

Crisis Countries	Indonesia (Rupiah)	Thailand (Baht)	South Korea (Won)	Malaysia (Ringgit)	Singapore (S$)
Jun-97	2427.9	24.318	887.03	2.5157	1.4264
Lowest Rate (period)	13,995.9 (Jul 98)	52.551 (Jan 98)	1693.65 (Jan 98)	4.1941 (Aug 98)	1.7566 (Aug 98)
Depreciation	-83%	-54%	-48%	-40%	-19%

Source: Derived from [Lim, 2000]

The collapse of the stock markets occurred almost all at the same time. In table: 5, September 1998 figures showed the lowest point for stock markets for Bangkok, Hong Kong, Kuala Lumpur and Jakarta, and Singapore. The collapse in Kuala Lumpur was the most serious; only 21% of the January 1997 value was left in September 1998 [Lim, 2000].

TABLE 5: STOCK MARKET COLLAPSE (JANUARY 1997-FEBRUARY 1999)

	Bangkok SET	Singapore STI	Manila Composite	KL Composite	Jakarta SE Composite	Hong Kong Hang Seng
Highest Pre-Crisis =100	Jan-97	Feb-97	Feb-97	Mar-97	Jul-97	Aug-97
Lowest Point	25% (Sept 98)	40% (Sept 98)	35% (Sept 98)	21% (Sept 98)	37% (Oct 98)	43% (Sept 98)

Source: Derived from statistics published by various Stock Exchanges [Lim, 2000].
* Figures are computed for the first day of each month.

The outbreak of the Asian crisis saw the decline in net asset value of many banks and companies increasing the cost of debt servicing [Chua et al., 1999]. A severe reversal in capital flows was experienced as investors rushed to withdraw their investments from the region with the onset of the confidence crisis. Radelet and Sachs (1998) observed that private capital flows to Indonesia, Korea, Malaysia, Thailand and Philippines swerved from US$92.8 billion in 1996 to an estimated negative US$12 billion.

The sudden capital flight from the region coupled with the increasing amount of bad debts makes the domestic banks more reluctant in extending and renewing loans. More stringent provisioning rules[v] and loan classification were further imposed on these financial institutions. As international lenders began to withdraw their investments for fear of further decline in values of the currencies, the availability and affordability of both internal and external funds fell, bringing about increasing interest rates [Chua et al., 1999].

Social Impact

There was a sharp deterioration in labor market conditions during the crisis. The employment of new entrants in the market and the re-employment prospects of displaced workers were bleak. On top of this, the IMF labor market reforms in Indonesia, South Korea and Thailand added to the increasing unemployment rates. The real earnings of workers who managed to retain their jobs decreased with the fall in labor demand and rising inflation. This factor together with the increase in open unemployment is likely to swell the ranks of those with incomes below poverty level [Chua et al., 1999].

Prices of imports escalated in the region with the depreciation of the currencies, adversely affecting all sectors of the economies. Furthermore, the prices of basic essentials also skyrocketed in Indonesia, causing the inflation rate to rise to an annualized rate of over 200% [Shalendra, 1998].

Political Impact

Political pressures mounted during the crisis period. Unconvincing political response or government inaction compounded the crisis, adding an element of political-risk premium. Street protests demanded the resignation of former PM Chavalit Yongchaiyudh in Thailand and the former President Suharto and President Habibie in Indonesia [Chua et al., 1999].

Policy Responses during the Crisis

Except for Hong Kong and China, all the Asian economies devalued their currencies in the crisis to reduce current account deficits and discourage further capital outflow so as to rebuild depleted foreign exchange reserves.

Indonesia, Korea, Malaysia, Thailand and subsequently Hong Kong also implemented austerity policies by raising interest rates, tightening credit, cutting government expenditure, and in some cases raising taxes. These policies were effective but the IMF and national governments subsequently relaxed fiscal austerity to cushion the impact of recession on the poor.

Indonesia, Korea, and Thailand

Besides devaluation and austerity, "structural reforms" are usually part of IMF policy conditions. These reforms include trade and investment liberalization, financial sector reforms, privatization of state enterprises, the dismantling of both private and public sector monopolies to increase efficiency and attract new capital inflows. Reforms in the IMF aided countries: Indonesia, Korea and Thailand have proceeded slowly due to the vested self-interests of governments and private enterprise owners. While Indonesia, Korea and Thailand have followed the standard IMF prescription with visible limited success to date; Hong Kong, Malaysia and Singapore have followed different routes.

Hong Kong

Hong Kong sought to maintain its currency peg to the U.S. dollar. Under the currency board system, domestic interest rates were forced up due to speculative attacks on the overvalued currency. When speculators also attacked the stock market, the government intervened by buying large quantities of stocks and introduced new controls on futures purchases to curb speculation. Although the currency was successfully defended and interest rates have fallen, a severe recession and asset-price deflation resulted.

Malaysia

Initially, the authorities attempted to stabilize the ringgit by raising domestic interest rates and introducing selective administrative measures to curb speculation. However, a depletion of foreign exchange reserves resulted and the economic downturn exacerbated. Subsequently, Bank Negara abandoned its defense and allowed the ringgit to float.

A source for another round of currency attack was the accumulation of ringgit funds abroad. Hence, selective controls on capital outflows were introduced to prevent manipulation of the ringgit exchange rate and restore investor confidence. However, the controls discouraged the new capital inflows required for recovery. Therefore, the controls were relaxed five months after imposition.

Singapore

Singapore responded by first adjusting exchange rates and then employing fiscal and cost-cutting measures to strengthen competitiveness. Several financial reforms were also implemented, including liberalization of Singapore dollar.

As the economy worsened, the government unveiled an S$2 billion off-budget package in June 1998 to reduce business costs, strengthen economic infrastructure and stabilize specific sectors in the economy [Kee-Jin, 2000].

The recovery of the Asian economies was in part due to domestic policy responses and market reactions to the evolving crisis. However, the impact of global forces such as the drop in U.S. interest rates and the value of U.S. dollar versus the yen also played an important role.

Economic Recovery Response

Post-Crisis Asian Economic Outlook

For the post crisis Asian Economic outlook, we will make use of tables reported in Appendix A. The slow-down in growth in the crisis-affected countries was short-lived. In 1999, the Asian economies rebounded with a V-shaped recovery (refer to figure 1), which illustrates the sharp decline and quick recovery of the affected countries [Lim, 2000]. However, incomes and living standards in Indonesia, Malaysia and Thailand have still a way to go before reaching pre-crisis levels.

A point to note is that the recovery in 1999 is uneven. Korea has been leading the pack at a 10.7% year-on-year (YOY) real GDP growth while Indonesia is still lagging behind with a mere 0.3% growth in output in 1999. Output also expanded in Malaysia, Singapore, Thailand and Hong Kong, increasing by 5.8%, 5.4%, 4.2% and 3.1%, respectively.

Recovery in the region is not yet broad-based. The financial and asset markets are recovering ahead of the real sector. Bank re-capitalisation and restructuring is also proceeding at an uneven pace: fastest in Korea and Malaysia, moderate in Thailand and slowest in Indonesia. Improvement in private consumption, exports, fiscal deficits, monetary policy and a favourable global environment also stimulated the recovery [ARIC, 2000a].

A positive point to highlight is that the quality of recovery is improving. Firstly, higher domestic demand and intraregional trade influenced recovery by increasing the resilience of these countries to external demand fluctuations. Secondly, greater clarity and coherence have been enforced in macroeconomic management policies. Thirdly, progress is being made on the restructuring of banks and corporates. Non-performing loans (NPL) are falling and real bank credit is beginning to stabilize or increase. Fourthly, external positions have improved significantly. Foreign exchange reserves provide sufficient cover for short-term obligations; thus improving the maturity structure of external debt. Lastly, property markets are beginning to bottom out [ARIC, 2000b].

However, weak areas still remain. Firstly, the fiscal positions are a cause of concern in Indonesia and to a lesser extent, Thailand. Secondly, restructuring[vi] still has a long way to go in Indonesia, Korea, Malaysia and Thailand. Thirdly, political uncertainties are hindering reforms and recovery in several countries [ARIC, 2000c].

There are also some external risks to Asia's recovery. For one, the risk that US growth could slow sharply and impacts the recovery in Asia negatively still exists, even though it has somewhat receded. Also, if the high oil prices continue to persist for a prolonged period or increase even further, there could be significant disruptions to the region's recovery [ARIC, 2000c].

Analysis of the Recovery

We will analyze the quarterly percentage[vii] changes and the number of quarters declining from 1997Q1 to 2000Q4.[viii] The variables considered in this analysis are GDP, inflation (Consumer Price Index (CPI) as a proxy), exchange rates, lending rates and stock exchange indices.

Indonesia

The economic recovery in 2000 for real GDP *growth* (driven by consumption) has been relatively stable [ARIC, 2000c]. Albeit the 13% negative growth in 1998, GDP grew by an encouraging 0.3% in 1999 [Appendix: A]. All in all, Indonesia's recovery has been going well the V-shaped recovery, considering the period of major political and economic disturbances it was experiencing [Figure: 1].

The decline in Indonesia lasted for five consecutive quarters with an 11.9% average per quarter decline. The impact of the crisis also caused a drastic upswing in prices. Prices only stabilized in the mid of 1999. 2000Q4 faced a high *inflation* rate of 8.8%. This was due to a reflection of lower agricultural output, faster growth in money supply and the depreciation of the rupiah [ARIC, 2000c].

External factors and domestic political problems weakened the rupiah. The *exchange rate* depreciated severely by 234.5% in 1998 and appreciated by 20.9% in 1999. *Lending rates* have been in a declining trend since early 1999. Despite the slow economic recovery, the *Jarkarta Composite Index* (JCI) has approached its pre-crisis level of double-digit growth in early 2000. Still, the JCI slumped anew in 2000Q2 when higher US interest rates, uncertain regional economic prospects, public unrest, and political uncertainty caused investors to sell Indonesian equities [ARIC, 2000c].

Thailand

The economic recovery continues strong in 2000 with the manufacturing sector leading *GDP growth* [ARIC, 2000c]. The growth is proceeding slowly but steadily with a V-shape recovery [Figure: 1]. the impact of the crisis led to seven quarters of decline and the average per quarter decline was 6.8% [Appendix: A]. CPI *inflation*, on the other hand, hit the lowest growth ever of 0.3% in 1999. This declining trend started in 1998Q3. The slight rise in 2000 was caused by the depreciation of the baht and the increase in oil prices.

The recent trend in depreciation of *exchange rate* began in 1999Q4. Major factors causing this phenomenon were rise in US interest rates and uncertainties about the pace of economic recovery in the region. *Lending rates* had also been on the decline since 1999. Equity prices have fallen since the middle of 1999. The substantial losses in the *stock market* in 2000 is largely due to the hike in US interest rates and reduced investment weight for Thailand in the MSCI Indexes. Concerns over the performance of financial institution, the pace of corporate restructuring, and political uncertainties were also influencing factors [ARIC, 2000c].

Malaysia

The Malaysian economy has been recovering strongly from the crisis. Real GDP *growth* for the first half of 2000 saw an optimistic 10.3% growth [Appendix A]. This was fuelled by both external and domestic demand. All in all, Malaysia went through five quarters of decline and the average per quarter decline is 6%. The overall *inflation* for Malaysia is well under control. Despite strong expansion in economic activity and the increase in oil and transport prices in 2000, inflation remained subdued. The Malaysian *exchange rate* has remained unchanged at 3.8 RM/US$ from 1999Q4 to 2000Q4 since the implementation of exchange control in September 1998. *Lending rates* however have been falling steadily since 1999. The decline has slowed down to 15.5% and 8.3% in 2000Q1 and 2000Q2 respectively.

The *stock market* has slowed down much in 2000 after its strong recovery from the fall in 1999. It decreased by 5.6% in 2000Q4 after a 4.4% growth in 2000Q3. This slow down is in line with weaknesses in other regional equities markets.

Korea

The strong economic rebound began in early 1999, where GDP grew by 10.7% and continued strongly in 2000 [Appendix A]. The principle driving force is the *growth* in the manufacturing sector [ARIC, 2000c]. Overall, real GDP declined for four quarters and the average per quarter decline is 6.7%.

Inflation growth has always been positive. Recent inflation edging up in 2000 is partly due to increases in prices of agricultural goods and services and high world oil prices [ARIC, 2000c]. In the midst of the weakening of the other Asian currencies, the won remained relatively stable in 2000.

Despite an optimistic post-crisis recovery of the *stock market* in 1999, the performance for 2000 was less cheerful. Increases in US interest rates led to downward adjustments in global asset markets. Furthermore, the slow progress of corporate restructuring, the reported troubles of the largest chaebol, Hyundai, and liquidity problems of investment trust companies (ITCs), all had negative impacts on investor confidence [ARIC, 2000c].

Hong Kong

The double-digit *growth* momentum was strong for year 2000. There was a total of five quarters of decline in quarterly GDP. The average per quarter decline was 4.7%. Overall, the recovery in Hong Kong has been proceeding on a positive note. Inflation fell by 4.5% in 2000Q2 to 2.8% in 2000Q3 [Appendix A]. This smaller decline was partly due to a 50% property rates concession given in 1999Q3. Despite having adjusted for this factor, the 3.6% decline was still smaller than that of the previous quarter [HKMA, 2000].

The recent growth in *exchange rate*[ix] was due to the strong increase in demand for HK$ assets [HKMA, 1999]. Overall, there was limited fluctuation[x]. The recent growth in *lending rates* indicated a speedy recovery in the sector. The movements in the US markets caused the recent volatility in the *stock market*. The volatility in the earlier years was however related to the crisis. In 1998, the stock market was badly hit, declining to 29.5%.

Singapore

The *growth* momentum of recovery has been increasing steadily since 1999. The decline in growth only lasted for two quarters and the average per quarter decline was 1.6% [Appendix A]. While many countries could not control prices, Singapore managed to maintain price stability of 0% change in 1999. However, *inflation* began edging up slightly in 2000, bringing overall increase for the year to 1.4%. This rise resulted from higher global oil prices, and hence hikes in both petrol prices and electricity tariffs [MAS, 2000a, and b].

Exchange rate fell severely in 1998. The subsequent depreciation during the recovery was mild, with exchange rate increasing by 1.3% and 1.7% in 1999 and 2000 respectively. After a period of high growth in 1998 and declining growth in 1999, *lending rates* have finally stabilized in 2000. There were wide fluctuations in the *stock market* during the crisis (1998) and the immediate recovery (1999). The stock market had been receding since 1999Q3 and it entered into a decline in 2000.

Econometric Analysis of Economic Recovery Response

Methodology

The methodology of our econometric analysis will be to identify the fundamental and speculative variables that may affect the speed of recovery of the Asian Economic Crisis. The speed of recovery of the pre- and post- crisis period will be analyzed by utilizing error correction mechanism. In the error-correction model, the short-term dynamics of the variables in the system are influenced by the deviation from equilibrium. This deviation is known as the

equilibrium error. For the equilibrium to be meaningful, it must be the case that the equilibrium error process is stationary, that is, the linear combination of the variables must be cointegrated.

When the variables are cointegrated, the residuals from the equilibrium regression can be used to estimate the error-correction model. Assuming $\{y_t\}$ represents the dependent variable and $\{z_t\}$ represents an independent variables and are cointegrated of order *CI*(1,1), the variables have the error-correction form as follows:

$$\Delta y_t = \alpha_0 + \delta \hat{e}_{t-1} + \sum \alpha_{11}(i)\Delta y_{t-i} + \sum \alpha_{12}(i)\Delta z_{t-i} + \nu_t$$

where δ represent the speed of adjustment

ν_t = white-noise disturbances

α_0, $\alpha_{11}(i)$, and $\alpha_{12}(i)$ are all parameters.

Engle and Granger (1987) propose to use the value of the residual $\hat{e}_{t-1}$ coefficient estimates, which measures the deviation from long-run equilibrium in period (t-1) as an instrument of the speed of adjustment of the variables back to their equilibrium position. This comparison allows us to assess the speed of recovery for the crisis.

The Data

In the error correction model and speed of recovery analysis, GDP is taken as the dependent variable for this model. The independent variables considered are Consumer Price Index, Exchange Rate, Money Supply, and Stock Exchange. These variables are selected to reflect the economic and financial conditions of a country. The negative quarters of GDP growth rates is assumed as the crisis period.

The countries selected are Indonesia, Thailand, Malaysia, Korea, Hong Kong and Singapore. For each of these variables, we have taken the monthly data from 1995 to 2000. In this analysis, we will be comparing two periods: Pre-crisis: (January 1995 to December 1997) and Post-crisis: (January 1999 to December 2000). The pre-crisis period is chosen due to its relatively stable economy while the post-crisis period is chosen as the recovery.

Nominal Gross Domestic Product (GDP) is the main variable in our analysis. It indicates the overall health of the economies. Although real GDP would be a better and more accurate indicator of economic health, we use nominal GDP instead as the consumer price index (CPI) (1995=100) is used as a proxy for inflation. Average Exchange Rate (EX) is defined as local currency in terms of US$. This is also an important indicator of the performance of the economy as it indicates the well being of the economy internationally. Money Supply (MS) is an important indicator of the performance of the economy. It indicates the monetary sector performance of the economy. The stock exchange index (SK) shows the performance of the asset market. The particular indices used are: Hang Seng Stock Index (HSI), Jakarta Composite Index (JCI), Korea Composite Index (KOSPI), Kuala Lumpur Composite Index (KLCI), Stock Exchange of Singapore All Index (SESALL), Stock Exchange of Thailand Index (SET) for Hong Kong, Indonesia, Korea, Malaysia, Singapore, and Thailand respectively.

Results

The unit root test on all of the variables in the model are based on Philips-Perron test critical value at 5% level of significance and reported in Table 6.. The results of the pre-crisis data show that GDP and SK are of the same first order integration for all the six countries while CPI and EX have a combination of first and second order integration. As for MS, it has a combination of first, second and zero order integration. Hence there is a possibility that GDP and SK are cointegrated at the same time for this period.

The results of the post-crisis data show that GDP, EX, MS and SK are of the same first order integration for all the six countries while CPI has a combination of first and second order integration. Hence there is a possibility that all the variables except CPI are cointegrated at the same time for this period.

TABLE 6: RESULTS OF UNIT ROOT TEST

Countries	Pre Crisis					Post Crisis				
	GDP	CPI	EX	MS	SK	GDP	CPI	EX	MS	SK
Indonesia	I(1)	I(1)	I(2)	I(0)	I(1)	I(1)	I(1)	I(1)	I(1)	I(1)
Thailand	I(1)	I(2)	I(1)	I(2)	I(1)	I(1)	I(1)	I(1)	I(1)	I(1)
Malaysia	I(1)	I(1)	I(2)	I(1)	I(1)	I(1)	I(1)	I(0)	I(1)	I(1)
Korea	I(1)	I(2)	I(2)	I(0)	I(1)	I(1)	I(1)	I(1)	I(1)	I(1)
Hong Kong	I(1)	I(1)	I(1)	I(1)	I(1)	I(1)	I(0)	I(1)	I(1)	I(1)
Singapore	I(1)	I(1)	I(2)	I(1)	I(1)	I(1)	I(1)	I(1)	I(1)	I(1)

Note: I(j) represent integrated of order j=0,1,2

Cointegration Test

We need to determine the cointegration combination of our model to ensure that our model is consistent throughout. The results of the integrating test eliminate those that are of different order for both periods. Hence, we conduct a Johansen Cointegration test on GDP and SK for the six countries in the two periods.

The results are shown in Table 7. The likelihood ratios are all greater than the 5 percent critical value for the null hypothesis of no cointegration between the two variables. Hence we can safely reject the null hypothesis and conclude that there is cointegration between GDP and SK for the two periods in the six countries.

TABLE7: JOHANSEN TEST OF COINTEGRATION BETWEEN GDP AND SK

Countries	Pre-Crisis		Post-Crisis	
	Likelihood Ratio	5% Level	Likelihood Ratio	5% Level
Indonesia	18.3971	12.53*	30.9339	19.96*
Thailand	13.7651	12.53*	28.9499	25.32*
Malaysia	13.7796	12.53*	23.1686	19.96*
Korea	19.6555	18.17*	16.3079	15.41*
Hong Kong	20.1540	18.17*	23.8816	18.17*
Singapore	24.2029	19.96*	17.1211	12.53*

* Denote rejection of the null hypothesis at 5% level

Error Correction Model (ECM)

We extract the measures of the speed of adjustment δ in Table 8 for both the pre- and post periods for our analysis.

TABLE 8: RESULTS OF δ FROM ERROR-CORRECTION MODEL

Countries	δ (Pre- Crisis)	δ (Post Crisis)
Indonesia	0.0004	0.3866
Thailand	-0.0723	-0.2031
Malaysia	-0.0834	-0.2436
Korea	-0.3352	-0.6076
Hong Kong	-0.5008	-0.3076
Singapore	-0.1213	-0.0224

The results show that the coefficient δ in the post-crisis for Hong Kong and Singapore are absolutely smaller than in the pre-crisis period. While the coefficient δ in the post-crisis for Indonesia, Thailand, Malaysia and Korea are absolutely larger than in the pre-crisis period.

Analysis

The coefficient δ is of particular significance in this model as it represents the speed of adjustment for the country. If the coefficient δ is not significantly different from zero, there would be no error correction, that is, the system is in equilibrium. Moreover, the value should always be negative to indicate a convergence of the variables to equilibrium. The absolute value will thus indicate the responsiveness of the country to the crisis while the percentage change will indicate the decline or increase in the speed of adjustment.

Indonesia

The positive coefficient $\delta_{,}$ for Indonesia for both pre- and post-crisis shows that the country experiences a diverging equilibrium for both periods. The absolute value for the post-crisis coefficient (0.3866) is larger than the pre-crisis coefficient (0.0004), further emphasize the divergence in the economy. Hence we can conclude that Indonesia is not at all responsive to the crisis.

Thailand

The negative coefficient, $\alpha_{yi,}$ for Thailand for both pre- and post-crisis shows that the country experiences a converging equilibrium for both periods. The absolute value for the post-crisis coefficient (0.2031) is also larger than the pre-crisis coefficient (0.0723). This shows a 181% improvement in the speed of adjustment for the Thailand. Hence we can conclude that Thailand is very responsive to the crisis.

Malaysia

The negative coefficient, $\alpha_{yi,}$ for Malaysia for both pre- and post-crisis shows that the country experiences a converging equilibrium for both periods. The absolute value for the post-crisis coefficient (0.2436) is also larger than the pre-crisis coefficient (0.0834). This shows an almost greater than 192% improvement in the speed of adjustment for the Malaysia. Hence we can conclude that Malaysia is extremely responsive to the crisis.

Korea

The negative coefficient, $\alpha_{yi,}$ for Korea for both pre- and post-crisis shows that the country experiences a converging equilibrium for both periods. In addition, the absolute value for the post-crisis coefficient (0.6076) is larger than the pre-crisis coefficient (0.3352). The figures show an 81% improvement in the speed of adjustment for the Korea. Hence we can conclude that Korea is responsive to the crisis.

Hong Kong

The negative coefficient $\delta_{,}$ for Hong Kong for both pre- and post-crisis shows that the country experiences a converging equilibrium for both periods. However, the absolute value for the post-crisis coefficient (0.3076) is smaller than the pre-crisis coefficient (0.5008). This shows a 39% decline in the speed of adjustment for the Hong Kong. Hence we can conclude that Hong Kong is not very responsive to the crisis.

Singapore

The negative coefficient δ for Singapore for both pre- and post-crisis shows that the country experiences a converging equilibrium for both periods. However, the absolute value for the post-crisis coefficient (0.0224) is smaller than the pre-crisis coefficient (0.1213). This shows an 82% decline in the speed of adjustment for the Singapore. Hence we can conclude that Singapore is not much responsive to the crisis. This may be due to the fact that Singapore is the least effected country among the Asian economic crisis driven countries.

Conclusion

The 1998 AEC was short-lived and the V-shaped crisis and recovery curves surprised many analysts, both on the downside as well as the upturn. It stretched the longest from 1997Q2 to 1998Q4 in Thailand while it only lasted for a mere two quarters from 1998Q3 to 1998Q4 in Singapore. This indicates that the crisis may be more due to speculative attack rather than the economic fundamental weakness.

The recovery is analyzed from the econometric perspective to determine the responsiveness of the six crisis-affected economies. Among the countries, Malaysia is discovered to be the most responsive to the crisis with the largest increase in the speed of adjustment (%), followed by Thailand and Korea. The results also show that Hong Kong and Singapore are less responsive to the crisis, with the latter having a larger decline in the coefficient of the equilibrium error. Indonesia on the other hand is found to be not at all responsive to the crisis. The error correction response to Singapore is due to the fact that Singapore economy maintains stable economic fundamentals and least effected during the crisis. It is thus conclusive that Indonesia is the slowest to recover from the crisis. As for the other countries, the varying results presents a cause for in-depth analysis as to whether they are really as responsive to the AEC as they appear to be.

Policy Implications

The policy responses taken for Indonesia, Korea, and Thailand were quite similar. They turned to IMF for help and went through the same process of devaluation, austerity and structural reforms. Malaysia took on capital controls to curb the sharp exchange rate depreciation while Hong Kong raised interest rates to fend off speculative attacks. Finally, Singapore undertook fiscal and cost-cutting measures to strengthen its competitiveness.

We can thus see that IMF is not a good solution in Indonesia’s case as shown by the results. Although Korea and Thailand also came under the IMF, their recovery is proceeding on a more positive route because of their respective domestic economic climate. Korea is experiencing strong growth while Thailand’s growth is debatable.

Hong Kong is recovering moderately, indicating that raising interest rates is an adequate solution to the crisis. It aids in the recovery but does not produce dramatic results. The recovery in Malaysia is going strong due to the non-conventional but effective approach of imposing capital controls. As for Singapore, it is unsettled as to whether Singapore’s recovery through fiscal and cost-cutting measures has been as strong as we were led to believe from the statistical results.

There are six countries being considered in this analysis instead of the eight East Asian countries that are affected by the crisis. Including all eight countries would give a more comprehensive and insightful analysis. The model specification is important as it determines the focus in the econometric analysis. Further studies can be done, using the framework that we have developed, by including more variables, more affected countries and a longer post-crisis timeframe.

References

[1] Asia Recovery Information Centre, Asia Recovery Report 2000, (March 2000a).

[2] Asia Recovery Information Centre, Asia Recovery Report 2000, (May 2000b).

[3] Asia Recovery Information Centre, Asia Recovery Report 2000, (October 2000c).

[4] Bank of Korea, Quarterly Bulletin, Volume 31, Number 4, (December 2000).

[5] Bank of Thailand, Reports on Economic and Monetary Conditions, (2000).

[6] Chua, S.J., Sim, W.Y. and Tham, S.S., "The Asian Financial Crisis – A Critical Study", Applied Research Project, Nanyang Technological University, 1999, pp. 36-47.

[7] Engle, R.E., and Granger, C.W.J., "Cointegration and Error-Correction: Representation, Estimation, and Testing", Econometrica 55, (March 1987), pp. 251-276.

[8] Stanley, F., "The Road to Sustainable Recovery in Asia", International Monetary Fund, (October 1999).

[9] Goldstein, M., "The Asian Financial Crisis: Causes, Cures, and Systematic Implication", Institute for International Economics, Washington, D.C., (June 1998), pp. 1-22.

[10] Hong Kong Monetary Authority, Annual Report, (1999).

[11] Hong Kong Monetary Authority, Quarterly Bulletin, (November 2000).

[12] Hong Kong Shanghai Bank of China, Asian Economic Insight, Volume 9, (June 2000).

[13] International Monetary Fund, "Malaysia: Recent Economic Developments", IMF Staff Country Report, Number 99/85, Washington D.C., (August 1999).

[14] International Monetary Fund, "Malaysia: Selected Issues", IMF Staff Country Report, Number 99/86, Washington D.C., (August 1999), pp.33-36, 55-62.

[15] International Monetary Fund, "The IMF's Response to the Asian Crisis", Factsheet, http://www.imf.org/External/np/exr/facts/asia.HTM, (October 1998).

[16] Kee-Jin, N., "Coping with the Asian Financial Crisis: The Singapore Experience", http://www.fba.nus.edu.sg/fba/mscphd/index0001.htm,

[17] (Accessed November 2000).

[18] Lim, C.Y, "From Recession to Recovery in East Asia: A Non-IMF and Non-World Bank Explanation", Accounting and Business Review, Volume 7, Number 2, (July 2000), pp.1-10.

[19] Lin, J.Y., "The Asian Financial and Economic Crisis: Causes and Long-Term Implications", Manila Social Forum, (November 8-12, 1999).

[20] Monetary Authority of Singapore, Annual Report, (1999/2000).

[21] Monetary Authority of Singapore, Quarterly Bulletin, Volume II, Issue 3, (September 2000a).

[22] Monetary Authority of Singapore, Recent Economic Developments in Singapore, (December 2000b).

[23] Radelet, S., & Sachs, J., "The Onset of the East Asian Financial Crisis", National Bureau of Economic Research, Working Paper No. 6680, (1998).

[24] Reside Jr, Renato E., & Bautista, Maria Socorro Gochoco, "Contagion and the Asian Currency Crisis", The Manchester School, Volume 67, Number 5, Special Issue (1999), pp. 460-474.

[25] Shalendra, D. S., "The IMF and Asia's Financial Crisis: Bitter Medicine for Sick Tigers", IISS Quarterly, Volume 49, Number 2, University of San Francisco, (1998).

[26] Statistics Indonesia, Macroeconomic Statistics, (August 2000).

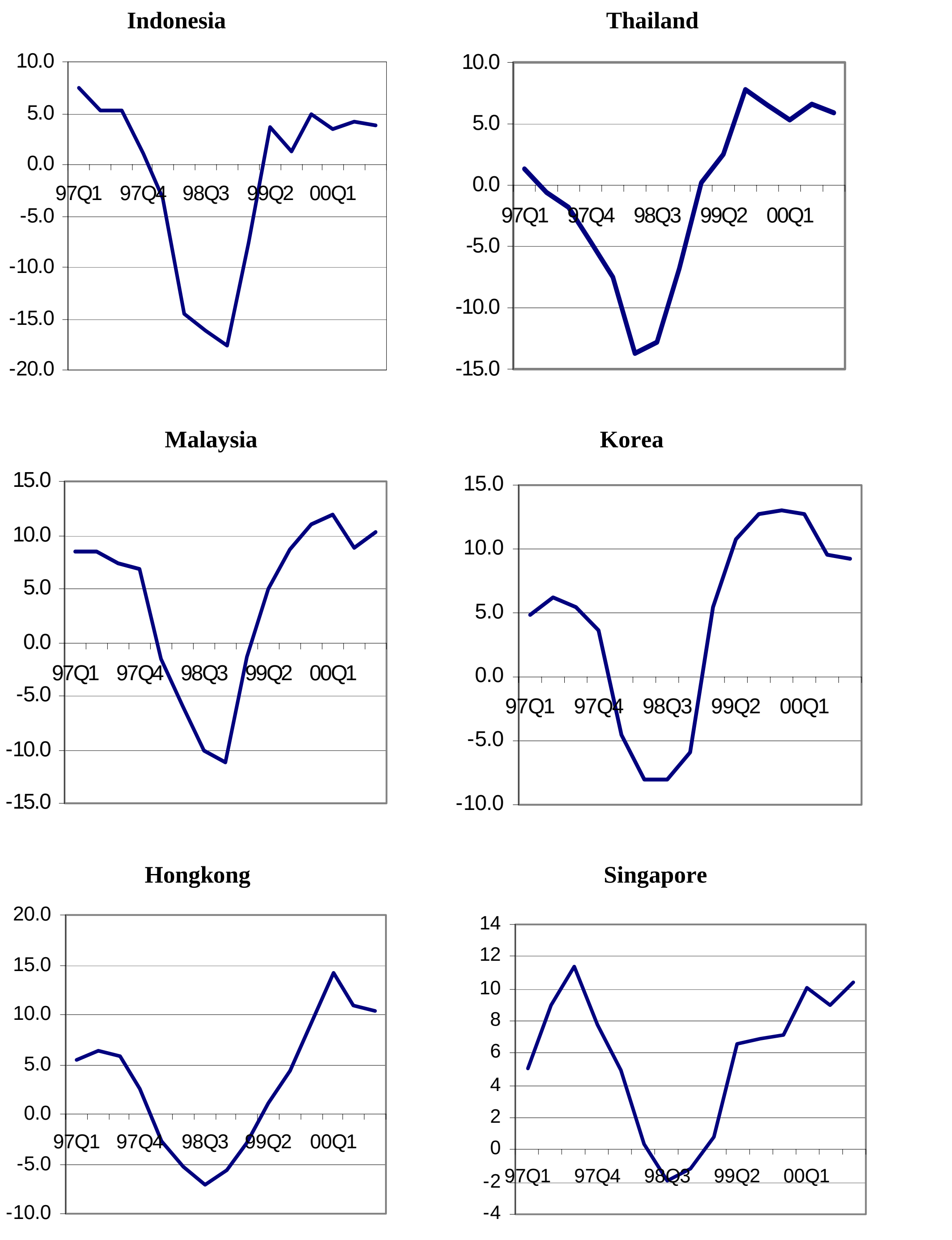
[27] Stiglitz, J., "Road to Recovery: Restoring growth in the region could be a long and difficult process", World Bank,

[28] http://www.worldbank.org/html/extdr/extme/jsart-aw071798.htm, (July 1998).

[29] Stiglitz, J., "Responding to Economic Crises: Policy Alternatives for Equitable Recovery and Development", The Manchester School, Volume 67, Number 4, Special Issue (1999), pp. 409-427.

[30] World Bank, "Responding to the Crisis: Backing East Asia's Social and Financial Reforms", http://www.worldbank.org/html/extdr/asian_crisis/backingreform.htm, (June 1998).

Figure1: Quarterly Growth Rates (%)



APPENDIX A: ECONOMIC INDICATORS (1997Q1- 2000Q4)

	Indonesia					Thai Land				
Period	**GDP**	**CPI**	**EX**	**LR**	**SK**	**GDP**	**CPI**	**EX**	**LR**	**SK**
1996	7.8	8.0	4.2	1.9	24.1	5.9	5.8	1.7	1.1	-10.7
1997	4.7	6.2	25.7	13.5	1.9	-1.7	5.6	24.1	1.9	-50.0
1998	-13.0	58.5	234.5	47.4	-30.2	-10.2	8.1	31.8	5.6	-38.8
1999	0.3	20.5	-20.9	-14.0	29.7	4.2	0.3	-8.7	-37.7	20.1
2000	…	3.7	9.3	…	-9.0	…	1.5	6.1	…	-22.6
97Q1	7.5	4.7	3.6	-1.7	17.7	1.3	4.4	2.4	-5.5	-44.8
97Q2	5.2	5.1	4.0	-2.7	12.9	-0.6	4.3	2.4	-5.0	-54.4
97Q3	5.3	7.5	26.3	22.0	6.3	-1.8	6.2	30.1	5.0	-47.6
97Q4	1.1	9.7	68.5	36.7	-28.3	-4.6	7.5	59.6	13.3	-54.4
98Q1	-3.3	27.7	280.1	38.8	-26.7	-7.5	9.0	45.2	17.3	-35.3
98Q2	-14.5	49.7	356.0	71.7	-36.0	-13.7	10.3	35.7	19.6	-42.7
98Q3	-16.2	76.3	290.3	49.4	-37.6	-12.8	8.1	20.0	6.6	-57.1
98Q4	-17.6	78.4	91.1	34.4	-16.8	-6.8	5.0	-9.7	-17.3	-13.6
99Q1	-7.7	55.8	-4.0	29.5	-20.4	0.2	2.7	-27.0	-33.3	-26.5
99Q2	3.7	30.9	-30.9	-5.7	31.4	2.5	-0.4	-8.3	-41.5	42.8
99Q3	1.2	6.7	-34.4	-29.8	55.7	7.8	-1.0	-7.3	-42.1	75.0
99Q4	5.0	1.7	-6.3	-38.4	70.9	6.5	0.1	4.6	-33.1	23.8
00Q1	3.5	-0.6	-14.6	-42.6	49.5	5.3	0.8	1.6	-21.3	18.6
00Q2	4.1	1.1	9.6	-39.1	-83.0	6.6	1.6	3.9	-10.3	-27.6
00Q3	3.9	5.8	14.2	…	-19.4	5.9	2.2	6.4	…	-36.3
00Q4	…	8.8	33.1	…	-32.6	…	1.6	10.4	…	-43.9
	Malaysia					Korea				
Period	**GDP**	**CPI**	**EX**	**LR**	**SK**	**GDP**	**CPI**	**EX**	**LR**	**SK**
1996	10.0	3.5	0.3	16.5	15.6	6.8	4.9	4.8	10.8	-11.0
1997	7.3	2.7	12.0	7.2	-16.9	5.0	4.4	19.3	19.1	-23.0
1998	-7.4	5.3	39.3	11.3	-45.3	-6.7	7.5	42.3	28.6	-33.4
1999	5.8	2.7	-2.6	-31.3	34.4	10.7	0.8	-13.3	-38.5	92.1
2000	…	1.5	0.0	…	19.4	…	2.3	-4.2	…	-12.8
97Q1	8.5	3.2	-2.6	9.6	12.2	4.9	4.7	11.7	26.4	-21.7
97Q2	8.4	2.5	0.8	5.8	-5.9	6.2	4.0	12.4	30.2	-18.4
97Q3	7.4	2.3	17.4	4.7	-20.8	5.5	4.0	10.4	4.7	-13.6
97Q4	6.9	2.7	42.8	8.8	-50.3	3.6	5.1	41.5	18.7	-41.2
98Q1	-1.6	4.3	38.0	21.2	-44.9	-4.6	8.9	75.1	51.8	-21.2
98Q2	-5.9	5.8	33.6	30.8	-50.3	-8.0	8.2	54.7	48.3	-52.3
98Q3	-10.1	5.7	28.5	13.4	-59.0	-8.1	7.0	45.5	28.0	-53.0
98Q4	-11.2	5.4	5.0	-17.9	-17.3	-5.9	6.0	6.2	-8.0	13.0
99Q1	-1.4	4.0	-5.3	-28.0	-19.6	5.4	0.7	-21.1	-38.0	6.4
99Q2	5.0	2.7	0.0	-39.6	37.6	10.8	0.6	-14.9	-44.6	125.6
99Q3	8.6	2.3	-7.9	-36.3	104.9	12.8	0.7	-8.4	-40.2	182.0
99Q4	11.0	2.1	0.0	-17.1	53.4	13.0	1.3	-7.0	-28.5	101.6
00Q1	11.9	1.5	0.0	-15.5	75.9	12.8	1.5	-7.2	-19.0	53.9
00Q2	8.8	1.4	0.0	-8.3	18.6	9.6	1.4	-4.5	-8.6	-3.9
00Q3	10.3	1.5	0.0	…	4.4	9.2	1.5	-7.5	…	-26.8
00Q4	…	…	0.0	…	-5.6	…	…	2.5	…	-46.5

APPENDIX A: ECONOMIC INDICATORS (1997Q1- 2000Q4) (Continued)

	Hong Kong					**Singapore**				
Period	**GDP**	**CPI**	**EX**	**LR**	**SK**	**GDP**	**CPI**	**EX**	**LR**	**SK**
1996	4.5	6.3	0.0	-4.9	28.0	7.5	1.4	-0.5	-1.7	8.4
1997	5.0	5.8	0.1	5.1	16.6	8.4	2.0	5.3	1.0	-13.6
1998	-5.3	2.8	0.0	9.1	-29.5	0.5	-0.3	12.7	17.7	-27.0
1999	3.1	-4.0	0.2	-12.8	35.1	5.4	0.0	1.3	-22.1	50.6
2000	…	-3.7	0.4	…	24.4	…	1.4	1.7	…	3.4
97Q1	5.4	6.2	0.2	2.9	17.4	5.1	1.7	0.4	0.0	-8.9
97Q2	6.4	5.7	0.1	2.9	28.9	9.0	1.7	1.9	0.0	-15.6
97Q3	5.8	6.1	0.1	2.9	35.0	11.4	2.3	5.4	0.0	-10.3
97Q4	2.5	5.4	0.0	11.8	-18.9	7.8	2.3	13.6	4.0	-20.1
98Q1	-2.8	5.0	0.0	14.3	-21.7	4.9	1.2	15.3	24.2	-24.6
98Q2	-5.3	4.4	0.0	14.3	-53.8	0.4	0.1	12.8	24.2	-30.5
98Q3	-7.0	2.8	0.0	14.3	-97.2	-1.9	-0.9	13.9	23.1	-40.0
98Q4	-5.7	-0.7	0.1	-5.3	-4.1	-1.2	-1.5	2.9	0.1	-11.4
99Q1	-2.9	-1.8	0.1	-12.5	-6.4	0.8	-0.7	2.6	-25.4	-4.0
99Q2	1.1	-4.0	0.0	-17.5	28.6	6.6	0.0	4.0	-25.4	60.9
99Q3	4.4	-5.9	0.2	-15.0	41.4	6.9	0.3	-2.3	-24.7	98.8
99Q4	9.2	-4.1	0.3	-5.6	32.9	7.1	0.5	1.8	-11.0	64.0
00Q1	14.2	-5.1	0.4	2.9	39.5	10.1	1.1	-1.4	0.6	51.8
00Q2	10.9	-4.5	0.5	15.2	15.9	9.0	0.8	0.5	0.9	-1.7
00Q3	10.4	-2.8	0.5	…	20.5	10.4	1.5	2.4	…	-3.5
00Q4	…	-2.2	0.4	…	-3.7	…	2.0	4.1	…	-16.4

Note: LR represent lending rate and other variables notations are as defined before

Sources: Various National Agencies, Asia Recovery Reports (Asian Development Bank), CEIC Database, and International Financial Statistics.

End Notes

[i] The growth of bank and non-bank credit to the private sector had surpassed the rapid growth of real GDP by a wise margin.

[ii] Although this did not seem to be a risky strategy then, the negative consequences of these liquidity and currency mismatches eventually surfaced in the form of speculative attacks and the exchange rate crisis.

[iii]Loan classification and provisioning practices were too lax. The quality of public disclosure and transparency was poor. Furthermore, there was too much "connected lending", thus bringing problems of concentration of credit risk and crony capitalism. There was also excessive government ownership and involvement in banks resulting in banks acting as "quasi-fiscal" agents of governments to channel government off-budget assistance to ailing industries.

[iv] Gresham's Law states that bad money (surfeit of hot money) chases out good money [Lim, 2000, pp. 2-3].

[v] Central banks began to require recapitalize and the consolidate banks in an effort to aid the recovery of the financial sector.

[vi]Banking sector recapitalization and restructuring made considerable headway in 1999, with capital adequacy and asset quality improving. The affected countries also began the process of corporate debt resolution and restructuring. In general, however, corporate restructuring lagged behind financial sector restructuring [ARIC, 2000c].

[vii] All percentages are calculated on a year-on-year basis.

[viii] The following analysis is calculated based on the data of the last available quarter from the tables in Appendix I.

[ix] Hong Kong practiced a system of linked exchange rate whereby the Hong Kong dollar (HK$) exchange rate largely moves in tandem with the convertibility rate.

[x] The HK$ exchange rate has 0% growth in 1998, 0.2% growth in 1999 and 0.4% growth in 2000.

Cultural Impact on Total Quality Management Implementation, an Example of Life-long Learning at Workplace

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Abstract

In this paper, Total Quality Management (TQM) as life-long learning at workplace will be discussed and assessed through UNESCO - Delors' four pillars of life-long learning. It is argued that optimal accomplishment of a Total Quality Management as a life-long learning process is determined by the existence of four pillars; the ability to learn to know, the ability to learn to do, the ability to learn to live together, and the ability to learn to be. Life-long learning process depends upon frames of references of the learners, and therefore cultural background would be a moderating factor in discussing the life-long learning process. Life-long learning processes at workplace are flavoured by cultural diversities. Since TQM as life-long learning was first introduced and implemented in Japan and only in much later period the western world began putting it into practice, the TQM life-long learning process will be discussed in terms of cultural differences between the east and the west. The total quality life-long learning involves both formal and informal learning types. It is suggested that informal learning would accomplish more transfer of tacit knowledge, and thus TQM life-long learning should consist more informal learning. TQM life-long learning is a social process where people share experiences and create tacit knowledge such as shared mental models, technical skills and competence. Based upon observations on prominent companies, it has been suggested that the implementation of TQM is more successful in Japan and other Asian countries than in the US and Europe.

Introduction

Life long learning is a process that can be done in almost every scene of life. Work place is one good place to learn continuously. At work, we learn how to accomplish certain tasks, how to behave in making decisions, how to treat other people within the organization, and how to cope with the everlasting changes. Hayes (1997) stated that if a company is to develop the ability of continuous self-renewal, it's real battle lies in changing individual organisation members' behaviours and actions. Therefore, if an organisation is to respond successfully to rapidly changing circumstances, this process is dependent on the people in the organisation to forge the new path to progress. It is suggested by scholars that one way of facilitating this process is to create a learning organisation where 'people are continually learning how to learn together' (Senge, 1993). Organizational learning refers to a group of people learning new processes, practices, and structures in order to reorganize their work. Total Quality Management (TQM) is one of the many things that people learn at work place. Cultural differences play an important role in this learning process. It was proposed that cultures endow individuals with different rules or principles that provide guidance for making decisions. The way culture influences decisions would be through the reasons that individuals recruit when required to explain their choices. Some anomalies of famous theories such as the Maslow's theory of motivation may occur due to cultural differences. Hofstede (1980) suggests that Maslow's theory of motivation stating that the human needs will go in order from basic needs to the highest need of self-actualization does not hold for workers outside the US. For instance, in countries of high uncertainty avoidance such as Japan as compared with lower uncertainty avoidance countries such as the US, security motivates most workers more strongly that does self-actualization. As Peat (1995) states, each society can approach the world in its own way, for the cosmos has unending richness and subtlety. Adler (1986) found that an individual's frame of reference will determine the order of importance of the individual's needs. It has also been found that one's frame of reference is in part determined by one's culture. Thus, an individual's needs to learn are partially bound by culture. Human needs may well include fundamental or universal aspects, but their importance and the ways in which they learn is different in varied cultures. In the past, there were some resistance by the eastern countries in adopting western practices due to the resentment of colonialism. In a more radical way, Prakash and Esteva (1999) argued fervently that education, particularly at the margins of the industrialized world, as a form of colonialism. Being more advanced in many ways during the late centuries, the western society tend to consider practices from the eastern countries as less sophisticated. Therefore, it is quite possible that the tardiness in adopting the Japanese style Total Quality Management by American companies was due to this contemplation. It was until the world recognized the advantages and results of outstanding Japanese firms applying TQM, then American companies began to learn and implement this practice.

Total Quality Management: Life-long Learning at Work Place

Total Quality Management is a *collection* of methods and practices an organization uses in an attempt to achieve total quality (Schonberger, 1991). Often used loosely as a general statement of purpose, TQM does not represent a specific method or set of methods, nor does it appear to represent a theory for transformation of organizations. The definition of the term 'quality' itself has progressed from 'meeting customer specifications' to 'satisfying the customer', to 'meeting and *exceeding* customer expectations', but even this last definition puts an unnecessary boundary on quality, because it is limited to the customer's current information and perspective. Deming (1982) points out that many innovations have occurred because the *creator* of a product or service was able to develop a new idea that was not even imagined by the customer. The words 'Total Quality' used together are usually meant to recognize that real quality requires all elements of the organization to work together toward achieving that end. It means to strive for excellence in everything an organization does. Total Quality Management (TQM) refers to a collection of *practices*. Originally, TQM was first practised in Japan during the 1970s. The founders of TQM models were not all Japanese. In fact, some of them were westerners. However, TQM was not popular in the western world at first. US experts such as Deming accompanying allied occupation forces began to teach quality control to the Japanese, and in Japan today everyone, from production employee to CEO, is knowledgeable in quality control techniques. The result is that Japan has become dominant in numerous quality-sensitive international markets. Good quality also avoids the high costs of rework, scrap, extra inventories, and warranty work; bad feelings and finger pointing within the firm; and loss of customers. These factors translate into lower prices for Japanese goods and a healthy environment for further improvements.

Component and Methods of TQM

Total Quality Management consists of many components and methods such as:
Deming's 14 principles of Total Quality Management: As the 'father' of TQM, Deming formulated the main beliefs required in implementing TQM (Deming, 1982)

1. Create constancy of purpose toward improvement of product and service with a plan to become competitive and to stay in business. Decide whom top management is responsible to.
2. Adopt the new philosophy. We are in a new economic age. We can no longer live with commonly accepted levels of delays, mistakes, defective materials, and defective workmanship.
3. Cease dependence on mass inspection. Require, instead, statistical evidence that quality is built in. (*Prevent* defects rather than *detect* defects)
4. End the practice of awarding business on the basis of price tag. Instead, depend on meaningful measures of quality, along with price. Eliminate suppliers that cannot qualify with statistical evidence of quality.
5. Find problems. It is management's job to work continually on the system (design, incoming materials, composition of material, maintenance, improvement of machine, training, supervision, retraining).
6. Institute modern methods of training on the job.
7. The responsibility of foremen must be changed from sheer numbers to quality [which] will automatically improve productivity. Management must prepare to take immediate action on reports from foremen concerning barriers such as inherited defects, machines not maintained, poor tools, fuzzy operational definitions.

8. Drive out fear, so that everyone may work effectively for the company.
9. Break down barriers between departments. People in research, design, sales, and production must work as a team, to foresee problems of production that may be encountered with various materials and specifications.
10. Eliminate numerical goals, posters, and slogans for the work force, asking for new levels of productivity without providing methods.
11. Eliminate work standards that prescribe numerical quotas.
12. Remove barriers that stand between the hourly worker and his right to pride of workmanship.
13. Institute a vigorous program of education and retraining.
14. Create a structure in top management that will push every day on the above 13 points.

Quality Circles: The *quality circle* was originated in Japan. It is a small work group that meets periodically to discuss ways to improve quality, productivity, or the work environment. In Japan, management or a committee assigns problems to circles. The circle then defines and refines the problem into projects. Analysis, solution, presentation, and implementation follow.

Just-in-time (JIT) production: a system of managing operations with little or no delay time or idle inventories between one process and the next with the purpose of efficiency and therefore optimising the quality. JIT inventory control system was originally developed in Japan by Taiichi Okno, a vice president of Toyota (Scott *et al*, 1999). Initially the system was called the *kanban* system, named after the cards that were placed in the parts bins that were used to call for new supply. The idea behind the system is that the firm should keep a minimum level of inventory on hand, relying on suppliers to furnish parts 'just-in-time' for them to be assembled. This is a direct contrast to the traditional inventory philosophy of US firms, which is sometimes referred to as 'just-in-case' system, which keep healthy levels of safety stocks to ensure that production will not be interrupted. Although large inventory may not a bad idea when interest rates are low, when interest rates are high they become very costly. JIT is not merely a method for reducing inventory. It should be viewed broadly as a procedure for helping companies to manage and reduce their total processing times and therefore improve quality.

The new supplier-customer relationships to ensure total quality: Out of the concept of total quality management (TQM), which is a company-wide system approach to quality, has come a new philosophy of 'love thy supplier' (Scott *et al*, 1999). Under this approach, the traditional antagonistic relationship between suppliers and customers, where suppliers are coldly dropped when a cheaper source can be found, is being replaced by a new order in customer-supplier relationship. In effect, what began as an effort to increase quality through closer supplier relations has turned to have unexpected benefits. Close customer relationships have helped trim costs, in part, by allowing for the production of higher quality products. This close customer-supplier relationship has allowed the TQM philosophy to be passed across company boundaries to the suppliers, enabling the firm to tap the supplier's expertise in designing higher-quality products.

Zero defects (ZD) proposed as the proper goal of a quality program; an alternative to the past practice of setting an acceptance quality (defect) level. Philip B. Crosby (1979), former corporate vice president and director of quality control at ITT Corp., is the developer of the zero defect concept.

Kaizen: A Japanese term meaning continual improvement involving everyone. It is one of the most important concepts in Japanese management. It means working *each and every day* to make improvements in all the processes of the organization. Such incremental, but continuous improvement may reap great gains over time.

Why Adopting Total Quality Management?

Once a company adopts a Total Quality Program for itself and its suppliers, the quality problem might disappear and unexpected machine breakdowns and defective parts become rare occurrences. While improving quality reduces the need for holding inventory, reduced inventory also leads to higher quality. Long set-up and changeover times of equipment provide the second source of demand for high inventory levels in traditional (western) manufacturing systems. The difference in optimal economic order quantity batch sizes between a US automobile manufacturer that took six hours to change stamping dies and a comparable Japanese firm that took only four to six minutes was enormous (Kaplan & Atkinson, 1999). Successful adopters of JIT production have enjoyed tremendous savings. The most obvious saying arises from the much lower investment required to hold inventory. Beyond these obvious financing savings, companies also discovered large space savings. Having eliminated work-in-process goods, companies found another factory inside their old factory. The success of TQM in Japan was considered and followed by US companies. During the 80s, US companies started to contemplate and apply TQM in their operation.

The Practice of Total Quality Management Scrutinised by Means of the Four Pillars of Life-long Learning

Learning to Know

Awareness Is the Beginning of Learning to Know

Total Quality Management contains some methods that should be shared within all members of the organization. In initialling the TQM process, it is important that all members of the organization are knowledgeable of what TQM really is. One of the first things that Deming (1982) taught in exercising TQM is: adopting the new philosophy, realizing that today is the new economic age. Commonly accepted levels of delays, mistakes, defective materials, and defective workmanship are no longer tolerable. This awareness should be the beginning of the TQM learning process. In exercising Total Quality Management, all employees should not only have information on what TQM is, but also gain knowledge, the know-what, know-why, know-how, and know-who of TQM. Before the practices of TQM in the 1970s, Japanese products were considered products of lower quality in the world market. In Japan, where people are taught to work hard to survive, this new philosophy might be easier to absorb under the shadow of Japan's huge loss in the Second World War, and the motivation to excel in the world market. Looking at the success gained by the Japanese firms implementing TQM, US firms were beginning to adopt this "new" practice.

Knowledge as the Commodity in Learning to Know

Knowledge is a deeper concept than information. The term 'knowledge' itself is arguable. Barnett (2000) noted that in western tradition knowledge has come to stand for ordered conceptual frameworks, providing systematic holds on the world, expressed in written and spoken language. The idea of knowledge contains elements of universality. Meanwhile, Peat (1995) described that knowledge can be seen as information that comes with insights, framed experience, intuition, judgement, and values, thus contain locality. Traditional cultures represent a different form of knowledge expressed in written or spoken language, and consciously or unconsciously, traditional people educate their children how to live in traditional life. People all over the world learn formally and informally. In some sense knowledge represents truth and therefore offers a reliable basis for action. Clarke & Rollo (2001) refer knowledge as the body of understanding and skills that is mentally constructed by people. Knowledge is increased through interaction with information typically from other people. Business organisations are coming to the view that knowledge is their most valuable strategic resource. They are realising that in order to remain competitive they must explicitly manage their intellectual resources and capabilities embedded in knowledge. Intuitively, it makes sense that the firm that knows more about its customers, products, technologies and markets, and their linkages should perform better (Zack, 1999). These arguments are in alliance with the idea of autopoiesis (Barnett, 2000) that implies that company-specific processes can count as knowledge. TQM as a system encourages people in the organization to acknowledge their environment specifically and communicate the information effectively. In implementing TQM, each member of the organization learns to know their customers, suppliers, all stakeholders, and other specific information altogether. These types of information are considered as company-specific knowledge that enables TQM optimising the company's value.

How to Learn To Know

In initiating TQM, all levels employees would be trained on 'quality' courses and trainings. In this early stage, the process of learning to know is usually formal as classes are formed and formal instructors are assigned to share the total quality knowledge. Transfer of knowledge is mostly limited to mere theoretical knowledge.

Knowledge Is Of No Use without Implementation

Thomas Clarke (2001) argued that knowledge management initiatives are unlikely to be successful unless they are integrated with business strategy, and related to the development of the core capabilities of the organisation. Similar claim noted by Barnett (2000), knowledge is only authentic if it can be put to work. Therefore the 'learning to know' pillar only is not enough in exercising TQM. The four pillars of life long learning (learning to know, do, be, and live together) should be built in TQM.

Learning to Do

Wisdom could be described as the best use of knowledge (Clarke, Rollo, 2001). Knowledge processes can always be improved but wisdom is necessary to determine which processes to focus on in order to achieve organisational objectives. After the members learn to know what TQM is, they have to learn how to do and implement it in the work place wisely.

From Skill to Competence, Top Management Commitment

Skill only is not enough in the TQM process. All members should excel in their very own vicinity. The goal of all TQM members should be creating competence. Top management and the shareholders should commit to the TQM application and the to ultimate goal, producing competence, not skill. Once the management and the shareholders were committed to implement TQM, they have to communicate clearly this new direction to all employees and to make sure that everyone within the company understands the TQM strategies thoroughly and acquires competence, not merely the skill. Peterson (1999) affirmed, top management must have a passion for TQM application. Without this sustained passion, top management's attention and energy would be diverted to other pressing needs (Petersen, 1999). In this 'learning to do' process, senior members teach juniors how to gain competence in TQM. As Kotter (1996) stated, successful implementation occurs in companies where executives 'walk the talk', teaching new behaviors by example. The determinant of success of enterprises is ever more reliant upon their effectiveness in gathering and utilising knowledge, that is, their competence. In exercising TQM, companies require good coordination of complex activities, such as manufacturing and procurement, and therefore competent employees are needed to operate the system. Top management role in demonstrating examples is the key to gain competence among TQM members.

More Informal Learning Instigates More Tacit Knowledge Transferred

In implementing TQM, companies develop formal organized learning support, such as quality circles, mentoring, visits, and formal educational trainings. In TQM, quality circles as formal small groups are scheduled to meet in a regular basis to talk about problems, evaluations, and other things involving quality. These groups might work in certain cultures as Japan and other Asian countries. However, it may not work that well in western world. Eraut *et al* (1998) found in their research conducted in the United Kingdom that informal mentoring and coaching would be more effective rather than formal ones. The more formal the meeting, the less tacit knowledge transferred. Argyris (1994) of Harvard University also stated that correctly used communication tools such as focus groups actually inhibit the learning and communication that corporations now demand of managers and employees. Those formal communication tools do not encourage individual accountability or allow the revelation of threatening or embarrassing information. Tacit knowledge is important to spread among all TQM members as they not only have to gain skills, but also competence. Therefore, quality circles in TQM should be not too formal and gradually develop interpersonal support which might extend beyond workplace. In Japan, after office hour people usually gather at pubs, mainly to drink and talk and this would strengthen their personal and social relationships as well as at work as members of TQM team. The formal quality circles at work become more informal for them as they are bound by personal friendship. Hence the transfer of tacit knowledge would be less difficult. This is not the case in the west where people value individualism more. The disappointment of TQM in western world might due to these arguments. The ways Americans and Japanese learn to do are dissimilar. With the Japanese frame of reference, where security is the most important concern, they are more willing to learn to do their best in performing quality. Defect could mean the termination of wealth leading to death. Consequently, zero-defect is understandable among Japanese workers. They would learn to do the TQM with a clear goal of achieving prime quality, for it is their way to survive. The American frame of reference assesses pride and self-actualization the highest. Americans would tend to seek pleasure on top of work. The zero-defect concept would be considered 'not human.' They would learn to implement TQM as another type of a Japanese worth-trying management method. Therefore, cultural background could be a moderating factor in learning to do the TQM.

Learning to Be

Knowledge produced by individuals reaches its full potential to create economic value when it becomes embedded in organisational routines. It is important to focus upon flows of knowledge, and not simply measure stocks of knowledge (Clarke and Rollo, 2001). It is implied that the results of the learning processes can be observed in how the learners become the features they have learned.

To Be the Members of TQM

All members should learn to be part of the whole total quality management team. In TQM, there is no useless member. Every one is useful, every one is important. As we scrutinize Deming's 14 points of TQM, some of the points stress on the attitudes and characters of the people.

- Adopt the new philosophy. We are in a new economic age. We can no longer live with commonly accepted levels of delays, mistakes, defective materials, and defective workmanship. ➔ *TQM members should be enlightened with the vision of the new economic age.*
- Drive out fear, so that everyone may work effectively for the company. ➔ *TQM members should be individuals working effectively without fear.*
- The responsibility of foremen must be changed from sheer numbers to quality [which] will automatically improve productivity ➔ *Foremen should be 'quality individuals'.*
- Break down barriers between departments. People in research, design, sales, and production must work as a team, to foresee problems of production that may be encountered with various materials and specifications. ➔ *TQM members should consider themselves as a team achieving a common goal: total quality.*
- Remove barriers that stand between the hourly worker and his right to pride of workmanship. ➔ *TQM members should be proud of being TQM members.*

It is obvious that Deming stated the characteristics of the TQM members as an important requirement in contributing success to TQM. The workers and management team in the TQM are required to 'be' true members with certain characteristics, not merely to work and be able to do things. Some companies create certain specific features distinguishing the company's TQM members from other companies to build the sense of pride and sense of belonging. The management constantly imposes total quality character building on workers as TQM can only be success when supported by well-built total quality characters of the team. TQM is not just a method that can be learned, but the implementation needs to be nurtured every day to build positive attitudes towards the success of maximizing quality. The people within the organization should learn how to be supportive members of the TQM. Building a community of TQM is the hardest part of implementing TQM. Community - shared understanding and access to the work and minds of others - is the principal element in an innovation strategy (Compaq, 1999). Being knowledge-able of TQM does not only mean understanding all the information about TQM. It covers the institutionalization of the new behaviors, values and attitudes into the organization's shared values and belief system on TQM. All members of the organization now are exposed to TQM and gain knowledge on how to utilize it for the purpose of the company's goal achievements, maximizing quality. The TQM members have their trademark as TQM members. While Deming (1982) insisted that there was no 'instant pudding' in implementing TQM, many western consultants are establishing themselves with a client suggested short-term gains. Because of this search for short-term gains, process improvement and reductions in cycle time became very popular and in some cases a final objective. Unfortunately, after they ran their short-term course, many efforts collapsed and TQM was often declared a failure. In these cases, the so-called 'TQM members' are not really TQM members. They do not acquire the attitudes and characteristics of TQM members as Deming pointed. More informal learning involves in shaping the members to gain all the attitudes and characteristics of TQM members and this takes time.

Continuous Improvement as a Life Style

TQM is a long-term process and it involves continuous improvement. It requires the change of attitudes of the employees. One very important characteristic required in TQM is the ability to improve continuously. This characteristic comes from the willingness to improve, to be the best. Therefore a very high standard should be set in order to push TQM members to continuously improve. In the east, usually children are taught to fight for their goals at any cost and not to be easily satisfied. This character is nurtured from early age. The zero-defect requirement in TQM would be easily implemented where people are used to have the highest standards and continuously fight toward them. When the zero-defect was first introduced to the western world, it was quite shocking as western people are usually more tolerant. In the west, to err is human and this philosophy certainly does not fit the TQM philosophy. In implementing TQM, all members should learn to have a TQM life style. Argyris (1991) argued that (western) professionals are least able to learn because they have rarely experienced learning-related failure and are prone to defensive reasoning. This perhaps could be one of the biggest hindrances in implementing TQM in established industrial world, as professionals unconsciously are not willing to change their lifestyle and habit to some new things. Total Quality Management is a lifestyle. It is not merely a system of management. It involves all aspects of the employees' and management's life. Japan today has adopted this prime quality life-style in all aspects of their life.

Loyalty and High Expectation as TQM Life Style

Lincoln (1989) compared employee work attitudes and management practice in the US and Japan. The research results showed that with the causal reciprocity thus statistically controlled, satisfaction in Japan is lower but commitment and loyalty to the company proved substantially higher than in the US. The resulting picture of Japanese work attitudes as combining low job satisfaction and high organizational commitment might be an evidence that the discipline of the Japanese work force does have some basis in the work attitudes of Japanese employees. With high commitment and loyalty, the Japanese would employ continuous improvement naturally. This might explain the early successful implementation of total quality management as life long learning at work place in Japanese firms. Japanese employee's combination of high commitment couples with low satisfaction may imply a restless striving for perfection, an ongoing quest for fulfilment of lofty work values and company goals. High percentages of the US workforce routinely reporting satisfaction with their jobs may be more cause for concern than complacency. It may signal low expectations and aspirations, and a preoccupation with leisure-time pursuits. Another possibility is that the Japan-US differences in work attitude found are due to measurement biases. Many would argue that a distinctly American impulse is to put the best face on things, to be upbeat and cheerful, to appear in control and successful even when uncertainty is high and the future looks bleak. The Japanese, it appears, bias their assessments in the opposite direction. The Japanese seem to colour their evaluations of nearly everything with a large dose of pessimism, humility, and understatement. A Japanese child coming home from school with a B for a test might get scolded for being 'failed' to get an A. An American child in the same condition might get rewarded for his achievement. It is arguable that the Japanese would have a stronger coerce to learn life-long, since their expectation is higher than the average Americans. In TQM, high expectation combined with high loyalty is very important in creating prime quality. Scott *et al* (1999) showed an example experienced by General Motors, a prominent American firm which has saved millions of dollars by going to a just-in-time system. While implementing TQM, if there is a breakdown in the supply of inventory to the system, the result can be catastrophic. In 1996 GM was hit by a strike that involved about 3,000 workers at two of its plants that produces brakes for the cars GM makes. As a result of not having brakes for the cars to put in cars, GM was forced to stop production and lay-off over 177,000 workers. Moreover, because GM used a just-in-time inventory system, it did not take long for the shutdown of the brake plant to affect all of GM’s other operations. In Japan, this kind of strike among TQM members would hardly happen for TQM is their life-style, and consequently they are loyal to the organization embedding TQM. It is argued that because of this reason the total quality management implementation was first successfully implemented in Japan long before it was in the US. Implementing TQM is not as easy as expected. It needs a life-long learning process, a continuous improvement, and a high commitment to quality.

Learning to Live Together

Scott *et al* (1999) described how TQM needs not only a good system, but also an integrated life-style necessitating the ability to live together. Employee, customer, and supplier involvements are essential to quality and organizational success. Such efforts must include participation by top management in order to have clear aim, redesign of products and process, innovation, and plans and actions that support the organization's strategies. The final and most important stage in Total Quality Management implementation is how to acclimatize a condition where all members live together in harmony to achieve the total quality. Senge (1993) argues that to excel in an increasingly complex and dynamic world, organizations will have to provide for and encourage individuals and teams in *all* levels of the organization to learn. He envisions ‘learning organizations are places where people *continually* expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together’. In TQM, learning to live together is a crucially important part of the learning process as this management system needs people supporting it.

Customer – Supplier - Employee Relationship in TQM

TQM techniques offer advantages in addition to satisfying customers and helping them to succeed. TQM brings suppliers, customers, managers, and employees into the decision process. TQM is no longer simply applied to manufacturing; quality improvement programmes now stress on customer focus, employee training and empowerment, top management support and commitment. TQM requires tacit knowledge embedded in company practices and the people of the organisation. It includes know-how, intuition and informal communications that make up a large part of the company culture. Clarke & Rollo (2001) argue that tacit knowledge is experimental, intuitive and communicated most effectively in face-to-face collaboration that obviously needs a harmonious relationship between all parties in TQM team. The above example about GM shutting down its operation and laying-off 177,000 workers merely due to the strike done by 3,000 workers shows that learning to live together would be a substantial effort in implementing TQM. In Japan, this strike is unlikely to happen.

Structural Reflexivity in TQM

Total Quality Management (TQM) claims to be a people-oriented management system, emphasizing satisfaction of organizational members as one of its core values, alongside customer satisfaction and community well-being. A built-in structural reflexivity would be formed in TQM learning with the existence of circle groups creating learning climate, customer-supplier relationship continuously evaluating quality, and the community as a whole forming an opinion on the quality of the organization. TQM is most successfully implemented within intelligence organizations. As Editor Kenneth Leithwood (2000) distinguishes, there are organizations that are only ‘smart’ (i.e., highly skilled) and there are those that are intelligent — that is, those with the capacity to learn new skills and knowledge, acquiring competence. Only intelligent organizations are capable of effectively implementing the structural reflexivity in TQM. The level of intelligence of an organization is determined by the intelligence of the people within. TQM is effective as long as people involved can live together harmoniously within intelligent organizations.

Conclusion

Total Quality Management (TQM) generally refers to a comprehensive system whereby companies are able to achieve extraordinary levels of quality in their delivered products and services. TQM implementation encloses the four pillars of life-long learning for it is a continuous improvement process that should be done continuously. Despite of the early implementation by the Japanese, based on some researches done by experts, TQM contributes to success more in Japanese firms than in US firms. Accomplishment differences might be due to strategy shaping, frames of reference and cultural background. As a process, the accomplishment of life-long learning in form of TQM depends upon the people executing it. Interactions among people within and outside the organization, how they interrelate, intermingle, cooperate, and link up one to another are factors contributing success to TQM. These senses are not created instantly; people need to learn how to nurture them together. Nurturing TQM characters would be done by living together harmoniously. Living together is a matter of socialism. Socialisation is a process of sharing experiences and creating tacit knowledge such as shared mental models, technical skills, and competence. The key to acquiring tacit knowledge is experience. Without some form of shared experience, it is extremely difficult for one person to project her or himself into another individual's thinking process. The transfer of information will often make sense, if it is abstracted from associated emotions and specific contexts in which shared experiences are embedded (Nonaka and Takeuchi, 1995). In conclusion, TQM is only a tool to achieve total quality. No tool, TQM included, is effective if exercised improperly. TQM is optimally implemented in an organization which members are committed to a life-long learning process of improving continuously.

References

[1] Adler, Nancy J. (1986) International Dimensions of Organizational Behavior. Boston: PWS Kent Publishing Co

[2] Argyris, Chris (1991) Teaching Smart People How to Learn Harvard Business Review, 69, 3, 99-109, May-Jun 1991

[3] Argyris, Chris (1994) Good Communication That Blocks Learning Harvard Business Review, 72, 4, 77-85, Jul-Aug 1994

[4] Argyris, Chris (1998) Empowerment: The Emperor's New Clothes Harvard Business Review, 76, 3, 98-105, May-Jun 1998

[5] Badaracco, J.L. (1991) The Knowledge Link: How Firms Compete Through Strategic Alliances. Boston: Harvard Business School Press

[6] Barnett, R. (2000) Working Knowledge. In Garrick and Rhodes (2000) Research and Knowledge at Work: Perspective, Case studies and Innovative Strategies, London: Routledge

[7] Chun Wei Choo (2001) The Knowing Organization As Learning Organization. Education + Training, 43,4

[8] Clarke, Thomas (2001) The Knowledge Economy. Education + Training, 43, 4

[9] Clarke, T., Rollo, C. (2001) Corporate initiatives in knowledge management. Education + Training, 43, 4/5

[10] Compaq (1999) Knowledge Management: Approaching Solutions. White Paper, Compaq Computer Corporation, Houston, TX.

[11] Crosby, P.B., (1979) Quality is free: The Art of Making Quality Certain. New York: McGraw-Hill,

[12] Davenport, T.H, Prusak, L. (1998) Working Knowledge: How Organisations Manage What They Know Boston: Harvard Business School Press

[13] Delbridge, R., Oliver, N. (1991) Just-In-Time Or Just The Same? Developments In The Auto Industry - The Retailers' View. International Journal of Retail & Distribution Management 19, 2

[14] Delors, J. (1996) Learning: The Treasure Within. Report to UNESCO of the International Commission on Education for the Twenty-first Century Paris: UNESCO

[15] Deming, W. Edwards (1982) Quality Productivity and Competitive Position Cambridge, Mass.: MIT, Center for Advanced Engineering Study

[16] Dimitriades, Z. S. (2000) Employee satisfaction Total Quality Management (TQM). European Quality 7, 6

[17] Dyer, Jeffrey H. (1996) How Chrysler Created an American Keiretsu. Harvard Business Review July-August 1996

[18] Eraut, M., Alderton, J., Cole, G., Senker, P. (1998) Learning from Other People at Work. In Coffield, F (ed), Learning at Work. Bristol: The Policy Press

[19] Ferraro, Joan M. (2000) Reflective Practice and Professional Development. ERIC Digest. ERIC Clearinghouse on Teaching and Teacher Education

[20] Hayes, Treasa (1997) The Learning Organisation: Fashionable Fad or Path to Progress? www.globalresearchbusiness.com

[21] Hofstede, Geert (1980) Motivation, Leadership, and Organization: Do American Theories Applied Abroad? Organizational Dynamics. Summer 1980, 42-63

[22] Imel, Susan (1998) Transformative Learning in Adulthood. ERIC Digest No. 200, ERIC Clearinghouse on Teaching and Teacher Education

[23] Kaplan, Robert S., Atkinson, Anthony A. (1999) Advanced Management Accounting. New Jersey: Prentice Hall

[24] Kotter, J.P. (1996) Leading Change Boston: Harvard Business School Press

[25] Kumar, Nirmalya (1996) The Power of Trust in Manufacturer-Retailer Relationships. Harvard Business Review Nov-Dec 1996

[26] Lee, Yoon R., Lazarus, Harold (1993) Uses and Criticisms of Total Quality Management. The Journal of Management Development. 12, 7

[27] Leithwood, Kenneth (2000) Understanding Schools as Intelligent Systems. Stamford, CT: JAI Press

[28] Leonard-Barton, D (1995) Wellsprings of Knowledge: Building and Sustaining the Sources of Innovation. Boston: Harvard Business School Press

[29] Lincoln, James R. (1989) Employee Work Attitudes and Management Practice in the US and Japan: Evidence from a Large Comparative Survey. California Management Review, 89-106.

[30] Loknath, S., Gupta, T. (1997) An Empirical Study Of Just-In-Time And Total Quality Management Principles Implementation In Manufacturing Firms In The USA. International Journal of Operations & Production Management. 17, 12, 1215 -- 1232

[31] Mayo, Peter (1999) Gramsci, Freire, and Adult Education: Possibilities for Transformative Action. London: Zed Books

[32] Mezirow, Jack. (1991) Transformative Dimensions Of Adult Learning. San Francisco, CA: Jossey-Bass

[33] Morris, M.W., Simonson, I., Briley, D.A. (2000) Reasons as Carriers of Culture: Dynamic vs. Dispositional Models of Cultural Influence on Decision Making. Stanford University - Graduate School of Business. Stanford GSB

[34] Nonaka, I., Takeuchi, H. (1995) The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation. New York: Oxford University Press

[35] OECD (1996) The Knowledge-Based Economy Paris: OECD

[36] Peat, D. (1995) Blackfoot Physics: A Journey into the Native American Universe. Chapter 10, 239-274, London: Fourth estate

[37] Petersen, Peter B. (1999) Total Quality Management And The Deming Approach To Quality Management. Journal of Management History 5, 8, 468 – 488

[38] Prakash, M.S., Esteva, G. (1998) Escaping Education: Living as Learning within Grassroots Cultures. New York: Peter Lang

[39] Scheuermann, L., Zhu, Z., and Scheuermann, S.B. (1997) TQM Success Efforts: Use More Quantitative Or Qualitative Tools? Industrial Management & Data Systems 97, 7, 264 – 270

[40] Schon, D.A. (1996) Educating The Reflective Practitioner: Toward A New Design For Teaching And Learning In The Professions. San Francisco: Jossey-Bass, Inc

[41] Schonberger, R.J., and Knod, E.M., Jr. (1991) Operations management: Improving Customer Service. Boston: Richard D. Irwin, Inc.

[42] Scott, D.F., Martin, J.D., Petty, J.W., and Keown, A.J. (1999) Basic Financial Management. New Jersey: Prentice Hall International Inc.

[43] Senge, Peter (1993) The Fifth Discipline: The Art and Practice of the Learning Organization

[44] Snow, Charles C., Mathews, John A., Miles, Raymond E. (1999) The Concept of the Corporation in the Twenty-First Century. www.globalresearchbusiness.com

[45] Stiglitz, J.E. (1999) Public Policy for a Knowledge Economy. Department of Trade and Industry, London.

[46] Talbot, Colin (1997) Paradoxes of Management Development--Trends and Tensions. Career Development International, 2, 3, 118-147

[47] Wikstrom, S, Normann, R (1994) Knowledge and Value: A New Perspective on Corporate Transformation. London: Routledge

[48] Zack, M. (1999) Developing a Knowledge Strategy. California Management Review. 41, 3, 125-44

[49] Zack, M, Smith, D.E., Slusher, J.A. (1999) Knowledge and Strategy. Institute for Knowledge Management. Williamsburg, VA.

Evaluation of Structural Factors' Effect on Industrial Production Efficiency

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Abstract

Industrial policy is the most important part of state global economy policy. One of its primary goals is to create advantageous economic-organizing conditions providing economy with stabilization and industrial production development. Long-term and purposeful industry policy research is particularly important for the Russian Federation, where industry always played a significant part in formation of encompassing economical performance of the country.
Since 1992 industry potential has deeply fallen, and now we have reasons for talking about system crisis in this prime sector of real economy.

During the last decade called as transition period structural reorganization of economy was performed. Share of services increased essentially in total production volume, material production decreased and at present it's less than half GDP.

Decline of industry production was accompanied with its sectional structure change. For the years of reforms share of extracting fields still more grew, share of engineering branches decreased essentially. Such changes influence competitive strength in technology and opportunities for hi-tech production development in Russia.

In given article we have stated a problem of analysis necessity for state production policy conducted in Russia, including analysis of most significant industry section efficiency ratios.

Industrial policy is the most important part of state global economy policy defining reference points and priorities of industrial production economic development and organising the base for its competitiveness increasing. One of its primary goals is to create advantageous economic-organising conditions providing economy with stabilisation and industrial production development. Long-term and purposeful industry policy research is particularly important for the Russian Federation, where industry always played a significant part in formation of encompassing indexes of economy performance of the country.

Data on production accounts divided by economy fields for the period since 1992 through 2000 is shown in Table 1[1].

Table 1: GROSS VALUE ADDED STRUCTURE (IN PERCENTS)

Years	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**
Gross Value Added	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Total production,	50.42	52.83	50.76	51.09	45.47	42.82	42.70	44.99	46.87
including industrial production	35.13	35.68	34.00	34.09	29.64	28.42	29.08	32.07	32.45
Services production	49.58	47.17	49.24	48.91	54.53	57.18	57.30	55.01	53.13

The data mentioned above can demonstrate that industry contribution in gross value added (GVA) was more than one third in 1992-1995. However, industry share in goods manufacturing as well as goods production share in GVA came down permanently and in 1998 it was equal to 29.08%. In 1999 and 2000 there can be observed some growth of industry share in GVA, but even 1995 level wasn't reached yet.

The most important indexes for the last decade after 1992, which is known as transition period, demonstrate essential increasing of industry potential and now we have reasons for talking about system crisis in this prime sector of real economy. Thus, in 2000 physical volume of industrial production was reduced by 42,80% in comparison with 1990; capital assets depreciation came to 51.30%; engines and equipment ratio fell by 11.10%. Fully depreciated assets ratio reached 18.70%.

Necessary structural changes in capital assets are prevented by low investment activity which decline had dangerous scope in 1990s. Annual investment in 1998 was hardly more then 20% in comparison with level of 1990. On the whole, in industry real capital investments are 1.7 times less than investment resources. Production facilities capacity in the first six months of 1999 mounted to 55.60% while in some industry fields this ratio was less than 20% (for instance in light industry). Industrial staff average annual number was in 1998, 1999 and 2000 just a little more than 20% of the total employed staff number (20.60%, 20.40%, 20.70% correspondingly), whereas in 1991 employed in industry staff number was 30.40%. The dynamics of the main indexes that describe Russian industry potential are performed in Table 2.

Table 2: THE DYNAMICS OF THE MAIN INDEXES OF RUSSIAN INDUSTRY

Indexes	**Years**								
	1992	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**
1. Capital assets physical volume indexes, in comparable prices, % to the prior year	101.90	100.70	100.10	100.10	100.00	99.50	99.50	99.80	100.20
2. Depreciation degree, %	46.70	46.40	45.80	47.80	50.50	52.40	52.90	52.90	52.40
3. Industrial staff number, thousands of people	20,020	18,864	17,440	16,006	14,934	14,009	13,173	13,077	13,294
4. Industrial production indexes, % to 1990	75.00	65.00	51.00	50.00	48.00	49.00	46.00	51.10	57.20
5. Production profitability, %	38.30	32.00	19.50	20.10	9.20	9.00	12.70	25.50	24.70

Industrial production decreasing was accompanied by its field structure change. For the years of reforms share of extracting branches has still more raised, share of machinery construction has fallen essentially. These factors adversely affect competitive strength of different economy fields as well as opportunity for development of Russian advanced technological production (Table 3).

Table 3: PRODUCTION ALLOCATION AMONG DIFFERENT INDUSTRY FIELDS

Industry fields	**Production volume ratio, %**			
	1992	**1995**	**1999**	**2000**
1. Fuel and energy complex	23.40	34.70	28.20	42.60
2. Ferrous and non-ferrous metallurgy	13.30	19.60	16.60	16.30
3. Chemical and petrochemical industry	8.30	8.10	8.80	6.20
4. Machinery construction and metal-working	22.40	17.80	19.10	16.30
5. Timber, woodworking, pulp and paper industries	6.00	4.90	5.10	3.80
6. Construction materials industry	5.70	3.60	3.90	2.40
7. Light industry	5.60	2.40	2.00	1.40
8. Food industry	11.40	11.30	12.20	11.00

More than two times drop of industrial production in 1999 in comparison with 1991 (physical volume ratio was $45.80%) caused quick deterioration for all indexes of industry functioning. Such resumptive industrial production index as labour productivity fell by 28.95% for the period since 1990 till 1998. At the same time fixed assets use, material capacity, power-consuming indexes deteriorated. Profitability level was reduced from 38.30% in 1992 to 24.70% in 2000 (see Table 2).

For various industry fields it is typical to suffer from production effectiveness decrease in 1994-1998, including labour productivity fall. For such fields as power engineering, construction materials industry, and light industry such tendency is stable enough. In ferrous metallurgy industry, chemical and petrochemical industries there can be observed fluctuations of labour productivity in different years, while in machinery construction, fuel industry, timber and pulp and paper industries tendency of labour productivity growth is rather stable. After 1998 the only one field with such tendency, where labour productivity continues decreasing, is power industry. In the rest fields, we can see not only production volume growth, but also productivity growth as well. Chain indexes of production volume, industrial staff numbers and labour productivity in 1994-2000 are represented in Table 4.

Table 4: DYNAMICS OF PRODUCTION VOLUME, INDUSTRIAL STAFF NUMBER AND LABOUR PRODUCTIVITY IN DIFFERENT INDUSTRY FIELDS

Indexes	**Year**	**Industry fields**									
		1.Power industry	**2.Fuel industry**	**3.Ferrous metallurgy**	**4.Non-ferrous metallurgy**	**5.Chemical and oil-chemical industry**	**6.Machinery construction and metal-working**	**7.Timber, woodworking, pulp and paper industries**	**8.Construction materials industry**	**9.Light industry**	**10.Food industry**
Physical volume indexes, % to the prior year	1994	91.00	90.00	83.00	91.00	76.00	69.00	70.00	73.00	54.00	83.00
	1995	97.00	99.20	110.00	103.00	108.00	91.00	99.30	92.00	70.00	92.00
	1996	98.00	99.00	98.00	96.00	93.00	95.00	83.00	83.00	78.00	96.00
	1997	98.00	100.30	101.00	106.00	104.00	104.00	100.90	96.00	98.00	99.20
	1998	98.00	98.00	92.00	95.00	93.00	93.00	99.60	94.00	89.00	98.00
	1999	99.00	102.00	117.00	110.00	124.00	117.00	118.00	110.00	112.00	104.00
	2000	102.00	105.00	116.00	115.00	115.00	120.00	113.00	113.00	121.00	114.00
Industrial staff number, % to the prior year	1994	106.60	97.10	93.70	95.40	91.20	85.80	93.50	94.90	94.20	99.90
	1995	105.60	98.40	98.50	106.20	95.70	88.10	90.10	93.60	83.30	96.90
	1996	105.30	101.20	100.00	97.80	95.40	89.90	91.20	89.20	85.10	98.70
	1997	102.50	95.90	93.90	94.60	96.50	93.20	90.30	90.20	88.80	97.80
	1998	102.50	93.40	98.10	94.50	96.50	92.20	93.10	94.50	90.50	97.70
	1999	104.50	92.90	100.40	104.80	97.80	97.10	102.20	100.70	97.20	103.10
	2000	103.80	98.90	105.20	111.30	104.50	100.60	104.30	95.30	98.40	103.10
Labour productivity indexes, % to the prior year	1994	85.40	92.70	88.60	95.40	83.30	80.40	74.90	76.90	57.30	83.10
	1995	91.80	100.90	111.70	96.90	112.60	103.20	110.30	98.20	83.10	94.80
	1996	92.90	97.60	98.00	98.00	97.60	106.20	90.60	93.30	93.20	97.40
	1997	95.60	104.70	107.30	112.00	108.00	111.60	113.20	106.60	109.10	101.50
	1998	95.60	104.80	93.80	100.80	96.10	100.60	105.80	99.40	98.30	100.40
	1999	94.70	109.80	116.50	105.00	126.80	120.50	115.50	109.20	115.20	100.90
	2000	98.30	106.20	110.30	103.30	110.00	119.30	108.30	118.60	123.00	110.60

Differences in labour productivity values, industrial staff allocation among different fields as well as labour productivity dynamics differences in various industry fields influence undoubtedly average labour productivity value in industry on the whole.

Labour productivity in industry fields (W_i) can be characterised by average annual output of one worker, i.e. by the following formula:

$$W_i = \frac{Q_i}{N_i} \qquad (1)$$

where Q_i is production volume of *i*-field;

N_i is average payroll number of industrial staff in *i*-field.

Average labour productivity ($\overline{w}$) can be realised by the following mode:

$$\bar{w} = \frac{\sum_i W_i N_i}{\sum_i N_i} = \sum_i W_i d_i \qquad (2)$$

where d_i is share of industrial staff of i-field in total number of industrial staff.

The more share of occupied staff in fields with high labour productivity, the faster their growth. In 1999 and 2000, the highest level of labour productivity (much higher than average in industry) was resided in fuel industry, power industry, ferrous and non-ferrous metallurgy. This figure was below the average in light, timber, woodworking, pulp and paper, engineering, and construction materials industries (see Table 5).[2]

Table 5: LABOUR PRODUCTIVITY DYNAMICS IN DIFFERENT INDUSTRY FIELDS [3]

Industry fields	**Labour productivity (l.p.), thousand roubles per person**		**Weight of industry staff, %**		***i* (l.p.), %**	$\frac{W_i^0 d_i^0}{100}$	$\frac{W_i^0 d_i^1}{100}$	$\frac{W_i^1 d_i^1}{100}$
	1999 W_i^0	**2000 in prices of 1999** W_i^1	**1999** d_i^0	**2000** d_i^1				
1	306.30	301.10	7.10	7.20	98.30	21.75	22.05	21.68
2	613.40	651.10	5.90	5.80	106.15	36.19	35.58	37.76
3	330.40	364.40	5.40	5.60	110.29	17.84	18.50	20.41
4	535.80	553.50	4.00	4.40	103.30	21.43	23.58	24.35
5	234.10	257.60	6.80	6.90	110.04	15.92	16.15	17.77
6	108.90	129.80	37.90	37.50	119.19	41.27	40.84	48.68
7	121.70	131.90	8.50	8.70	108.38	10.34	10.59	11.48
8	107.40	127.40	5.80	5.40	118.62	6.23	5.80	6.88
9	52.20	64.20	6.90	6.70	122.99	3.60	3.50	4.30
10	272.80	301.60	11.60	11.70	110.56	31.64	31.92	35.29
Total by industry						***206.22***	***208.50***	***228.60***

Comparison of industry staff weights of different fields in 1999 and 2000 enables us to draw a conclusion about indisputable structural factors impact on dynamics of labour productivity in industry.

As we can see in Table 5, almost in all fields with high labour productivity level industrial staff numbers growth can be observed, in which connection the most significant growth took place in non-ferrous metallurgy – in the field with one of the highest labour productivity. Share of staff occupied in light industry, machinery construction and construction materials industries – in fields with the lowest labour productivity level - decreased essentially.

Dynamics of average labour productivity in industry can be measured by the following correlation:

$$Iv. = \frac{\sum_i W_i^1 d_i^1}{\sum_i W_i^0 d_i^0} \qquad (3)$$

It reflects labour productivity changes in every field and fields share in total industrial staff (index of variable content).

Variable index for 2000 in comparison with 1999 shows labour productivity increase by 10.73% ($Iv.$ =1.1073). At the same time rate of growth varied from +23.00% in light industry to –1.70% in power industry. For the more detailed analysis of average labour productivity factors we supplement variable index with labour productivity index of fixed content and structure changes impact fixed index.

Influence of labour productivity changes in every field on its average level in industry can be characterised by labour productivity index of fixed content ($If.$)

$$If. = \frac{\sum_i W_i^1 d_i^1}{\sum_i W_i^0 d_i^1} \tag{4}$$

Value of this index calculated from The Table 5 is equal to 1.0964. This figure means that average increase of labour productivity in industry due to labour productivity changes in separate fields is equal to 9.64%. Comparison of variable and fixed indexes allows us to draw conclusion about ponderable impact of structural factors on labour productivity dynamics in industry even for the concerned period.

Index of structural changes influence on average labour productivity change in industry can be evaluated in the following manner:

$$Istr.ch. = \frac{\sum_i W_i^0 d_i^1}{\sum_i W_i^0 d_i^0} \tag{5}$$

Its value is 1.099 for 2000 in comparison with 1999. It means that labour productivity has grown for this period by 0.99% due to changes in allocation of staff number among different industry fields.

Yield of capital investments (capital productivity) has independent importance at labour productivity dynamics analysis. Labour productivity can be represented as product of capital productivity (f) and provision of labour (v).

$$L.P. = \frac{Q}{\overline{F.A.}} * \frac{\overline{F.A.}}{\overline{N}} = f * v \tag{6}$$

where Q is volume of industrial production;

$\overline{F.A.}$ is average annual cost of fixed assets;

$\overline{N}$ is average industrial staff number.

Labour productivity index is equal correspondingly to a product of capital productivity index and provision of labour index:

$$I_{l.p.} = I_f * I_v \tag{7}$$

Labour productivity analysis must be accompanied with analysis of capital productivity changes factors. Average capital productivity in industry depends on this index value for every industry field as well as on fixed assets allocation among fields.

$$f=\frac{\sum_i Q_i}{\sum_i \overline{F.A._i}}=\frac{\sum_i f_i * \overline{F.A._i}}{\sum_i \overline{F.A._i}}=\sum_i f_i d_i \qquad (8)$$

where d_i is specific weight of fixed assets of i-field in total cost of industry fixed assets;

f_i is capital productivity in i-field.

Average capital productivity changes can be calculated by means of capital productivity index of variable content:

$$I_f v.=\frac{\sum_i f_i^1 d_i^1}{\sum_i f_i^0 d_i^0} \qquad (9)$$

Besides, for the analysis it's necessary to reveal influence of capital productivity changes in different fields as well as estimate impact of structural factors on capital productivity dynamics.

Capital productivity dynamics in industry without taking into account influence of structural factor can be appraised by index of fixed content:

$$I_f f.=\frac{\sum_i f_i^1 d_i^1}{\sum_i f_i^0 d_i^1} \qquad (10)$$

Impact of structural factor on capital productivity dynamics can be measured by index of structural changes:

$$I_f d.=\frac{\sum_i f_i^0 d_i^1}{\sum_i f_i^0 d_i^0} \qquad (11)$$

Besides, there is no doubt that analysis of eventual effect of ownership forms on labour productivity constitutes great interest for analysts. There can be realised analysis of changes in ownership forms structure influence on labour productivity using official data of the State Committee of Statistics of Russia. Branch-wise structure of industrial production is represented with weights of different ownership forms by companies' numbers, by production volume and by staff number. This data is composed as a whole for industry and by separate fields.

It is possible to show labour productivity in company of appointed ownership form relying on information given in statistics yearbooks in the following way:

$$L.P._j=\frac{Q*d_{jQ}}{N*d_{jN}}=L.P.*\frac{d_{jQ}}{d_{jN}} \qquad (12)$$

where $L.P._j$ and $L.P.$ are labour productivities in companies with j-ownership form and in industry in the whole;

d_{jQ} and d_{jN} are weights of j-ownership form correspondingly in total production volume and total staff number.

Value of $\frac{d_{jQ}}{d_{jN}}$ will show us how labour productivity in companies of definite ownership form is correlated with average labour productivity in industry. Calculations for every industry field can be made similarly.

In such way (see Table 6) in 1998, the highest labour productivity in public enterprises was observed in power industry, in construction materials industry and light industry (correspondingly 33.03%, 32.32%, and 7.55% higher than average in industry). In the same year companies of mixed ownership forms without foreign participation had the highest labour productivity level in ferrous and non-ferrous metallurgy, chemical and petrochemical industries, machinery construction and metal-working, timber and woodworking industries, in pulp and paper industry as well as in light industry. Only in fuel industry the highest labour productivity took place in private businesses, though it was 1.5% lower than an average level. In the whole in industry in 1998 labour productivity level in private companies was the lowest relatively average industry level (it was about 72.19% of average in industry), while for companies with mixed ownership forms without foreign participation labour productivity was 24.17% higher than average in industry.

Table 6: CORRELATION OF $L.P._{IJ}$ AND $L.P._{I}$ BY INDUSTRY FIELDS[4]

Forms of owner-ship	Years	1	2	3	4	5	6	7	8	9	10	Total by industry
Public	1994	1.1592	0.4146	0.3611	1.0091	0.6653	0.8559	0.7143	1.0533	1.0803	0.9697	0.7743
	1995	0.7863	0.5314	0.6000	0.6437	0.5814	0.7787	0.7252	1.1215	1.1475	0.8980	0.6101
	1996	0.8319	0.4180	0.4000	0.8305	0.6772	0.8774	0.9455	1.2525	1.3077	1.0154	0.6667
	1997	0.8190	0.8000	0.5000	0.6667	0.7303	0.8216	1.0471	1.6377	1.5000	1.1228	0.7064
	1998	0.1330	0.8095		0.8864	0.8712	0.8145	0.7909	1.3232	1.0755	0.8730	0.7279
	1999	0.8972	0.4667	0.4000	0.6901	0.6480	0.8356	0.5145	1.2842	0.6901	0.8387	
	2000	0.9252	0.3667	0.2000	0.8028	0.4000	0.9452	0.5072	1.3579	0.7183	0.8226	
Private	1994	0.6667	0.5750	0.6216	0.6111	0.8913	0.9630	0.8905	0.8596	0.8671	0.8202	0.6637
	1995	0.8861	0.5000	0.7589	0.9070	0.9343	0.9444	0.8517	0.8621	0.9172	0.8630	0.6923
	1996	1.0278	0.6327	0.8306	0.9120	0.8874	1.7340	0.8601	0.8431	0.9140	0.8769	0.7200
	1997	0.7965	0.8108	0.7811	1.1087	1.0493	1.0738	0.9859	0.8566	0.9762	0.9338	0.7890
	1998	0.7841	0.9850	0.7575	0.8762	0.8944	0.9139	0.8471	0.8566	1.0154	0.8909	0.7219
	1999	1.0380	0.5333	0.7425	0.8595	0.9446	0.8435	0.8266	0.8556	1.0268	0.8434	
	2000	2.0127	2.7167	0.7700	1.4811	1.0769	1.0290	0.8851	0.9037	1.0505	0.8098	
Mixed without foreign participation	1994	1.0687	1.2772	1.0554	1.0607	1.1691	1.1034	1.1595	0.9789	1.0786	1.1442	1.2661
	1995	1.1329	1.0811	1.0295	1.0736	1.1104	1.1013	1.1733	1.0113	1.1160	1.1140	1.2671
	1996	1.0982	1.0288	1.0857	1.0582	1.1470	0.9840	1.0882	1.1283	1.1461	1.0924	1.2884
	1997	1.0814	0.9726	1.1002	1.0115	1.0060	0.9918	0.9306	1.0459	0.9509	0.9227	1.1644
	1998	0.9874	0.9300	1.1639	1.1000	0.9839	1.1614	0.8991	1.0354	1.0047	0.9935	1.2417
	1999	1.1370	1.0652	1.2127	1.1381	1.0022	1.8276	0.9886	0.9702	1.0240	1.0290	
	2000	0.7943	0.4932	0.7556	0.4937	0.8842	0.8982	0.8593	0.7881	0.9231	0.8768	

However, in 1999 this tendency was changed. First, in public enterprises we can see decrease of labour productivity levels ratio. The lowest value of this index is observed in ferrous metallurgy: in 1999 – 40.0% of average productivity, in 2000 – only 20.0%. Second, in all fields but food industry labour productivity in private companies grows towards average in industry field. The most intensive growth was registered in power industry and fuel industry (101.27% and 171.67% correspondingly). Third, in all fields in 2000 in comparison with 1999 we can see some fall of labour productivity level for companies of mixed ownership forms without foreign participation.

Independent sense resides in analysis not only of labour productivity level in companies of specified ownership form, but also tendencies of changes in this level for concerned period. We separate 3 available ways for labour productivity changes: growth, fall and variations of labour productivity. Industry fields are grouped by tendency character (see Table 7).

Table 7: TENDENCIES IN LABOUR PRODUCTIVITY CHANGES IN INDUSTRY FIELDS IN 1994-2000

Form of ownership	Years	Growth	Fall	Fluctuations
Public	1994-1998	Power industry Fuel industry Chemical industry Timber, woodworking and pulp and paper industry Construction materials Light industry	Machinery construction Metal-working industry	Non-ferrous metallurgy Ferrous metallurgy Food industry
	1999-2000	Power industry Non-ferrous metallurgy Machinery construction Construction materials Food industry	Fuel industry Ferrous metallurgy Chemical and petrochemical industry Timber, woodworking and pulp and paper industry Food industry	
Private	1994-1998	Fuel industry Light industry Food industry	Timber, woodworking and pulp and paper industry	Power industry Non-ferrous metallurgy Ferrous metallurgy Chemical and petrochemical industry Machinery construction and metal-working Construction materials
	1999-2000	All fields, but food industry	Food industry	
Mixed without foreign participation	1994-1998	Ferrous metallurgy Non-ferrous metallurgy	Power industry Fuel industry Chemical and petrochemical industry Timber, woodworking and pulp and paper industry Food industry	Machinery construction and metal-working Construction materials Light industry
	1999-2000		All fields	

As we can see from this table for the most number of fields (6 out of 10) in public enterprises growth of labour productivity took place in 1994-1998 and only in machinery construction and metal-working field the tendency was fall of labour productivity.

For the most number of fields (also 6 out of 10) in private companies' fluctuation of this index took place (growth in some years and fall in another) towards average level in industry. Tendency of growth was representative for companies with mixed form of ownership in fuel, light and food industries.

There is a tendency of labour productivity level fall in companies of mixed ownership form without foreign participation for a half of fields represented in Table 8 (5 out of 10). They are power industry, fuel, chemical and petrochemical industries, timber and woodworking industries as well as food industry. This tendency becomes apparent in full measure in 1999 and 2000. As we see from The Table 7 labour productivity fall in companies with mixed ownership forms can be observed in all industry fields.

There is no doubt in great interest of analysis of ownership form impact on labour productivity dynamics. The principal scheme of such analysis is shown with using an example of power industry. The Table 8 contains results of labour productivity calculations in companies of different ownership forms in 1997 and 2000. As we can see in this table, one of the highest productivity levels belonged to private enterprises and of mixed ownership with foreign participation forms. Growth of productivity in 2000 in comparison with 1997 was observed only in private companies (101.70%) and in mixed ownership companies (5.90%). In municipal industries labour productivity decreased by 28.60%, in public companies – by 9.40%, in companies of mixed ownership without foreign participation – by 33.40%. In the whole for power industry this decrease was equal to 12.20% $\left[\frac{236.51}{269.39} * 100\% - 100\%\right]$. Impact of ownership form structural factor on labour productivity dynamics can be evaluated by structural changes index:

$$I_{l.p.}d = \frac{\sum_{j=1}^{6} LP_j^0 d_j^1}{\sum_{j=1}^{6} LP_j^0 d_j^0} \tag{13}$$

where $L.P._j$ is labour productivity level in companies with *j*-ownership form in basis period (in the given example - in 1997);

d_j^0 and d_j^1 are weights of staff in companies of *j*-ownership form in basis and reported periods.

Value of this index for 2000 calculated by The Table 8 is equal to 1.044. That means that growth of labour productivity in power industry connected with total staff redistribution among enterprises of different ownership forms was 4.4% in comparison with 1997. If don't take on account structural factor productivity decrease in this industry field was 15.90% for concerned period.

Table 8: LABOUR PRODUCTIVITY DYNAMICS IN COMPANIES OF DIFFERENT OWNERSHIP FORMS IN POWER INDUSTRY

Form of ownership	**Labour productivity, thousand of roubles per person**		**Share in total staff number, %**		**Labour productivity index, %**	$\frac{L.P._j^0 d_j^1}{100}$	$\frac{L.P._j^0 d_j^0}{100}$
	1997	**2000**	**1997**	**2000**			
Public	241.52	218.83	11.60	0.906	0.906	25.843	28.016
Municipal	173.18	123.67	7.00	0.714	0.714	26.497	12.123
Private	236.01	476.01	11.30	2.017	2.017	18.645	26.669
Mixed without foreign participation	281.91	187.86	68.80	0.666	0.666	168.582	193.954
Mixed with foreign participation	663.10	702.02	1.30	1.059	1.059	41.775	8.620
Total for industry field	269.39	236.51	100	0.878	0.878	281.341	269.382

There is no doubt that represented in statistics yearbook data allows us holding just the first step of analysis, including revealing differences in labour productivity levels in companies with different ownership forms, describing dynamics of productivity for the analysable period and to show structure changes influence on labour productivity dynamics. Further research requires more detailed information that allows explaining essential differences in labour productivity levels in companies of different ownership forms. In particular the main indexes are to be differentiated by types of power stations – thermoelectric, hydro-electric and nuclear that requires additional data.

In given article we just stated a problem of necessity of analysis of results of state production policy conducted in Russia, including analysis of most significant efficiency indexes of industry fields. There is no sense in drawing any conclusions for such short time period still we must not ignore presence of some negative tendencies mentioned in the article.

References

[1] “General theory of statistics” edited by Efimova M. R., Petrova E. V., Rumyantsev V. N., published by “Infra-M”, Moscow, 2000

[2] “Statistics year-book”, Moscow, 2001

End Notes

[1] The performed figures were calculated using the data of the State Statistics Committee of Russian Federation
[2] Fields numbering agrees with the numbering in Table 4
[3] Labour productivity data is represented in comparable prices
[4] Fields numbering is represented in Table 4.

Identifying and Explaining Risk Factors Associated with Information Systems Projects in Thailand: A Model and Research Propositions

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Abstract

Many information systems projects are classified as failures because time/budget overruns or they do not meet user's expectations. In this paper we examine the influence of culture on the propensity for these factors to occur in a software development context. This study seeks to investigate the environmental dynamics within IS projects in Thailand, a country whose development lags that of western economies and whose cultural characteristics differ significantly from western nations. First we review the literature on risk factors in IS projects and discuss the eleven risk factors that Schmidt et al. identified as being important in multiple cultural settings. We then present a cultural analysis of Thailand and discuss the effect of cultural, socioeconomic and technological factors on eleven risk factors in Thai IS projects. We conclude with a set of propositions that suggest that the risk of project failure is generally greater in Thailand than in western nations.

Introduction

Research studies indicate that a high proportion of Information System (IS) projects end in failure [17, 46, 48]: twenty-five percent of IS projects are cancelled outright while more than 80 percent overrun budget by an average of 50 percent [17, 48]. Furthermore, approximately three-fourths of large software systems are "operational failures", meaning that the systems either do not work according to the system requirements or have never been used by their users [17]. IS project failures not only drain a company's resources, including time, labor and money, but also have a detrimental effect on the morale of its employees. A consequence of many failed projects is that the company may lose its competitiveness and go out of business altogether, especially during a period of economic downturn. Hence, a new trend in the IS literature is to find ways to avoid IS project failure [36]. One way of doing this is to identify those risks that have been shown to cause failure in past IS projects [36]. By identifying and analyzing risk factors, actions can be taken to reduce the possibility of project failure [4, 5, 7]. However, although the business literature has investigated risk management for several years, a neglected area of study is the influence of culture on project risk. Since culture influences people's behavior [14], its significance in the success or failure of IS projects merits further investigation [8].

The software project management literature offers several approaches for reducing risk in IS projects. Barki designed a measure to assess risk facing IS projects; Schwalbe suggested three actions to reduce the chance of IS project failure: risk avoidance, risk acceptance, and risk mitigation; and Schmidt, Lyytinen, Keil and Cule developed a framework of eleven common risk factors for identifying risk in IS projects in three countries: United States, Finland, and Hong Kong [38]. Of these studies, Schmidt, Lyytinen, Keil and Cule are the only one that takes a cross-cultural perspective. Schmidt and his colleagues, as well as other researchers in the IS area, acknowledge that culture plays a significant role in the success or failure of IS projects, since an IS management technique that is effective in one cultural environment may not work well in a different cultural environment [23, 45]. Similarly, what is a significant risk factor in one culture may not be significant in another [36].

Like most of the cross-cultural research in international business that has been done to date, Schmidt, Lyytinen, Keil and Cule focused on developed and newly industrialized countries. This is understandable, since much of the underlying theory has been developed by scholars in these regions. However, the study of IS phenomena is also relevant to managers in emerging economies, particularly where cross-cultural research indicates likely differences in behavior or practices. Furthermore, the validity of IS frameworks and theories needs to be tested in different environments in order to assess their generalizability. Therefore, we have elected to apply framework of Schmidt, Lyytinen, Keil and Cule to a different cultural and economic environment: Thailand. Building on Hofstede's [14, 15] widely accepted framework of cultural values, and supplemented by insights from Trompenaars, we seek to develop a model of relationships between IS risk factors and influential national culture impacting on IS projects. By using this model, analysts can understand the mechanism of how IS projects fail in a specific environment and what they should do to reduce the chance of failure [44].

The rest of this paper is in three parts: first, we review the literature on risk factors in IS projects and discuss the eleven risk factors identified by Schmidt, Lyytinen, Keil and Cule as being important in multiple cultural settings (Europe, Asia and the US). We then present a cultural analysis of Thailand and discuss the effects of cultural and socioeconomic factors on the eleven risk factors in information systems projects in Thailand. We conclude with a model of project risk management in Thailand and a set of propositions that suggest that the risk of project failure is generally greater in Thailand than in western nations.

Cultural Values and International Business

According to Dunning [9], culture is central to international business research. He states: "...firms which are best able to identify and reconcile (cultural) differences, or even exploit them to their gain, are likely to acquire a noticeable competitive advantage in the marketplace". Pornpitakpan maintains that lack of success in cross-cultural business transactions is partly due to the partners' lack of understanding of each other's culture. It is not surprising, then, that cross-cultural studies are prominent in international business research, since they seek to help managers understand and adjust to cultural differences that affect the workplace. Although several models of culture have been developed in the fields of anthropology, sociology and psychology, the values-based model is the one that has been widely adopted in business research. A value is defined as "… a centrally held, enduring belief which guides actions and judgments across specific situations and beyond immediate goals to more ultimate end-states of existence" [35]. Since people assess events and take actions using personal values as their criteria [35], values come to play an important role in understanding the behavior of individuals in their work environment. Furthermore, people from different cultures differ in the importance that they place on their personal values, so an understanding of these differences in values should inform and even predict differences in behavior across cultures [14, 15]. Studies have examined the effect of differences in national culture on a wide range of issues, such as human resource management [37], technology transfer [18], foreign market entry [20], cross-border acquisition performance [25], product development [27], international joint venture survival [2], and strategic management and decision-making [13, 28, 37].

Cultural Research and Information System Project Risk

There are many research studies of the impact of culture on IS projects risk; (e.g., [6], [36]). Several of them suggest that by countering threats to IS project success, the incidence of failure can be reduced [5,7].

One study of risks examines escalation of commitment behavior in IS projects across 3 nations (Finland, Singapore, and the Netherlands) and employed three basic theories (Self-justification theory, Prospect theory, and Agency theory) in information systems to investigate and compare the probability that runaway IS projects in each country will continue [19]. A previous study identified a framework for investigating culture and IS project risks [36]. The study led not only to the identification of risk factors, but also answers the question why project managers might view certain risks as being more important than others.

To investigate further the role played by culture in IS project risk, Schmidt and colleagues developed a list of significant risk factors that impact IS projects in three nations. Schmidt, Lyytinen, Keil and Cule synthesized two streams of risk factor literature from project management and IS implementation to create a single list of the most important risk factors; they also did a cross-cultural study to identify whether culture influences risk. They first used the Delphi methodology with a panel of project management practitioner experts from three nations (Finland, US, Hong Kong) representing three major regions of the world (Europe, North America and Asia). Each panelist was first asked to generate six factors and then each national group was asked to pare the overall list down to only the most important factors. The final steps were to have each national group rank the factors in the shortlist as to their importance and then do several round of discussion until a consensus was reached. They found eleven factors that were important to all three national groups (See Table 1).

Table 1: RISK FACTORS FOUND TO BE IMPORTANT IN THE FINLAND, THE U.S. AND HONG KONG

Risk Factor	Brief Description
1. ***Lack of top management commitment to a project***	Lack of executive oversight, visible support and public endorsement as well as active policy intervention
2. Failure to gain user commitment	When lack of end-user involvement is due to failure of developers to involve them
3. Misunderstanding the requirements	Not thoroughly defining the requirements of the new system before starting, consequently not understanding the true work effort, skill sets and technology required to complete the project
4. Lack of adequate user involvement	Active participation by end-users is missing. There is no commitment to deliverables and responsibilities. Lack of time given to achieving project goals
5. Lack of required knowledge/skills in the project personnel	Lack of knowledge and/or experience in IS and/or business
6. Lack of frozen requirements	Requirements change because the needs of end-users change. The system is never moved into production because requirements are never finalized
7. Changing scope/objectives	When the organization changes or reorganizes partway through the project
8. Introduction of new technology	Using new, or 'cutting edge' technology that has not been used successfully at other organizations or when a major technological shift occurs during the project
9. Failure to manage end user expectations	Expectations are mismatched with deliverable -- too high or too low
10. Insufficient/ inappropriate staffing	Risks from insufficient/inappropriate staffing imply the inability to allocate a skilled workforce to the project, regardless of availability.
11. Conflict between user departments	Serious differences in project goals, deliverables, and design shared by different departments in an organization.

This study extends model of Schmidt, Lyytinen, Keil and Cule by determining if culture influences whether any of these risk factors are likely to appear in a specific IS environment: Thailand. To that end, the next section describes the Thai workplace culture and the subsequent section sets forth hypotheses that link Thai cultural traits to each of the eleven risk factors.

Cultural Analysis of Thailand

Several frameworks of values have been compiled (see [11] for a complete review). In international business research, the most common are Hofstede's dimensions of values [14] and the Rokeach Value Survey [35], the latter of which has been expanded by Schwartz and his colleagues [39, 40, 41] and Trompenaars [44]. Hofstede's framework was developed from surveys involving more than 120,000 respondents from over 70 nations. Widely adopted by international business researchers, it consisted originally of four groupings, or dimensions, of values, which Hofstede termed Uncertainty Avoidance, Power Distance, Individualism, and Masculinity/Femininity. A fifth dimension, Confucian Dynamism, was later added to account for certain aspects of cultural values thought to be unique to some eastern societies.

Uncertainty Avoidance refers to the degree to which individuals feel threatened by ambiguous or uncertain situations, to which they respond by creating more structure. A culture with a high uncertainty avoidance index (UAI) has a low tolerance for ambiguity; its members prefer to establish formal rules and strong institutions and to adopt technologies in order to reduce the uncertainty in their environment. Any uncertain situation that impacts these people can express itself in higher anxiety than in people from low UAI cultures. In contrast, members of low UAI cultures are comfortable with ambiguity, are more willing to take risks, tolerate deviant behavior, and reflect a more laidback approach to life in general. Hofstede's research indicates that Thai people demonstrate a high degree of uncertainty avoidance. They are sensitive to the concept of change, because change often brings out the underlying conflict that Thais would rather avoid. This is why they tend to make contact with other people on a superficial level [22]. Thais are also less likely to take risks; for example, Pornpitakpan observed that Thai customers rely on their acquaintances or trusted sources for information before purchasing new products and/or services. In high UAI cultures, managers of organizations tend to be selected based on their seniority; in Thailand, higher-ranking managers are generally much older and more experienced than their low UAI counterparts. If a subordinate were to presume to exercise authority, it would be a clear case of overstepping one's station [12], so subordinates are reluctant to exercise their initiative, to make recommendations or suggestions, or to contradict their boss.

In order to reduce uncertainty, Thai people are very sensitive to emotional cues when listening to others and will proactively attempt to put them at ease. For instance, most Thais would find 'a little white lie' told out of politeness more preferable than a direct but critical comment [12]. In a workplace situation, Thais avoid uncertainty by examining the fine points of detail and the interrelationship of people in order to make the best decision. Additionally, considerate Thais do not ask something that is unclear or may cause a problem, believing that it may lead to a conflict and feeling of uncertainty [12]. Because of this, Thais tend not to strongly agree or disagree with anything [34].

On the other hand, Thais are not high in uncertainty avoidance concerning all things. Thailand has always been historically very rich in resources and this has given Thai people a strong feeling of security, which has influenced the Thai culture. Thus, their behavior reflects a lack of uncertainty avoidance when expending resources. For example, Thais generally do not wish to undertake long term planning, work hard for the future or conserve their resources [33]. They do not even pay attention to scheduled meetings or interviews [12]. However, Thais will put an enormous effort into their work when a deadline approaches because at that time, resources become scarce [12].

Power Distance refers to the degree to which power is equally distributed within a society. In cultures with a high Power Distance Index (PDI), economic and political power is unequally distributed and in the hands of a minority. At the organizational level, managers in high PDI cultures tend to be more autocratic and paternalistic than those from a lower PDI culture. The hierarchy of power within the organization reflects an existential inequity where everyone has his rightful place and is protected by the organizational structure. People are grouped into different levels and at each level they have shared perceptions of their positions. Conversely, a boss in a low PDI culture believes that hierarchy means an inequity of roles created for convenience and that subordinates are people just like him.

In Hofstede's survey, Thailand was clustered in a group of countries with a high PDI [15]. Thais are divided into many societal classes; members of each group share a similar worldview and tend to isolate themselves from the other groups. Thai social status is based on both ascribed criteria (age, birth, and family background) and achieved criteria (education, position in work, wealth, and power) and one's status is determined by using these two sets of criteria. Respect for one's elders, superiors, and patrons are emphasized. Out of consideration for people with higher status and seniority, a Thai tends to oblige their requests in order to avoid offending those [34].

In a workplace situation, according to Fieg, "a Thai knows who is in a superior position and the amount of deference that must be shown; likewise, the Thai is aware of subordinates in the social order and the respect that can be expected from them." Assertively challenging the authority of one's superior is out of the question, and the superior, in turn, is generally not interested in soliciting opinions from subordinates since the traditional view has been that the one in authority is free to exercise power without consulting underlings [12]. Also, the decision-making process in Thai organizations is centralized by the top officials [22]. Correspondence, reports, requests of various kinds have to be successively transmitted in writing until they arrive at the ultimate superior. In turn, people who are in lower social or organizational positions recognize that they are supposed to obey and admire those in higher positions [42].

Kreng-Jai. Combining the two cultural dimensions described above, high UAI and high PDI, a new cultural phenomenon known as "Kreng-Jai" emerges in Thai society. In a society where "Kreng-Jai" is predominant, a vacuum is likely to form between people of different classes in order to avoid interpersonal conflict. Sriussadaporn-Charoenngam & Jablin defines "Kreng-Jai" as:

"… an extreme reluctance to impose on anyone or disturb another's personal equilibrium by refusing requests, accepting assistance, showing disagreement, giving direct criticism, challenging knowledge or authority, or confronting in a conflict situation …" [42]

The following are examples of Kreng-Jai situations:

(1) Older Thai people are not happy when younger people argue with them or give more critical opinions than requested [42]. Even if a Thai manager allows subordinates to offer their opinions or criticism, subordinates may not speak frankly, believing that they will say something different from what their boss expected [12].

(2) When a foreign boss assigns work to Thai workers, even if they do not understand what they are being asked to do they still try to keep working based on their assumptions of what is required of them [30].

(3) Thais often feel that unless a problem is very serious they should not disturb their boss. When a problem does occur, Thais tend to beat about the bush instead of confronting it [32].

Individualism/Collectivism refers to the extent to which a culture shows either strong or weak relationship among individuals. People from a high individualism index (IDV) culture do not perceive a large psychological distance between in-group and out-group members. In contrast, people in low IDV cultures prefer to live and work within their in-group. In a low IDV culture, there is a strong relationship between the organization and employees. Employees expect the organization to look after them and defend their interests, and they have a strong preference for consensus in decision-making. Additionally, they identify strongly with the institution or organization [15]. According to Hofstede, Thais have a very low degree of individualism; that is, they have a very high degree of collectivism [15]. Because of this, Thais divide their society into two parts: in-group and out-group sub-cultures. Thais prefer to communicate with the in-group, believing that they share the same perspectives. Loyalty is expected between in-group members as within a family [1]. In contrast, Thais may be uncooperative to out-group people whom they perceive as one-time contractors or complete strangers [34].

According to Pornpitakpan, there are two layers of in-group sub-cultures, ascribed and achieved, as discussed earlier. Thai people determine their in-groups by using both sets of criteria. In addition to this, educated people assume a quite different class-linked status depending on which Thai educational institution they attended and whether they obtained a college or university degree abroad [12]. Even so, most of the time personal in-group connections are crucial for success in Thailand [34].

The collectivistic nature of the Thais influences the way they work in organizations. Thais seem to have less self-confidence in making any decision alone. Thorelli and Sentell found that Thai people from all kinds of groups are affected by the opinions of others and by reference groups. They also try to help each other and work like the best person in the group would [43].

Masculinity/Femininity indicates the degree to which a culture reflects what Hofstede refers to as "masculine" or "feminine" values. Masculine values include assertiveness, ambition, achievement, acquisition of wealth, and flamboyance; feminine values include caring for others, especially the less fortunate and greater equality between the sexes. Thailand is rated as a moderately feminine culture. Feminine cultures emphasize a slow and smooth flow of communication; people from such cultures are considered to be modest and to care about others. They believe that conflicts can be resolved by compromise [34]. This is true of Thais. Thai people do not feel that it is necessary to pressure them in their daily activities [12].

In the workplace situation, the concept of "small and slow" seems to work very well with the Thai people. Thai office workers seem to pay less attention to their work. They can simply "snap to" in order to carry out instructions, and then they return to chatting with their friends [12]. A perception of comfort known as "sa-bai" and an easy-going feeling known as "mai-pen-rai" are also predominant among the Thai people. According to Pornpitakpan, Thai people have a high degree of tolerance toward deviations from norms and commitments [34] Because of this; decision-shifting behavior can be easily noticeable in Thai organizations [34]. It seems that acquiescing to superiors lessens uncertainty for a Thai employee because the behavior corresponds to the dimensions of high power distance, high femininity and external locus of control.

Saving Face occurs when an individual's actions are designed to either protect one's own image or protect the image of another in a social situation. In cultures where power distance is high, persons in power will be very careful to maintain their image as knowledgeable and capable people worthy of their power. Even when power distance is low, saving face will be important when uncertainty avoidance is low because losing face causes anxiety for the person and for others watching. Saving face is also important in collectivist cultures because it is difficult to gain consensus when one or more individuals have been humiliated. Since saving face reflects elements of several cultural dimensions, it will be included herein as a separate trait in our analysis.

Since Thailand has high power distance, uncertainty avoidance and collectivism, Thais generally discourage losing face in any situation. To protect themselves from losing face, Thais consumers tend to purchase brand name products, which, they believe, are higher in quality and reliability [34]. In a Thai organization, an effective subordinate has to protect his boss from losing face by carrying out orders from his boss without deviation in order to make the boss look good [12]. When a Thai has a problem, he or she might reveal only a small portion of the problem and conceal the rest in order to save his/her own face [12].

Locus of Control Trompenaars provides a different cultural framework to explain cultural variation and offers an additional cultural perspective, "Attitude to the environment". Also known as "locus of control", attitude to the environment indicates the degree to which members of a culture view their environment as affecting their lives. According to Trompenaars, societies can be divided into two poles toward nature, inner-directed, and outer-directed [44]. People in societies with an inner-directed nature consider that they should control nature, whereas the outer-directed people believe that people should go along with nature. Thai people are grouped into the latter category. Individuals with an outer-directed nature tend to have more trust in a highly reliable source of a message [24]. For example, Thai people have a good attitude toward an advertisement having an expert as a presenter regardless of the quality of the advertising message [34].

Considering that life is unpredictable, Thais believe that failure is predetermined and beyond their immediate control [34]. This explains why many Thais do not have a strong commitment to anyone. In fact, as Niratpattanasai observed, they are committed, but their contribution is not wholehearted [31]. For example, the target dates of a project in an organization in Thailand are chosen according to astrology or special fortuitous occasions rather than in conformity with the actual work plan [29].

Socioeconomic Status Developing nations are characterized as having a low industrial base, including a lack of technology, skilled workforce and industrial facilities (plants, offices). At the same time, developing nations often view the introduction of new technology as a necessary step for economic development to occur. The lack of resources in a developing nation and the mindset that embraces technology as a developmental tool would impact the ability of an organization to successfully complete information systems projects almost as strongly as the cultural dimensions above, and so has been included here in our analysis of Thailand.

The next section examines the relationship between the Thai cultural characteristics discussed here and the eleven risk factors in IS projects identified by Schmidt, Lyytinen, Keil and Cule and develops a model of project risk management in Thailand.

Influence of Thai Cultural Traits on Risk in Is Projects

The research model presented herein follows logically from the research presented previously. It is based on the premise that if culture influences system development risk and if Thai culture has a strong impact on the workplace, then Thai culture is also likely to impact the propensity for risk to occur. Therefore, our basic research model is this:

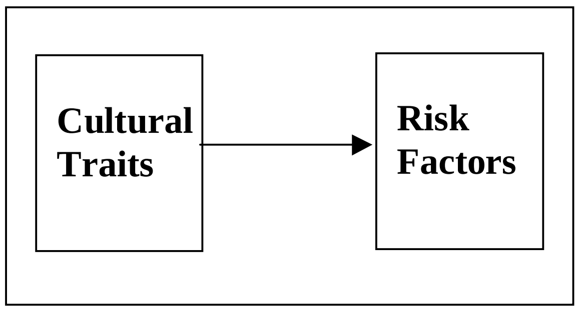

Fig. 1: BASIC RESEARCH MODEL

In order to further define the model we analyzed each risk factor using a Thai cultural perspective to determine exactly how Thai cultural traits might influence the dynamics of an IS project specifically related to a specific risk factor. For example, in the next paragraph we examine the first risk factor from Table 1: "Lack of Top Management Commitment" to determine whether power distance, uncertainty avoidance, etc. might increase or decrease the degree of top management commitment. According to our analysis, Thai culture would make a lack of top management commitment more likely. This becomes our first proposition whose logic is presented below:

Proposition 1: Thai IS projects lack top management commitment

There are several reasons why top management might not provide adequate oversight, and visible commitment to Thai projects.

First, high power distance in the form of rigid hierarchies and high collectivism that results in strong in-group cohesiveness, members from one class are likely to keep themselves segregated from member of another class. The person who is in charge distances himself from subordinates by paying less attention to what they do. Additionally, those who are ultimately responsible for a project rarely are the same people who actually manage it. Because commitment becomes visible when one knows the needs of others, it is impossible for Thai top managers to allocate resources to a project to which they do not pay much attention.

Second, an external locus of control and a mid-range score on femininity in Thai society encourages Thai top managers to drive the project with slow and moderate speed, believing that everything turn out fine in the end.

Finally, reflecting a characteristic of less-industrialized nations, Thais lack management skills and self-discipline. Generally, there have many projects on their hands simultaneously, so top managers may not be able to pay equal attention to all the projects at the same time. They have to choose which one has higher priority based on the status of whoever assigned the project to them. It should be also noted that due to the economic growth in Thailand over the last decade, many managers were promoted who lacked sufficient experience. Moreover, because of strong uncertainty avoidance and collectivism, managers are often placed in positions of authority, not because of their expertise but because of their seniority or their relationship with powerful people.

Proposition 2: Thai project team leaders fail to gain user commitment to the IS project

One recommended method of gaining user commitment is to encourage and listen to end-user requests. Unfortunately, due to a high degree of uncertainty avoidance, project team leaders will tend to have only superficial contact with end-users and will tend to only trust those whom they know well. Since project team leaders have high status due to their authority and thus, implied expertise, their relationships with end-users will reflect high power distance. This means the project team leader will tend to be autocratic and paternalistic and will expect to be treated with respect. Gaining end-user commitment will not be a high priority. Due to collectivism and external locus of control, project leaders are likely to trust their developer teams and so will have less user commitment, believing that the developers can solve any problems that might arise.

Furthermore, project team leaders in Thailand are less likely to have expertise in IS project development or even in project management, in general, because of the lack of industrialization in the nation. Coupled with the fact that they may be managing several projects at once, this will reduce the time they have to spend with end-users [34].

Proposition 3: Thai IS analysts misunderstand the requirements of users

Developers, just like top managers and project leaders, may feel it necessary to remain aloof from users and may have a tendency to be paternalistic because of their authority bestowed upon them by their expertise (power distance). They are also likely to feel what is known as “face-losing apprehension”. Analysts may avoid losing face in the requirement definition phase by not asking too many questions, and they may assume certain requirements are needed based on their knowledge or by trying to guess what the users want. This phenomenon is especially worrisome when developers lack strong development skills because of the low level of industrialization in Thailand. The result of all this is that the work effort, skill set and technologies required will be misestimated.

Proposition 4: Thai IS projects lack of adequate user involvement

IS projects lack adequate user involvement if functional users do not commit to their deliverables and responsibilities, and/or they do not dedicate their time to the goals of the project.

End-users will be reluctant to be highly involved in a development project for several reasons. Due to collectivism, the developers will be seen as out-group members and therefore, regarded with suspicion. Moreover, Krieng-jai will make end-users reluctant to impose their ideas on the developers. Thai users tend to avoid conflict in communication by not getting too involved in the team project. End-users are also likely to be easy going and very open to compromise both because the culture is feminine and because of an external locus of control and power distance. 'The developers know what they are doing' becomes the mindset of end-users.

Second, Thai users worry about losing face in front of other people. They withhold their ideas and never strongly agree or disagree with anything. Because of a lack of industrialization, losing face may be a real fear if end-users are unfamiliar with information technology. Even worse, end-users may appear more involved than they actually are out of a strong need to be accommodating due to uncertainty avoidance.

Proposition 5: Thai IS projects lack the necessary knowledge/ skills in the project personnel

Due to numerous layers of the hierarchy of authority in Thai organizations (power distance), the person in charge of the project may not be the same one who implements it. Additionally, the implementer may not have enough experience in IS project because of the extremely high economic growth in the 1990’s. Many more senior managers were promoted very quickly in a nation with a low level of industrialization. Therefore, they tend to lack business knowledge/experience and technical know-how.

Furthermore, the historic abundance of resources throughout Thailand's history has caused Thais to believe that planning and investment are not important. Thus, managers are not well-versed in how to manage a project effectively. Unfortunately, especially for a developing country, technologies need visible and thoughtful planning. Finally, a perception of the external locus of control hampers the desire to learn new skills, making it unlikely they would seek out training on their own.

Proposition 6: Thai IS projects lack frozen requirements

Project requirements are “frozen” when they are finalized; that is, at some point a decision is made as to what the system specifications will be. IS projects contain this risk if there are continually changes to the project requirement definitions so that the specifications are never finalized.

Although Thai users would like to clarify their requirements, difficulties due to a lack of basic information technology literacy prevents them from clearly expressing their needs or even knowing what those needs are (Less Industrialized Nation). Under some circumstances, Thai users hesitate to give their opinions to others, believing that they will lose face in front of either their colleagues or developers. In contrast, developers may lack communication skills and/or are aware of losing face to their clients, so they will build systems based faulty or inadequate information (see Proposition 3 and 4).

Both end-users and developers will move forward with the project despite these problems because of the external locus of control trait that produces great optimism and a tendency to avoid long term planning because of a perception that resources are abundant.

Eventually, however, it will become clear that the system will not effectively fit the users' needs and at that time end-users and developers will begin to feel uncertainty about the success of the project. Uncertainty about resources will also become an issue as the project reaches its later stages. Developers will then become more interested in improving communication with end-users and end-users will oblige in order for everyone to save face but may still only expose problems a little at a time to soften the news. The feminine side of Thai culture often leads to decision-shifting behavior. End-users will change their opinions to match those of the developers. It will be difficult for developers to determine what is really on the users' minds. Collectivism will encourage everyone to compromise and work together but there may be an extended period where requirements must be modified as end-users' true needs become known.

Proposition 7: Thai IS projects are likely to encounter changing scope/ objectives

Changing scope/objectives occur whenever the organization encounters a changing environment, such as a merger, acquisition, downsizing effort, economic slowdown or boom, etc. Thai organizations may be more prone to organizational shifts due to the growing economy and the nation's status as a less industrialized nation. As the nation attempts to develop there may be radical swings in the economy and fierce competition from multinationals. Since Thai people try not to lose face in any situation a Thai top manager will find some way to regain competitiveness lost to strategic moves by its rivals. Consequently, the scope or objectives of the current project will change.

Proposition 8: Thai IS projects experience difficulty with new technology

The Thai people have always been interested in innovations and as a developing nation; it is natural to look to technology as the means to economic growth. On the other hand, there are cultural traits in Thai people that suppress the introduction of innovations.

Although top managers desire to evolve their systems to the up-to-date state, Thai users may be unwilling to do so due to a high degree of uncertainty avoidance and their lack of information technology literacy. They prefer to keep everything stable and running smoothly.

From the developers' viewpoint, implementation of new technology in the project can also cause risks because they do not want to implement it or learn new know-how. They may be reluctant to take a risk by implementing new technology, which nobody can successfully use, or they may not have time enough to learn new ideas.

Still, to please those in authority, Thai users will appear to be very interested in the innovation and happy to embrace it (Power Distance and External Locus of Control). During development, however, the users may actually be unwittingly sabotaging the project (see earlier risk factors).

Proposition 9: Thai IS analysts fail to manage end user expectations

Expectations are unvoiced requirements that only become salient after deliverables have been created. Managing end-user expectations is very difficult because often end-users do not realize what their expectations were until they see the new system. On the other hand, developers that are cognizant of the changing nature of user expectations will take steps to manage the situation when user expectations are not satisfied.

Because Thailand is a developing nation, end-users may have unrealistically high expectations of how good the system will be and at the same time will not know what to expect in reality. On the other hand, once it is clear that the system does not match their expectations, Thai end-users will be unlikely to share their disappointment with developers (Krieng-Jai, Femininity) and so there may not be a need to 'manage' their dissatisfaction. Moreover, developers may be uninterested in whether the system met the users' expectations or not (Power Distance, Saving Face).

Proposition 10: Thai IS projects lack sufficient/ appropriate staffing

It is likely that Thailand will have a lack of qualified developers and project leaders because of its status as a less industrialized nation. Moreover, there may be a tendency for Thais to underestimate the degree and type of staffing that is necessary to achieve success.

Top managers do not want to lose face, so they would rather overestimate their performance and the ability of their project teams. Furthermore, because of high power distance, higher-level managers can simply order their employees in any "lower-levels" to do any work regardless of the organization structure. This human resource perspective, coupled with a mindset that resources are abundant and that everything will turn out fine, might make it seem that projects were well staffed when in reality they are not.

Proposition 11A: User Department Conflicts will be Common in Thai Organizations
Proposition 11B: User Departments will put aside differences in Thai projects

Because of a high degree of power distance and collectivism, Thais have a highly stratified society that emphasizes harmonious relationships with others, especially those of higher status. On the other hand those in one's own group take priority over those in another group. Because each Thai belongs to a different department and each department has it own goals, conflict between user departments might be significant in the Thai business environment even though the departments all work for the same organization. Secondly, due to a face-saving perception by the in-group and individuals, each department wishes to generate the highest profit and show off the most efficient performance of the department. If this perception is too strong, conflict between departments will be the result. Still, the feminine nature of Thais would keep conflicts from becoming overt.

So, one the one hand, we would expect conflicts between departments to occur in Thai IS projects but, on the other hand, Thai culture should prevent these conflicts from hurting the project's performance. Therefore, we suggest that this risk factor is moderate.

Research Model

After analyzing these risk factors in light of Thai cultural traits, we conclude that Thai projects seem to have a high propensity for risk, except in one area: Conflict between User Departments (Risk Factor 11). Table 2 summarizes the cultural traits that were linked to each of the risk factors.

Table 2: RISK FACTOR HYPOTHESES WITH CORRESPONDING CULTURAL TRAITS

Risk Factor	Thai Cultural Traits	Impact on Risk
1. ***Lack of top management commitment***	Power Distance, Collectivism, External Locus of Control, Femininity, Less Industrialized Nation, Uncertainty Avoidance	Increases risk
2. Failure to gain user commitment	Uncertainty Avoidance, Power Distance, Collectivism, External Locus of Control, Less Industrialized Nation	Increases risk
3. Misunderstanding the requirements	Power Distance, Krieng Jai, Feminine, External Locus of Control, Less Industrialized Nation	Increases risk
4. Lack of adequate user involvement	Collectivism, Krieng Jai, Femininity, External Locus of Control, Saving Face, Uncertainty Avoidance	Increases risk
5. Lack of required knowledge/skills of project personnel	Power Distance, Less Industrialized Nation, Low Uncertainty Avoidance in Regards to Resources, External Locus of Control	Increases risk
6. Lack of frozen requirements	Less Industrialized Nation, External Locus of Control, Saving Face, Uncertainty Avoidance, Collectivism, Femininity	Increases risk
7. Changing scope/objectives	Less Industrialized Nation	Increases risk
8. Introduction of new technology	Less Industrialized Nation, Uncertainty Avoidance related to Resources, Power Distance, External Locus of Control	Increases risk
9. Failure to manage user expectations	Less Industrialized Nation, Krieng Jai, Femininity, Power Distance, Saving Face	Increases risk
10. Insufficient/ inappropriate staffing	Less Industrialized Nation, Power Distance, Uncertainty Avoidance related to Resources, Femininity	Increases risk
11. Conflict between user departments	Power Distance, Collectivism	PD = increases risk Coll = moderates risk

Conclusion

This paper extends the theory that culture influences risk by demonstrating the mechanisms by which specific cultural traits can be linked to specific risk factors. In so doing, we have created a theoretical model that can be tested in Thailand and that can be adapted to other cultural environments. In this way, it is possible to extend the IS project risk literature to other settings around the world and to examine the degree to which eleven risk factors of Schmidt, Lyytinen, Keil and Cule are universal in their applicability. At the same time, our methodology could be used to analyze other cultures until a consistent set of relationships between cultural dimensions and risk factors would emerge. Although we have primarily used Hofstede's dimensions of values in this study, future research should investigate the use of alternative frameworks of cultural values, such as Schwartz and Bilsky's set of motivational domains. In the meantime, the next stage of this research will be to test the model with comparative data gathered from Thai and western IS project managers. [41]

References

[1] Andrews, Tim G., and Chompusri, Nartnalin. 2001. Lessons in ‘Cross-Vergeance’: Restructuring the Thai Subsidiary Corporation. *Journal of International Business Studies.* 32(1): 77-94.

[2] Barkema, H.G. and Vermeulen F. 1997. "What differences in the cultural backgrounds of partners are detrimental for international joint ventures?" *Journal of International Business Studies*, 28: pp. 845-864.

[3] Bigoness, William J. & Gerald L. Blakely. 1996. A Cross-National Study of Managerial Values. *Journal of International Business Studies.* 27(4): 739-752.

[4] Boehm, B. 1989. *Software Risk Management Tutorial*. Washington, DC: IEEE Computer society Press.

[5] 1991. Software Risk Management Principles and Practices. *IEEE Software.* 8(1): 32-41.

[6] Carayannis, E. G. & Sagi John. 2001. Dissecting the Professional Culture: Insights from Inside the IT “black box.” *Technovation*. 21(2): 91-98.

[7] Charette, R. 1989. *Software Engineering Risk Analysis and Management.* New York: McGraw Hill.

[8] Deans, P., Karwan, K., 1997. *Global Information Systems and Technology: Focus on the Organization and its Functional Areas*. Hershey: Idea Group.

[9] Dunning, J.H. 1997. Micro and Macro Organizational Aspects on MNE and MNE Activity, in Toyne, B. and Nigh, D. (Eds.) *International Business: An Emerging Vision*, Columbia, SC: University of South Columbia Press.

[10] Elenkov, Detelin. 1997. Differences and Similarities in Managerial Values between U.S. and Russian Managers. *International Studies of Management & Organization*, 27: 85-106.

[11] Erez, M. & Earley, P.C. 1993. *Culture, Self-Identity and Work*. New York: Oxford University Press.

[12] Fieg, John P. 1989. *A Common Core: Thais and Americans*. Maine: Intercultural Press.

[13] Geletkanycz, M.A. 1997. The Salience of “Culture’s Consequences”: The Effects of Cultural Values on Top Executive Commitment to the Status Quo. *Strategic Management Journal*, 18: 615-634.

[14] Hofstede, G. 1980. *Culture's Consequences: International Differences in Work-Related Values.* Newbury Park, CA: Sage

[15] Bond, M. 1984. Hofstede’s Cultural Dimensions: An Independent Validation using Rokeach’s Value Survey. *Journal of Cross-Cultural Psychology*, 15(4): 417-433.

[16] Bond, M. 1988. The Confucius Connection: From Cultural Roots to Economic Growth. *Organizational Dynamics*, 16(4), 1988, pp. 4-21.

[17] Gibbs, WW. 1994. Software’s chronic crisis. *Scientific American.* 271(3): 86-95.

[18] Kahle, Lynn R., Beatty, Sharon E. & Homer, Pamela. 1986. Alternative Measurement Approaches to Consumer Values: The List of Values (LOV) and Values and Life Style (VALS). *Journal of Consumer Research*, 13(3): 405-409.

[19] Kedia, B.L.& Bhagat, R.S. 1988. Cultural Constraints on the Transfer of Technology across Nations: Implications for Research in International and Comparative Management. *Academy of Management Review*, 13: 559-571.

[20] Keil, Mark; Mixon, Richard; Saarinen, Timo & Tuunainen, Virpi. 1994-5. Understanding Runaway Information Technology Projects: Results from an International Research Program Based on Escalation Theory. Journal of Management Information System. 11(3): 65-85

[21] Kogut, B. & Singh, H. 1988. The Effect of National Culture on the Choice of Entry Mode. *Journal of International Business Studies*, 19: 411-432.

[22] Komin, Suntaree. 1990. Culture and Work-related Values in Thai Organizations. *International Journal of Psychology*. 25: 681-704

[23] Kulick, Elliott & Dick Wilson. 1992. *Thailand's Turn: Profile of a New Dragon*. New York: St. Martin's Press.

[24] Martinsons, M. G. & Hempel, P.S., 1998. Chinese Business Process Re-engineering. *International Journal of Information Management.* 18: 393-407

[25] McGinnies, E. & Ward, C. 1974. Persuasibility as a Function of Source Credibility and Locus of Control: Five Cross-Cultural Experiments. *Journal of Personality*. September 1974: 360-371

[26] Morosini, P., Shane, S., & Singh, H., 1998. National Cultural Distance and Cross-border Acquisition Performance. *Journal of International Business Studies*, 29:137-158.

[27] Munson, J. Michael & Shelby H. McIntyre.1979. Developing Practical Procedures for the Measurement of Values in Cross-Cultural Marketing. *Journal of Marketing Research*, 16(Feb.): 48-52.

[28] Nakata, C. & Sivakumar, K. 1996. National Culture and New Product Development: An Integrative Review. *Journal of Marketing,* 60: 61-72.

[29] Newman, K.L. & Nollen, S.D., 1996. Culture and Congruence: The Fit between Management Practices and National Culture. *Journal of International Business Studies*, 27: 753-779.

[30] Niratpattanasai, Kriengsak. 2000. The Bangkok Sky Train and Mai Pen Rai. *Asia Pacific Management Forum*. 26. Retrieved August 22, 2002, from http://www.apmforum.com/columns/thai26.htm

[31] 2000. Special Edition: Thai and Foreigners. *Asia Pacific Management Forum*. 40. Retrieved August 22, 2002, from http://www.apmforum.com/columns/thai40.htm

[32] Niratpattanasai, Kriengsak. 2000. Evolution of Thai Management Post-Crisis: (Part Three of Three). *Asia Pacific Management Forum*. 25. Retrieved August 22, 2002, from http://www.apmforum.com/columns/thai25.htm

[33] 2001. Tips for Thais on working with foreigners. *Asia Pacific Management Forum*. 43. Retrieved August 22, 2002, from http://www.apmforum.com/columns/thai43.htm

[34] 2001. Thais and Planning. *Asia Pacific Management Forum*. 42. Retrieved August 22, 2002, from http://www.apmforum.com/columns/thai42.htm

[35] Pornpitakpan, Chanthika. 2000. Trade in Thailand: A Three-Way Culture Cultural Comparison. *Business Horizons*. 43(2): 61-70

[36] Rokeach, Milton. 1973. *The Nature of Human Values.* New York, NY: Free Press.

[37] Schmidt, Roy, Lyytinen, Kalle, Keil, Mark & Paul Cule. 2001. Identification Software Project Risks: An international Delphi Study. *Journal of Management Information Systems*. 17: 5-37.

[38] Schuler, R., Jackson, S., Jackofsky, E. & Slocum Jr., J.W., 1996. Managing Human Resources in Mexico: A Cultural Understanding. *Business Horizons,* 39: 55-61.

[39] Schwalbe, Kathy. 2000. *Information Technology Project Management.* Cambridge, MA: Course Technology.

[40] Schwartz, Shalom H. 1990. Universals in the Content and Structure of Values: Theoretical Advances and Empirical Tests in 20 countries. In M.P. Zanna, editor. *Advances in Experimental Social Psychology.* San Diego, CA: Academic Press.

[41] Beyond Individualism/Collectivism: New Cultural Dimensions of Values. In U. Kim, H.C. Triandis & G. Yoon (eds.) *Individualism and Collectivism: Theoretical and Methodological Issues*, pp.85-119. Newbury Park, CA: Sage.

[42] W.Bilsky. 1987. Toward a Universal Psychological Structure of Human Values. *Journal of Personality and Social Psychology,* 58: 878-891.

[43] Sriussadaporn-Charoenngam, Nongluck & Jablin F.M., 1999. An Exploratory Study of Communication Competence in Thai Organizations. *The Journal of Business Communication.* 36(4): 382-419.

[44] Thorelli, H.B. & Sentell, G.D., 1982. *Consumer Emancipation and Economic Development: The Case of Thailand*. Connecticut: JAI Press.

[45] Trompenaars, Alfons. 1998. *Riding the Waves of Culture: Understanding Cultural Diversity in Global Business*. New York: McGraw Hill.

[46] Tung, Lai Lai & Quaddus, M.A., 2002. Cultural Differences Explaining the Differences in Results in GSS: Implications for the Next Decade. *Decision Support Systems.* 33(2): 177-199.

[47] Van Genuchten, M. 1991. Why is software late? An empirical study of the reason for delay in software development. *IEEE Transactions on Software Engineering.* 17(6): 582-590.

[48] Vinson, Donald E., Jerome E. Scott & Lawrence M. Lamont. 1977. The Role of Values in Marketing and Consumer Behavior. *Journal of Marketing*, April: 44-50.

[49] Walkerden, F. & Jeffery, R. 1997. *Software Cost Estimation: A Review of Models, Processes, and Practice.* San Diego: Academic Press.

Risk in Globalization: A Comparative Analysis of African and Asian Countries

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Abstract

The conventional model of globalization is based on a set of five basic premises. First, competitive markets are more efficient than public sector intervention. Second, structural reforms are needed to achieve competitive markets. Third, international capital flows are essential to achieve sustainable economic growth. Fourth, G-7 country coordination of monetary and fiscal policy is essential to success. Fifth, globalization can help not just developing, but also transition and less developed economies to achieve sustained economic growth. Each of these assumptions carries varying levels of risk, not all of which are measured, and thus raising the question whether in the presence of risk, the conventional model of globalization can achieve sustainable economic growth.

To better understand why globalization appears to have worked better in some instances and less well so in others, we propose a quantitative model with explicit measures of risk to explain the behavior of a sample of African and East Asian economies. We find that while partial reforms may be necessary, they are insufficient to provide sustainable economic growth in the presence of risk. We identify a hierarchy of determinants that are essential to a comprehensive program of reform from which both African and Asian economies may benefit.

Introduction

For some time, a broad international consensus has supported the expansion of economic globalization. Building on the principle of comparative advantage, globalization offers both developed and developing countries the prospect of higher rates of economic growth as both product and factor markets engage in their most efficient uses[i]. At the same time, globalization has met with mixed results, both in terms of economic growth and in terms of the global distribution of income, as has been noted in recent critiques (Stiglitz 2002; Easterly 2001)[ii]. This mixed picture is particularly striking if one compares the generally robust performance of East Asian economies with those in Sub-Saharan Africa, which has been the subject of much debate (The World Bank 2000, Morisset 2000, Ayittey 1998, Easterly and Levine 1997, Bates 1981)[iii]. As is becoming clear, achieving sustainable benefits of globalization requires a set of institutions that are capable of providing good economic policy and political governance. In this paper, we examine the comparative determinants of policy and governance for a sample of East Asian and Sub-Saharan countries to explain the differential results of globalization, and from which constructive policy lessons may be derived. We place major emphasis on the role of risk in the allocation of resources[iv]. In particular, we find that economic and political reform can succeed only when risk is more transparent and factored into institutional design and reform than has typically been the case up to now. In short, successful globalization is not just about what steps to take, but in what sequence of implementation.

Trends in Globalization

As a framework designed to generate increases in real per capita income, globalization places major emphasis on market forces for the allocation of resources. We illustrate below several principal indicators of globalization, which we then will use to analyze the differential performance of East Asian and Sub-Saharan African countries. We focus first on five input measures which then are placed in comparison to two basic output measures.

Trade is a key element in globalization. Table 1 shows the evolution of trade dependence by region for the past twenty years, the first ten of which coincided with the end of the Cold War period, and the latter as the first decade of the post-Cold War era.

Table 1: GLOBAL TRADE INTERDEPENDENCE
(Trade Share of PPP GDP)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
High income OECD	28.4	26.2	24.4	23.2	23.5	22.2	22.5	24.1	25.3	26.2
East Asia & Pacific	18.1	18.0	16.3	15.8	15.0	13.8	12.2	12.5	13.5	14.5
Sub-Saharan Africa	35.6	30.2	24.6	22.6	20.2	18.4	15.5	16.1	15.5	15.9
L.Am. & Caribbean	14.8	15.1	12.5	11.3	11.4	10.3	8.5	8.6	9.4	10.2
M.East & N.Africa	55.8	58.0	47.8	39.4	32.9	24.3	18.7	18.4	17.3	19.4
World	27.2	25.6	23.1	21.8	21.5	19.8	19.1	20.5	21.5	22.5

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
High income OECD	28.8	30.6	30.5	28.3	30.5	34.3	34.1	33.9	34.0	34.7
East Asia & Pacific	15.4	15.9	15.5	15.5	16.6	18.3	17.6	17.2	14.9	15.3
Sub-Saharan Africa	17.3	17.0	17.1	15.6	15.7	17.7	17.9	18.2	16.0	16.3
L.Am. & Caribbean	11.4	11.6	12.4	12.7	14.0	15.6	16.6	18.2	18.5	18.2
M.East & N.Africa	23.5	23.1	22.7	19.6	18.3	20.0	21.1	20.5	17.3	16.8
World	24.3	25.8	25.8	24.3	25.2	28.3	28.2	28.1	27.3	27.4

Source: The World Bank: *World Development Indicators 2001*

We note first of all that while there has not been any significant expansion of global trade dependence, there have been changes in various regions. High income OECD countries have done the most to expand their dependence on trade. In contrast, East Asia countries have largely kept their trade dependence below the world average, while Sub-Saharan African countries and Middle East and North African countries reduced their dependence from above the world average to below world average levels between 1980 and 1999. By this measure, higher income countries have expanded their commitment to international trade at a time when many developing regions of the world have either kept their dependence stable or have moved to reduce their commitment.

Globalization traditionally means combining expanded dependence on international trade with a reduction in public sector intervention. Table 2 measures the evolution of the fiscal burden across regions, which is defined as the ratio of tax revenues to GDP. Here we find the opposite pattern of trade dependence, namely, that there has been some effort to reduce public sector intervention in developing countries while the fiscal burden in high income OECD countries has actually increased.

Table 2: FISCAL BURDEN
(Tax Revenues as a Percent of GDP)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
High income OECD	20.3	20.9	21.2	20.6	20.6	21.0	21.2	21.9	21.7	21.8
East Asia & Pacific	20.3	18.4	17.6	16.8	16.2	15.3	15.7	14.5	13.8	12.3
Sub-Saharan Africa	21.6	17.8	21.2	19.2	18.8	19.7	19.5	19.5	21.5	23.0
L. Am. & Caribbean	15.9	16.0	15.9	16.1	14.6	15.6	15.7	14.9	13.4	13.4
World	19.5	20.0	20.4	19.9	19.8	20.2	20.3	20.7	20.5	20.5

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
High income OECD	21.9	23.7	23.3	23.3	25.2	25.5	25.9	26.3	25.8	25.9
East Asia & Pacific	11.0	10.5	10.4	10.0	11.8	11.7	11.7	12.1	9.3	10.3
Sub-Saharan Africa	21.3	21.1	19.4	19.5	19.2	20.3	20.6	19.3	19.7	19.8
L. Am. & Caribbean	16.0	14.5	15.0	16.4	17.1	17.2	17.0	17.0	17.0	17.0
World	20.4	21.8	21.5	21.6	22.9	23.2	23.6	23.8	23.7	23.8

Source: The World Bank: *World Development Indicators 2001*

For developing countries, reductions in public sector intervention can be traced to rising rates of default on debt along with the absence of efficient capital markets, while for high income countries, expanded public sector intervention can be traced to efforts to cushion the effects of increased dependence on trade. The most notable declines have been the shifts in public sector intervention in East Asia countries.

Despite weaknesses in the development of capital markets, developing countries have expanded their reliance on private market forces. We measure this emphasis in terms of financial flows to emerging markets in Figure 1, by the rising significant of foreign direct investment in Table 3, and by the market capitalization of listed companies on regional stock exchanges.

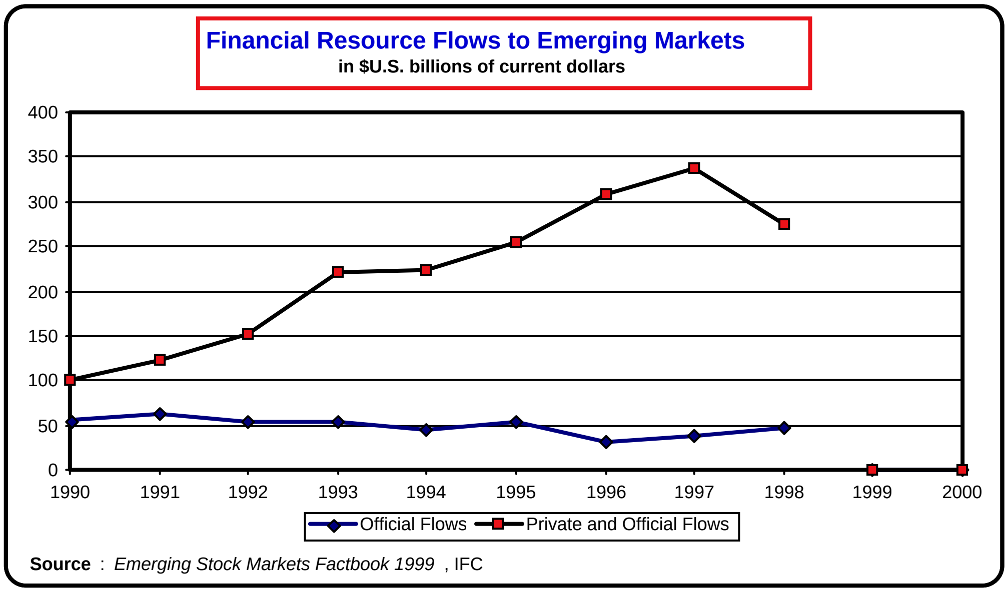

Fig 1

Figure 1 illustrates the role of private capital flows, both direct and portfolio, to emerging markets relative to official capital flows. This shift marks the relative decline in the client-state model that was so characteristic of developing country policy relations during the Cold War.

Annual rates of growth of FDI dependency vary significantly by region. Between 1980 and 1999, annual rates were, respectively for the regions above, 8.78%, 6.63%, -1.10%, 8.83%, -4.10%, and 7.71%. Sub-Saharan Africa and the Middle East and North Africa were the two regions with negative rates of growth, with the Middle East and North Africa experiencing the greatest rate of decline. Moreover, as with the profile of trade dependency noted in Table 1, we see in Table 3 that high income OECD countries have placed the greatest emphasis on FDI. Much of the variation can be attributed to differences in the extent and depth of capital markets, and the associated governance rules.

Table 3: GROSS FOREIGN DIRECT INVESTMENT
(GFDI Share of PPP GDP)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
High income OECD	1.30	1.41	1.13	1.15	1.28	1.06	1.42	2.25	2.52	2.93
East Asia & Pacific	0.31	0.41	0.24	0.25	0.22	0.28	0.29	0.28	0.37	0.41
Sub-Saharan Africa	0.84	0.76	0.57	0.37	0.34	0.53	0.29	0.36	0.26	0.56
L.Am. & Caribbean	0.55	0.64	0.52	0.41	0.38	0.41	0.35	0.40	0.49	0.44
M.East & N.Africa	1.21	1.80	2.67	1.23	1.18	0.36	0.40	0.38	0.29	0.35
World	1.05	1.14	0.92	0.85	0.92	0.77	0.97	1.51	1.69	1.96

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
High income OECD	3.32	2.42	2.16	2.26	2.39	2.95	2.99	3.55	5.85	6.99
East Asia & Pacific	0.46	0.52	0.74	1.11	1.10	1.11	1.17	1.19	1.29	1.12
Sub-Saharan Africa	0.43	0.50	0.75	0.51	0.74	1.00	0.87	1.33	0.74	0.67
L.Am. & Caribbean	0.43	0.61	0.67	0.62	1.15	1.16	1.58	2.27	2.52	3.00
M.East & N.Africa	0.46	0.29	0.43	0.60	0.42	0.55	0.57	0.72	0.84	0.52
World	2.19	1.70	1.57	1.66	1.73	2.08	2.14	2.55	3.91	4.62

Source: The World Bank: *World Development Indicators 2001*

Our final input measure of globalization is the ratio of market capitalization to GDP. As globalization and a shift to market forces proceeds, one expects this ratio to rise. However, market capitalization rates have been influenced by erratic valuations, notably the global stock market bubbles of the 1990s and the fact that GDP growth has been uneven across regions. In East Asia countries, the market capitalization ratio reflects a genuine shift in emphasis on market forces, while for Sub-Saharan African countries, expanded market capitalization rates belied actual declines in GDP in some cases.

Table 4: MARKET CAPITALIZATION OF LISTED COMPANIES
(Percent of GDP)

	1988	1990	1992	1994	1996	1997	1998	1999	2000
High income OECD	67.6	55.1	51.2	62.4	76.7	91.8	109.7	137.4	122.8
East Asia & Pacific	21.5	24.3	27.9	47.5	43.0	22.1	33.2	52.4	41.8
Sub-Saharan Africa	37.2	55.2	52.0	119.9	110.7	102.8	80.3	121.0	98.6
L.Am. & Caribbean	7.6	7.7	21.0	29.9	27.0	30.9	20.5	29.7	24.7
M.East and N.Africa	23.7	26.2	29.0	19.4	24.6	29.0	27.7	33.9	30.7
World	62.2	50.7	46.8	58.9	69.4	79.3	93.2	119.0	105.3

Source: The World Bank: *World Development Indicators 2001*

On the output side, if globalization is successful, it should translate into higher rates of growth in per capita GDP across broad segments of the population. Figure 2 illustrates annual rates of growth of real per capita GDP by region. East Asia countries, where shifts to market-based policies have been the greatest, have enjoyed the highest rates of growth, followed by high income OECD countries and the rest of the world. In contrast, Latin American and Caribbean countries, along with Middle East and North African countries have lagged the world average, while Sub-Saharan African countries have experienced declines. It is the striking contrast in performance of East Asian countries with those in Sub-Saharan countries that we need to further examine.

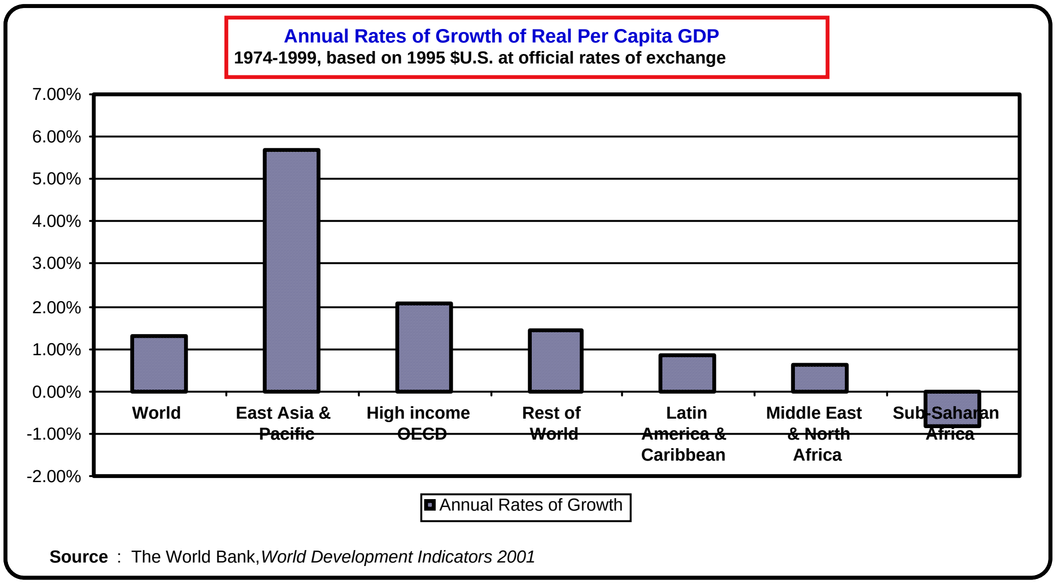

Fig 2

Our second output measure is the distribution of income across regions. If we take simple means, we find that there has been an increase in global inequality as globalization has proceeded[v]. Much of the increase in inequality reflects more rapid rates of growth in per capita GDP among high income countries as international trade dependence has increased rather than declines in per capita incomes in other regions.

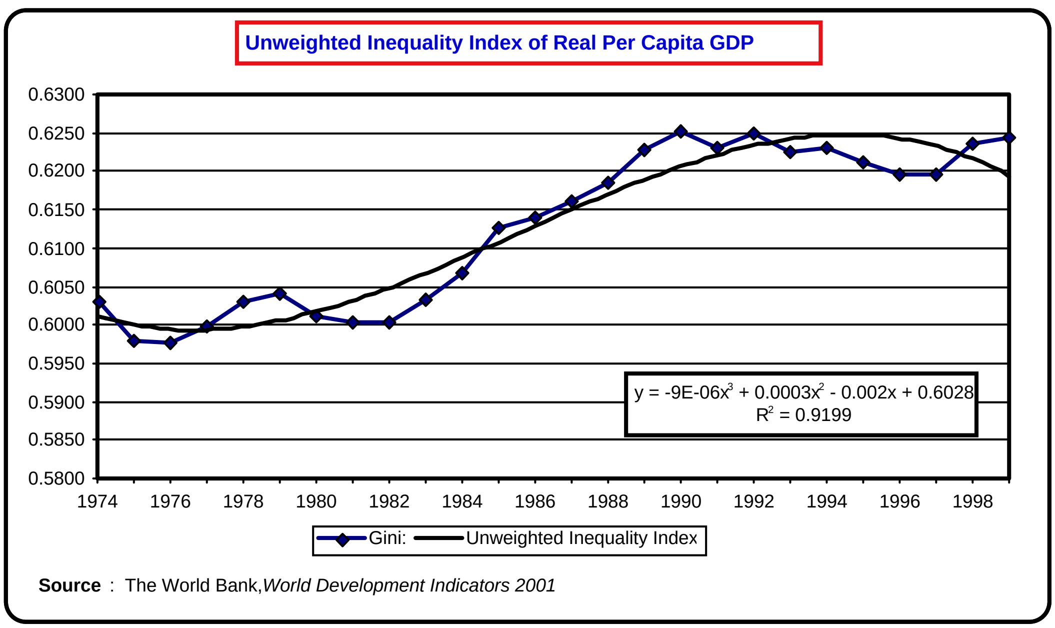

Fig 3

We note finally that while per capita GDP only reflects one dimension of development, we could make comparable findings with other benchmarks such as the Index of Human Development, or as a proxy, the evolution of life expectancy, as is shown in Table 5. Overall, there has been an increase in global life expectancy, reflecting investments in health, education, and in physical capital. However, the gap between the well-performing developing countries of East Asia and those in Sub-Saharan Africa has been widening. In fact, Sub-Saharan Africa is the only region of the world to experience a decline in life expectancy in recent years, due partly to the spread of HIV-AIDS, and partly to the kinds of resource mis-allocations to which we have already alluded.

Table 5

Evolution of Life Expectancy

	1960	1965	1970	1975	1980	1985	1990	1995	2000	Annual Rate of Change, 1960-1999
High income OECD	69.6	70.6	71.4	72.8	74.2	75.4	76.3	77.0	77.6	0.28%
East Asia & Pacific	39.2	53.4	59.3	62.2	64.5	66.3	67.4	68.2	68.6	1.42%
Sub-Saharan Africa	40.2	42.2	44.2	46.0	47.6	49.3	49.9	49.2	47.9	0.38%
Latin America & Caribbean	56.4	58.6	60.6	62.7	64.7	66.5	67.9	69.1	69.4	0.53%
Middle East & North Africa	47.4	50.0	52.8	55.8	58.6	62.0	64.6	66.5	67.2	0.90%
World	50.3	55.9	58.7	60.8	62.7	64.3	65.4	66.1	66.3	0.70%

Source: The World Bank: *World Development Indicators 2001*

Comparisons of East Asian and African Economies

While globalization offers the prospect for rising levels of per capita income, individual countries have adopted the standard set of policy prescriptions in varying degrees. Since East Asian countries have enjoyed remarkable increases in per capita income while countries in Sub-Saharan Africa have had some of the lowest rates of economic performance, we set out here a framework to explain these differences within the context of globalization. Our choice of variables is influenced by some of the standard references in the literature on globalization.

We use a pooled sample of cross-sectional and time series data for a sample of 11 East Asian countries and 40 African countries[vi]. We use 1980, 1985, 1990, 1995, and 1999 as our five-year time periods, and draw on a data set that combines World Bank indicators with the Index of Economic Freedom compiled by the *Wall Street Journal*, along with indicators from the Economist Intelligence Unit and related sources[vii]. Our sample contains 60 observations for Asian countries and 150 for African countries. Sample means and variable definitions are given below in Table 5, with first-order correlations given in Table 6.

Table 5: VARIABLE UNWEIGHTED MEANS

	1980		1985		1990		1995		1999	
	Asia	Africa	Asia	Africa	Asia	Africa	Asia	Africa	Asia	Africa
RPCGDP	$3,174	$787	$3,678	$798	$4,654	$815	$5,325	$816	$5,583	$857
TRDEP	20.91	37.41	15.75	23.34	18.25	22.77	24.34	20.03	22.06	19.57
GNS	22.76	11.19	22.47	11.38	26.41	12.18	26.95	12.32	27.78	11.38
ICOR	12.26	27.96	13.42	25.05	7.69	30.05	7.74	29.58	10.00	32.81
FDIGDP	1.60	4.00	1.49	5.62	3.58	3.11	8.01	6.24	7.07	9.42
CURCON	5.24	3.86	5.35	3.91	5.40	3.93	7.35	5.13	7.54	5.67
AIDGNI	9.72	57.94	8.77	71.25	12.09	81.71	5.73	84.68	5.30	50.49
IRSPRD	2.45	10.55	8.07	16.67	7.50	21.32	7.82	25.05	5.66	20.31
JUDIND	4.98	4.35	4.17	4.04	3.89	4.24	6.28	5.33	5.87	5.31
CONREP	4.55	5.24	4.56	5.27	4.02	5.13	2.25	4.60	1.89	4.35
CONFRSK	4.80	5.98	4.63	6.10	4.41	6.12	2.21	5.43	1.92	5.47
BKLAR	9.32	14.90	9.07	19.80	9.01	19.71	9.70	13.53	9.66	8.55
PROPRT	2.24	1.69	2.24	1.69	2.25	1.70	2.24	1.70	2.29	1.65
CCRISK	30.22	43.53	30.42	43.73	29.72	43.31	30.23	44.06	21.91	35.54
FISCBURD	13.83	18.46	13.51	18.32	14.08	17.82	14.5	16.69	13.43	16.83
REALINRAT	2.23	-4.05	8.37	1.29	5.58	5.46	5.04	4.92	7.5	13.09
DEBTSRAT	14.13	14.53	21.05	24.74	18.31	21.61	13.8	21.23	14.73	16.09
MILBURD	3.84	2.98	3.71	2.89	3.51	3.04	2.86	2.31	2.78	2.28

RPCGDP	Real per capita GDP, measured in $U.S. 1995 at official rates of exchange.	The World Bank, *World Development Indicators 2001*
TRDEP	Trade dependency, measured as the share of GDP in international trade	The World Bank, *World Development Indicators 2001*
GNS	Gross National Saving, all sources, as a percentage of GDP	The World Bank, *World Development Indicators 2001*
ICOR	Incremental capital output ratio	The World Bank, *World Development Indicators 2001*
FDIGDP	Foreign Direct Investment as a share of GDP	The World Bank, *World Development Indicators 2001*
CURCON	Index of currency convertability, scaled from 1=lowest to 10=highest	The Wall Street Journal, Index of Economic Freedom 2002
AIDGNI	The ratio of international official aid as a percentage of gross national income	The World Bank, *World Development Indicators 2001*
IRSPRD	Interest rate spread, measured as the difference between the domestic rate and LIBOR	The World Bank, *World Development Indicators 2001*
JUDIND	Index of judicial independence, scaled from 1=lowest to 10=highest	The Wall Street Journal, Index of Economic Freedom 2002
CONREP	Index of contract repudiation risk, scaled from 1=lowest to 10=highest	The Wall Street Journal, Index of Economic Freedom 2002
CONFRSK	Index of asset confiscation risk, scaled from 1=lowest to 10=highest	The Wall Street Journal, Index of Economic Freedom 2002
BKLAR	Bank liquid reserves to asset ratio	The World Bank, *World Development Indicators 2001*
PROPRT	Index of property rights, scaled from 1=lowest to 5=highest	The Wall Street Journal, Index of Economic Freedom 2002
CCRISK	Country composite political, economic, and financial risk, scaled from 1=lowest to 100=highest	ICRG and the World Bank
FISCBURD	Fiscal burden, measured as the ratio of tax revenues to GDP	The World Bank, *World Development Indicators 2001*
REALINRAT	Real interest rate, based on local rates of inflation	The World Bank, *World Development Indicators 2001*
DEBTSRAT	Debt service ratio, measured as the ratio of debt service payments to exports of goods and services	The World Bank, *World Development Indicators 2001*
MILBURD	Military burden, measured as the percent of GDP devoted to military expenditures	The World Bank, *World Development Indicators 2001*

Table 6: ASIA SAMPLE FIRST-ORDER CORRELATIONS

	RPCGDP	TRDEP	GNS	ICOR	FDIGDP	CURCON	AIDGNI	IRSPRD	JUDIND	CONREP	CONFRSK	BKLAR	PROPRT	CCRISK	FISCBURD	REALINRAT	DEBTSRAT	MILBURD
RPCGDP	1.0000																	
TRDEP	0.1401	1.0000																
GNS	0.3694	0.3705	1.0000															
ICOR	-0.3318	-0.0473	-0.5015	1.0000														
FDIGDP	-0.0869	0.8679	0.2136	0.1766	1.0000													
CURCON	0.4833	0.6571	0.5595	-0.4370	0.4618	1.0000												
AIDGNI	-0.2871	-0.2990	-0.4706	0.8195	-0.0444	-0.4159	1.0000											
IRSPRD	-0.3020	-0.2365	-0.6619	-0.0405	-0.2462	-0.1256	-0.0243	1.0000										
JUDIND	0.5351	0.3200	0.4396	-0.5035	0.1506	0.3603	-0.5404	-0.4718	1.0000									
CONREP	-0.4705	-0.7014	-0.4879	0.4640	-0.5105	-0.6292	0.5944	0.3941	-0.8351	1.0000								
CONFRSK	-0.5630	-0.6124	-0.6933	0.3076	-0.4204	-0.5512	0.5211	0.6216	-0.8231	0.8335	1.0000							
BKLAR	-0.5191	-0.3179	-0.1636	0.1271	-0.1580	-0.3101	0.1146	0.4690	-0.4445	0.5980	0.3893	1.0000						
PROPRT	0.5978	0.5844	0.3928	-0.4293	0.2394	0.6031	-0.4529	-0.3402	0.6927	-0.8575	-0.6537	-0.7694	1.0000					
CCRISK	-0.6107	-0.3474	-0.4116	0.3765	-0.1264	-0.4062	0.6508	0.3767	-0.8444	0.7331	0.8460	0.3530	-0.6044	1.0000				
FISCBURD	-0.1006	0.6397	-0.1710	0.0177	0.5804	0.4451	-0.1505	0.5255	-0.1846	-0.2579	0.0154	0.0994	0.2021	0.0978	1.0000			
REALINRAT	-0.0346	-0.1601	-0.2398	-0.2695	-0.0775	0.2495	-0.2793	0.7233	-0.2651	0.2150	0.2924	0.4582	-0.3624	0.0597	0.3730	1.0000		
DEBTSRAT	-0.5275	-0.2436	-0.2366	0.3443	-0.3302	-0.3141	0.3712	0.0602	-0.4892	0.4073	0.4750	-0.0659	-0.1211	0.4661	-0.1592	-0.3224	1.0000	
MILBURD	-0.3806	-0.0691	-0.3871	-0.2494	0.0394	-0.2643	-0.1103	0.5481	-0.1912	0.1532	0.4130	0.2196	-0.2516	0.4306	0.2604	0.3098	-0.1695	1.0000

AFRICA SAMPLE FIRST-ORDER CORRELATIONS

	RPCGDP	TRDEP	GNS	ICOR	FDIGDP	CURCON	AIDGNI	IRSPRD	JUDIND	CONREP	CONFRSK	BKLAR	PROPRT	CCRISK	FISCBURD	REALINRAT	DEBTSRAT	MILBURD
RPCGDP	1.0000																	
TRDEP	0.1039	1.0000																
GNS	0.3674	0.3317	1.0000															
ICOR	-0.2790	0.0850	-0.3766	1.0000														
FDIGDP	-0.0895	0.0392	0.0094	0.0263	1.0000													
CURCON	0.4176	0.1102	0.4154	-0.2303	0.0269	1.0000												
AIDGNI	-0.2342	-0.2438	-0.5938	0.3111	0.1367	-0.2698	1.0000											
IRSPRD	-0.0875	-0.1617	-0.1923	-0.0069	-0.0280	-0.0843	0.0279	1.0000										
JUDIND	0.3072	0.1619	0.2849	-0.0521	0.1368	0.2891	-0.0886	-0.2512	1.0000									
CONREP	-0.4271	-0.1356	-0.5476	0.4083	0.0034	-0.5760	0.4468	0.1899	-0.4746	1.0000								
CONFRSK	-0.3849	-0.1391	-0.5828	0.4255	-0.0143	-0.5279	0.3769	0.2240	-0.4132	0.8467	1.0000							
BKLAR	-0.1620	-0.1239	-0.2260	0.0619	-0.0391	-0.2732	0.2219	0.0206	-0.2942	0.2546	0.1681	1.0000						
PROPRT	0.5366	0.1517	0.3553	-0.3856	-0.0399	0.4405	-0.1832	-0.1807	0.2565	-0.4784	-0.4423	-0.0215	1.0000					
CCRISK	-0.5026	-0.1455	-0.5762	0.4274	-0.0518	-0.4740	0.4249	0.2342	-0.4378	0.6928	0.6787	0.2726	-0.4684	1.0000				
FISCBURD	0.0070	0.1230	-0.0077	0.2228	-0.0703	0.0055	-0.0889	-0.1001	-0.1718	0.0582	0.0885	0.1936	-0.0977	0.2762	1.0000			
REALINRAT	0.0020	-0.0347	0.0462	0.0784	0.0421	0.2657	0.0165	-0.5579	0.2205	-0.1761	-0.1189	-0.2453	0.0303	-0.1233	0.0466	1.0000		
DEBTSRAT	-0.1981	-0.0736	-0.1943	0.1428	0.0339	-0.0943	0.3700	0.0216	-0.0624	0.1876	0.0741	0.0327	-0.0264	0.1156	-0.0325	0.0220	1.0000	
MILBURD	-0.1281	0.0339	-0.0142	0.0917	-0.1171	-0.1349	-0.0172	-0.0480	-0.3699	0.2103	0.1723	0.1123	-0.0935	0.1611	0.1337	-0.0510	-0.0462	1.0000

AFRICA-ASIA JOINT SAMPLE FIRST-ORDER CORRELATIONS

	RPCGDP	TRDEP	GNS	ICOR	FDIGDP	CURCON	AIDGNI	IRSPRD	JUDIND	CONREP	CONFRSK	BKLAR	PROPRT	CCRISK	FISCBURD	REALINRAT	DEBTSRAT	MILBURD
RPCGDP	1.0000																	
TRDEP	0.1030	1.0000																
GNS	0.3669	0.3243	1.0000															
ICOR	-0.2835	0.0845	-0.3993	1.0000														
FDIGDP	-0.0925	0.0544	-0.0048	0.0482	1.0000													
CURCON	0.4251	0.1383	0.4156	-0.2385	0.0367	1.0000												
AIDGNI	-0.2329	-0.2345	-0.6008	0.3371	0.1514	-0.2618	1.0000											
IRSPRD	-0.0913	-0.1590	-0.2034	0.0070	-0.0212	-0.0832	0.0400	1.0000										
JUDIND	0.3306	0.1677	0.2891	-0.0776	0.1305	0.2970	-0.0954	-0.2462	1.0000									
CONREP	-0.4233	-0.1514	-0.5375	0.4006	-0.0054	-0.5700	0.4368	0.1892	-0.4877	1.0000								
CONFRSK	-0.3973	-0.1555	-0.5841	0.4199	-0.0184	-0.5268	0.3739	0.2270	-0.4412	0.8437	1.0000							
BKLAR	-0.1685	-0.1238	-0.2320	0.0743	-0.0324	-0.2656	0.2295	0.0270	-0.2894	0.2565	0.1720	1.0000						
PROPRT	0.5448	0.1687	0.3649	-0.3961	-0.0426	0.4576	-0.1980	-0.1832	0.3012	-0.4883	-0.4567	-0.0461	1.0000					
CCRISK	-0.5114	-0.1475	-0.5788	0.4413	-0.0354	-0.4647	0.4359	0.2392	-0.4658	0.6824	0.6851	0.2767	-0.4872	1.0000				
FISCBURD	0.0005	0.1325	-0.0184	0.2243	-0.0583	0.0189	-0.0787	-0.0929	-0.1690	0.0522	0.0880	0.1956	-0.0908	0.2730	1.0000			
REALINRAT	-0.0018	-0.0354	0.0337	0.0802	0.0455	0.2557	0.0228	-0.5461	0.1989	-0.1695	-0.1069	-0.2364	0.0119	-0.1088	0.0519	1.0000		
DEBTSRAT	-0.2092	-0.0748	-0.2036	0.1574	0.0373	-0.1021	0.3754	0.0269	-0.0781	0.1905	0.0868	0.0367	-0.0378	0.1341	-0.0302	0.0215	1.0000	
MILBURD	-0.1427	0.0253	-0.0106	0.0479	-0.1222	-0.1427	-0.0403	-0.0467	-0.3473	0.2049	0.1810	0.1019	-0.0914	0.1564	0.1273	-0.0452	-0.0583	1.0000

A simple way to explain economic growth is in terms of a country's rate of saving and its incremental capital-output ratio. Since we are using a pooled sample based on observations for 1980, 1985, 1990, 1995, and 1999, we use OLS estimates for the following equation:

RPCGDP = f(GNS, ICOR) (1.)

For our sample period, Table 7 confirms standard theory, namely that higher rates of saving lead to higher levels of real per capita income, as do lower capital-output ratios.

Table 7: SIMPLE GROWTH MODEL[viii]

	Joint	Asia	Africa
Intercept	921.21	-4492.49	644.88
GNS	157.66 (4.34)	394.33 (2.29)	77.90 (10.22)
ICOR	-63.86 -(2.34)	-96.90 -(0.78)	-25.47 -(4.31)
n	210	60.00	150.00
Adjusted R^2	0.1488	0.0943	0.4537
F	19.27	4.07	62.86
DW	1.92	2.08	2.02
Jarque-Bera	9386.95	164.47	76.01

We now postulate a standard globalization model, namely, that per capita income is a direct function of savings, trade dependence, foreign direct investment, and property rights, and depends negatively on the capital-output ratio, the fiscal burden, the debt service ratio, the international aid ratio, and the country composite risk index. Our estimating equation is:

RPCGDP = f(GNS, ICOR, TRDEP, FDIGDP, FISCBURD, DEBTSRAT,
AIDGNI, CCRISK, PROPRT) (2.)

Regression results are shown in Table 8 for the pooled and dis-aggregated regional samples. For our pooled sample, we find several contradictions with established theory: the ICOR is positive, trade dependence is negative as is FDI, while the fiscal burden and aid are positive. When dis-aggregated by regional sub-sample, the capital-output ratio carries the expected negative sign but is statistically insignificant for Asian countries. Moreover, trade dependence and FDI still have a negative influence on real per capita GDP for both regions, and only in the African sample does aid carry the expected negative coefficient, and which is statistically insignificant. However, we find that property rights and country composite risk are the most important determinants of real per capita income, which suggests that the sequencing of policy measures is critical if globalization is to succeed. We thus reformulate our model in terms of policy sequence variables, i.e., that some of the variables in the standard globalization model are important determinants of given exogenous variables rather than operating directly on the real per capita GDP endogenous variable.

Table 8: STANDARD GLOBALIZATION MODEL

	Joint	Asia	Africa
Intercept	2677.56	-874.73	2056.80
GNS	40.68 (0.99)	167.20 (1.12)	46.37 (5.39)
ICOR	9.30 (0.36)	-54.34 -(0.63)	-17.16 -(3.02)
TRDEP	-8.94 -(0.67)	-247.99 -(3.89)	4.94 (1.89)
FDIGDP	-60.21 -(1.68)	-1078.93 -(0.95)	-12.71 -(1.80)
FISCBURD	57.58 (2.32)	355.18 (1.58)	14.70 (3.23)
DEBTSRAT	-(64.04) -(3.02)	-(402.53) -(4.50)	-(3.82) -(0.94)
AIDGNI	(11.89) (1.64)	(188.83) (1.85)	-(0.54) -(0.40)
CCRISK	-(169.23) -(4.82)	-(232.27) -(2.58)	-(44.89) -(5.74)
PROPRT	(2675.28) (5.87)	(6170.24) (5.56)	(240.73) (2.08)
n	210	60.00	150.00
Adjusted R^2	0.403529	0.6695	0.6112
F	16.71	14.28	24.45
DW	2.06	1.80	2.25
Jarque-Bera	3755.00	2.39	49.67

To examine how policy sequences play a role in globalization, we next analyze key determinants of gross national savings, results for which are shown in Table 9. Our estimating equation is:

GNS = f(AIDGNI, CCRISK, TRDEP, CURCON, IRSPRD) (3.)

Here we find that increased aid reduces the national saving rate, while trade dependency increases it, thus providing an indirect contribution to real per capita GDP. While statistically insignificant for Asia, reductions in country composite risk raise a country's national saving rate, as does an increase in currency convertibility. Reductions in interest rate spreads further raise a country's national savings rate, as gross rates of return across regions tend to equalize.

Table 9: GROSS NATIONAL SAVINGS EQUATIONS

	Joint	Asia	Africa
Intercept	24.66	25.96	19.29
AIDGNI	-0.07 -(7.23)	-0.26 -(2.94)	-0.05 -(4.55)
CCRISK	-0.26 -(4.99)	0.01 (0.10)	-0.19 -(2.75)
TRDEP	0.07 (3.12)	0.03 (0.56)	0.10 (4.24)
CURCON	0.69 (2.70)	0.54 (1.78)	0.39 (0.95)
IRSPRD	-0.02 -(1.60)	-0.41 -(3.74)	-(0.01) -(0.92)

	Joint	Asia	Africa
n	210	60.00	150.00
Adjusted R^2	0.5244	0.5274	0.3725
F	47.09	14.17	18.69
DW	1.72	1.85	1.77
Jarque-Bera	1.58	1.51	2.60

We now examine determinants of country capital-output ratios. Our estimating equation is:

$$\text{ICOR} = f(\text{AIDGNI, TRDEP, PROPRT, CCRISK, FISCBURD}) \qquad (4.)$$

Results of equation 4. are given in Table 10. Here we find that increases in property rights lower the capital-output ratio, while increases in aid, trade dependency, risk, and the fiscal burden ratio increase the ratio. The interesting exception in this is trade dependency. Ordinarily one would expect that an increase in trade dependency would lower a country's capital-output ratio. Since the coefficients in the sub-samples are not statistically significant, we do not treat this finding as important.

Table 10: ICOR EQUATIONS

	Joint	Asia	Africa
Intercept	16.04	3.68	31.61
AIDGNI	0.06 (3.92)	0.48 (3.48)	0.02 (1.01)
TRDEP	0.11 (3.33)	0.05 (0.60)	0.04 (1.17)
PROPRT	-4.96 -(4.16)	-1.86 -(1.14)	-6.29 -(3.90)
CCRISK	0.22 (2.42)	-0.11 -(0.85)	0.10 (0.92)
FISCBURD	0.15 (2.31)	0.64 (2.09)	(0.09) (1.38)

	Joint	Asia	Africa
n	210	60.00	150.00
Adjusted R^2	0.3106	0.2466	0.1309
F	19.83	4.86	5.49
DW	1.48	1.91	1.47
Jarque-Bera	168.55	565.48	108.59

In each of the preceding regressions country composite risk is a statistically significant and economically substantial determinant of economic growth variables. Since this index is a synthetic composite, we examine its determinants. We expect increases in confiscation risk (CONFRSK) the fiscal burden ratio (FISCBURD), international aid (AIDGNI), and the interest rate spread (IRSPRD) to increase country composite risk. In turn, we expect increases in judicial independence, property rights, and currency convertibility to lead to reductions in country composite risk. Our estimating equation is given as:

CCRISK = f(CONFRSK, FISCBURD, AIDGNI, AIDGNI, JUDIND, PROPRT, IRSPRD, CURCON) (5.)

Results of regressions of these variables on country composite risk are reported in Table 11.

Table 11: COUNTRY COMPOSITE RISK EQUATIONS

	Joint	Asia	Africa
Intercept	31.20	21.86	34.44
CONFRSK	2.01 (6.38)	2.15 (3.01)	1.71 (4.73)
FISCBURD	0.21 (5.22)	-0.17 -(0.57)	0.21 (5.16)
AIDGNI	0.05 (5.21)	0.30 (2.07)	0.04 (4.03)
JUDIND	-0.75 -(2.90)	-0.52 -(0.89)	-0.78 -(2.68)
PROPRT	-2.21 -(2.82)	-3.06 -(1.91)	-(0.60) -(0.58)
IRSPRD	(0.03) (2.12)	(0.32) (1.56)	(0.03) (2.19)
CURCON	-(0.49) -(1.71)	(1.02) (1.83)	-(1.02) -(2.64)
n	210	60.00	150.00
Adjusted R^2	0.6161	0.5672	0.5099
F	48.92	12.05	23.14
DW	1.75	2.15	1.50
Jarque-Bera	4.80	12.99	3.18

With the exception of currency convertibility and the fiscal burden ratio for Asia, we find that variables conform to their expected signs. Property rights remain as the economically most substantial variable, followed by confiscation risk.

In our capital-output ratio and risk equations, property rights are statistically significant and economically substantial. While property rights are not readily reducible to a simple quantitative index, we examine some of the key determinants for our joint and separate sub-samples, results of which are reported in Table 12. Our estimating equation is given as:

PROPRT = f(FISCBURD, GDIGDP, MILBURD, REALINRAT, CONREP,
AIDGNI, CONFRSK, JUDIND) (6.)

Results for Asia are more complete than those for Africa. They underline the importance of contract repudiation risk (CONREP) and judicial independence (JUDIND) as important determinants. Increases in the fiscal burden may reflect differences in budgetary priorities, including an independent judiciary, which contribute to Asian property rights, where this does not hold true for African countries. Increases in FDI reduce property rights in Asia, which may explain the tendency for Asian countries to resist the use of FDI as a means of raising per capita GDP, but this depends as much as anything on how property rights are upheld in the presence of increased FDI. Reductions in the military burden also increase property rights, although this may not be universally true. Reductions in real interest rates and in international aid tend to increase property rights, reflecting expanded emphasis on investment at the local level. The only anomaly is the positive sign of confiscation risk with property rights in Asia, which may be due to sampling error.

Table 12: PROPERTY RIGHTS

	Joint	Asia	Africa
Intercept	2.67	2.05	2.40
FISCBURD		0.09 (4.16)	-0.01 -(2.00)
FDIGDP		-0.04 -(2.92)	
MILBURD		-0.15 -(2.81)	
REALINRAT		-0.05 -(2.62)	
CONREP	-0.15 -(2.82)	-0.27 -(2.55)	
AIDGNI		-(0.03) -(2.46)	
CONFRSK	-(0.05) -(1.30)	(0.19) (2.13)	-(0.11) -(4.28)
JUDIND	(0.03) (1.11)	(0.08) (1.76)	(0.00) (0.13)
n	210	60.00	150.00
Adjusted R^2	0.2391	0.5651	0.1355
F	22.89	10.58	8.78
DW	1.34	2.10	1.64
Jarque-Bera	5.53	1.57	5.10

Conclusion

While globalization offers the promise of increases in real per capita income, Asian and African countries have not adopted all of the standard policy prescriptions. While they also have not reaped all of the benefits of globalization, there are several conclusions regarding the choice of globalization strategy and the sequence of policy adoptions. We summarize them here.

1. Growth in real per capita income depends in the first instance on a country's rate of saving and its capital-output ratio;
2. Globalization through international trade in both outputs and inputs further adds to economic growth in real per capita income, but in which certain preconditions are necessary if it is to be effective;
3. Since risk and property rights dominate savings rates and capital output ratios in economic growth, measures to reduce risk and strengthen property rights are a necessary condition for successful globalization;
4. Measures to reduce risk are more important than international aid and trade dependence in increasing a country's rate of saving;

5. Measures to strengthen property rights enhance economic efficiency through reductions in capital-output ratios while aid, trade and a country's fiscal burden lead to losses in economic efficiency;
6. Measures to strengthen property rights do more to reduce country composite risk than currency convertibility and judicial independence, while confiscation risk, international aid, interest rate spreads, and the fiscal burden tend to increase the level of risk;
7. African countries tend to have weaker levels of property rights than Asian countries, and have moved to reduce trade dependence from above to below world average levels, thus reducing prospects for higher levels of per capita income;
8. African countries have not succeeded in raising significantly levels of gross national saving while Asian countries have done so, thus widening rates of growth in per capita income;
9. African countries have higher than Asian average capital-output ratios, and they have tended to increase over time, thus reducing prospective rates of economic growth;
10. Confiscation and contract repudiation rate risks have on average been much higher in Africa than in Asia, thus raising the gap between country composite risk indices between Africa and Asia.

While there is no magic key to economic growth, it is clear that institutional variables such as property rights that add to country composite risk have a significant impact on a country's prospective rate of economic growth. For Asian countries, strengthening property rights has contributed to its relative success. Recent initiatives in Africa such as the New Economic Partnership for African Development suggest that governance has been recognized as an important precondition for sustainable growth[ix]. The challenge ahead is how to adopt measures for good governance that raise the level of economic performance in Africa to rates comparable to those in East Asia.

References

[1] Adams, Dale W. (1995). “From Agricultural Credit to Rural Finance.” *Quarterly Journal of International Agriculture* 34:2; 109-120.

[2] Aghion, Philippe, Mathias Dewatripont, and Patrick Rey. (1999). “Competition, Financial Discipline and Growth.” *Review of Economic Studies* 66:4, 825-852.

[3] Allen,Douglas and Dean Leuck (1999). “The Role of Risk in Contract Choice.” *Journal of Law and EconomicOrganization 15*:3, 704-36.

[4] Allen, Franklin and Douglas Gale (2000). *Comparing Financial Systems*. (Cambridge, Mass.: MIT Press).

[5] Alston, Lee, Gary Libecap, and Robert Schneider (1996). “The Determinants and Impact of Property Rights: Land Titles on the Brazilian Frontier.” *Journal of Law, Economics and Organization,* 12:2, 25-61.

[6] Austin, Garth, and Kaoru Sugihara, eds. (1996). *Local Suppliers of Credit in the Third World, 1750-1960*. (New York: St. Martin’s Press).

[7] Ayittey, George B.N. (1998). *Africa in Chaos*. (New York: St. Martin’s Press).

[8] Barro, Robert J. (1997). *Determinants of Economic Growth: A Cross-Country Empirical Study*. (Cambridge, Mass.: MIT Press).

[9] Bates, Robert H. (2000). “Ethnicity and Development in Africa: A Reappraisal.” *American Economic Review* 90:2 (May), 131-134.

[10] Bates, Robert H. (1981). *Markets and States in Tropical Africa: The Political Basis of Agricultural Policies*. (Berkeley, Cal.: University of California Press).

[11] Berthelemy, Jean-Claude, and François Bourguignon. (1996). *Growth and Crisis in Côte d’Ivoire.* (Washington, D.C.: The World Bank.)

[12] Binswanger, Mathias (1999). *Stock Markets, Speculative Bubbles and Economic Growth*. (Northampton, Mass.: Edward Elgar Publishers).

[13] Borensztein, Eduardo, José de Gregorio, and John-Wha Lee. (1998). “How Does Foreign Direct Investment Affect Growth?” *Journal of International Economics* 45 (June): 115-135.

[14] Brunnermeier, Markus K. (2001). *Asset Pricing under Asymmetric Information: Bubbles, Crashes, TechnicalAnalysis, and Herding*. (New York: Oxford University Press).

[15] Coase, Ronald W. (1937). “The Nature of the Firm.” *Economica* 4:6, 386-405.

[16] Coase, Ronald W. (1960). “The Problem of Social Cost.” *Journal of Law and Economics* .3 (October), 1-44.

[17] Christiaensen, Luc, Lionel Demery and Stefano Paternostro. (2002). “Growth, Distribution and Poverty in Africa: Messages from the 1990s.” World Bank Policy Research Working Paper 2810. (March).

[18] Commander, Simon, Hamid R.Davoodi, and Une J. Lee (1992). “The Causes and Consequences of Government for Growth and Well-Being.” World Bank Background paper. (Washington, D.C.: World Development Report 1997).

[19] Coolidge, Jacqueline and Susan Rose-Ackerman (2000). “High-Level Rent Seeking and Corruption in African Regimes.” World Bank Background Paper. (Washington, D.C.: The World Bank).

[20] Dailami, Mansoor and Robert Hauswald (2001). “Contract Risks and Credit Spread Determinants in the International Project Bond Market.” World Bank Policy Research Working Paper 2712. (November).

[21] Demirgüç-Kunt, Ash and Edward J. Kane (2002), “Deposit Insurance Around the Globe: Where Does it Work?” *Journal of Economic Perspectives* 16:2 (Spring), 175-196.

[22] Demsetz, Rebecca S., Marc R. Saidenberg, and Philip E. Strahan (1997). “Agency Problems and Risk Taking at Banks.” *Federal Reserve Bank of New York Staff Report* no. 29.

[23] DeSoto, Hernando (2000), *The Mystery of Capital*. (New York: Basic Books).

[24] Devarajan, Shantayanan, Andrew Sunil Rajkumar, and Vinaya Swaroop (1999). “What Does Aid to Africa Finance?” *World Bank Background Paper*. (Washington, D.C.: The World Bank).

[25] Dooley, Michael P. and Kenneth M. Kletzer (1994). “Capital Flight, External Debt, and Domestic Policies.” *Economic Review*, Federal Reserve Bank of San Francisco 1994:3, 29-37.

[26] Easterly, William (2002, 2001). *The Elusive Quest for Growth*. (Cambridge, Mass.: MIT Press).

[27] Easterly, William and R. Levine. (1997). “Africa’s Growth Tragedy: Policies and Ethnic Divisions.” *Quarterly Journal of Economics* 112:4 (November): 1203-1250.

[28] Fafchamps, Marcel and Eleni Gabre-Madhin (2002). “Agricultural Markets in Benin and Malawi: Operation and Performance of Traders.” World Bank Policy Research Working Paper 2734.

[29] Froot, Kenneth A., editor (1999). *The Financing of Catastrophe Risk*. (Cambridge, Mass.: MIT Press).

[30] Goldberg, Linda and Thomas Klitgaard, editors (2000). “Special Issue: Lessons from Recent Crises in Asian and Other Emerging Markets.” *Economic Policy Review*, Federal Reserve Bank of New York (September).

[31] Goldstein, Morris (1998). *The Asian Financial Crisis*. (Washington, D.C.: Institute for International Economics).

[32] Hart, Oliver (2001). “Financial Contracting.” *Journal of Economic Literature* XXXIX:4 (December), 1q079-1100.

[33] Herbst, Jeffrey I. (2000). *States and Power in Africa: Comparative Lessons in Authority and Control.* (Princeton, N.J.: Princeton University Press.)

[34] Huh, Chan and Sun Bae Kim (1994). “Financial Regulation and Banking Sector Performance: A Comparison of Bad Loan Problems in Japan and Korea.” *Economic Review*, Federal Reserve Bank of San Francisco, 1994:2, 18-29.

[35] Husain, Ishrat, and John Underwood, editors. (1991). *African External Finance in the 1990s*. (Washington, D.C.: The World Bank).

[36] Ianchovichina, Elena, Aaditya Matoo, and Marcelo Olarreaga. (2001). “Unrestricted Market Access for Sub Saharan Africa: How Much Is It Worth and Who Pays?” World Bank Policy Research Working Paper 2595.

[37] Kaminsky, Graciela and Sergio Schmukler (2001). “Emerging Markets Instability: Do Sovereign Ratings Affect Country Risk and Stock Returns?” World Bank Policy Research Working Paper 2678. (February).

[38] Kaufmann, Daniel, Aart Kraay, and Pablo Zoido-Lobatón (2002). “Governance Matters.” World Bank Policy Research Working Paper 2772. (Washington, D.C.: The World Bank).

[39] Klinge Biel, Daniela, Randy Kroszner, Luc Laeven, and Pieter van Oijen (2001). “Stock market Responses to Bank Restructuring Policies during the East Asian Crisis.” World Bank Policy Research Working Paper 2571.

[40] Kawai, Masahiro, Richard Newfarmer, and Sergio Schmukler. (2001). “Crisis and Contagion in East Asia: Nine Lessons. World Bank Policy Research Working paper 2610. (February).

[41] Lemi, Adugna, Sisay Asefa, and Panos Varangis (2001). “Foreign Direct Investment and Uncertainty: Empirical Evidence from Africa.” Research Monograph, Center for Economic Research on Africa, Montclair State University.

[42] Levine, Ross and Zervos, Sara (1998). “Stock Markets, Banks, and Economic Growth,” *American Economic Review* 88:3 (June), 537-558.

[43] Levonian, Mark E. (1994). “Bank Capital Standards for Foreign Exchange and Other Market Risks.” *Economic Review*, Federal Reserve Bank of San Francisco, 1994:1, 3-18.

[44] Lucas, Robert E., Jr. (1990). “Why Doesn’t Capital Flow from Rich to Poor Countries?” *American Economic Review* 80:2 (May): 92-96.

[45] McFadden,Daniel (2001). “Economic Choices.” *American Economic Review* 91:3, 351-378.

[46] Mckenzie, David (2002). “An Econometric analysis of the Creditworthiness of IBRD Borrowers.” World Bank Policy Research Working Paper 2822 (April).

[47] Megginson, William L. and Jefffrey M. Netter (2001). “From State to Market: A Survey of Empirical Studies on Privatization.” *Journal of Economic Literature* XXXIX:2 (June), 321-389.

[48] Mengistae, Taye (2000). “Indigenous Ethnicity and Entrepreneurial Success in Africa: Some Evidence from Ethiopia.” Background Paper, The World Bank. (Washington, D.C.: The World Bank).

[49] Milne, Frank (1999, 1995). *Finance Theory and Asset Pricing*. (New York: Oxford University Press).

[50] Mishkin, Frederic S.(1999). "Global Financial Instability: Framework, Events, Issues." *Journal of Economic Perspectives* 13:4 (Fall):, 3-20.

[51] Molho, Ian. (1997). *The Economics of Information: Lying and Cheating in Markets and Organizations*. (New York: Blackwell Publishers).

[52] Morisset, Jacques (2000). "Foreign Direct Investment in Africa: Policies Also Matter." Background Paper, The World Bank. (Washington, D.C.: The World Bank).

[53] Morisset, Jacques (1997). "Unfair Trade? Empirical Evidence in World Commodity Markets Over the Past 25 Years." World Bank Background Paper. (Washington, D.C. The World Bank).

[54] Moss, David A. (2002). *When All Else Fails: The Role of Government in the Allocation of Risk*. (Cambridge, Mass.: Harvard University Press).

[55] Pesendorfer, Wolfgand and Jeroen M. Swinkesl (2000). "Efficiency and Information Aggregation in Auctions." *American Economic Review* 90:3 (June), 499-525.

[56] Rajan, Raghuram G., and Zingales, Luigi (1998). "Financial Dependence and Growth," *American Economic Review* 88:3 (June), 559-586.

[57] Ritzen, Jo. (2002). "On 'Good' Politicians and 'Bad' Policies: Social Cohesion, Institutions, and Growth." World Bank Background paper. (Washington, D.C.: The World Bank).

[58] Rodrik, Dani (1995). "Getting Interventions Right: How South Korea and Taiwan Grew Rich." *Economic Policy* 20 April): 55-107.

[59] Salanié, Bernard (2000). *Microeconomics of Market Failures*. (Cambridge, Mass.: MIT Press).

[60] Skees, Jery, Panos Varangis, Donald Larson, and Paul Siegel (2002). "Can Financial Markets be Tapped to Help Poor People Cope with Weather Risks?" World Bank Policy Research Working Paper 2812.

[61] Serven, Luis (1996). "Irreversibility, Uncertainty and Private Investment: Analytical Issues and Some Lessons for Africa." Background Paper, The World Bank. (Washington, D.C.: The World Bank).

[62] Shleifer, Andrei (2000). *Inefficient Markets: An Introduction to Behavioral Finance*. (New York: Clarendon Press for Oxford University Press).

[63] Simon, Herbert (1957). *Models of Man*. (New York: John Wiley and Sons).

[64] Stiglitz, Joseph (2002). *Development and Its Discontents*. (New York: W. W. Norton).

[65] Williamson, Oliver (2000). "The New Institutional Economics: Taking Stock, Looking Ahead." *Journal of Economic Literature* XXXVIII:3 (September), 595-613.

[66] Williamson, Oliver (1975). *Markets and Hierarchies: Analysis and Antitrust Implications*. (New York: The Free Press).

End Notes

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[i] See, for example, Robert J. Barro (1997), *Determinants of Economic Growth: A Cross-Country Empirical Study* (Cambridge, Mass.: MIT Press); Michael Porter (1990), *The Competitive Advantage of Nations* (New York: The Free Press); Bernard Hoekman and Michel Kostecki (1999), The Political Economy of the World Trading System: From GATT to WTO (New York: Oxford University Press); and various World Bank reports, notably, *World Development Report 1997 The State in a Changing World* (New York: Oxford University Press for the World Bank); *World Development Report 1998/1999: Knowledge for Development* (New York: Oxford University Press for the World Bank); *Securing Our Future in a Global Economy* (Washington, D.C.: The World Bank, 2000); *Global Economic Prospects and the Developing Countries* (Washington, D.C.: The World Bank, 2000); and *World Development Report 2002: Building Institutions for Markets* (New York: Oxford University Press for the World Bank).

[ii] Joseph Stiglitz (2002). *Development and Its Discontents* (New York: W.W. Norton); Easterly,William (2001). *The Elusive Quest for Economic Growth* (Cambridge, Mass.: MIT Press).

[iii] The World Bank (2000), Can Africa Claim the 21st Century (Washington, D.C.: The World Bank); Morisset, Jacques (2000), "Foreign Direct Investment in Africa: Policies Also Matter." Background paper, the World Bank (Washington, D.C.: the World Bank); George B.N. Ayittey (1998), *Africa in Chaos* (New York: St. Martin's Press); William Easterly and Ross Levine (1997), "Africa's Growth Tragedy: Policies and Ethnic Divisions." *Quarterly Journal of Economics* 112:4 (November): 1203-1250.; Robert Bates, (1`981). *Markets and States in Tropical Africa: The Political Basis of Agricultural Policies* (Berkeley, Cal.: University of California Press)

[iv] For an examination of risk and the role of government, see Phillip LeBel, "Risk and the Choice of Optimal State-Market Relations" (2001), http://alpha.montclair.edu/~lebelp/StateMarketRiskFinal.pdf

[v] If we use a population weighted average, however, there is a reduction in inequality of per capita GDP. This is not often noted in official comparisons, but is actually a more accurate measure of the impact of globalization on the distribution of income.

[vi] Asian countries used are: Bangladesh, China, India, Indonesia, Japan, Republic of Korea, Malaysia, Pakistan, Philippines, Sri Lanka, Thailand, and Vietnam. African countries used are: Benin, Botswana, Burkina Faso, Cameroon, Central African Republic, Chad, Democratic Republic of Congo (ex-Zaïre), Republic of Congo, Côte d'Ivoire, Ethiopia, Gabon, Ghana, Guinea, Kenya, Madagascar, Malawi, Mali, Mauritania, Mauritius, Mozambique, Niger, Nigeria, Senegal, South Africa, Sudan, Tanzania, Togo, Uganda, Zambia, and Zimbabwe. These samples cover a wide range of countries and no attempt has been made to separate outliers such as Japan and South Africa, or Asian "tiger" economies from East Asia for the analysis.

[vii] The Wall Street Journal's *Index of Economic Freedom* draws on its own direct estimates as well as from such sources as the Economist Intelligence Unit Limited, *Country Profiles*, various years, Ernst and Young's *Worldwide Corporate Tax Guide*, Freedom House's *Freedom in the World: The Annual Survey of Political Rights and Civil Liberties*, Transparency International's *The Corruption Perceptions Index*, various issues, the UNDP *Human Development Report*, various issues, the U.S. Department of State, *Country Commercial Guides*, along with data from the International Monetary Fund.

[viii] T-statistics are reported in parentheses for all tables.

[ix] See http://www.NEPAD.gov, for a list of references and source materials.

Service Quality in Provincial Hospitals in South Africa - A Comparative Approach

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Abstract

Public health care in South Africa is in a crisis. According to numerous newspapers and magazines the quality of primary health care, which is provided by provincial hospitals, is unsatisfactory. Strong allegations have been made in reports alluding to the incompetence of various provincial hospitals to provide basic primary health care. The purpose of this study is to measure the expectations and the perceived performance of patients regarding the service quality of primary health care in a provincial hospital in South Africa. The results will then be compared to the results that were measured during the first investigation and be reported on. By investigating these aspects an attempt can be made to determine problem areas that still exist and to make suggestions to improve the quality of service where deficiencies occur between the expectations of the patients and the perceived performance of the provincial hospitals in South Africa in terms of the quality of the services provided.

Introduction

Numerous newspapers and magazines reports that the quality of primary health care, which is provided by provincial hospitals, is unsatisfactory. Strong allegations have been made in reports alluding to the incompetence of various provincial hospitals to provide basic primary health care. This could lead to an intolerable situation, because private hospitals are not an option for those who do not have the financial means. Whether the allegations are true or only limited to isolated incidences have to be investigated.

The South African government is responsible for the provision of primary health care to amongst other all population groups who cannot afford it. According to the results of this survey the majority of patients in provincial hospitals are not members of a medical aid fund or have sufficient funds to cover their health expenses. The government has an obligation to provide acceptable primary health care to people in need, irrespective of their ability to pay and also to provide excellent medical care to the community. This study is particularly important for the future of South Africa because of the "apartheid" history, which ended during 1994 with the country's first democratically elected government. The human rights of all races, except the white population, were neglected under the "apartheid" policy of the previous government. After six years under a new government, it is the right time to evaluate the different views of diverse culture groups in the country. South Africa is a country with many different groups of people where eleven official languages are spoken. This diversity is often ignored by many citizens but is very important and necessary to investigate. An extensive quality service survey has been conducted in 1999 where almost 600 patients at three provincial hospitals in the Tshwane region were interviewed. A report was presented to al three the hospitals in an attempt to get the questionable issues addressed.

The purpose of this study is to measure the expectations and the perceived performance of patients regarding the service quality of primary health care in a provincial hospital in South Africa. The results will then be compared to the results that were measured during the first investigation and be reported on. By investigating these aspects an attempt can be made to determine problem areas that still exist and to make suggestions to improve the quality of service where deviations occur between the expectations of the patients and the perceived performance of the provincial hospitals in South Africa in terms of the quality of the services provided.

By succeeding in the provision of excellent service it may be possible to develop a positive national and international image and consequently attract more financially independent patients. This may contribute to the overall efficiency of health care in a competitive world market. Currently it seems as if private patients prefer to support private hospitals due to the alleged inferior services provided by provincial hospitals. Although it appears that quality control is only relevant to the private sector, it can be concluded after reviewing some relevant literature that satisfied clients are more likely to accept and continue to support primary health care services. Mitchell (1998:3) pointed out that patient satisfaction is important in the public sector because it can influence compliance. However, the Government bears the responsibility to provide satisfactory primary health care service, or at least the best, which can be provided with the resources available.

Problems experienced by provincial hospitals in South Africa.

Tremendous pressure is placed on the government's budget with their acceptance of providing primary health care to citizens in South Africa who qualify. Mitchell (1992:2) however, points out that managed care organizations need to prove to their clients that cost containment does not necessarily imply that the quality of services rendered, is being compromised. The majority of patients in provincial hospitals are patients who qualify in terms of a low income and do not have a choice as to where they obtain primary health care without financial constraints. This may be a result of the negative publicity that is discouraging private patients, who can contribute in financial terms, to making use of provincial hospitals. In this way the burden on the government could be eased. The hospital which was included in this survey is medical training hospitals and needless to say its image is negatively affected by the perception towards provincial hospitals in the country due to negative publicity. According to van Niekerk et al. (1992:61-64) several other problems are also evident and may result in unsatisfactory service quality. These include problems of unavailability of services, inaccessibility, unacceptableness and inequality.

Another factor that negatively impacts on the functioning of the hospitals are the tremendous impact of the HIV/AIDS infected patients who occupies facilities in the hospitals. South Africa is currently the country with the highest infection rate of HIV/AIDS in the world. This result in over crowded waiting rooms as well as limited beds available.

Measuring service quality in the health care services

Service quality is an important ingredient in the success of all service organizations. According to Devlin & Dong (1994:562) research has shown that the provision of high quality service is directly related to increased profits, market shares and cost savings. Friedenberg (1997:31a) points out that the third and latest revolution in medical care was supposedly the era of quality control, quality of service and effectiveness of medical treatment. According to this author this was the theme used by those who were effecting the change to managed care. Unfortunately the people who were living through the beginning phase of this change felt only the stringent cost control, with very few positive changes, other than oral statements about quality of services. Donabedian (1988:1747) argues that a requirement for measuring quality is to translate the theoretical concepts into more concrete representations that can be quantified. This author concludes by pointing out that these representations are the criteria and standards of structure, process and outcome.

Dyck (1996:541-549) points out that knowing what clients expect is the first and most critical step in delivering quality care. Furthermore she states that service quality can be determined by the extent of the discrepancy between client expectations or desires and their perceptions of the services they receive. This supported by Kotler and Andreason (1996:604). This issue will be addressed after a brief discussion about the concepts of expectations and the final outcome, which may result in satisfaction or dissatisfaction. Zeithaml & Bitner (1996:118) and Devlin & Dong (1994:562) point out that organizations have to be aware of clients expectations and their perceptions of aspects such as reliability, willingness to help, knowledge, courteousness of employees, interest in members affairs, the physical appearance of personnel, equipment, communication and the accessibility of services. Band (1991:25) calls the above elements a definition of service quality. These elements are investigated in this study.

In an attempt to determine service quality the patients were given an opportunity to air their views and to make use of their consumer rights. According to Carr-Hill (1992:240) consumerism can help authorities to advance from considering individual members of the public as passive clients or recipients of services (who get what they are given for which they must be thankful) regarding them as customers with legitimate rights and preferences as well as responsibilities. This idea recently came into place in South Africa with the acceptance of a proposal by the government that patients in the country have basic consumer rights in terms of medical care. This may be a step in the right direction to ensure that patients are entitled to certain rights and preferences but along with certain responsibilities.

Satisfaction

According to Kotler & Andreason (1996:604) satisfaction is the state felt by a person who has experienced a performance (or outcome) that has fulfilled his or her expectations. According to these authors, satisfaction is thus a function of the relative levels of expectations and perceived performance. Three states of satisfaction can be experienced: if a situation occurs where results exceed a person's expectation, that person is highly satisfied; if the results of the experience match the expectations, the person is satisfied; if the results do not meet the expectations, the person is dissatisfied. In the survey conducted for this study, it is evident that it is not very easy to generalize the extent of satisfaction for a group of people. Zeithaml & Bitner (1996:124) point out that satisfaction is an internal and personal matter and is influenced by perceptions of service quality, product quality, price, situation and personal factors. This is a much broader concept than service quality, because a perception of the latter influences consumer satisfaction. Friedenberg (1997:31a) argues that a limitation of satisfaction surveys is that patients have no yardstick to measure quality by, with the result that their perception of quality may relate more to convenience and cost factors - the quality that they might expect in a department store or hotel, rather than the quality of medical care. However Zeithaml & Bitner (1996:113) gave three important guidelines to be bear in mind, which influence a client's perception with regard to an organization. These are: service encounters, service evidence and the image of the organization. In this investigation the above-mentioned issues may be influenced by the continued negative reports regarding the provision of primary health care in South Africa.

Band (1991:25) points out that consumers are more tolerant with regard to problems experienced with service rendering if they are treated with respect. Bearden et al. (1995:123) feel that dissatisfied customers, who complains should not be ignored as they speak to other people and that most of the dissatisfied people do not lodge their complaints directly to the service rendering institution. This may impact negatively on patients' expectations. In one of his investigations Carr Hill (1992:242) came to the conclusion that patient satisfaction was considerably higher if the doctor was friendly and the patients' expectations were fulfilled. Friedman (1997:31a) agrees with this statement and argues that patients need to identify with their physician because an important part of the healing process occurs when patients trust and have faith in their physician.

Expectations

The expectations of consumers play an important role in assessing the services of an enterprise. This implies that service quality is assessed by clients by comparing what they want or expect, and their perception of what they get (Berry & Parasuraman, 1991:57). Because of the above mentioned, it is important for any service rendering business to be constantly aware of the needs and expectations of their clients in an attempt to deliver expected service quality. This is also applicable to hospital patients. Berry & Parasuraman (1991:63) point out that an organization is able to manage their consumers' expectations by applying the following principles: ensuring that promises reflect the reality, emphasis on reliability and communicating with consumers.

The measurement of patients' expected service and the actual service in health care is a complex phenomenon. It is assumed that all patients have a certain level of expectations of health care before going to a health care provider. These expectations may differ from patient to patient and if the expectations are for some or other reason not met, dissatisfaction results. Various factors influence the expectation levels of people. This makes the issue very complex. The outcome of the process (being satisfied or dissatisfied) will differ for each person and makes measuring of satisfaction very complex.

Friedenberg (1997:31a) and Carr Hill (1992:242) have strong feelings about this issue and the latter points out that the additional complexities, involved in measuring patient satisfaction, mean that those who set out to measure satisfaction are probably on a hopeless quest. However, the authors feel that the above-mentioned issue must not result in not measuring these important tendencies. Oswald & Turner (1998:18) point out that it is extremely difficult for consumers to evaluate health care quality because they lack the expertise to gauge the clinical aspects. Consumers therefore rely on their own attitudes toward caregivers and the facility itself when making an evaluation. This is a process quite different from the ones used when buying an automobile or selecting a day-care provider.

For the purpose of this study the expectations of certain pre-identified service quality elements were measured and compared with the perceived performance of the hospitals as experienced by the patients. Hill and McCrory (1997:231) argued that expectations may be inferred from important ratings on the grounds that if a consumer believes a service attribute to be important he/she would expect the quality of that attribute to be good. However Kotler & Andreason (1996:602) points out that both importance and expectation ratings can be used to measure patients' satisfaction.

Empirical evidence

Empirical research for this study was undertaken at a provincial hospital in Tswane and compared with a similar study that was performed in 1999. The hospital that was selected is an academic training hospitals. The attitudes of the patients were tested regarding certain pre identified service quality aspects related to health care. A total of 520 in and outpatients were personally interviewed during the research. Although an attempt was made to select the patients randomly it was not always possible due to patients who were not able and or willing to complete the questionnaires. In such cases substitutes were used to overcome the problem of no responses.

A five-point Likert type scale was used to test the *expectations of the patients (E)* and the *perceived performance (P)* of the hospital as indicated by a number of predetermined items that formed the questionnaire. This measurement scale consisted of the following items (1) very high expectation / excellent performance (2) high expectation / good performance, (3) neutral, (4) low expectation / poor performance and (5) very low expectation / very poor performance. The scale used designates that a mean closer to one (1) may be regarded as a more desirable situation, contrasting to a mean closer to five (5), which would indicate a least desirable situation. A rank method was used to compare significant findings. As stated above, the empirical approach followed in this study was based on a model designed by Kotler & Andreasen (1996:610). A rank method was used to compare certain findings.

An item analysis was also carried out to test the validity and the reliability of the questionnaire and an overall Cronbach coefficient Alpha of a 0,85 was measured. In order to determine significant dependencies between the two studies a chi-square dependency test was used to determine the statistical significant dependency on a 5% level of significance between the two studies in relationship with the various questions. In order to determine significant dependencies between the two studies, the statistical procedure analysis of variance was performed on the questions, which measured the expectations and the perceived performance of the hospitals in terms of the various service quality items. Overall there seem to be many statistical significant differences ($p< 0,05$) on a 5 percent level of significance which is indicated on the tables.

Findings of the study

Demographic profile

Fifty percent of the respondents have indicated that they are between 18 and 44 years of age. Fifty eight percent of the patients are female whilst fifty eight percent of the sample have indicated that they are married. More than seventy percent of the respondents indicated that they have completed their primary education (grade 8 to 12 and higher); however 23 percent of them are unemployed. Fifty percent of the sample earns less than R1000 per month per household. Sixty percent of the respondents come from the Tshwane region and live in the eastern parts of the region. The majority of the respondents, thirty three percent, speak Afrikaans followed by Zulu speaking respondents (15 percent). The vast majority of the respondents do not have a medical aid fund. Forty percent and forty three percent of the patients respectively were government in-patients (rely on government financial support) and government outpatients. Thirty two percent of the respondents have indicated that they are patients because of regular problems, while twenty six percent of them are patients as a result of an accident, injury of sudden illness. The majority of the respondents (31 percent) have indicated that it was a personal decision to frequent a specific hospital followed by friend or family who suggested the hospital. To interpret tables 1 to 7, the following have to be borne in mind:

By subtracting the perceived performance average score from the expectations average score, a performance deficiency score is calculated. The more negative the performance deficiency score is, the greater the degree of dissatisfaction (Kotler & Andreasen, 1996:609).

For the purpose of the study, a difference of more than –0.4 between expectations and perceived performance (performance deficiency) is regarded as problem areas that deserve immediate attention.

Table 1: PATIENTS' EXPECTATIONS AND PERCEIVED PERFORMANCE WITH REGARD TO THE GENERAL CIRCUMSTANCES OF THE HOSPITAL

	1999 STUDY			**2002 STUDY**		
	E Mean	**P Mean**	**Dev**	**E Mean**	**P Mean**	**Dev**
General hygiene in hospital	1.44# 1	2.39 5	-0.95 7	1.68# 4	2.47 5	-0.79 6
General hygiene in toilets	1.58 2	2.46 7	-0.88 6	1.64 1	2.58 7	-0.94 7
Neatness of the hospital	1.60 3	2.16* 1	-0.56 3	1.64 1	2.39* 3	-0.75 4
Accessibility of the toilets	1.62 4	2.39* 5	-0.77 5	1.68 4	2.44* 5	-0.76 5
General condition of the hospital	1.64 5	2.20* 3	-0.56 3	1.66 3	2.31* 1	-0.65 3
Accessibility of the hospital	1.81 6	2.17* 2	-0.36 1	1.87 6	2.32* 2	-0.45 1
Accessibility of dispensary supplies	1.82 7	2.36* 4	-0.54 2	1.87 6	2.42* 4	-0.55 2

E = mean expectations ***P = mean perceived performance*** ***Dev = performance deficiency***
*/# Statistical significant dependency ($p < 0.05$) on a 5% level of significance between the two studies in relationship with the various questions.

Statistical significant dependency ($p < 0.05$) on a 5% level of significance was measured for expectations for both studies in terms of the general hygiene in the hospital. Statistical significant dependency ($p < 0.05$) on a 5% level of significance were also measured for both studies in terms of perceived performance of the neatness of the hospital, accessibility of the toilets, general condition of the hospital, accessibility of the hospital and the accessibility of dispensary supplies.

The 1999 survey showed that the general hygiene in the hospital was regarded as the factor in this category that deserved the highest expectation. However the biggest deviation between expectations and perceived performance in this category was measured for this variable thus resulted in highly dissatisfaction. The 2002 survey proved that it was managed to reduce the rate of dissatisfaction of this variable which resulted in slightly more satisfied patients. However, the general hygiene of the toilets, followed by the neatness of the hospital was regarded as the most important issues in terms of their expectations under general circumstances of the hospital in the 2002 study. It was measured that the highest rate of dissatisfaction was measured for general hygiene in the toilets followed by the general hygiene in the hospital, accessibility of the toilets followed by the neatness of the hospital

It appears that al the variables in this category, except one, have deteriorated after the 1999 study based on a comparison between the rate of satisfaction of the two studies. The only noteworthy exception was an improvement of the general hygiene of the hospital in terms of the rate of satisfaction. The difference between expectations and perceived performance is however still very high and needs immediate attention. To conclude, areas where services were not being offered at the desired performance levels without any exception should be given to all the variables in this category. Immediate attention should be given to these aspects.

Table 2: PATIENTS' EXPECTATIONS AND PERCEIVED PERFORMANCE WITH REGARDS TO THE MEDICAL STAFF

	1999 STUDY			**2002 STUDY**		
	E Mean	**P Mean**	**Dev**	**E Mean**	**P Mean**	**Dev**
Expertise of the medical staff	1.60 1	1.89* 1	-0.29 3	1.59 1	2.01* 1	-0.42 4
The concern of the medical staff	1.63# 2	2.11* 6	-0.48 6	1.73# 3	2.17* 4	-0.44 5
Availability of medical staff	1.70# 3	2.10 5	-0.40 5	1.71# 2	2.19 5	-0.48 6
Friendliness/courtesy of medical staff	1.74 4	2.01* 3	-0.27 2	1.77 4	2.09* 2	-0.32 2
Quality time spent by medical staff	1.76# 5	2.09* 4	-0.33 4	1.91# 6	2.23* 6	-0.32 2
Reputation of the medical staff	1.79 6	1.99 2	-0.20 1	1.88 5	2.09 2	-0.21 1

E = mean expectations ***P = mean perceived performance*** ***Dev = performance deficiency***
*/# Statistical significant dependency ($p < 0.05$) on a 5% level of significance between the two studies in relationship with the various questions.

Statistical significant dependency ($p < 0.05$) on a 5% level of significance was measured for both expectancy and perceived performance for both studies in terms of the concern of the medical staff and the quality time spent by the medical staff. Statistical significant dependency ($p < 0.05$) on a 5% level of significance was measured for both tests in terms of expectations for availability of medical staff, and for performance, the expertise of the medical staff and the friendliness/courtesy of them.

In both studies the expertise of the medical staff were regarded as most important issue and came out first in terms of performance. During the 2002 study the availability of the medical staff were regarded as second most important in terms of patient's expectations. Compared to the 1999 study improvements in terms of the mean were measured for the concern of the medical staff and quality of time spend by medical staff.

Areas where services were not being offered at the desired performance levels are the availability of medical staff, concern of medical staff and their expertise.

Table 3: PATIENTS' EXPECTATIONS AND PERCEIVED PERFORMANCE WITH REGARDS TO THE NURSING STAFF

	1999 STUDY			2002 STUDY		
	E Mean	**P Mean**	**Dev**	**E Mean**	**P Mean**	**Dev**
Expertise of the nursing staff	1.62 1	2.14 4	-0.52 6	1.77 2	2.19 3	-0.42 3
The concern of the nursing staff	1.63# 2	2.13* 3	-0.50 4	1.83# 4	2.21* 1	-0.38 2
Availability of the nursing staff	1.66# 3	2.17 2	-0.51 5	1.71# 1	2.17 1	-0.46 6
Friendliness/courtesy of the nursing staff	1.70 4	2.07* 1	-0.37 2	1.81 3	2.23* 4	-0.42 3
Quality time spent by the nursing staff	1.79# 5	2.17* 6	-0.38 3	1.95# 6	2.24* 5	-0.29 1
Reputation of the nursing staff	1.82# 6	2.14* 4	-0.32 1	1.94# 5	2.36* 6	-0.42 3

E = mean expectations ***P = mean perceived performance*** ***Dev = performance deficiency***
*/# Statistical significant dependency (p< 0.05) on a 5% level of significance between the two studies in relationship with the various questions.

Statistical significant dependency (p< 0.05) on a 5% level of significance was measured for both expectancy and perceived performance for both studies in terms of the concern of the nursing staff, quality time spent by the nursing staff and the reputation of the nursing staff. Statistical significant dependency (p< 0.05) on a 5% level of significance was measured for both tests in terms of expectations of the availability of nursing staff, and for performance, their friendliness/courtesy.

The availability of the nursing staff appeared to be the most important aspect in this category followed by the expertise of the nursing staff according to the 2002 study while the expertise of the nursing staff was indicated the most important issue during the 1999 study, followed by the concern of the nursing staff.

Compared to the 1999 study, improvements in terms of satisfaction were measured for the expertise of the nursing staff, the concern of the nursing staff, availability of the nursing staff, the quality time spent by them and their reputation.

Areas where services were not being offered at the desired performance levels are the availability of the nursing staff, the expertise of the nursing staff, the friendliness/courtesy of the nursing staff and the reputation of the nursing staff. It seems as if the availability of the nursing staff is an aspect that first needs immediate attention in this category.

Statistical significant dependency (p< 0.05) on a 5% level of significance was measured for both expectancy and perceived performance for both studies in terms of after care service rendered. Statistical significant dependency (p< 0.05) on a 5% level of significance was measured for both tests in terms of perceived performance for ggeneral safety of patients, quality of medical services rendered, range of medical services under one roof and porter services (See table 4).

Table 4: PATIENTS' EXPECTATIONS AND PERCEIVED PERFORMANCE WITH REGARDS TO GENERAL SERVICES

	1999 STUDY			**2002 STUDY**		
	E Mean	**P Mean**	**Dev**	**E Mean**	**P Mean**	**Dev**
General safety of patients	1.62 1	2.29* 4	-0.67 5	1.8 2	2.29* 2	-0.49 4
Quality of medical services rendered	1.64 2	2.08* 1	-0.44 4	1.67 1	2.16* 1	-0.49 4
After-care service rendered	1.79# 3	2.21* 3	-0.42 3	1.94# 3	2.30* 3	-0.35 2
Range of medical services under one roof	1.79 3	2.14* 2	-0.35 1	1.96 4	2.32* 4	-0.36 3
Porter services	2.04 5	2.43* 5	-0.39 2	2.18 5	2.51* 5	-0.33 1

E = mean expectations ***P = mean perceived performance*** ***Dev = performance deficiency***
*/# Statistical significant dependency (p< 0.05) on a 5% level of significance between the two studies in relationship with the various questions.

It was interesting to note that without exception, al the variables that were measured met the expectations in terms of the rank but not in terms of the mean in this category. The quality of medical services rendered was indicated as the most important issue and secondly the general safety of the patients during the 2002 study. In terms of the ranking the expectations were met. On the other hand the general safety of the patients was ranked first in the 1999 study followed by the quality of medical services rendered.

However, areas for improvements based on the performance deficiency, are general safety of the patients and quality of medical services rendered.

Table 5: PATIENTS' EXPECTATIONS AND PERCEIVED PERFORMANCE WITH REGARDS TO WAITING TIME AND PROCEDURES

	1999 STUDY			**2002 STUDY**		
	E Mean	**P Mean**	**Dev**	**E Mean**	**P Mean**	**Dev**
Waiting time for treatment/help	1.81 1	2.70* 4	-0.89 4	1.88 1	2.59* 4	-0.71 4
Waiting time for dispensary supplies	1.83 2	2.56* 3	-0.73 3	1.92 2	2.56* 3	-0.64 3
Registration procedures	1.88 3	2.39* 1	-0.51 1	1.99 3	2.53* 2	-0.54 2
Patient flow in general (time aspects)	1.95# 4	2.48* 2	-0.53 2	2.11# 4	2.49* 1	-0.38 1

E = mean expectations ***P = mean perceived performance*** ***Dev = performance deficiency***
*/# Statistical significant dependency (p< 0.05) on a 5% level of significance between the two studies in relationship with the various questions.

Statistical significant dependency ($p < 0.05$) on a 5% level of significance was measured for both expectancy and perceived performance for both studies in terms of patient flow in general (time aspects). Statistical significant dependency ($p < 0.05$) on a 5% level of significance was measured for both tests in terms of perceived performance for waiting time for treatment/help, waiting time for dispensary supplies and registration procedures.

Variables where improvements were measured compared to the 1999 study were waiting time for treatment/help, waiting time for dispensary supplies and patient flow in general.

Areas where services were not being offered at the desired performance levels are waiting time for treatment/help, waiting time for dispensary supplies and registration procedures and needs immediate attention.

Table 6: PATIENTS' EXPECTATIONS AND PERCEIVED PERFORMANCE WITH REGARDS THE PHYSICAL FACILITIES

	1999 STUDY			**2002 STUDY**		
	E Mean	**P Mean**	**Dev**	**E Mean**	**P Mean**	**Dev**
Specialised equipment in general	1.77# 1	2.19* 1	-0.42 2	1.93# 1	2.3* 1	-0.37 4
Availability of waiting rooms	1.85# 2	2.41* 3	-0.56 5	1.96# 2	2.43* 2	-0.47 5
Telephone facilities	1.95 3	2.41* 3	-0.46 4	2.14 3	2.44* 3	-0.30 3
Parking facilities	1.97# 4	2.40* 2	-0.43 3	2.25# 4	2.51* 4	-0.26 1
Restaurant facilities	2.20# 5	2.41* 3	-0.21 1	2.37# 5	2.64* 5	-0.27 2

E = mean expectations ***P = mean perceived performance*** ***Dev = performance deficiency***
*/# Statistical significant dependency ($p < 0.05$) on a 5% level of significance between the two studies in relationship with the various questions.

Statistical significant dependency ($p < 0.05$) on a 5% level of significance was measured for both expectancy and perceived performance for both studies in terms of sspecialized equipment in general, availability of waiting rooms, parking facilities and restaurant facilities. Statistical significant dependency ($p < 0.05$) on a 5% level of significance was measured for both tests in terms of perceived performance for ttelephone facilities.

It was interesting to note that without exception, al the variables that were measured met the expectations in terms of the rank but not in terms of the mean in this category.

Overall improvements compared to the 1999 study were measured for sspecialized equipment in general, availability of waiting rooms and parking facilities. Specialised equipment in general was ranked first in terms of both expectations and performance but was overall ranked forth in terms of satisfaction.

Improvement of services is always encouraged. While in this category all the variables seems to be under control it is suggested that attention should be given to the availability of more waiting rooms.

Table 7: PATIENTS' EXPECTATIONS AND PERCEIVED PERFORMANCE REGARDING THE PROVISION OF INFORMATION

	1999 STUDY			**2002 STUDY**		
	E Mean	**P Mean**	**Dev**	**E Mean**	**P Mean**	**Dev**
Information on the use of medication	1.55 1	2.03 1	-0.48 2	1.64 1	2.07 1	-0.43 2
Handling of enquiries by staff	1.68# 2	2.21* 3	-0.53 4	1.81# 4	2.26* 2	-0.45 3
Helpfulness of reception staff	1.75 3	2.39* 5	-0.64 5	1.79 3	2.4* 5	-0.61 5
Sufficient information prior to treatment	1.75 3	2.24* 4	-0.49 3	1.77 2	2.29* 3	-0.52 4
Arrangements for follow up visits	1.86 5	2.20* 2	-0.34 1	1.94 5	2.3* 4	-0.36 1

E = mean expectations ***P = mean perceived performance*** ***Dev = performance deficiency***
*/# Statistical significant dependency (p< 0.05) on a 5% level of significance between the two studies in relationship with the various questions.

Statistical significant dependency (p< 0.05) on a 5% level of significance were measured for both expectancy and perceived performance for both studies in terms of handling of enquiries by staff. Statistical significant dependency (p< 0.05) on a 5% level of significance were measured for both tests in terms of perceived performance for hhelpfulness of reception staff, sufficient information prior to treatment and arrangements for follow up visits.

While information on the use of medication was regarded as most important issue in this category it also turned out first in terms of perceived performance. However it ended up second in terms of overall satisfaction in this category. The second highest expectation was in terms of sufficient information prior to treatment but resulted in third place in terms of perceived performance. The rank in terms of satisfaction was fourth. The helpfulness of the reception staff was ranked third in terms of expectancy and fifth in terms of performance.

Overall improvements compared to the 1999 study based on the rate of satisfaction were measured for information on the use of medication, handling of enquiries by staff and the helpfulness of reception staff. Areas for improvement based on the rate of satisfaction includes the helpfulness of the reception staff, sufficient information prior to treatment, handling of enquiries by staff and information on the use of medication. The final outcome of the two studies was very much the same when satisfaction is compared for the two studies in terms of the rank.

Conclusion

In the empirical study, measures were taken to assess the expectations of the patients and the perceived performance of the hospital with regard to selected service quality elements. It was found that none of the service quality elements in terms of patient's expectations were met or exceeded. Because of this phenomenon, a further step was taken to calculate the rank order of the patient's expectations as well as the rank of the perceived performance of individual attributes in order to compare them and to try to support conclusions.

Following this method, emphasis was placed on the biggest negative differences between the average expectation score and the average perceived performance score that resulted in the performance deficiency score. Performance deficiency scores of less than –0.4 were treated as first priority areas.

General circumstances of the hospital

General hygiene in hospital, general hygiene in toilets, neatness of the hospital, accessibility of the toilets, general condition of the hospital, accessibility of the hospital, accessibility of dispensary supplies.

Medical staff

The availability of the medical staff, the concern of the medical staff and the expertise of the medical staff were the main areas of dissatisfaction.

Nursing staff

Areas where services were not being offered at the desired performance levels are the availability of the nursing staff, the expertise of the nursing staff, the friendliness/courtesy of the nursing staff and the reputation of them. It seems as if the availability of the nursing staff is an aspect that first needs immediate attention in this category.

General services

No serious overall problems were measured, however the general safety of the patients and the quality of medical services rendered were the issues with the highest dissatisfaction rate.

Waiting time and procedures

Waiting time for treatment and the waiting time for dispensary supplies are areas where services were not being offered at acceptable performance levels.

Physical facilities

No serious problems were experienced. However it is suggested that attention should be given to the availability of waiting rooms.

Provision of information

Areas for improvement based on the rate of satisfaction includes the helpfulness of the reception staff, sufficient information prior to treatment, handling of enquiries by staff and information on the use of medication

In conclusion, the top priority problem areas are summarized as follows in order of priority and immediate attention should be given to the following aspects:

- General hygiene in the toilets
- General hygiene in the hospital
- Accessibility of the toilets
- Neatness of the hospital
- Waiting time for treatment/help
- Waiting time for dispensary supplies
- Helpfulness of the reception staff

Action plans should be drawn up in order to address the above-mentioned problems. The South African government has already started to address some of the serious problems. Legislation has been accepted for a period of one-year compulsory service by doctors who have just completed their studies. Investigations are already taking place to include pharmacists and other medical services to the system. Considering of some extent of demarketing programmes should also be considered to reduce the demand for minor medical attention. This should include actions to encouraging patients to buy for example head ache pills at a supermarket rather to sit and wait hours to be attended to. Regarding other problem areas like the hygiene aspects, a new hospital has almost being completed near the hospital currently being in use. Information regarding problem areas should be kept in mind in order to ensure that these problems are not repeated in the new hospital.

References

[1] Band, W. (1991). Creating Value for Customers: Designing & Implementing a total Corporate strategy. New York: John Wiley & Sons, Inc.

[2] Berry, L.L.& Parasuraman, A. (1991). <u>Marketing services. Competing through quality</u>. New York: The free press.

[3] Bearden, W.O. , Ingram, T.N. & La Forge, R.W. (1995). <u>Marketing - principles and perspectives</u>. Chicago: Irwin.

[4] Carr - Hill, R.A. (1992). The measurement of patient satisfaction. <u>Journal of Public Health Medicine</u>. 14:236-249.

[5] Donabedian, A. The quality of care. How can it be assessed? <u>JAMA</u> (1988): 260(12):1745-1748.

[6] Dyck, D. Gap analysis of Health services. Client satisfaction surveys. <u>AAOHN Journal</u> (1996): 44:11: 541-549.

[7] Friedenberg**,** R.M. The next medical revolution should be quality. <u>Radiology</u> (1997):204(1):31a.

[8] Hill, F.M. & McCrory, M.L. (1997). An attempt to measure service quality at a Belfast maternity hospital: Some methodological issues and some results. <u>Total quality management</u>. 8 (5): 229 - 243. October.

[9] Kotler, P. & Andreason, A.R. (1996). <u>Strategic Marketing for Nonprofit organizations</u>. Third edition. Englewood Cliffs: Prentice Hall.

[10] Kotler, P. & Clark, R.N. 1987. <u>Marketing for health care organizations</u>. Englewood Cliffs: Prentice Hall.

[11] Mitchell, T. <u>Patient Satisfaction survey: Pretoria Academic Hospital</u>. (1998). Unpublished report.

[12] Oswald S.L. & Turner, D. (1998). Quality determinants and hospital satisfaction. <u>Marketing Health services</u>. 18 (1): 18 - 22. Spring.

[13] Van Niekerk, H.C.J., Fourie, A. & Pretorius, E. (1992). <u>Health care in South Africa: structure and dynamics</u>. Pretoria: Van Schaik.

Social and Ethical Issues in Applying Information Technology to Link Global Supply Chains

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Abstract

In this paper some ethical and social issues that arise in applying new information technology to global supply chains are discussed. The Internet, private exchanges, global satellite linkages, and other forms of new technology hold great promise in terms of allowing global supply chains to operate more efficiently and cut cycle times throughout the chains substantially. However, these new technologies also present some social and ethical issues to managers and firms operating in the global environment. For example, to make full use of a global supply chain there must be extensive communication of inventory, production scheduling, and cost information among supply chain partners. This requires a certain level of trust among the partners, and in some cases, collides with cultural differences in how business relationships are conducted. Managers in different countries also may have different views of what constitutes ethical business relationships. These cultural and ethical differences complicate the application of these new technologies and must be dealt with by firms developing global supply chains to use them effectively. The issue of sweatshop labor use in global supply chains is another ethical issue which the principles of lean production and integrated supply chains have the potential to address. This paper will explore such issues and suggest ways managers can deal with them.

Introduction

Supply chain management has become an important topic for most firms in recent years. As globalization proceeds, and information technology develops, the value of and ability to link together supply chain partners is more and more apparent. Firms throughout the world increasingly are sourcing materials and selling their products abroad. Competitive demands require that they respond with quality, low prices, speed, and flexibility to their customers. This puts a premium on a well-functioning supply chain.

Several factors have contributed to the expansion of global supply chains. The continuing liberalization of trade and capital flows has opened many countries to both imports and exports. Multinational firms have been quick to exploit these new opportunities, investing abroad, seeking new sources of low cost supply, and finding new markets for their products. Global expansion poses a host of challenges as well as opportunities, however. Coordinating production and distribution among multiple countries can be a logistical nightmare.

Fortunately, information technology has been developing in parallel with the rapid globalization of business. IT makes it possible to provide the information along the supply chain that is critical to its successful operation. In the 1990's satellite communication was extensively deployed allowing transmittal of phone and fax messages around the world quickly and easily. Companies began joining the computer systems of their subsidiaries in various countries using enabling technology such as EDI (Electronic Data Interchange) for orders and invoices and EFT (Electronics Funds Transfers) for financial transactions. The advent of the Internet in the 1990's is providing a quantum leap in the ability to link together a supply chain because of its interactive nature allowing faster and more extensive communication and the ability to coordinate activities in real time. This, no doubt, is contributing to the rapid development of global supply chains making them both more feasible and more effective.

The application of information technology presents some challenging social, cultural, and ethical issues that are just beginning to be realized and addressed in many global firms. It is the objective of this paper to identify some of these issues and discuss them. Some suggestions will be offered on how firms can anticipate and deal with the inevitable challenges that will arise as they expand their global supply chains and the information technology which supports them.

Using the principles of *lean production* to integrate a global supply chain offers the potential to ameliorate some of the negative consequences of globalization such as sweatshop labor and low prices paid to small commodity producers. The requirements of lean production necessitate establishing supplier relationships based on flexible, high quality production which is unattainable with the transitory, opportunistic pattern of supply contracts used by many multinational firms. The application of IT to global supply chains is an important facilitator to making supply chains lean. The ethical and social consequences of leanness and IT will be discussed in a later section of this paper.

Applications of Information Technology in Supply Chains

The 1990's were a period of rapid development of new information technology. In the early 90's the advances occurred in the greatly increasing speed and lowered cost of personal computers and workstations and the proliferation of application software targeted to supply chain applications. Accompanying these advances were developments in telecommunications technology such as cellular phones and increasing use of satellite transmission to allow worldwide coverage. Bar coding has allowed electronic tracking of products throughout the supply chain facilitating demand tracking and inventory management. All of these advances facilitated the operation of global supply chains that had previously been hindered by the cost and time involved in transmitting information, the lifeblood of a supply chain. But the most important technological advance will likely be the Internet which appeared in the mid-90's and has proliferated at rapidly since then.

The Web provides tremendous advantage in terms of allowing fast and inexpensive transmittal of large amounts of information in real time. Unlike previous inter-company linkages such as EDI that are sequential and hierarchical, the Internet allows simultaneous exchange of information with all supply chain partners. In effect, there is an open communications circuit in the supply chain. Along with the rapid adoption of Internet usage new software applications designed to allow many new uses of the Web have been developed. All of this has facilitated the expansion of global supply chains.

The benefits of improved information transmittal in a supply chain are significant. The difficulties of locating capable suppliers internationally were daunting to many companies causing them to either produce parts and materials internally or outsource domestically. Now with the Internet it is much easier to find suppliers in other countries and carry out the bidding and purchase order process. Once a supplier is selected, coordination of production schedules and delivery requirements is facilitated. Any changes necessary to distribution requirements can be readily transmitted along the supply chain via the Internet. These Internet linkages often take the form of private exchanges where access is limited to supply chain partners.

The development of integrated supply chains is partially motivated by and completely congruent with the movement to *JIT (Just-in-Time)* or *pull* production systems. The JIT approach stresses minimal inventory and fast response to changes in demand along the supply chain. With older *push* approaches to production, orders were submitted well in advance of actual requirements and based on forecast sales rather than actual. The communication process by itself added substantial lead-time to the whole cycle when done by mail, fax or phone. This often led to the so-called *bullwhip effect* in the supply chain where small changes in demand downstream translated into amplified changes as they worked their way upstream in the supply chain. The result was cycles of overproduction with excess inventory at some times and shortages at others. This all leads to fluctuating employment, excess inventory, and unhappy customers. The Internet combined with the JIT approach can minimize the bullwhip effect in a supply chain by letting all supply chain partners know demand and inventory levels both upstream and downstream.

Software application packages are still being developed to take full advantage of the Internet for supply chain coordination. ERP packages can readily link to the Internet but often lack the shop-floor information critical to production planning, capacity planning, inventory control, and logistics. Application software is becoming available to provide this final linkage, but is not widely deployed yet, especially in developing countries.

The Internet also potentially allows members of a supply chain to work more closely together and evolve into a partnership relation. Effective partnerships depend on knowledge and trust of the other firms and the Internet has the capability for providing the information and communication necessary to make this work. For example, firms may transmit information about their production schedules, capacity availability, inventory levels, quality performance, and so on that can lead to better coordination of their production and distribution, and perhaps facilitate mutual problem solving as well. The paucity of information about members in a supply chain is particularly acute in global relationships and hinders developing true partnership attitudes. The Internet may not replace face-to-face contact, but it certainly can make partners more knowledgeable about each other's activities.

The Internet may also dramatically change the way organizations interact with each other and their organizational structures. The directions in which this may go range from companies that form ephemeral e-commerce relationships to semi-permanent *value chains* of supply chain partners that almost function as a single entity (Hewitt, 2000). Hammer (2001) has developed the concept of a linked supply chain that operates as one integrated process extending the benefits of reengineering outside the walls of the firm. From the JIT point of view the longer-term partnership relationships are preferable to allow the inter-organizational learning that can occur and the mutual assistance that benefits all partners.

Challenges to Applying IT in Global Supply Chains

The potential benefits of information technology to making supply chains more effective and efficient are readily apparent. The pitfalls and challenges to doing so may not be so apparent. There are financial and technical challenges, of course, but perhaps the most difficult will be the cultural and social ones. In this section, I will highlight some of the possible roadblocks to applying IT to global supply chains.

Shore (2001) proposes a model for information sharing in a global supply chain. He calls this model the *Supply Chain IT Linkage Capability Model.* It includes seven variables and the interactions among those variables. The variables are the industry, the market and competitive environment, national culture, corporate IT culture, size of the firm, IT infrastructure, and country IT support. He analyzes four organizations to validate the model. The seven variables all appear to be important influences on the effectiveness of information systems in global supply chains. Barua, et al, (2001) emphasize the importance of a holistic view in implementing Internet technology considering the complementary nature of technology, business processes, and e-business readiness. Then, firms must develop the internal capabilities of using the information shared with their supply chain partners effectively (Lee and Whang, 2000).

The technical challenges involve the absence of adequate computer facilities, transmission infrastructure, and trained personnel. In developing countries, in particular, there may be a shortage of computer equipment and software to allow deployment of Internet-based technologies. The big advantage of the Internet is that it is so readily available, but this assumes one can access it, which requires a PC and appropriate software such as e-mail. It may be assumed that most firms in the industrialized countries have such access, but cannot be assumed in many developing countries.

Use of the Internet requires at least adequate phone lines for transmittal. In some developing countries such infrastructure cannot be assumed. Satellite links or high-speed cable connections may have to be installed which are expensive and may come up against regulatory restrictions in some countries. This constraint may force selection of suppliers or establishment of facilities in more developed countries, or at least major cities of developing countries. That choice may not be optimal either for the firm or the country.

Installation of computer equipment and software requires some technical expertise and this may also not be readily available in some developing countries. Fortunately Web technology is simpler and more easily installed than previous mainframe and mini-computer based systems and their associated software, but never the less can be a constraint in some developing countries. The firm may have to provide its own training or bring in expatriate personnel.

The associated costs of installing the necessary IT hardware and software, and then training people how to use it, also may be a barrier to some supply chain partners. This constraint has even limited application of information technology in smaller firms in developed countries, so can be expected to be even more of a limitation in developing countries. The main supply chain partner (i.e., the dominant or largest firm) may have to provide financial support to other supply chain partners.

The technical and financial problems at least are fairly identifiable compared to the cultural and social issues that arise in applying information technology to global supply chains. Some of the more obvious cultural issues that may arise are listed below:

1. Trust in business relationships
2. Status differences within and between firms
3. Power and hierarchy in organizations
4. Decision models
5. Disclosure of information
6. Goals of the firm

The basis on which business relationships are established and maintained varies among countries. In some regions they are formal, impersonal, and legalistic whereas in others they are informal and personal. The former type of relations is common in industrialized countries, though in varying degrees of formality. This is due to well-established legal covenants and recourse for business relations as well as long-established practice. In many developing countries, on the other hand, legal remedies for business problems are much less easily obtained. Therefore, there is a strong emphasis on trust in conducting business. Often this is viewed as nepotism or favoritism in the developed world but does serve a purpose in avoiding potential problems due to disagreements on business matters. This factor can potentially be either a facilitator or a constraint in a global supply chain. If the relationship is based on trust, there may be more of a willingness to share sensitive information with supply chain partners. However, informal relationships may downplay the value of data interchange stressing instead a phone call or a handshake to make business decisions which could serve as a barrier to using information technology in a supply chain, especially if substantial capital investment is required for the technology. Bell, et al, (2002) emphasize the importance of establishing a basis of trust early in international supply relations and working to maintain that trust.

Status differences between firms based on various dimensions can be much greater in some countries than others. For example, in certain countries the buyer is assumed to be in a superior position to the seller rather than being equals. Another status difference may arise based on size of the firm with large firms assuming superiority over small firms. Nationality of the firm may also induce perceived status differences. Such differences can complicate the partnership relations that are found in the most effective supply chains. They may hinder the willingness to work closely together on issues such as production schedules and new product introductions and to extensively share information.

As Hofstede (1984) has pointed out, societies vary in *power distance* that governs many interactions between individuals, both in business and life in general. Some countries such as the United States and the Scandinavian countries have low perceived power distance ratings allowing individuals from different educational and socioeconomic backgrounds to work together harmoniously. In other countries with greater power distance rankings such as the Latin American countries, there is likely to be less willingness of individuals from differing backgrounds to work together. In such countries, this can hinder the information sharing and cooperation necessary to closely link a supply chain.

How decisions are made (i.e. decision models) can also have an impact on a global supply chain. Western countries tend to stress *data-based decision-making* whereas in other regions, decisions are often more subjectively made. Partially this may be due to lack of accurate data to be used for decision making but is also a cultural characteristic. Management education in the developed world is heavily oriented to the scientific method of knowledge acquisition and the use of analytical (often mathematical) tools for making business decisions. Management education is much less widespread outside the developed Western countries, and therefore many managers are unaware of these decision models. As the number of Western-educated managers increase in the developing countries perhaps this will change, but in the meantime it may be a barrier to implementation of information technology to link global supply chains; i.e. if managers do not perceive the need for extensive data collection and analysis to make a decision why invest in the technology and training to use information systems? Even if the investment is made, will the information provided be used effectively?

The amount and type of information to be disclosed to business partners will be another challenge as global supply chains expand. This is partially related to the first factor discussed (trust) but has other dimensions as well. In some cases the type of information needed for supply chain coordination will just not be readily available because it has not been collected in the past. Examples would be accurate inventory data and production schedules. Without this critical data supply chain coordination cannot be effective. If accurate data is available, then there may be a reluctance to share it with other firms, either because of lack of trust, or even if trust in the business partners exists, due to the fear that the information may leak to competitors or to the regulatory authorities. In most countries, much less information is provided to the public and government agencies than in the United States. Firms in these countries may have an ingrained hesitancy to share information that has always been considered private. Without information exchange information technology will provide little value to a supply chain.

Finally, firms in different countries may have different business goals. In the United States, and increasingly in Europe and Japan, there is an emphasis on putting the interests of shareholders first. This, of course, raises some ethical issues which will be considered later in this paper. Strictly for pragmatic reasons differing goal orientations can cause problems in a supply chain. If, for example, a firm is focused on stability of sales and employment, it may be hesitant to invest in new technology or to open the firm to linkages with other firms that may threaten the status quo. Or if its orientation is to profitability, but more short-term than long, it may also be reluctant to invest in technology and training that has a long-term payback. Information technology is sometimes perceived also as a laborsaving innovation and thus may be opposed by a labor union in a partner firm. Another dimension of goal orientation that may affect the implementation of IT in a supply chain is the value placed on speed and efficiency. Most Western managers value highly process changes that increase speed in any of its dimensions (time to market, cycle time in production, new product development time, transport time) and productivity improvements. In other countries managers do not put as high a premium on these types of improvements and may feel less urgency about pulling products through a supply chain in the minimum amount of time at the lowest possible cost. Therefore, they may be less willing to invest in the technology and training required to implement IT in the supply chain.

Culture has many dimensions, and I have only attempted to list a few that could possibly influence when and how information technology will be implemented in global supply chains. None of these need prevent the application of IT to link global supply chains, but managers should be aware that these types of issues may arise and be prepared to deal with them. Some suggestions on how they might do this will be presented in a later section of the paper. Next some ethical issues that may arise in applying information technology in global supply chains will be discussed.

Ethical Issues in Applying Information Technology in Global Supply Chains

Not only are firms operating global supply chains confronted with many cultural challenges as they deploy information technology to make their supply chains operate more efficiently, they also frequently encounter ethical issues. Of course many of the ethical issues also arise because of cultural differences. In this section, some of the more likely ethical conflicts that may arise as firms implement IT solutions in their global supply chains will be discussed. The ethical issues to be discussed are the following:

1. Exploiting market power
2. Fair pricing
3. Use of confidential information
4. Monitoring of supply chain partners' performance
5. Transfer pricing and tax avoidance
6. Environmental impacts

A potential ethical conflict may arise in a supply chain when the partners have different degrees of market power. This can easily lead to exploitation of other members of a supply chain by the dominant partner. In terms of information technology issues this could result in conflict as the dominant partner imposes a technology solution on other partners which is not the technology solution that best meets their needs. The mismatch could result from either technology compatibility or cost considerations. For example, a sophisticated information system that requires hardware or software beyond the technical capabilities of a supply chain member to install, operate, and maintain may impose unjustified costs on that partner and not lead to the desired benefits for the dominant partner either. The ethical issue involved is to consider the mutual benefits of a technology solution for the entire supply chain rather than maximization of the dominant partner benefits.

The issue of *fair* pricing has arisen with some agricultural commodities (especially coffee) and labor-intensive products (such as shoes and clothing) where multinational firms have been accused of paying very low prices and wages because of their monopsony power. The growth of global supply chains has the potential to either mitigate or exacerbate this practice. If smaller firms, through their participation in global supply chains, are able to challenge the large multinationals, they may be able to provide an alternative to those firms as buyer of these products and commodities. If these firms act in an ethical fashion paying fair (i.e. prices high enough to allow a living wage to be paid to workers producing the product or commodity), then they could offset the market power of the large MNC's. The application of information technology in a supply chain facilitates this possible social benefit in several ways. First, the use of IT allows smaller firms to participate in global supply chains since information can to some extent substitute for investment. Second, it will allow better knowledge of local conditions as to sources of supply, costs of production, economic conditions, etc., which will allow those firms operating in a socially conscious fashion to implement and enforce living wage policies. However, there is no guarantee that the technology will be used in this way. It could also be used to better identify lowest cost sources of supply and increase monopsony power rather than weaken it. Therefore it becomes very much an ethical issue for managers in global supply chains on how they use information technology.

The primary value of information technology to a supply chain is the vast amounts of information it can collect and disseminate throughout the chain. Ethical issues can arise in how this information is used. To maximize the joint benefits of a supply chain and foster the partnership relations, each member has to know quite a lot about the other members. This often will include production schedules, capacity, inventory levels, product designs, costs of production, and data on quality performance. Effective partnerships use such information to help coordinate supply chain activities and to assist each other to improve their operations. However, there may be a tendency to exploit this competitive information for individual firm advantage. For example, an unethical manager might use cost information from a supplier to try to achieve a lower price from a competitor. Or product or component designs developed by a supplier might be shopped around to find a supplier who will produce it at a lower price. The fear of this type of unethical behavior has made some firms hesitant to apply IT that will allow sharing of this type of confidential information.

The knowledge gained about supply chain members from the information technology employed can also be used in a positive way to monitor adherence to ethical policies adopted by one or more partners in a supply chain. A common excuse used by firms who outsource production of labor-intensive products like shoes and toys to developing countries is that they do not run these factories, do not know what goes on in them, and, in any case, it is none of their business. The negative publicity that firms like Nike have garnered from these practices have forced many of them to join industry coalitions to address working condition and wage issues in developing country factories and to develop ethics policies. If these coalitions and ethics policies are to be effective, extensive monitoring of the overseas plants will be needed. The occasional inspection that occurs by company personnel or some independent oversight body may be insufficient to insure compliance with working condition standards. The information available in a firm's global supply chain could be a useful supplement if the right types of information are collected and the partners in the supply chain diligently monitor performance. If production systems are linked via IT, all supply chain partners should know what and when other members are producing and what their inventory levels and costs are. With this information they can assess whether maximum working hour restrictions are being violated and whether adequate wages are being paid. Of course, supply chain partners will have to be willing to provide the information on their IT systems. This could be a criterion for supplier selection by those companies that want to have a real-time ability to monitor compliance with their ethical policies.

Transfer pricing presents another possible ethical dilemma for managers in a supply chain. The prices charged for movement of products between different entities within a firm or with customers and suppliers can have significant effects on taxes paid. This issue is not new, but information technology makes it much visible what production costs are anywhere in the supply chain. Managers can choose to use this information to shift income around in the supply chain to minimize the total tax bill, which in itself is not unethical unless it violates established tax regulations in a particular country. Since the information necessary to set transfer prices in a way that is in compliance with tax laws can be available with IT in the supply chain, managers will have to decide how to use this information. If the same information is available to all supply chain partners, then a firm may confront an ethical dilemma if it is aware that a partner is violating tax laws, even though it may not be doing so itself.

Environmental issues are also capable of presenting managers in global supply chains with ethical challenges. Much like the excuse used concerning inadequate or dangerous working conditions used by some firms which outsource to developing countries, it has been argued by some multinational firms that they are not responsible for environmental compliance of their suppliers. The greater knowledge of the environmental policies and practices of suppliers that may come through the information flows within a global supply chain again presents managers with the dilemma of what to do if supply chain partners are violating policies which they have established for their own firms. Should they pressure those firms in violation of their policies to change their practices, drop them as suppliers, and report them to authorities or what? In any case, the supply chain can be an effective method of spreading environmental consciousness and implementing *green* policies (Bowen, et al, 2001).

These are some possible ethical challenges that may confront managers of firms participating in global supply chains. There are of course many other potential ethical dilemmas that can arise in business dealings abroad that will also have to be addressed. The relative frequency of occurrence and importance of ethical issues varies between countries Cooper, et al (2000) found in a comparison of Indian, U.S., U.K., and Canadian purchasing and supply management professionals. The impact of global supply chains on these ethical issues occurs because it draws the supply chain members into a partnership relationship that requires extensive information sharing and coordination to be effective. Along with this may come greater awareness of ethical issues at supply chain partners and a need to coordinate as well on these issues. In fact, perhaps the overriding ethical dilemma in global supply chains will be the issue of to what extent greater knowledge of partner behavior carries responsibility to take action when a partner's actions violate one's own ethical policies. The closer relationships mediated by more extensive data interchange via IT is sure to heighten the importance of this issue in the years ahead. In the next section, ways in which firms may respond to the social and ethical issues in their supply chains will be discussed.

Corporate Responses to the Social and Ethical Issues

Firms involved in global supply chains will inevitably have to deal with social and ethical challenges. In this paper the focus is on the ethical and social issues that may arise as firms apply information technology to more effectively link their global supply chains. The previous sections identified some of the issues that may be confronted in these global supply chains. In this section some approaches to understanding and responding to these challenges will be presented. Effective response will depend on both a proper conceptualization of the issues and implementing policies and methods to deal with them as they arise.

A conceptual framework for dealing with cultural and social issues in transferring technology is the sociotechnical systems approach. This approach, formulated in the 1960's by Trist and his colleagues (Trist, 1981), says that any production system is a combination of a technical system and a social system. The technical system consists of the plant, equipment, and methods employed while the social system is attitudes, values and behaviors of the employees working with the technical system. To optimize performance they must be designed to work in harmony. When a technology is being transferred between countries, inevitably the technical system will have to be adapted to function effectively in the different cultural environment. This adaptation takes place through design of the technical system to be congruent with the social system. The key dimensions of the design process are the following: job design, the personnel and reward systems, work organization and supervision, and the information and control system (Miles, 1975). In this paper, the emphasis is on the last of these, but it cannot be considered in isolation from the other dimensions. A proper sociotechnical systems analysis and design will develop all facets jointly. This S/T approach makes intuitive sense and provides a framework for implementing process improvements in a global supply chain.

For firms in a global supply chain it will be worthwhile when they plan on implementing new information systems to carry out a careful sociotechnical analysis involving all member firms. In the structured S/T approach, each of the design elements will be evaluated as they may affect the installation and usage of the new IT system. For example, if employees of firms in countries that are not experienced in using IT are to be expected to utilize the new system effectively, the way in which their work is structured (work organization), the manner in which decisions are made (supervision), and how they are motivated (reward system) should be carefully analyzed and altered if necessary. The proper S/T design of a job will probably be different in each country so local knowledge is essential to do this properly. If a firm from an industrialized country attempts to impose a uniform IT system on its worldwide supply chain this very likely will fail.

A good method to identify and respond to potential social and ethical conflicts is to use cross-cultural implementation teams. Since knowledge of the local culture is essential to get a good S/T fit, this would include local managers and employees. It should also include representatives from other key partners in the supply chain who can make sure that there exists compatibility between the local system and the global one. Also there need to be individuals on the teams who thoroughly understand the technology, its requirements, limitations, and adaptability. It may have to be adapted but not to the extent that it loses its key functionality. A cross-cultural, cross-functional team from the supply chain partners can analyze and resolve these types of issues to achieve a proper S/T fit and a system that meets the supply chain requirements. Lee and Kim (1999) found that information sharing, participation, and top management support were significantly related to success of IT implementation projects.

A complementary conceptual approach to sociotechnical system theory is to design an information system that is structured to maximize the benefits of a *pull* or *JIT* approach. The major benefits of such an approach are faster response time, greater flexibility, and lower inventories throughout the supply chain. To achieve these benefits the supply chain must be designed in such a way to allow the rapid transmittal of data and fast adjustment to demand changes upstream in the chain. The information system is key to allowing this to happen. A framework of the key factors to consider and the linkages among supply chain partners is presented in a model we developed in another paper (Bruun and Mefford, 2002).

The suggestions made so far address primarily the cultural adaptation of the information system to the host country environments of supply chain participants. The process of doing the sociotechnical system design of the supply chain will likely also identify some of the potential ethical conflicts that may arise. How should firms deal with these and prepare their staffs for additional ones that may occur?

Corporations with strong ethical policies have total support at the top for such policies and disseminate those policies to all employees. This alone would be inadequate without training in how to interpret and employ the policies and clear guidelines on what to do if ambiguities arise. Also they must constantly monitor compliance with those policies and have rewards and sanctions so that employees will follow them. With experience some global firms have been reasonably successful in assuring ethical business practices by their employees. But with the growth of global supply chains, how can they spread these policies throughout their supply chain?

This is no small challenge, and I believe that many firms have not really confronted it yet. To avoid the type of ethical dilemmas suggested in a previous section, they will need to deal with this issue if they want to have effective global supply chains that operate in an ethical manner. Carter (2000) found that firms that communicate their ethical standards and codes of conduct to other supply chain partners experience fewer instances of unethical conduct in buyer-supplier transactions. However, there may be opposition from some supply chain partners who will view attempts by a dominant partner to impose their ethical standards on the supply chain as *cultural imperialism.* More likely there will be a slow diffusion process of common ethical standards throughout the supply chain as the partners become comfortable working together, sharing information, and begin to see themselves as part of a *value chain* rather than completely separate entities. Especially if supply chain partners share information openly and come to have a long-term perspective on the relationship, there may be lower levels of unethical behavior (Ellram and Cooper, 1990; Gardner and Cooper, 1988). Also as markets become more global there may be movement toward more universal business and management practices; toward best-practice approaches one would hope (for example, Just-in-Time manufacturing). This will not be a rapid process, however, and in the meantime managers will continue to be confronted with ethical dilemmas in their global supply chain relationships. But research has shown that the payoff to pursuing an approach to global supply chain management emphasizing ethics, cooperation, and a joint vision results in "higher competitiveness and greater creation of wealth." (Valenzuela and Villacorta, 1999).

Lean Global Supply Chains and Sweatshop Labor

As companies expand their global supply chains and apply lean/JIT principles to them, there exists the potential for amelioration of the poor working conditions and low wages found in some industries such as shoe and clothing manufacture. The reason for this is that a lean supply chain cannot operate effectively with sweatshop suppliers. The JIT goal of a flexible, high quality supply chain with minimal inventories and fast delivery is simply not achievable with suppliers that employ the traditional long lead-time, batch production systems that are typically used in the low-tech companies which produce much of the world's shoes, clothing, toys, and other similar products.

As many firms in the developed countries of Europe, Asia, and North America have realized, the lowest price supplier may not be the lowest cost one. The quality problems and excess inventories that result from selecting suppliers primarily on a price basis are leading astute companies to select suppliers based on the criteria of quality, product design capabilities, delivery reliability, and improvement potential in addition to price. Partnerships with suppliers are increasingly sought to assist each other in production coordination and product development as well as mutual improvement of quality and productivity. Fewer but more capable suppliers with long-term relationships is the inevitable result of such efforts.

The emphasis on supplier partnerships, a key principle in lean production, has not been as widely applied to foreign suppliers. Probably this results from the communication and coordination problems inherent in global supply chains. However, improvements in information technology are making it possible to overcome these constraints and develop closer relationships with foreign suppliers and customers. As these technologies are more widely deployed, firms following JIT principles will logically attempt to extend the same efforts to making their global supply chains leaner, as they are currently doing domestically (Hammer, 2001). In order to accomplish this they will want to develop closer relationships with fewer but better suppliers. In selecting these suppliers they will look for firms capable of producing high quality at low cost and with flexibility to respond quickly to changes in demand.

Firms that compete mainly on price by paying low wages and providing harsh working conditions are not likely to be attractive partners to customers developing lean supply chains. Those types of firms depend on inspection-based quality and do not improve their productivity significantly over time. Customers who follow JIT principles look for suppliers who employ quality-at-the-source (*jidoka)* and continuous improvement (*kaizen)* methods. Sweatshop firms do not do the training nor have the type of motivated employees and low turnover rates that are necessary for jidoka and kaizen to be applied. Although the price may currently be lower for these sweatshop firms, sophisticated customers know that JIT suppliers ultimately will provide lower costs through higher quality and productivity. They also will allow lower inventories to be carried throughout the supply chain since they can respond more quickly to demand changes.

As the benefits of applying lean principles throughout the supply chain are realized, and those firms in the forefront of doing this gain competitive advantage, it can be expected that firms with global supply chains will increasingly reject the low price, sweatshop supplier in favor of those suppliers who realize the importance of a trained and motivated workforce. Looking beyond short-term cost savings, the JIT customer will seek a capable supplier for a long-term relationship. In some cases this may be a domestic supplier who, in spite of higher labor costs, is competitive because of much higher productivity. For example, New Balance Athletic Shoe, Inc., a U.S. manufacturer, is able to produce many of their athletic shoes in the U.S. and be competitive with firms such as Nike and Reebok that produce overseas. They are able to do this with labor productivity much higher than plants in developing countries (24 minutes per pair versus 3 hours in China) which offsets much of the labor cost differential

($4 labor cost per pair in the U.S. versus $1.30 in China). The reasons for the higher productivity are automation and use of cellular production in New Balance's U.S. factories. New Balance figures the remaining cost differential is made up by its ability to respond quickly to changes in demand at the retail level and to reduce inventories throughout its supply chain. It is currently moving more of its overseas production back to the U.S. to increasingly capture these benefits (Bernstein, 2001). Another U.S. company that has realized similar benefits from keeping production within the U.S. by using JIT manufacturing and cellular production is Milwaukee Electric Tool Co. It is able to be competitive in an industry dominated by production in developing countries.

There is no reason why the same techniques cannot be used as well in developing countries to achieve both high productivity and lower wages. In fact, there are many examples of firms doing this in many different industries in Mexico, China, and other developing countries. In conjunction with a fast and flexible supply chain, this is the best of both worlds for many firms. Cellular production has the potential to greatly reduce the throughput time from weeks to hours in industries like clothing and shoe manufacture and thus make a supplier much more flexible and able to respond quickly to changes in demand. The major constraint on achieving this flexibility and responsiveness will be the lack of such suppliers in developing countries. In many cases they will have to be developed by the multinational firm which is only worthwhile for a long-term supply relationship. Some multinational firms may even find it desirable to invest in their own plants if they believe they can make them so efficient that changes in wages rates and exchange rates will not make them uncompetitive. Or perhaps large contract manufacturers will develop such as has occurred in the electronics assembly industry, each of which services multiple customers with high quality, lean production.

Whatever type of foreign supply relationship is selected, it will be imperative to pay fair wages and invest in training and attractive working conditions to create the skill levels and motivation needed for a *jidoka-kaizen* system to work. Investment in training can only be justified if a loyal and motivated workforce with low turnover is created. But, if properly implemented the higher productivity and quality that results will more than offset the costs of higher wages and better working conditions provided. Combined with the greater flexibility and speed of the lean JIT supplier, the sweatshop company will find itself at a competitive disadvantage.

Over time, as more global manufacturers realize the advantages of a lean supply chain, wages will rise pulling up wage levels in other firms in those countries as well. But as long as productivity increases at least as rapidly as wages, that country will not lose competitiveness, a major fear of developing countries that resist global efforts to improve wages and working conditions. As it has always been, higher productivity is the key to improving standards of living. Lean global supply chains have the potential to contribute to the productivity improvement which fosters economic development, as well as in the short-term to improving the wages and working conditions of workers in companies supplying those global supply chains.

Conclusions

Many potential social and ethical conflicts were identified in this paper as firms attempt to leverage the value of information in their global supply chains by applying information technology. The value of integrating the supply chain into an *Electronic Supply Chain* is readily apparent; the ESC will be able to respond to customers more quickly and flexibly, inventories will be reduced throughout the chain, and productivity and quality will improve for all supply chain partners. However, inter-organizational relationships will be fundamentally altered intensifying the cultural and ethical challenges. How companies respond to these challenges will ultimately determine whether there global supply chains become powerful core competencies or a persistent source of problems and conflict. Several approaches to increase the chances of the former outcome were suggested including a business process analysis approach and the application of sociotechnical system concepts. There also exists the potential for integrated global supply chains to improve the working conditions of employees in developing countries and raise prices to commodity producers by applying the principles of lean production. Sweatshop labor suppliers become uneconomic in the framework of JIT.

References

[1] Barua, Anitesh, Prabhudev Konana, and Andrew Whinston, "Driving E-Business Excellence", Sloan Management Review, Fall 2001, pp. 36-44.

[2] Bell, Geoffrey G., Robert J. Oppenheimer, and Andrew Bastien, "Trust Deterioration in an International Buyer-Supplier Relationship", Journal of Business Ethics, March 2002, pp. 65-78.

[3] Bowen, Frances E., Paul D. Cousins, and Adam C. Faruk, "The Role of Supply Management Capabilities in Green Supply", Production and Operations Management, Summer 2001, pp. 174-189.

[4] Bruun, Peter, and Robert N. Mefford, "Lean Production and the Internet", Proceedings of the Twelth International Working Seminar on Production Economics, Feb. 2002, pp. 37-52.

[5] Cooper, Robert W., Garry L. Frank, and Robert A. Kemp, "A Multinational Comparison of Key Ethical Issues, Helps, and Challenges in the Purchasing and Supply Management Profession: the Key Implications for Business and the Professions", Journal of Business Ethics, Jan. 2000, pp. 83-100.

[6] Carter, Craig R., "Precursors to Unethical Behavior in Global Supplier Management", Journal of Supply Chain Management, Winter 2000, pp. 45-56.

[7] Ellram, L.M. and M.C. Cooper, "Supply Chain Management, Partnerships, and the Shipper-Third Party Relationship', International Journal of Logistics Management, V. 1:2, 1990, pp. 1-10.

[8] Gardner, J. and M.C. Cooper, "Elements of Strategic Partnership", in J.E. McKeon (Ed.), Partnerships: A Natural Evolution in Logistics, Logistics Resource, Inc. Cleveland, 1988, pp. 15-32.

[9] Hammer, Michael, "The Superefficient Company", Harvard Business Review, September 2001, pp. 82-91.

[10] Hewitt, Fred, "Demand Satisfaction Communities: New Operational Relationships in the Information Age", International Journal of Logistics Management, V.11:2, 2000, pp. 9-20.

[11] Hofstede, G., Culture's Consequences: International Differences in Work-Related Values, Sage, Newbury Park, CA, 1984.

[12] Lee, Hau L. and Seungjin Whang, "Information Sharing in a Supply Chain", International Journal of Technology Management, Nov-Dec. 2000, pp. 373-387.

[13] Shore, Bary, "Information Sharing in Global Supply Chain Systems", Journal of Global Information Technology Management, V. 4:3, 2001, pp. 27-50.

[14] Valenzuela, Jose Luis Duran and Fernando Sanchez Villacorta, "The Relationship between the Companies and Their Suppliers", Journal of Business Ethics, Nov. 1999, pp. 273-280.

The Impact of Cultural Values on the Successful Implementation of Total Quality Management: A Comparison between the Australian and Thai Models

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Abstract

Regarded as a tool for improving quality and potentially other performance related outcomes, total quality management (TQM) is held as a key way of achieving competitive advantages in the today's global work context (Anderson & Adams, 1997; Evans & Lindsay, 1996). A review of the existing literature however, suggests that two-thirds of all quality programmes fail to show improvement in organisational performance. Cultural differences have been cited as one of the significant contributors to these failures. Although a myriad of studies exist which support this claim (for example see Galperin, 1995; Nasierowski & Coleman, 1997; Tata & Prasad, 1998), empirical investigations of the role of cultural values on TQM success have been neglected.

This study aims to examine the impact of cultural values on the success of TQM implementation utilising data collected from a cross-section of employees who worked for Australian and Thai quality management organisations. Completed questionnaires were received from 724 respondents out of 1,190 (60.84% response rate). Using structural equation modelling (SEM), results from this study showed that the basic causality structure of the relationships between organisational design and TQM success is similar for the Australian and Thai samples. The importance (or existence) of some relationships of organisational design (as measured by formalisation, centralisation, and reward system) and TQM success (as measured by perceived corporate quality culture, organisational commitment, and perceived business results) varies between these two models. Implications for valuing cultural values as part of implementing a successful TQM programme are discussed.

Introduction

The emphasis on total quality management (TQM) as a management philosophy implemented in order for organisations to achieve world-class status, has grown considerably in the past two decades. Although, theoretically, the use of TQM practices is an important part of successfully involving employees in processes that lead to improvements in business performance (Kanji & Tambi, 1999; Kunst & Lemmink, 2000; Quazi, Jemangin, Kit, & Lee, 1998), in reality a considerable number of organisations have fallen short in implementing their quality programmes (Boyett, Kearney, & Conn, 1992; Douglas & Judge, 2001). A review of the existing literature (for example see Caudron, 1993; Charles, 1993; Korukonda, Watson, & Rajkumar, 1999) suggests that two-thirds of all quality programmes fail to achieve improvements in organisational performance.

A number of studies have highlighted that cultural variables may account for the failure of TQM programmes (for example see Galperin, 1995; Katz, Krumwide & de Czege, 1998; Nasierowski & Coleman, 1997; Tata & Prasad, 1998). This is not surprising, given that TQM is generally known as a major organisational change programme that requires a transformation in organisational culture, processes, and beliefs, among others. Proponents acknowledge that a complete change in the prevailing attitudes and culture within the organisation must occur if positive outcomes are to result. This also seems to be particularly important, considering that it is usually interpreted that TQM came from Japan, as the Japanese spent considerable attention on using TQM to improve their product quality in the post war period. It is therefore a TQM model based commonly on the Japanese cultural, historical and social background (Dahlgaard, 1999). Most studies on TQM were also conducted in developed countries, usually in Western countries. Until now, only a little amount of literature on TQM implementation in Asian or developing countries has been available (Djerdjour & Patel, 2000). More importantly, there is insufficient evidence to support the idea that the application of TQM that works well for companies located in one country will work in others. In particular, a TQM implementation model developed from the Western society may not suit other societies due to the differences in social structure, economy, and way of life, specifically cultural values. Individuals from different countries have different values, beliefs, and attitudes that are influenced by their cultural background.

However, until recently most TQM information, especially the impact of cultural differences on the successful TQM implementation has relied predominantly on theory, case studies and anecdotes. Only a few empirical studies have been available. These cultural differences are potentially important variables overlooked in prior studies. It seems appropriate that some research be undertaken to examine the role that individual variables, such as cultural values, have on TQM success, given the internationalisation of the TQM movement. The primary purpose of this study is therefore, to determine the impact of cultural values on the success of TQM implementation utilising data collected from Australia and Thailand. According to Hofstede (1980), Australian and Thai cultural characteristics are notably different and are fair representatives of Western and Asian cultural values respectively.

Literature Review

Although organisations have universal characteristics, they are not culture-free (Hofstede, 1996). With regard to TQM programmes, cultural differences have been identified as one of the significant contributors to the failure of TQM applications. TQM is a management approach in which the application of practices such as teamwork, internal customer relationship, and supplier partnership, involves a major cultural change in the organisation (Entrekin & Pearson, 1995). This includes the transformation of the organisation's culture, processes, and beliefs, among employees; as a result, cultural change is seen as the essential aspect of the successful introduction of TQM (Brown, 1995). It is therefore not surprising that culture, which is a set of shared beliefs and values that govern how people think and behave (Hofstede, 1980; Naylor, 1996), will have a tremendous effect on the successful TQM implementation or other organisational innovations such as reengineering (De Cock, 1998).

In the past, management studies usually limited their attention only to TQM implementation and its effect on organisational culture. Since then TQM and its principles have been recognised and widely adopted by numerous managers, the internationalisation of the firms has created a new dimension of TQM worth considering: the national boundary (Katz et al., 1998). The study of Sun (1999) reveals that the components of a TQM programme may vary from country to country. After their modification, the models in different countries are not exactly the same (Lawler, Atmiyanada, & Zaidi, 1992). Furthermore, many scholars, such as Galperin (1995), Katz et al. (1998), Nasierowski and Coleman (1997), and Tata and Prasad (1998) have investigated the links between culture and TQM implementation. The findings of these studies have increased the level of understanding about national differences relating to TQM implementation.

Interestingly, contradicting results from these studies exist. For example, Tata and Prasad (1998) believed that firms with high power distance are more likely to have centralised control over decision-making that leads to failure in TQM implementation. Conversely, Katz et al. (1998) argued that companies in countries with a high score on power distance are more likely to succeed in adopting TQM because their employees are willing to listen to the suggestions of managers. In fact, besides cultural values, the factors such as organisational structure and management practices have been overlooked in those studies. Do cultural values really have a direct impact on TQM success? Or are they just moderators of the relationships between organisational design and TQM success?

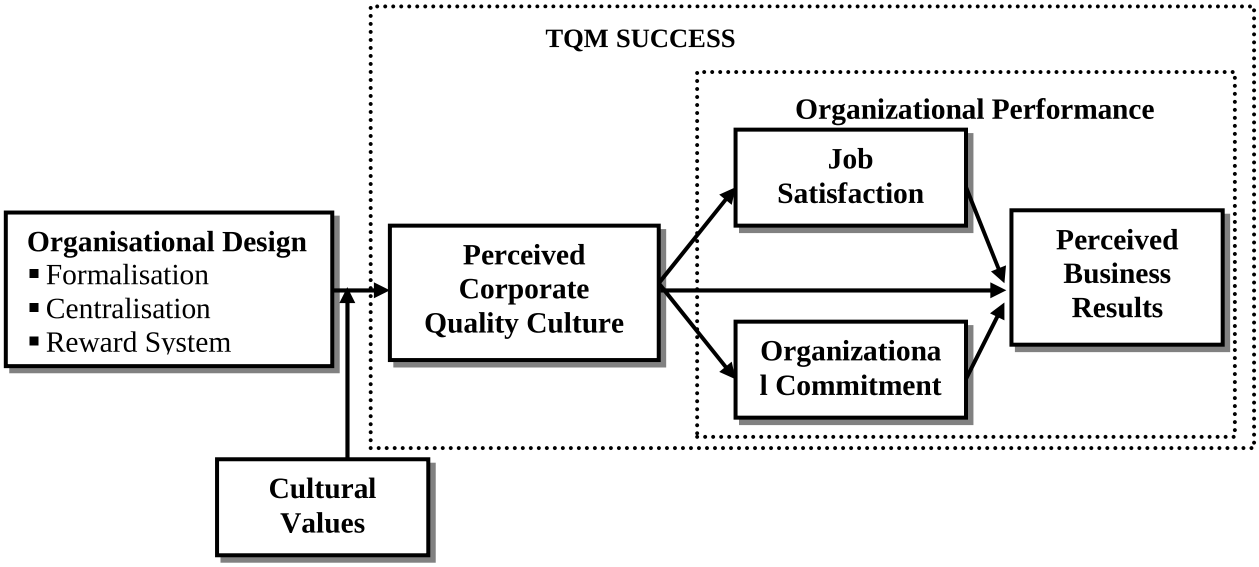
The relationships between organisational design and TQM success may indeed be varied in a particular degree of cultural values. These relationships are, however, still vague. To date, no research work has yet collectively taken all these features into consideration nor provided a holistic model for the relationships between TQM success and individual cultural values. Empirical research thus needs to be conducted beyond anecdotal evidence in order to be effective. The present study thus attempts to fill this gap by providing a basis for a thorough and insightful discernment of TQM and cultural values.

Conceptual Framework and Hypotheses

The conceptual schema of this study is presented in Figure 1 indicating the relationships among cultural values, organisational design, and TQM success. The theoretical framework proposed shows the relationship between centralisation and TQM success (Douglas & Judge, 2001; Morrow 1997; Yeh-Yun Lin, 1998). The framework also posits that TQM success is affected by formalisation (Douglas & Judge, 2001; Katz et al., 1998; Tata & Prasad, 1998), and reward system (Anderson & Adams, 1997; Gurnani, 1999; Kanji & Tambi, 1999). Overall, this study explores organisational design (as measured by formalisation, centralisation, and reward system) as the key determinant of TQM success. More importantly, it examines the moderating effects of cultural values on the relationships between organisational design and TQM success (Galperin, 1995; Katz et al., 1998;

Nasierowski & Coleman, 1997; Tata & Prasad, 1998). These relationships are primarily based on theoretical considerations and case studies; the value of the model is therefore very limited unless it is verified empirically.

Figure 1: Conceptual framework



The following research question is formulated aiming to explore the relationship between cultural values and TQM success. The findings are also expected to enhance and deepen the understanding of issues relating to the implementation of TQM programmes which are useful in building the theory in quality management studies and to assist managers in implementing more effective quality programmes.

Is the relationship between the organisational design and TQM success similar across countries?

To answer this research question, the following hypothesis is formulated.

H_1: The structural paths between organisational design and TQM success across the Australian and Thai samples are similar.

Methodology

Sample

The target population of this study comprised employees from Australian and Thai TQM organisations. A random set of companies was chosen from the established lists of the organisations that were accredited for ISO certificate obtained from JAS-ANZ Register (2000) and Directory of ISO Certified Companies in Thailand (Technology Promotion Association, 1999). Of these, there were Australian and Thai companies in a wide range of industries, including manufacturing and services. The unit of study is employees in those companies which have adopted and implemented TQM programmes, as this study aims to measure the effects of individual cultural values upon the success of TQM implementation.

Data Collection

The mail survey was the main form of data collection. In order to bolster response rates, electronic mail surveys and web-based surveys were also utilised. This alternative was seen to be of great value considering the rapidly increasing number of people using the Internet and World Wide Web (Cook, Heath, & Thompson, 2000).

Instruments

The *perceived corporate quality culture* scale was tapped by a 30-item measure developed from the results of the Delphi study. All items measure the attitude of the employees toward their work, and what they understand about quality in their job and quality-related problems. A five-item scale was adapted from the study of Rao, Solis, and Raghunathan (1999) to capture *perceived business results.* *Job satisfaction* was tapped by five items taken from Job Diagnostic Survey developed by Hackman and Oldham (1975). The nine-item scale developed by Cook and Wall (1980) was used to assess *organisational commitment*. Organisational design was measured by 16 items, consisting of six items representing *formalisation* (John, 1984), five items representing *centralisation* (John, 1984), and five items representing elements of *reward system*. For each item, responses were measured on a five-point scale ranging from 1, “Strongly disagree”, to 5, “Strongly agree”.

All measurements were originally developed in English and translated into Thai for the Thai respondents via the back-translation technique (see Brislin, 1980). Prior to administering the questionnaire, a pilot study was conducted. The results of the pilot study revealed that scales used in this study demonstrate acceptable psychometric properties.

Data Analysis

The structural equation modelling (SEM) technique was used in order to examine the data and test hypothesis of interest due to the advantage it has over traditional regression methods (Anderson & Gerbing, 1988; Hair, Anderson, Tatham, & Black, 1998). To test the invariance of common structural paths across Australian and Thai samples, multi-sample LISREL analysis as prescribed by Byrne (1998) was undertaken. This analysis begins by developing good-fitting models in separate runs for each sample. This will provide an overview of model consistency. Thereafter, the models are tested simultaneously in one run with none of the parameters across models constrained to be equal. This unconstrained multiple group model serves as the “baseline model” (Tabachnick & Fidell, 1996).

Following baseline model estimation, the model is re-run but constrained so that the structural paths are equal across samples, yielding a chi-square value for the “restricted model” (Tabachnick & Fidell, 1996). Then a chi-square difference test is performed between the baseline and restricted models. If a significant difference in χ^2 is found between the baseline and restricted models, it is concluded that the structural model is invariant across the samples.

Assessment of Model Fit

Multiple criteria were used in testing for the extent to which the proposed model fits the observed data. The most popular index for assessing the overall goodness of fit is the chi-square (χ^2) likelihood ratio statistic which is a statistical test of the lack of fit resulting from over-identifying restrictions placed on a model (Hoyle, 1995). The p-value associated with χ^2 represents the likelihood of obtaining a χ^2 value that exceeds the χ^2 value when the hypothesis is true. Thus, the larger the probability associated with χ^2, the closer the fit between the hypothesised model and the perfect fit (Byrne & Campbell, 1999). Moreover, other fit indices were also used to assess the model fit in this study. These include the goodness-of-fit index (GFI), the adjusted goodness-of-fit index (AGFI), the root mean square residual (RMR), the root mean-square error of approximation (RMSEA), the non-normed fit index (NNFI), and the comparative fit index (CFI). A value above 0.90 for GFI, AGFI, NNFI, and CFI indicates an acceptable fit to the data (Byrne & Campbell, 1999) and the values between 0.05 and 0.08 for RMR and RMSEA imply reasonable overall fit, whereas values above 0.10 indicate significant fit problems.

Survey Results

Of the 1,190 questionnaires were distributed, 500 were sent out to companies in Australia and 690 to Thai companies. Although rather lengthy, 819 questionnaires were returned (68.82 % response rate) with 724 usable for this research. Of these, 213 usable questionnaires were obtained in Australia and 511 usable questionnaires were received in Thailand, representing a net response rate of 42.60 % and 74.06 %, respectively. These response rates are considered as acceptable (Baruch, 1999).

Sample Characteristics

The majority of Australian respondents were male (72%). The average age of the respondents was between 30-49 years, with more than 47% of the sample completing at least an undergraduate degree. Thirty-five per cent of the respondents were managers whist 36 % of them were monthly employees. The average tenure was five years and the average time that they had been involved with a quality management programme was five years. Even though most respondents held Australian nationality (91%), only 67% of them had Australian as the nationality at birth.

Of the 511 Thai respondents, 51% were male and 74% of them were aged between 20-39 years. More than 68% of the respondents had graduated with at least a Bachelor's Degree. Fifty-three per cent of the respondents were monthly employees and the average tenure was seven years. The average time that the respondents had been involved with a quality management programme was two years. All respondents held Thai nationality.

Measurement Validation Results

Before embarking on model testing, the Australian and Thai data were combined and used to validate the measurement instrument. A number of procedures were employed to modify and validate the construct of measurement used in this study. First one-factor congeneric models for each latent construct were tested to uncover their factorial structure. CFAs were then conducted to determine the reliability and validity of the measurement scales using maximum likelihood (ML) estimation.

The results of final CFA of all latent variables used in this analysis demonstrate that there are ten distinct latent variables: Perceived Corporate Quality Culture, Perceived Business Results, Organisational Commitment, Formalisation, Centralisation, Reward System, Uncertainty Avoidance, Collectivism, Power Distance, and Masculinity. However, when assessing discriminant validity between latent constructs, the findings suggested Job Satisfaction and Organisational Commitment were highly correlated. As a result, the job satisfaction scale was removed from the further analysis because of the lack of discriminant validity with the organisational commitment scale. Organisational commitment is retained in the analysis because it is considered as a better measurement of human behaviour in organisations than other related measures such as job satisfaction (Moon, 2000).

After assessing construct validity, convergent and discriminant validity were examined. All parameter estimates are statistically different from zero (t-value>± 1.96); supporting the fact that convergent validity is achieved. Discriminant validity was then evaluated by comparing the average variance extracted[i] with the square of the correlation between the constructs. These results support that the requirements of discriminant validity are satisfied.

Finally, to assess the instrument's reliability, construct reliability[ii] was computed using the results from CFA discussed previously. In general, all constructs were found to be reliable since all measurement scales ranged between 0.70 and 0.85 (see Table 1). The results of validity and reliability testing reveal that the measurements used in this analysis appear to demonstrate acceptable psychometric properties.

Table 1: CONSTRUCT RELIABILITY

Latent Construct	Construct Reliability
Perceived Business Results	0.83
Organisational Commitment	0.73
Perceived Corporate Quality Culture	0.83
Formalisation	0.71
Centralisation	0.81
Reward System	0.83
Uncertainty Avoidance	0.79
Collectivism	0.70
Power Distance	0.70
Masculinity	0.85

Model Testing Results

The hypothesis to be tested is that the structural paths between organisational design and TQM success across the Australian and Thai samples are similar. To test for the invariance of common structural paths across the Australian and the Thai samples, multi-sample LISREL analysis was used. The sample was first split into two subgroups representing the Australian sample (n = 213) and the Thai sample (n = 511). The descriptive statistics are summarised in Table 2, which presents mean, standard deviation, and correlation matrix of the Australian and the Thai samples.

A model was then separately tested for each sample. The parameter estimates for the Thai and Australian samples are shown in Figure 2 and 3, respectively. Even though the χ^2 test statistic is significant for both models ($p<0.05$), given the known sensitivity of this statistic to sample size, use of the χ^2 index provides little guidance in determining the extent to which the model does not fit. Thus, it is more beneficial to rely on fit as represented by the CFI, which, in these two models, provides evidence of a fairly well-fitting model (CFI = 0.95 and 0.94 for the Australian and the Thai models, respectively). Note also that the RMSEA values for both models are well within the recommended range of acceptability as suggested by Byrne (1998) (RMSEA = 0.05 for both models).

Table 2: MEAN, STANDARD DEVIATION, AND CORRELATION MATRIX-AUSTRALIAN AND THAI SAMPLES

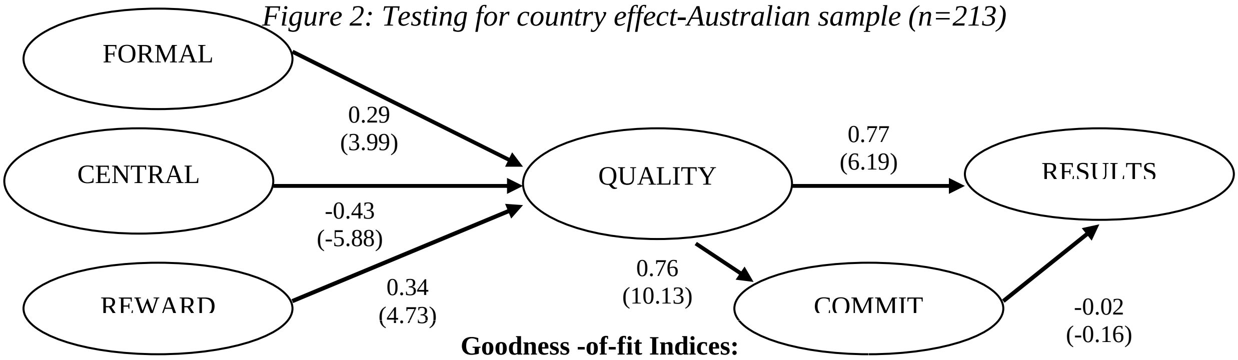
	Mean (Std Dev)		Results	Commit	Quality	Formal	Central	Reward
	Australia	**Thailand**						
Results	3.35 (0.82)	3.90 (0.70)		0.38**	0.52**	0.39**	-0.09*	0.34**
Commit	3.44 (0.87)	3.79 (0.72)	0.39**		0.43**	0.29**	-0.09*	0.32**
Quality	3.45 (0.63)	3.66 (0.52)	0.68**	0.56**		0.42**	-0.10*	0.49**
Formal	3.06 (0.88)	3.59 (0.68)	0.20**	0.04	0.13		0.12**	0.31**
Central	2.41 (0.98)	3.00 (0.83)	-0.27**	-0.43**	-0.40**	0.23**		-0.03
Reward	2.73 (1.06)	3.64 (0.90)	0.44**	0.30**	0.41**	0.00	-0.30**	

** Correlation is significant at the 0.01 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

Correlations from Thai sample (n=511) are shown above the diagonal; correlations from Australian sample (n=213) are shown below the diagonal.

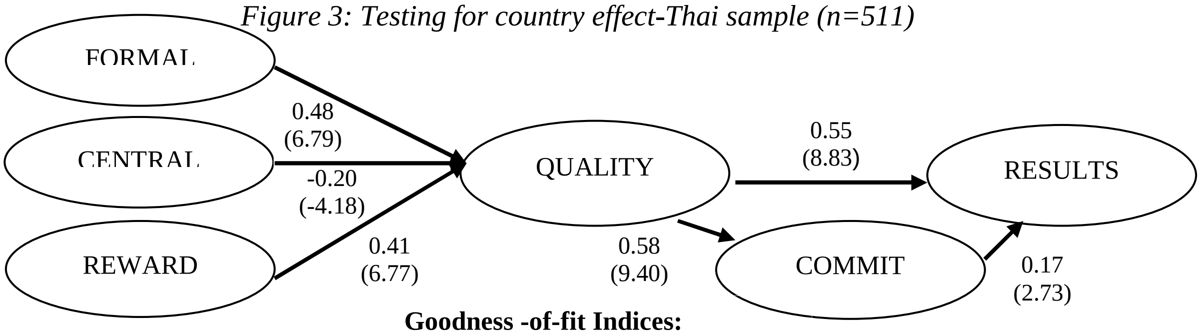
Figure 2: Testing for country effect-Australian sample (n=213)



Goodness -of-fit Indices:
χ^2(197)=317.06, p<0.05
GFI=0.88, AGFI=0.85
RMR=0.08, RMSEA=0.05
NNFI=0.94, CFI=0.95

*Values in parenthesis are t-values.

Figure 3: Testing for country effect-Thai sample (n=511)



Goodness -of-fit Indices:
χ^2(197)=410.20, p<0.05
GFI=0.93, AGFI=0.91
RMR=0.04, RMSEA=0.05
NNFI=0.93, CFI=0.94

*Values in parenthesis are t-values.

On the surface, these two models appear the same, with identical path structures and congruent causal links. However, subtle discrepancies were present in the strengths of individual paths. To test if the path coefficients of these two models were in fact significantly different from each other, multiple-group LISREL analysis was conducted. A multi-group baseline model with the parameters across two samples freed estimated was first established. To eliminate the effect of unequal sample size between the Australian and the Thai samples, 215 cases were randomly selected from the Thai sample as suggested by Tabachnick and Fidell (1996). Estimating this multi-group baseline model produces a chi-square of 626.66 with 400 degrees of freedom. As it is almost impossible to judge the adequacy of the multi-group model fit based on this value (Byrne, 1998), the RMSEA, NNFI, and CFI values were subjected to examination, which indicate a marginally adequate fit to the data representing both samples (RMSEA=0.05, NNFI=0.93, and CFI=0.94).

Thereafter, the constrained model with the equality constraints on both the factor loadings and the structural paths across two samples was conducted. Results from the estimation of this constrained multi-group model yielded a χ^2 value of 746.17 with 416 degrees of freedom. The overall model fit statistics of the baseline and the constrained models are illustrated in Table 3.

Table 3: OVERALL MODEL FIT STATISTICS FOR COUNTRY EFFECTS

	χ^2(df)	$\Delta\ \chi^2$(df)	Sig$\Delta\ \chi^2$	RMSEA	GFI	NNFI	CFI
Baseline model	626.66 (400)			0.05	0.88	0.93	0.94
Constrained model	746.17 (416)	-119.51(16)	p<0.00	0.06	0.86	0.91	0.92

A chi-square difference test reveals a significant difference across the baseline and the constrained models ($p<0.00$). It is concluded that the structural model is not invariant between the Australian and Thai samples. This suggests that the magnitude and significance of the individual relationships are not the same for the Australian and the Thai organisational design-TQM success models. In reviewing these two models (Figure 2 and 3), notably, the Australian model against the Thai model manifested stronger path coefficients in the following links:

- from centralization to perceived corporate quality culture;
- from perceived corporate quality culture to perceived business results; and
- from perceived corporate quality culture to organisational commitment.

In contrast, the Thai model exhibited relatively higher scores on the following paths:

- from formalisation to perceived corporate quality culture;
- from reward system to perceived corporate quality culture; and
- from organisational commitment to perceived business results.

Conclusion

A number of conclusions can also be drawn by analysing the results of this study. Besides the differences discussed above, it is important to be noted that the Australian and the Thai models had some important similar attributes. Specifically, the findings indicate that organisational design does have a significant effect on TQM success. For instance, the study shows that formalisation has formalisation has a positive effect on TQM success as supported by the studies of Douglas and Judge (2001) and Katz et al. (1998). TQM requires adherence to standards that rely primarily on rigid policies and procedures; thus the greater the degree of formalisation the more likely the success of the implementation of TQM. The results also show that centralisation has a negative effect on TQM success, as well documented by many scholars (for example see Evans & Lindsay, 1996; Tata & Prasad, 1998).

Interestingly, one contradictory aspect of the findings is highlighted when the results of the mediating model indicate a positive relationship between merit-pay system and TQM success. Most of the TQM literature (e.g. Evans & Lindsay, 1996; Newman & Nollen, 1996) points out that TQM is less likely to be successful when recognition and reward systems, such as merit-based reward which place people in an internally competitive environment are employed. This environment reinforces individualism to the detriment of teamwork which is the core principle of TQM. One possibility for this contradiction is employees’ perceptions of accuracy and the fairness of reward allocation (Meyer & Smith, 2000). Group incentive plans usually suffer from what is called the “free-rider” problem (Milkovich & Newman, 1999) in which rewards are typically shared equally regardless of the individual contribution to the job. This may lead to increased turnover among top performing employees who are discouraged because they must share with lesser contributors.

This study suggests the importance of ensuring that supportive organisational structure and management practices are in place when implementing the TQM programme. If supporting structures and appropriate management practices are not present in the organisation, it is difficult for TQM concepts to become an attitude to organisational life for all employees.

The results of this study also point to a possible pattern of TQM dynamics in a particular culture. Although the analyses show several similarities between the Australian and Thai organisational design-TQM success models, there were substantial differences in the strengths of individual paths, suggesting that cultural values play an important role in the successful implementation of TQM programmes. In particular, the effect of centralisation on TQM success was more apparent in the Australian than the Thai model, whereas formalisation and reward system were more in evidence in the Thai than the Australian model.

One of the possible explanations for these differences is that Western quality environments such as Australia are commonly characterised by flatter structures (Pearson et al., 1997). Thus, the Australian model demonstrated a stronger effect of centralisation on TQM success than did the Thai model. It is, however, possible that these differences may be in fact due to cultural nuances. As suggested by Hofestede (1980; 1996), Australian culture scores lower on power distance than Thai culture. This implies that in a high power distance culture like the Thai, some degree of arbitrariness with regards to authority, hierarchy, special privileges, and power are accepted facts of life, and they are often personalised (Komin, 1991). This may account for why the relationship between centralisation and TQM success is weaker in Thailand than in Australia. It also raises the possibility that the difference in the relationship between organisational design and TQM success across the Australian and Thai sample is primarily due to the effect of distinctions in degree of power distance. However, to understand fully the effect of each cultural dimension on the successful implementation of TQM, an empirical study testing this effect is recommended for the future research.

In conclusion, significant differences between the Australian and Thai organisational design-TQM success models is at least partly because of the distinction of culture, due to the fact that culture usually governs how people think and behave. As evidenced by past research (e.g. Lachman, Nedd, & Hinings, 1995), cultural values can affect organisational structures and processes via their influences on the selectivity of management's perceptions. Moreover, the essential assumption underlying TQM concepts is power sharing. This supports the view that cultural values should be taken into account when implementing a TQM programme. Understanding this impact will help organisations in designing TQM procedures and practices suited to a particular cultural context and in improving the working environment of employees carrying out these TQM programmes.

References

[1] Anderson, E. A. & Adams, D. A. (1997). "Evaluating the success of TQM implementation: Lessons from employees." Production and Inventory Management Journal **38**(4): 1-6.

[2] Anderson, J. C. & Gerbing, D. W. (1988). "Structural equation modeling in practice: A review and recommended two-step approach." Psychological Bulletin **103**(3): 411-423.

[3] Baruch, Y. (1999). "Response rate in academic studies-A comparative analysis." Human Relations, **52**(4): 421-438.

[4] Boyett, J. H., Kearney, A. T., & Conn, H. P. (1992). "What's Wrong with Total Quality Management." Tapping the Network Journal **3**(1): 10-14.

[5] Brislin, R. W. (1980). "Translation and content analysis of oral and written materials." In H. C. Triandis & J. W. Berry (Series Ed.), Handbook of cross-cultural psychology: Vol. 2. Methodology (pp.389-444). Boston: Allyn and Bacon, Inc.

[6] Brown, A. (1995). "Quality management: Issues for human resource management." Asia Pacific Journal of Human Resources **33**(3): 117-129.

[7] Byrne, B. M. (1998). Structural Equation Modeling with LISREL, PRELIS, and SIMPLIS: Basic Concepts, Applications, and Programming. New Jersey, Lawrence Erlbaum Associates, Inc.

[8] Byrne, B. M. & Campbell, T. L. (1999). "Cross-cultural comparisons and the presumption of equivalent measurement and theoretical structure: A look beneath the surface." Journal of Cross-Cultural Psychology **30**(5): 555-574.

[9] Caudron, S. (1993). "Keys to starting a TQM program." Personnel Journal, **72**(2): 28-35.

[10] Charles, R. (1993). "Quality that pays: Tailoring TQM for adhesives." Adhesives Age, **36**(8): 26-31.

[11] Cook, C., Heath, F., & Thompson, R. L. (2000). "A Meta-Analysis of Response Rates in Web-or Internet-Based Surveys." Educational and Psychological Measurement **60**(6): 821-836.

[12] Cook, J. & Wall, T. D. (1980). "New Work Attitude Measures of Trust, Organizational Commitment and Personal Need Non-Fulfillment." Journal of Occupational Psychology **53**: 39-52.

[13] Dahlgaard, S. M. P. (1999). "The Evolution Patterns of Quality Management: Some Reflections on the Quality Movement." Total Quality Management **10**(4&5): S473-S480.

[14] De Cock, C. (1998). ""It seems to fill my head with ideas" A few thoughts on postmodernism, TQM, and BPR." Journal of Management Inquiry **7**(2): 144-153.

[15] Djerdjour, M., & Patel, R. (2000). "Implementation of quality programmes in developing countries: A Fiji islands case study." Total Quality Management, **11**(1): 25-44.

[16] Douglas, T., J. & Judge, W. Q. J. (2001). "Total quality management implementation and competitive advantage: The role of structural control and exploration." Academy of Management Journal **44**(1): 158-169.

[17] Entrekin, L. V. & Pearson, C. A. (1995). "A comparison of values espoused by quality and other managers." Asia Pacific Journal of Human Resources **33**(3): 130-139.

[18] Evans, J. R. & Lindsay, W. M. (1996). The Management and Control of Quality. New York, West Publishing Company.

[19] Fornell, C., & Larcker, D. F. (1981). "Evaluating structural equation models with unobservable variables and measurement error." Journal of Marketing Research, **18**(1): 39-50.

[20] Galperin, B. L. (1995). The Implementation of TQM in Canada and Mexico: A Cross-Cultural Perspective. Business Administration, Management. Canada, Concordia Unviversity (Canada).

[21] Gurnani, H. (1999). "Pitfalls in total quality management implementation: The case of a Hong Kong company." Total Quality Management **10**(2): 209-228.

[22] Hackman, J. R. & Oldham, G. R. (1975). "Development of the Job Diagnostic Survey." Journal of Applied Psychology **60**: 159-170.

[23] Hair, J. F. J., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). Multivariate Data Analysis (5th Ed.). New Jersey, Prentice-Hall International, Inc.

[24] Hofstede, G. (1980). Culture's Consequences: International Differences in Work-Related Values. California, SAGE Publication, Inc.

[25] Hofstede, G. (1996). "An American in Paris: The Influence of Nationality on Organization Theories." Organization Studies **17**(3): 525-537.

[26] Hoyle, R. H. (1995). The Structural Equation Modeling Approach: Basic Concepts and Fundamental Issues. Structural Equation Modeling: Concepts, Issues, and Applications. R. H. Hoyle. Califormia, SAGE Publications.

[27] JAS-ANZ Register (Version 1.05) [Electronic data type]. (2000). Sydney: Commonwealth of Australia [Producer and Distributor].

[28] John, G. (1984). "An empirical investigation of some antecedents of opportunism in a marketing channel." Journal of Marketing Research, **21**(3): 278-289.

[29] Kanji, G. K. & Tambi, A. M. B. A. (1999). "Total Quality Management in UK Higher Education Institutions." Total Quality Management **10**(1): 129-153.

[30] Katz, J. P., Krumwiede, D. W., de Czege, M. W. (1998). "Total Quality Management in the Global Marketplace: The Impact of National Culture on TQM Implementation." International Journal of Management **15**(3): 349-356.

[31] Komin, S. (1991). Psychology of the Thai People: Values and Behavioral Patterns. Bangkok, National Institute of Development Administration (NIDA).

[32] Korukonda, A. R., Watson, J. G., & Rajkumar, T. M. (1999). "Beyond teams and empowerment: A counterpoint to two common percepts in TQM." S.A.M. Advanced Management Journal, **64**(1): 29-36.

[33] Kunst, P., & Lemmink, J. (2000). "Quality management and business performance in hospitals: A search for success parameters." Total Quality Management **11**(8): 1123-1133.

[34] Lachman, R., Nedd, A., & Hinings, B. (1995). "Analyzing cross-national management and organizations: A theoretical framework." In T. Jackson (Ed.), Cross-Cultural Management (pp.166-191). Oxford: Butterworth-Heinemann Ltd.

[35] Lawler, J., Atmiyanada, V.,& Zaidi, M. (1992). "Human Resource Management Practices in Multinational and Local Firms in Thailand." Journal of Southeast Asia Business **8**(1): 16-33.

[36] Meyer, J. P. & Smith, C. A. (2000). "HRM practices and organizational commitment: Test of a mediation model." Canadian Journal of Administrative Sciences **17**(4): 319-331.

[37] Milkovich, G. T. & Newman, J. M. (1999). Compensation (6th Ed.). Boston, Irwin/McGraw-Hill.

[38] Moon, M. J. (2000). "Organizational commitment revisited in new public management: Motivation, organizational culture, sector, and managerial level." Public Performance & Management Review **24**(2): 177-194.

[39] Morrow, P. C. (1997). "The Measurement of TQM Principles and Work-Related Outcomes." Journal of Organizational Behavior **18**: 363-376.

[40] Nasierowski, W. & Coleman, D. F. (1997). "Lessons Learned from Unsuccessful Transfers of Managerial Techniques: Cultural Impediments to the Transfer of TQM Practices." International Journal of Management **14**(1): 29-37.

[41] Naylor, L. L. (1996). Culture and Change: An Introduction. London, Bergin & Garvey.

[42] Newman, K. L. & Nollen, S. D. (1996). "Culture and Congruence: The Fit between Management Practices and National Culture." Journal of International Business Studies **27**(4): 753-779.

[43] Quazi, H. A., Jemangin, J., Kit, J. W., & Lee, C. (1998). "Critical Factors in Quality Management and Guidelines for Self-Assessement: The Case of Singapore." Total Quality Management **9**(1): 35-55.

[44] Rao, S. S., Solis, L. E., & Raghunathan, T. S. (1999). "A framework for international quality management research: Development and validation of a measurement instrument." Total Quality Management **10**(7): 1047-1075.

[45] Sun, H. (1999). "Diffusion and contribution of total quality management: An empirical study in Norway." Total Quality Management **10**(6): 901-914.

[46] Tata, J. & Prasad, S. (1998). "Cultural and Structural Constraints on Total Quality Management Implementation." Total Quality Management **9**(8): 703-710.

[47] Yeh-Yun Lin, C. (1998). "The essence of empowerment: A conceptual model and a case illustration." Journal of Applied Management Studies **7**(2): 223.

End Notes

[i] Variance extracted can be computed from model estimates using this formula: $\rho_{vc(\eta)} = \frac{\Sigma\lambda_i^{\ 2}}{\Sigma\lambda_i^{\ 2} + \Sigma\varepsilon_i}$

where λ_i is the standardised loading for each observed variable, ε_i is the error variance associated with each observed variable and ρ_η is the measure of construct reliability (Fornell & Larcher, 1981).

[ii] Construct reliability can be computed from model estimates using this formula: $\rho_{vc(\eta)} = \frac{(\Sigma\lambda_i)^2}{(\Sigma\lambda_i)^2 + \Sigma\varepsilon_i}$

where λ_i is the standardised loading for each observed variable, ε_i is the error variance associated with each observed variable and ρ_η is the measure of construct reliability (Fornell & Larcher, 1981).

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An Insight into Perceptions of Career Influences on Private Academic Staff in Malaysia

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Abstract

This paper examines the current trends in the perceptions of career influences on academic staff in and reports on an empirical research that was carried out in Malaysia to study the influences of selection, training, promotion, work and career development and family issues in forming a perception. Results based on the analysis of data relating to 174 respondents indicate that while there is a significant difference between the responses of males and females relating to recruitment policies pursued by employers. On the basis of ethnicity of respondents, it was found that there was an agreement on gender being a non-issue in career influences. Other findings are reported. Limitations of the study are highlighted and further research directions are suggested.

Key words: *career, perceptions, academic, Malaysia.*

Introduction

A growing interest in the study of human resource management practices in the higher education sector is triggered by an increasing transformation of the higher education system. Typically, private higher education service providers in Malaysia receive no funding from government and are profit oriented businesses, operating in a very competitive environment. With an increasing number of students, managerial practices in the higher education sector have transformed as the higher education service providers inculcates a market orientation (Buchbinder, 1993). Institutions are adopting aggressive promotional strategies and differentiating from themselves to maximize student output and income generation (Winter, Taylor & Sarros, 2000). Increasing challenges are being posed to the academic staff with a major transformation in the education system. In this light, this study attempts to investigate the staff motivation and commitment to make an effective contribution towards organizational success.

While numerous studies have been carried out to examine the issues in the wider context of career perceptions of individuals across different industries or from a regional context, to our knowledge, no comprehensive research to examine the perceptions of career influences on academic staff specifically in the Malaysian context has been undertaken. This study aims to fill the gap in the literature by focusing on the perceptions of career influences on academic staff in Malaysian private tertiary education.

In the next section, background information in the topic is presented. A review of the Malaysian education sector is then undertaken. The following section describes the research methodology, which is then followed by the results from the survey. The paper concludes with a summary, outlining the implications of the findings and the limitations of this study.

Background Information

In modern times, institutions of higher learning are increasingly being characterized by student diversity, newer teaching technologies, changing public expectations, shifting emphasis towards the learner, expanding faculty work loads, and a new labor market for faculty (Austin, 2002). These characteristics indicate a major transformation in higher education (Rice 1998, and Schuster 1999).

The academic environment makes a significant impact on the academic staff performance and their perception to career, significantly with a changing approach to teaching and learning. Institutions of higher learning are increasingly being encouraged, mainly due to external influences, to strengthen undergraduate education by shifting from an emphasis on teaching to an emphasis on learning (Barr & Tagg, 1995). This change of focus on the teacher, rather than the learner, has lead to new expectations on how the faculty should enact their roles.

Another trend witnessed in the higher education system has been an increasing diversity of students. Students are seemingly more diverse in their backgrounds, needs, motivations, and expectations (Keller, 2001; Syverson, 1996). Work requirements demand that staff must have an appreciation and an appropriate approach for working with students of diverse ages, genders, ethnicities, capabilities, levels of interest and commitment.

A further challenge is posed to the academic staff with the advent of newer teaching technologies. With more academic institutions incorporating virtual education and flexible delivery modes into teaching, academic staffs are expected to use technology-mediated teaching and learning strategies (Connick, 1997; Gilbert, 1996; Green, 1996, 1999; Levine, 2000). Even experienced teachers, having been in the business for a number of years are required to undergo training and bring about changes in delivery or learning options made available through new technologies.

Perceptions towards a career are also shaped by changing societal expectations. On the one hand, parents and students stir up questions on the quality of the education and on the other hand, employers express anxiety over the skills and abilities of students entering the job market. Institutions proclaim work expectations for faculty members, to spend a certain number of hours to teaching, expectations of research undertaking by the staff, staff members contribution to community services, to collaborate with colleagues in other disciplines towards research and teaching, and so on.

The implications of all these for the academic staff are extensive. Changing job requirements, multiple demands have led to many faculty members experiencing overload and stress due to a juggle between conflicting professional responsibilities and a desire to achieve balance between professional and personal lives (Rice, Sorcinelli, and Austin 2000). These demands and challenges will obviously lead to a changing perception towards a career in teaching.

Private Education Environment in Malaysia

A market sensitive educational system has been evolving in Malaysia. Traditionally, public universities were responsible for providing undergraduate and graduate studies. But as the demand for university places has outstripped the availability within the public university system and further considering other constraints as funding, a policy has been to allow for the development of private higher education institutions.

While private colleges have been in existence in Malaysia for the last twenty years, the government has been actively supporting them since 1995 to develop their own unique and innovative education career path. This has been necessitated due to the structural transformation of the economy, and the emphasis of the educational policy, which has been directed towards building a pool of well-educated and skilled professionals (Sohail, Jegatheesan and Nor Azlin, 2002).

Since the Asian economic crisis in 1997, Malaysia, as well as other countries in the region, have devised innovative ways. The strategy pursued for growth and development of education has been to encourage private sector to meet the needs of tertiary education resulting in a market sensitive educational system. Private colleges are since allowed to offer various types of courses. At the level of the bachelors' degree, they may offer courses leading to a degree under an inter-institutional collaborative arrangement with either a local or foreign university. Two major categories of arrangement has been envisaged – the split degree arrangement and the entire degree arrangement. Under the split degree arrangement, a part of the degree is undertaken at the private college and the final part of the program is completed at the foreign university – twinning programs and credit transfer programs and advanced standing program are the modes of completion of the degree. The major arrangements, which allow for the entire degree to be completed at the private college, are the 3+0 foreign degree franchised program, external program, and the distance learning program (Sohail and Saeed, 2001).

With a focus on the development of private colleges and universities, there were nine conventional private universities, one virtual university and branch campuses of four foreign universities, as until May 2001. While the private universities have been vested with the right to award their own degrees at all levels, the foreign universities award identical degree programs as at the host university.

Although a comprehensive breakdown of private tertiary academic staff is not well documented, it is estimated that there has been a twenty-fold increase in private tertiary students between 1985 and 2001 as a result of above measures. This will obviously mean that academic staff numbers must have increased.

Student enrolments in private tertiary education have increased almost tenfold from 15,000 in 1985 to 127,594 in 1995. There were a total of 666 institutions by the mid of 2001. The number of students in private tertiary education institutions at the same time was 232,069 and academic staff numbers were 9,395 (MOE 2001). Table I provides an overview of the numbers of institutions, student enrollment and the academic staff strength in the different states of Malaysia and the Federal Territory of Kuala Lumpur. As can be seen from Table 1, 162 of the institutions are in Kuala Lumpur.

Table 1: PRIVATE EDUCATION INSTITUTIONS (AS UNTIL 31ST MAY 2001)

Types of Institutions	No. of Institutions		No. of Students Enrolled		No. of Academic Staff	
	All States	Kuala Lumpur	All States	Kuala Lumpur	All States	Kuala Lumpur
College Status	652	158	209,589	48,512	8,445	1,808
University Status	10	2	20,839	933	855	45
University Branch Campus	4	2	1,641	110	95	11
TOTAL	666	162	232,069	49,555	9,395	1,864

The Malaysian government has linked economic development with education and envisioned that the country will be a regional educational hub. To this end, the government established the National Accreditation Board (LAN) to regulate activities related to all aspects of education such as infrastructure, curriculum and human resources to increase the efficiency and standardize education, particularly in the private higher institutions.

The scenario for private tertiary education institutions, which is the focus of this study, is such that although such institutions outnumber public tertiary education institutions, student numbers and the range of courses offered by them are relatively few. Almost all of the private tertiary education institutions are profit enterprises. The majority of private institutions is required to generate their own revenues as in any other business enterprise and is thus very innovative in their programs, fee requirement and the ever-changing needs of students. A survey of private education institutions indicate that many of these institutions offer courses in fields such as accountancy, business studies and computer studies which do not require large capital outlay (Lee, 1994). With a competitive trend for student numbers, cost-revenue calculations, limited scope for significant changes to work practices, funding for academic careers is unlikely to obtain high priority.

Private colleges are still largely fully dependent on universities (both local and foreign) to provide them with curriculum and academic support. The next stage of growth is the desire of university status. This is driven both by economic reasons and status reasons. The ability to confer degrees increases status, market competitiveness and reduction of operating costs (through royalties). Universities also are able to command an increase in fee collection (Tan, 2002).

The implication for academicians will be a drive towards gaining competitive advantage over others by upgrading academic qualifications and to establish a culture of teaching, research and services. Evaluation of individual academics will take into account such a service mix in the quest for high academic standards (Ismail and Murtedza 1996).

LAN and Academic Staff

The National Accreditation Board was formed in 15th May 1997 to facilitate the education direction, procedures, standards and issues regarding standards and quality of courses in private tertiary education (LAN, 1998). This new body rates private tertiary providers on criteria such as research, academic staff to student ratio, permitted qualifications of academic staff with respect to level of courses taught, facilities of tertiary providers and available funding.

LAN has provided selected guidelines on staff policies that influence career development for academic staff such as appointment criteria, promotion, professional development and merit based reward system. Broad based provisions in tertiary blueprint indicate that by 2005, 76% of staff at universities should have PhDs or equivalent professional qualifications, 50% with Masters at polytechnics and private institutions. At least 10% of staff at local universities should be drawn internationally and incentives are to be offered to reverse the brain drain (MOE 2001-2010). Upgrading of staff ratio between full-time and part-time to 60:40 has resulted in colleges making a move to replace part-time staff with better-qualified full time lecturers. Such development in the education frontier spearheads academic self-development for academic staff that is serious in maintaining an academic career.

Research Objectives

This study has three aims. The first is to determine if gender factor effects the perception of career influences in the areas of selection, training and promotion; work and career development; and family and career issues. The second objective is to test any significant differences between the ethnic groups, as Malaysia is a multi-racial society with people belonging to three distinct ethnic groups, and variables relating to career perception. Thirdly is to examine the effect of academic positions on the career perception.

Research Methodology

A survey was conducted during the first quarter of 2002, where a survey instrument was specifically designed for this study. The instrument comprised of a total of thirty constructs. These constructs were grouped under three main categories of selection, training and promotion; work and career development; and family and career issues. Each of these groups had ten questions raised where responses were measured on a 5-point Likert scale (details of the measures appended in Appendix I). Demographic variables like gender, designation, ethnicity, educational qualification, marital status, educational establishment and experience in academia was also sought from the potential respondents.

Academic staff employed by various private higher education institutions in Malaysia participated in the study. As the target respondents have a usage of Internet, the survey instrument was administered through the medium of the Internet. E-mail addresses were randomly obtained by visiting the websites of various higher education institutions. The instrument was posted on a link to a website. E-mails were sent with an explanatory statement containing the web-link as well as the instrument as an attachment. Because of the difficulty in reaching the academic staff across Malaysia, snowball sample was also utilized. Participants were asked to provide referrals of other academic staff who would be willing to respond to the survey. Questionnaires were also mailed out to potential respondents. A total of 174 responses were obtained.

Analysis and Discussion

A total of 174 useable questionnaires were used in the final analysis. The demographic profile of the respondents is presented in Table II. The female respondents outnumbered male by almost 1.5:1. The dominance of females in private tertiary education could be explained by the fact that, in Malaysia, women in general tend to prefer a career in teaching.

Table 2: DEMOGRAPHIC PROFILE OF RESPONDENTS

Sex	Frequency	Percent
Male	69	39.7
Female	105	60.3
TOTAL	174	100.0

Race	Frequency	Percent
Chinese	70	40.2
Indian	37	21.3
Malay	52	29.9
Others	15	8.6
TOTAL	174	100.0

Establishment	Frequency	Percent
Private College/Academy/Institute	106	60.9
Private University	63	36.2
TOTAL	169	97.1

Experience	Frequency	Percent
Up to 5 years	85	48.9
5 years to less than 11 years	53	30.5
11 years to less than 17 years	20	11.5
17 years and above	15	8.6
TOTAL	173	99.4

Designation	Frequency	Percent
Tutor	13	7.5
Lecturer	114	65.5
Senior Lecturer and Higher	47	27.0
TOTAL	174	100.0

In terms of ethnic group, the Chinese comprised the largest group (40.2 per cent), followed by the Malays (29.9 per cent) and Indians (21.3 per cent). There were other respondents from other ethnic groups as well which made up 8.6 per cent of the sample.

Almost two-thirds of the respondents were employed in private colleges, academies or institutions, accounting for 60.9 per cent of total respondents. The other respondents were established in private universities (36.2 per cent). In terms of their designated jobs, two-thirds of them were employed as lecturers, while only 27 per cent of the total respondents were holding senior lecturers or higher positions. Tutors accounted for the remaining 7.5 per cent. Respondents who had 5 years or less working experience in the academia industry made up the majority of the respondents (48.9 per cent). Those with 5 years to less than 11 years working experience (30.5 per cent) and then, those with 11 years to less than 17 years experience (11.5 per cent) followed them. Only a small portion of respondents (8.6 per cent) had 17 years or more worth of experience in the academia field.

Objective I – Effect of Gender Factor on the Perception of Career Influence

Before computing the means and t-test results, the component items for each of the three groups namely, selection, training and promotion; work and career development; and family and career issues, were tested for internal consistency using Cronbach's coefficient alpha. The alpha scores for the three groups were 0.7018, 0.6136 and 0.6862, which are found to be acceptable (Nunally, 1978).

Selection, Training and Promotion

Table III provides an overview of the mean scores and standard deviation of male and female respondents on the perception of career influence in the area of selection, training and promotion. T-test was also computed to find if there were any significant differences between the two groups.

Table 3: COMPARING THE MEAN SCORES OF RESPONDENTS IN THE AREA OF SELECTION, TRAINING AND PROMOTION

Variables	Male		Female		T-test
	Mean *	Std Dev	Mean *	Std Dev	
Fair recruitment policies	2.52	0.949	2.83	0.940	.035 **
Fair promotion policies	2.84	1.188	3.13	1.134	.113
Rigorous training for career development	3.16	1.128	3.41	1.228	.169
Gender is a non-issue	1.97	1.029	2.16	1.075	.246
Supportive of further education	2.23	1.139	2.45	1.214	.233
Job security working in academia	2.19	0.912	2.18	1.036	.961
Minimal competitive pressures working in academia	2.54	1.071	2.70	1.020	.352
Unable to concentrate on academia as often have to cover non-academia/admin functions	3.29	1.099	3.36	1.114	.702
Academic prospects rewarding primarily in non-financial terms	2.59	1.068	2.97	1.178	.032 **
Career break can damage future career prospects	2.81	1.102	2.99	1.184	.313

* Scores based on a 5-point scale where 1 equals to rarely, if at all and 5 equals to consistently true

** With a significance value smaller than 0.05 (at 95% significance), there is significant difference between male and female respondents

The table shows that male academic staffs strongly agree that they are not able to concentrate on academia as they are frequently covering non-academic/administrative functions (Mean = 3.29, S.D. = 1.099). This is followed by the perception that rigorous training is required for career development (Mean = 3.16, S.D. = 1.128). The highest level of disagreement among the male respondents relates to the perception that gender is not an issue in career development (Mean = 1.97, S.D. = 1.029).

As for the female group, they showed the highest agreement in their perceptions that rigorous training is required for career development (Mean = 3.41, S.D. = 1.228). They also agree that lack of concentration on academia is often due to the reason that they have to frequently cover other non-academic/administrative functions (Mean = 3.36, S.D. = 1.114). This is followed by the perception that their education institutions are fair in their promotion policies (Mean = 3.13, S.D. = 1.134). The measure that had the highest degree of disagreement relates to the perception that gender was a non-issue in career development (Mean = 2.16, S.D. = 1.075). Generally, the high standard deviation for both the groups indicate that there is greater degree of variation amongst the respondents, particularly since the standard deviation values for both groups were hovering around the value of 1.

To examine the perceptions of the two gender groups under this area of selection, training and promotion, t-tests were carried out. From the tests, only two out of the ten measures were found to be significant. It was found that females believed more strongly than males in their private education institution being fair in their recruitment policies (p-value = 0.035). There was also a significant difference between male and female academic staffs when it came to their perceptions in academic prospects rewarding primarily in non-financial terms (p-value = 0.032). Females held stronger perceptions when it came to these non-financial rewards. There were no significant differences between the two gender groups when the other measures were compared.

Work and Career Development

Table IV presents an overview of the mean scores of male and female respondents on their perceptions of career influence in the area of work and career development.

Table 4: COMPARING THE MEAN SCORES OF RESPONDENTS IN THE AREA OF WORK AND CAREER DEVELOPMENT

Variables	Male		Female		T-test
	Mean *	Std Dev	Mean *	Std Dev	
Working independently is a blessing	2.38	0.915	2.42	0.989	.795
Teaching experience is valued less relative to academic qualifications	2.68	1.078	2.87	1.038	.258
Work environment and facilities conducive to performance	2.62	1.086	2.82	1.036	.233
Promotional prospects which are solely related to research output frustrating	2.99	1.203	2.94	1.225	.816
Immediate Head of Department supportive	2.10	0.860	2.49	1.207	.022 **
Mentoring by senior staff non-existent	2.88	1.344	2.85	1.357	.864
Performance appraisal systems used were fair or objective	3.00	1.079	3.10	1.116	.573
Academic staff reacts positively towards performance appraisal	3.07	0.886	3.09	1.025	.923
Academic staff skeptical about the real effects of appraisal on actual day-to-day practices	2.81	0.950	2.76	1.001	.763
Career advancement a secretive process, as feedback is absent	2.72	1.170	2.50	1.222	.233

* Scores based on a 5-point scale where 1 equals to rarely, if at all and 5 equals to consistently true

** With a significance value smaller than 0.05 (at 95% significance), there is significant difference between male and female respondents

Based on the table, it is shown that male academic staffs strongly agree that academic staffs react positively towards performance appraisals (Mean = 3.07, S.D. = 0.886). This is followed by the perception that the performance appraisal systems used by their educational institutions were fair or objective (Mean = 3.00, S.D. = 1.079). The highest level of disagreement among the male respondents in this area of work and career development relates to the perceived supportiveness provided by their immediate Heads of Department (Mean = 2.10, S.D. = 0.860).

As for the female group, they showed the highest agreement in their perceptions that performance appraisal systems employed by their institutions were fair or objective (Mean = 3.10, S.D. = 1.116). This is closely followed by the agreement that academic staffs do react positively to towards performance appraisals (Mean = 3.09, S.D. = 1.025). The measure that had the highest degree of disagreement relates to the perception that working independently from other academic staff was a blessing to them (Mean = 2.42, S.D. = 0.989). By and large, since the standard deviation values for both groups were hovering around the value of 1, the high standard deviation indicates that there is greater variation in the responses of both gender groups.

On a comparative basis, the t-test results indicate that only one of the ten measures was significantly different between the male and female academic staffs. In this area, both gender groups were held significantly different perceptions about the support they received from their immediate Head of Department (p-value = 0.022). Here, female respondents were found to hold stronger perceptions about the support provided in relation to the male respondents. Apart from this, there were no other significant differences between the two gender groups as the remaining nine experiences were found to be insignificant.

Family and Career Issues

Under the third area of career influence, Table V provides an overview of the mean scores between the gender groups in regards to their perceptions of family and career issues.

Based on the table, it is strongly agreed among the male respondents that family commitments do limit their drive to seek for promotion (Mean = 3.59, S.D. = 1.252). The next degree of agreement is the interference that family commitments have on their flexibility on career change (Mean = 3.36, S.D. = 1.306). The measure with the highest level of discord was related to their beliefs on family support on their career (Mean = 2.00, S.D. = 0.970).

Female respondents showed the highest agreement in the limiting factor family commitments have in their drive to seek for promotion (Mean = 3.56, S.D. = 1.330). They also agree on the interference family commitments have on their flexibility on career change (Mean = 3.03, S.D. = 1.325). They disagreed most highly on the measure of support they received from their family on their career progress (Mean = 1.74, S.D. = 0.931). Likewise, since the standard deviation values for both groups were hovering around the value of 1, the high standard deviation indicated that there was larger variation in the responses of both gender groups.

On a comparative basis, although there were only a few significant differences between the gender groups in both of the prior areas of study, however, more significant differences were observed in the area of family and career issues. Four out of ten of the issues were found to be significantly different. The study found that both male and female respondents significantly differed in their perceptions on the influential power family considerations had on their career choice (p-value = 0.046). There were also significant differences when it came to male and female respondents' belief about the support they received from their family in their careers (p-value = 0.081). In addition, men held stronger beliefs that the secret to a successful academic career was dependent on the family support they received (p-value = 0.031). In fact, this was in line with another significant difference found between the gender groups, where female academic staffs faced greater challenges when it came to sacrificing personal time to reach their current working status compared to males (p-value = 0.001). The other six issues were found to be insignificant.

Table 5: COMPARING THE MEAN SCORES OF RESPONDENTS IN THE AREA OF FAMILY AND CAREER ISSUES

Variables	Male		Female		T-test
	Mean *	Std Dev	Mean *	Std Dev	
Family considerations have a strong influence on my career choice	2.81	1.263	2.41	1.328	.046 ***
Combine family responsibilities and a career in academia well	2.23	0.825	2.13	0.972	.454
Family commitments interfered with my flexibility to change my career	3.36	1.306	3.03	1.325	.104
Family commitments limit my drive to seek for promotion	3.59	1.252	3.56	1.330	.873
My family is supportive of my career	2.00	0.970	1.74	0.931	.081 **
Malaysian families equally support/reject a career in academia regardless of gender	2.91	1.119	2.72	1.205	.298
Have to sacrifice personal time to get to where I am today	2.38	0.947	2.99	1.319	.001 ****
Prepared to compromise career for family	2.84	1.106	2.88	1.193	.807
Married female academic staff will compromise career for sake of their partners	2.81	1.055	2.66	1.111	.393
Secret of a successful academic career depends on family support	2.57	1.169	2.18	1.116	.031 ***

* Scores based on a 5-point scale where 1 equals to rarely, if at all and 5 equals to consistently true

** With a significance value smaller than 0.10 (at 90% significance), there is significant difference between male and female respondents

*** With a significance value smaller than 0.05 (at 95% significance), there is significant difference between male and female respondents

**** With a significance value smaller than 0.01 (at 99% significance), there is significant difference between male and female respondents

Objective II – Effect of Ethnicity on the Perceptions of Career Influence

Malaysia is referred to as a multicultural society comprising of a diverse group of people from unique backgrounds. The country is generally made up of 3 main races. Ethnic Malays make up slightly more than half of the total Malaysian population while among the non-Malay, ethnic Chinese population make up the majority, followed by the Indians. Owing to its multi-racial trait, the study hypothesizes that ethnicity is a factor that affects the perceptions of career influence. To compare the effect of ethnicity, ANOVA was tested across all the constructs respectively.

Selection, Training and Promotion
As for the results relating to this area of career influence, significant differences were observed for two of the ten measures. These were that, firstly, gender was a non-issue in career influence (F = 2.3034, p-value = 0.079), and subsequently, that staff were unable to concentrate on academia as they were frequently engaging in non-academic/administrative functions (F = 3.0515, p-value = 0.030). Other variables did not reveal any significant differences.

Work and Career Development
For responses under the work and career development grouping, significant differences worth noting included only two of the ten measures as well. For one, there was significant difference in respondents' perception on the support they received from their immediate Head of Department (F = 2.1932, p-value = 0.091). In addition, responses significantly differed between the ethnic groups when it came to the existence of mentor roles played by their senior staff (F = 2.2150, p-value = 0.088). The other eight variables were found to be insignificant.

Family and Career Issues
In the group relating to family and career issues, three out of the ten measures were found to be significantly different. Different ethnic groups held different levels of belief about the level of interference their family commitments had on their flexibility to change career (F =2.2453, p-value = 0.085). Another significantly different measure observed was related to respondents' preparation in compromising their career for the sake of their family (F= 3.1519, p-value = 0.026). Lastly, another aspect of significant difference was found in the belief that the secret of a successful academic career was dependent on family support (F = 2.4751, p-value = 0.063). The other constructs were found to be insignificant.

Objective III – Effect of Qualification on the Perceptions of Career Influence

Teaching staffs employed in private colleges possess a diverse level of education attainment. Data obtained from the personal profile of respondents indicate that staff had qualifications ranging from a higher diploma to a bachelor degree to a masters degree and even to PhD holders. Given the diversity in higher qualification, the study aims to see if this would affect the career perceptions of different education holders. Again, to compare the effect of qualification, ANOVA was tested across all the constructs respectively.

Selection, Training and Promotion
Significant differences were observed for two of the ten measures. For one, there were significant differences observed in the rewards, primarily in non-financial terms, of respondents' academic prospects (F = 2.9406, p-value = 0.035). On top of that, significant differences were noticed in the belief that a career break could damage respondents' future career prospects (F = 5.1887, p-value = 0.001). Other variables did not reveal any significant differences.

Work and Career Development
For responses under the work and career development grouping, significant differences observed included only one measure. Responses significantly differed between the different levels of qualification holders when it came to the support respondents believed they received from their immediate Head of Department (F = 2.4616, p-value = 0.064). The other nine variables were found to be insignificant.

Family and Career Issues
Lastly, three out of the ten measures in this area of family and career issues were found to be significantly different. Different qualification holders had differing perceptions and abilities in combining their family responsibilities and their career in academia well (F =2.4099, p-value = 0.069). Another significantly different measure observed was associated to respondents' perception that Malaysian families were equally capable of supporting and rejecting a career in academia regardless of gender (F= 2.3037, p-value = 0.079). Another aspect of significant difference was

found in the perceptions of respondents on the personal time they believe they have to sacrifice to get where they are today ($F = 3.3975$, p-value = 0.019). The other constructs were found to be insignificant.

Limitations

While this research has revealed some interesting results, readers should be cautious on some of its limitations. The main drawback is the limited sample size. Therefore, findings of this study are tentative and needs further verification. Further study with a larger representative of all regions is suggested for a rigorous analysis. Secondly, it is also suggested that comparison between findings of this study be undertaken with other researches in the region to arrive at some meaningful conclusion.

References

[1] Austin, A.E. (2002). Preparing the Next Generation of Faculty: Graduate School as Socialization to the Academic Career. *The Journal of Higher Education*, 73, 94-122.

[2] Barr, R. B., & Tagg, J. (1995). From Teaching to Learning: A New Paradigm for Undergraduate Education. Change, 27(5), 13-25.

[3] Buchbinder. H. (1993). The Market Oriented University and the Changing Role of Knowledge. Higher Education, 26, 331-347.

[4] Connick, G. P. (1997). Issues and Trends to Take Us Into the Twenty-First Century. In T.E. Cyrs (Ed.), Teaching and Learning At A Distance: What it Takes to Effectively Design, Deliver and Evaluate Programs. New Directions for Teaching and Learning, 71. San Francisco: Jossey-Bass.

[5] Ismail, G. & Murtedza M. (Eds) (1996). The New Wave University – A Prelude to Malaysia 2020, 2nd Ed, Petaling Jaya, Malaysia: Pelanduk Publications.

[6] Gilbert, S.W. (1996). Making The Most of a Slow Revolution. Change 28(2), 10-23.

[7] Green, K.C. (1996). The Coming Ubiquity of Information Technology. Change, 28(2), 24-28.

[8] Green, K.C. (1999). When Wishes Comes True: Colleges and the Convergence of Access, Lifelong Learning and Technology. Change, 31 (2), 11-15.

[9] Keller, G. (2001). The New Demographics of Higher Education. Review of Higher Education, 24, 219-235.

[10] LAN (Lembaga Akreditasi Negara) (1998). Guidelines, Procedures and Criteria Standards and Course Quality Analysis for Private Tertiary Education Institutions, 2nd Edition. LAN-GP98-02.

[11] Lee, M.N.N. (1994). Private Higher Education in Malaysia: Social Implications. Educational Journal, 21(2) and 22(1), 157 – 167.

[12] Levine, A. (2000). The Future of Colleges: 9 Inevitable Changes. Chronicle of Higher Education (October 27), B 10-B 11.

[13] Ministry of Education (MOE) (2001-2010). Education Development. Private Education Department.

[14] Ministry of Education (MOE) (2001). Statistics. Retrieved June 18, 2002 from the World Wide Web: http://www.moe.gov.my/statistik/frinstat.htm.

[15] Nunally, J. (1978). Psychometric Theory, 2nd ed., New York, McGraw Hill.

[16] Rice, R.E. (1998). Making A Place for the New American Scholar. New Pathways Inquiry #1. Washington, DC: American Association for Higher Education.

[17] Rice, R.E., Sorcinelli, M.D., & Austin, A.E. (2000). Heeding new voices: Academic careers for a new generation. New Pathways Inquiry #7. Washington, DC: American Association for Higher Education.

[18] Schuster, J.H. (1999). Foreword. In R.J. Menges & Association, Faculty in New Jobs: A Guide to Settling In, Becoming Established and Building Institutional Support. San Francisco: Jossey-Bass.

[19] Sohail. S**,** Jegatheesan. R and Nor Azlin, (2-4 April 2002). Quality Practices in the Higher Education Sector: A Malaysian Case Study. 7th International Conference on ISO 9000 & TQM. Melbourne, Australia: RMIT.

[20] Sohail. S and Saeed, M (2-4 July, 2001). Private higher Education in Malaysia: A Study of Students' Satisfaction Levels and Its Strategic Implications. Academy of Marketing Conference 2001, A Marketing Odyssey. Cardiff Business School, Cardiff University.

[21] Syverson, P. (1996). The New American Graduate Student: Challenge or Opportunity? *CGS Communicator, 29(8)*, 7-8, 11. Retrieved from the World Wide Web: http://www.capnet.org/vcr/cctr610.htm

[22] Tan, A.M. (2002). Malaysian Private Higher Education – Globalisation, Privatisation, Transformation and Marketplaces, London, ASEAN Academic Press.

[23] Winter, R., Taylor, T. and Sarros, J. (2000). Trouble at Mill: Quality of Academic Work life Issues Within a Comprehensive Australian University. Studies in Higher Education, 25 (3), 279 – 294.

Appendix I

CONSTRUCTS USED IN THE AREA OF SELECTION, TRAINING AND PROMOTION

Fair recruitment policies
Fair promotion policies
Rigorous training for career development
Gender is a non-issue
Supportive of further education
Job security working in academia
Minimal competitive pressures working in academia
Unable to concentrate on academia as often have to cover non-academia/admin functions
Academic prospects rewarding primarily in non-financial terms
Career break can damage future career prospects

CONSTRUCTS USED IN THE AREA OF WORK AND CAREER DEVELOPMENT

Working independently is a blessing
Teaching experience is valued less relative to academic qualifications
Work environment and facilities conducive to performance
Promotional prospects which are solely related to research output frustrating
Immediate Head of Department supportive
Mentoring by senior staff non-existent
Performance appraisal systems used were fair or objective
Academic staff reacts positively towards performance appraisal
Academic staff skeptical about the real effects of appraisal on actual day-to-day practices
Career advancement a secretive process, as feedback is absent

CONSTRUCTS USED IN THE AREA OF FAMILY AND CAREER ISSUES

Family considerations have a strong influence on my career choice
Combine family responsibilities and a career in academia well
Family commitments interfered with my flexibility to change my career
Family commitments limit my drive to seek for promotion
My family is supportive of my career
Malaysian families equally support/reject a career in academia regardless of gender
Have to sacrifice personal time to get to where I am today
Prepared to compromise career for family
Married female academic staff will compromise career for sake of their partners
Secret of a successful academic career depends on family support

An International Knowledge Management Strategy: Evaluation, Transfer, and Measurement

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Abstract

Executives are becoming increasingly concerned about the role of knowledge and knowledge-based resources in creating sustainable competitive advantage for the organisation. Given the increasing globalisation of business, much attention has focused on knowledge transfer between organizations, mostly in an international context. While people accept that knowledge management influences an organisation's performance, most are still confused about how. Most measures of organisation success – profit, market share – are generally *indirect* results of good knowledge management and are affected by many other factors. Generally, organisation success is linked to tangible assets, eg. factories, rather than intangible resources such as knowledge. Using data gathered from 21 executive depth interviews within a case firm with 17 separate business units spread over 6 Asian countries, this paper examines the need for deeper analysis to see the linkages between knowledge and organisation success. We aim to develop a strategic framework for knowledge management that links knowledge resources with their transfer internationally, measured against performance targets.

We don't know what we don't know, the Vice President Human Resources said.
What do you think you need to know? I asked.
We are in the process of trying to change from 100 years as a manufacturing company that has focused on operational efficiencies to becoming a customer total solutions company. We need to understand our customers, we need to know about their business, their markets, and how we can add value for them with our products, he replied.
What are the implications if you don't do this? I asked.
We won't survive, he replied.

Knowledge is now the organisation's key strategic resource (Ghoshal, Bartlett, and Moran, 2000; Grant, 1996; Anand, Glick, and Manz, 2002). While people accept that knowledge influences an organisation's performance, many are still confused about how. Most measures of organisation success – profit, market share – are generally indirect results of good knowledge management and are affected by many other factors. Generally, organisation success is linked to tangible assets, eg. factories, rather than intangible resources such as knowledge. Managers require a framework for evaluating the contribution of knowledge to the organisation's performance in order to make strategic decisions about knowledge resource development, acquisition and deployment, particularly in an international business context.

There has been an increasing research impetus in knowledge management within international business (see Teece, 1976; Mansfield and Romeo, 1980; Zander, 1991; Simonin, 1999; Bresman, Birkinshaw and Nobel, 1999; Liesch and Knight, 2001; also the SMJ 1996 Special Issue on 'Knowledge Management and the Organisation'). Nonaka and Takeuchi (1995) created significant interest with their argument that Japanese companies have 'become successful because of their skills and expertise at organizational knowledge creation' and that their international success has largely been due to their knowledge management.

Despite this recognition of its importance, many managers still struggle to understand the role of knowledge in creating sustainable competitive advantage for their organisations. The executive quoted above is fortunate because he has identified customer knowledge as the key to his organisation's success but, as we shall see, that is just the beginning of his journey into knowledge management. Managers need to know which knowledge resources are most valuable so that they can make resource decisions. The knowledge-based view is a new field of strategic management that has begun to examine how to manage knowledge resources. This field has evolved from the resource-based view (RBV) (see Wernerfelt, 1984; Chatterjee and Wernerfelt, 1991; Barney, 1986, 1991, 2001; and Conner, 1991). According to Barney (2001), resource based logic can help managers 'more completely understand the kinds of resources that can generate sustained strategic advantages'.

From a knowledge management perspective, the same logic applies. Managers make choices about knowledge resources leading to organisation heterogeneity and sustainable advantage. Valuable knowledge resources are then combined to create superior capabilities leading to above average organisation performance.

This raises several questions. How can an organisation identify its most valuable knowledge resources? How are these knowledge resources transferred within an international business context? Do these knowledge resources contribute to the organisation's performance? I address the above issues in this article and explain how managers can make decisions about knowledge resources and transfer practices that allow their organisation to benefit from their knowledge.

Method

I aimed to achieve an in-depth comprehension of the problem, and given the contribution of knowledge to organisation performance is a somewhat abstract concept, it was considered appropriate to choose a case study approach that "seeks to describe, decode, translate and otherwise come to terms with the meaning not the frequency" of the phenomenon under study (Van Maanen, 1979, p 520). This methodology is supported by the qualitative nature of leading papers in international business (Johansson and Wiedersheim-Paul, 1975; Johansson and Vahlne, 1977, 1990; Stopford and Wells, 1972; Aharoni, 1966; Andersen, 1993; Lam and White, 1999). The case study research method is appropriate when the investigation must consider both the phenomenon (knowledge transfer in international business) and the context (the contribution to performance) in which the phenomenon is occurring (Yin, 1993).

I follow Eisenhardt's (1989a, 1989b) roadmap for building theories from case study research. Our approach, as defined by Eisenhardt's criteria, may be described as follows: case description is twenty subsidiaries within one multinational across six Asian countries; research problem is: how can knowledge resources and their transfer in international business contribute to the organisation's performance; data sources are six face-to-face (Australia) and fifteen telephone interviews (Asia) with senior executives lasting up to three hours; there was one investigator; and the output is a process model suggesting how to manage knowledge resources in an international context.

Knowledge management definitions

Knowledge

I begin by explaining key terms that are relevant to our arguments. First, I follow the definition of knowledge provided by Schulz (2001) beginning with the 1992 American Heritage Dictionary: 'knowledge is what has been learned from experience or study. Knowledge is a broad concept that usually includes insights, interpretations, and information…Organisational knowledge refers to knowledge and information that all, part, or parts of the organization share, and that is frequently stored in standard operating procedures, routines, or rules'.

Evaluating knowledge resources

Next, I examine the problem of valuing knowledge resources within the context of the resource-based view. Priem and Butler (2001) criticise the RBV's lack of managerial manipulation due to ambiguity about its contribution to competitive advantage. Barney (2001) accepts the problem is that an 'organisation's strategic advantage is based on causally ambiguous resources, and managers in that organisation cannot know, with certainty, which of their resources actually generate their strategic advantage'. These leading researchers agree that it is difficult to identify which resources are more important, even more difficult with intangible resources such as knowledge. The economic rationalist decision making model (see Oliver, 1997; Conner, 1991) explain that managers should evaluate knowledge resources based on their perceived contribution to the organisation's performance measures, which are usually a combination of financial and non-financial indicators (see Kaplan and Norton, 1996).

Knowledge transfer

Thirdly, I adopt the broad definition of knowledge combination, knowledge creation, or learning (see e.g. Bartlett & Ghoshal, 1989; Nonaka and Takeuchi, 1995). I also adopt the view that knowledge transfer implies successful transmission of resources from one organization to another, in that the organization accumulates or assimilates new knowledge (Zander, 1991). International transfer of knowledge can generally occur in three modes. Firstly, transfer can occur between two units of the same organization (Bresman, Birkinshaw, and Nobel, 1999). Secondly, it occurs in various forms of partnership, such as alliances, joint ventures, and licensing arrangements (Simonin, 1999). Thirdly, it can occur through a pure market transaction between two independent organizations (Massingham and Gregory, 2002).

Knowledge transfer depends on how easily that knowledge can be transported, interpreted, and absorbed (Hamel, et al; 1989). Researchers recognize that there are particular management challenges in the transfer and the process of organizational learning between subsidiaries or partners (Simonin, 1999). Knowledge transfer in international business is also complicated by geography and cultural distance.

Research on intra-firm knowledge transfer, e.g. between subsidiaries, has highlighted the tacitness of knowledge as a barrier to transfer (see Zander, 1991; Szulanski, 1996) and the influence of network centrality and absorptive capacity on innovation and firm performance (Tsai, 2001). Research on knowledge acquisition has examined the 'articulateness' of knowledge and the influence of organizational settings: size, technology, recency of acquisition (see Bresman, Birkinshaw, and Nobel, 1999). Simonin (1999) has investigated developed a conceptual model of knowledge ambiguity that identifies the following seven potential barriers to knowledge transfer: tacitness, specificity, complexity, experience, partner protectiveness, cultural distance, and organizational distance. Finally, research on knowledge purchase has looked at the tacitness and volume of knowledge (Anand, Glick, and Manz, 2002) and psychic distance and speed of competition (Massingham and Gregory, 2002).

Tacitness and absorptive capacity

This current research found that tacitness and absorptive capacity were two important factors in international knowledge transfer. The most obvious knowledge characteristic influencing its transferability is the distinction between codified or explicit and tacit knowledge. Most researchers agree that codified 'know-what' knowledge is more easily articulated, captured and able to be transferred compared with the tacit 'know-how' that explains the 'accumulated practical skill or expertise that allows one to do something smoothly and efficiently' (Kogut and Zander, 1992). Tacit knowledge cannot be easily communicated and shared, is highly personal, deep rooted in action and in an individual's involvement within a specific context (Nonaka, 1994). It is commonly referred to as 'the knowledge in people's heads'. Researchers agree that the most important knowledge is tacit (Nonaka & Takeuchi, 1995) but that the transfer of tacit knowledge between organizational members is exceptionally difficult (Grant, 1996).

Similarly, the organizational setting influences the transfer of knowledge. Firms must have pre-requisite knowledge and skills relevant to the knowledge required, that is, 'absorptive capacity' (see Cohen and Levinthal, 1990) or the ability to learn from the transfer of knowledge. This capacity is gained through having prior experience with the knowledge domain. For example, if the firm seeks knowledge about the market characteristics of an overseas location, it must have some knowledge of the steps involved in foreign market analysis, perhaps some basic understanding of the country(ies) involved), and, most importantly, know how to use the information to make decisions about market entry and so on. As Grant (1996) points out, there is a paradox in this. If the recipient of knowledge knows too much compared with the dispatcher of knowledge, there is really no need for a transfer of knowledge, but if it knows too little, it will not be able to capture and use the knowledge transferred.

Strategic themes

Finally, we use Kaplan and Norton's (2001) framework of strategy maps as a way to measure the contribution of knowledge to the organization's performance. Strategy maps provide executives with a framework for describing and managing strategy in a knowledge economy. Kaplan and Norton introduce the concept of strategic themes as the drivers of knowledge-based strategy. Strategic themes are 'the recipe for combining the intangible ingredients of skills, technologies and organizational climate with internal processes, such as sourcing and distribution, to create tangible outcomes-customer loyalty, revenue growth, profitability'. The themes reflect what the management team believes must be done to succeed and allow organizations to segment their knowledge-based strategy into several categories, e.g. build the franchise, increase customer value, achieve operational excellence, and be a good corporate citizen. The relative importance of these themes will vary for each organization.

The relationship between knowledge resources and strategy

The first step in understanding the contribution of knowledge is to tie it to the organization's strategy. Our case firm is pursuing a differentiation strategy by trying to create customer value through offering superior technical support, in the design, construct and after sales stages.

The firm wants to eliminate its customers' management headache of dealing with multiple contractors through becoming a 'one-stop-shop' for its customers. Its strategic themes are: customer service excellence, corporate governance, information & knowledge management, market leadership, manufacturing excellence, people & community, and zero harm. Its key knowledge-based strategy, in Kaplan and Norton's terms, is to Create Customer Value.

Evaluating knowledge resources

Organizations can evaluate knowledge resources in two ways. First, they should identify what knowledge is necessary to achieve the more important strategic themes. Second, they can use RBV logic to determine whether their knowledge resources meet the criteria for being a sustainable source of competitive advantage.

Linking knowledge resources to strategic themes

Our case firm's most important strategic theme is to Create Customer Value. In order to achieve this, it must pursue a customer intimacy strategy. This requires alignment between the firm's internal activities and the firm's value proposition that may be done through Customer Management Processes. This alignment between the firm's knowledge-based strategy – Creating Customer Value – and its activities identifies what it needs to know to achieve the strategy. In this case, it needs knowledge about solution development, customer service requirements, relationship management processes, and advisory service strategies. The firm needs deep knowledge about its customers, their markets, and how to use this knowledge to create value for them.

The firm's next most important strategic theme is to Build the Franchise. While its growth objectives will result from creating customer value, this will be incremental growth. In order to achieve more quantum growth, it must identify and capture new market opportunities through large-scale investment decisions. In terms of alignment between the knowledge-based strategy and activities, it needs knowledge about macro-environment, microenvironment and government indicators to enable market opportunities to be assessed and investment decisions made with confidence. In also needs product development, speed to market and – in some cases – joint venture/partnership knowledge in order to capture market opportunities.

Do the knowledge resources meet resource-based view criterion?

Once the organization has determined what knowledge resources it requires, it should then assess whether these resources represent a source of sustainable competitive advantage. This can be done through a fairly simple checklist of RBV attributes e.g. is the knowledge resource unique to the firm? Is it easily substituted by other knowledge? Is it easily imitated by competitors? Is it easily leaked i.e. can the knowledge just 'walk out the door'? Is it durable? If the answer to these questions is yes, the organization is likely to have a knowledge resource that creates a source of sustainable competitive advantage. Our case firm believes it has the potential to have sustainable advantage in both its key strategic themes due to the scope of its Asian operations, which it believes is unmatched by competitors.

Transferring knowledge resources

While there are numerous processes related to the transfer of knowledge in international business, they can be categorized based on the characteristics of the knowledge (explicit vs. tacit) and the organizational setting (absorptive capacity). Examples of such problems and the type of knowledge resources involved are shown in Exhibit 1. Explicit knowledge can be obtained from external sources, such as strategic alliances or consultants, through the use of impersonal communication such as electronic data exchange, reports, as well as faxes and emails. Tacit knowledge, however, requires personal communication that allows for direct and intense communication between individuals. Absorptive capacity determines the ability of subsidiary staff to understand and apply the knowledge resource. Low absorptive capacity means staff have little existing knowledge, while high absorptive capacity indicates that have good existing knowledge that they can use to recombine with new knowledge to apply to problems.

When discussing knowledge transfer with our case firm executives, it became clear that tacitness and absorptive capacity were two major problems. The major cause of frustration amongst executives is the volume of knowledge lost by the firm in recent years. This has occurred because the firm has downsized and has lost many experienced staff whose knowledge was not formally captured before they left. This has left a knowledge vacuum that has not been filled. It is also a result of the mobility of senior staff. When they begin a new role, much of the knowledge gained from the previous role is lost, particularly the explicit knowledge. As one executive said "I wouldn't know where to find all the reports I had from my last job, probably lost in a filing cabinet somewhere'. This problem is compounded by the need for relationships to source tacit knowledge within an international context. Managers feel that the only way they can locate what they need to know is through relationships or knowing whom to contact and, if their personal networks have been lost - through staff leaving the firm or not maintaining contact – then their tacit knowledge is often lost also.

Managing explicit knowledge with low absorptive capacity

Managing explicit knowledge with low absorptive capacity is necessary to solve moderately structured problems that require small quantities of factual information, approved policy or procedures, or basic knowledge that addresses key strategic themes. When explicit knowledge is sought by subsidiaries with low absorptive capacity, basic reports, emails, telephone calls and similar means of communication can be used to transfer the knowledge. The primary means of obtaining such knowledge for these subsidiaries is through codified methods, mainly reports.

Managing explicit knowledge with high absorptive capacity

Managing explicit knowledge with high absorptive capacity is necessary to solve relatively structured problems where there is some confidence that cause-effect relationships are understood. Explicit knowledge can be a critical source of competitive advantage for subsidiaries with the capacity to appreciate the significance of the information. The cause-effect relationship emerges from an awareness of the firm's strategic themes. For example, our case firm requires a deep knowledge of its markets and customers: markets to identify investment opportunities to pursue growth strategies and customers to understand how to create value in pursuit of the total solutions strategy.

Organizations can manage explicit knowledge for high absorptive capacity subsidiaries by designing IT systems (see Goh, 2002) that capture knowledge relevant to their strategic themes. Examples include economic and political indicators, customer performance ratings and so on. High absorptive capacity individuals will have the skills to interpret market and customer data to make strategic decisions.

Organizations can provide managers with the ability to interpret explicit market and customer knowledge by sending them on study tours to observe what is happening in mature markets in North America and Europe.

Managing tacit knowledge with low absorptive capacity

Managing tacit knowledge with low absorptive capacity is necessary to involve staff in making critical business decisions requiring consultation with internal and external subject matter experts. Examples include business planning, new product and new market decisions, introduction of major new systems (e.g. our case firm's new IT system), and other large-scale decisions that are relatively unfamiliar and irregular. When tacit knowledge is sought by subsidiaries with low absorptive capacity, new structures and processes must be created in order to create multiple informal and formal communication channels at appropriate levels of the organization. The primary means of obtaining such knowledge for these subsidiaries is through the process of socialization (see Nonaka & Takeuchi, 1995).

This Vice-President Finance explains the depth of knowledge necessary to make large-scale investment decisions:

Our business needs to grow. In order to make the correct investment decisions, we need to have detailed knowledge of existing and target markets. We need also to understand our relative competitive position in each market, particularly potential new markets. We need to understand our technical and human capabilities. We need to be aware of the strategic context when examining market opportunities e.g. what is the Board's view on investing in the Philippines? If they are not interested, we shouldn't even be looking at the Philippines. There are very few staff in our organization that are across all of these issues.

The knowledge necessary to contribute to these major decisions is not easily transferable. The President of our case firm's Thailand business suggested this knowledge only comes through 'diversity of experience' gained by working in multiple countries in various roles over many years.

Managing tacit knowledge with high absorptive capacity

Managing tacit knowledge with high absorptive capacity is necessary to solve ill structured problems with high ambiguity about cause and effect relationships. Examples include customer relationship management, transferring best practice processes, introducing improvement cycle-processes. When tacit knowledge is sought by subsidiaries with high absorptive capacity, organizations often use external experts e.g. consultants, to facilitate the knowledge sharing amongst staff. The primary means of obtaining such knowledge for these subsidiaries is through the process of direct involvement of key experts in highly interactive exchanges. Organizations should ensure that staff with high absorptive capacity, are brought together, on a regular basis, to share knowledge and solve problems related to its strategic themes.

Managers, then, attempting to manage international knowledge transfer must first determine what type of knowledge is being transferred and the absorptive capacity of those staff involved in the transfer. I have suggested various processes that can assist knowledge transfer under four different scenarios involving the type of knowledge and the absorptive capacity of staff.

Measuring the contribution of knowledge to performance

While it is important to identify the organization's most important knowledge resources, and to effectively transfer this knowledge across international boundaries, it is also necessary to measure its contribution to the organization's performance. In line with the strategic orientation of the resource-based view, managers must be able to measure the outcomes of their knowledge resource decisions. The various steps that organizations can use to measure the contribution of knowledge are outlined in table 1.

Measuring the value created from knowledge resources

Organizations can measure the value created by their knowledge resources by examining their contribution to their business performance targets. Our case firm uses indicators under the headings of business excellence, customer satisfaction, profitability, safety, and human performance. Table 2 highlights the contribution of our case firm's knowledge of business development processes and customer relationship management against its performance indicators.

Table 1:PREPARING AN ORGANIZATIONAL FOR INTERNATIONAL KNOWLEDGE MANAGEMENT

Method	Actions
Identify strategic themes	• Develop corporate level strategy i.e. scope of business • Develop business level strategy i.e. differentiation, cost leadership, focus • Prioritize the four strategic themes - build the business, customer intimacy,

	operational excellence, and corporate citizenship – based on business level strategy
Identify important activities	• Summarize the organization’s business processes in functional and/or value chain terms • Rank these processes in terms of their perceived contribution to the organization’s performance • Map the causal inter-relationships between the processes
Understand the nature of necessary knowledge	• Identify what the organization needs to know to perform well in its more important activities e.g. a knowledge template • Identify what part of this knowledge is explicit and tacit
Develop absorptive capacity	• Map absorptive capacity against each knowledge template • Staff training and study tours • Use external subject matter experts • IT systems designed to address strategic themes • Central library of published material: reports, memos, files etc – linked to the IT system • Formal processes in key activities (e.g. Hitchhikers Guide to Being a President)
Create value	• Identify how the knowledge resources underlying each strategic theme creates value for the firm e.g. how understanding of markets improves customer relationships
Measure performance	• Link each strategic theme to the organization’s performance indicators • Examine how the organization’s knowledge resources in each strategic theme contributes to each indicator

Specifically, table 2 demonstrates that there is a causal relationship between knowledge resources and organization performance.

Towards a knowledge management strategy for international business

Researchers have focused mainly on identifying barriers to international knowledge transfer within the intra-firm and acquisition contexts, supplemented by some recent work on purchasing knowledge resources. Researchers have yet to develop a strategic framework for managing knowledge within an international business context, although Goh (2002) has developed a sound framework for effective knowledge transfer.

In this article I have drawn upon theoretical and empirical research in a range of areas including the resource and knowledge based theories of the firm, learning theories and performance measurement. I have identified many of the practical challenges of managing knowledge in international business and ways to resolve them. (see Figure 1.) In addition, it indicates several steps that organizations should take to prepare an international knowledge management strategy (see Table 1). Finally, the article has identified ways that knowledge resources can contribute to international business performance (see Table 2).

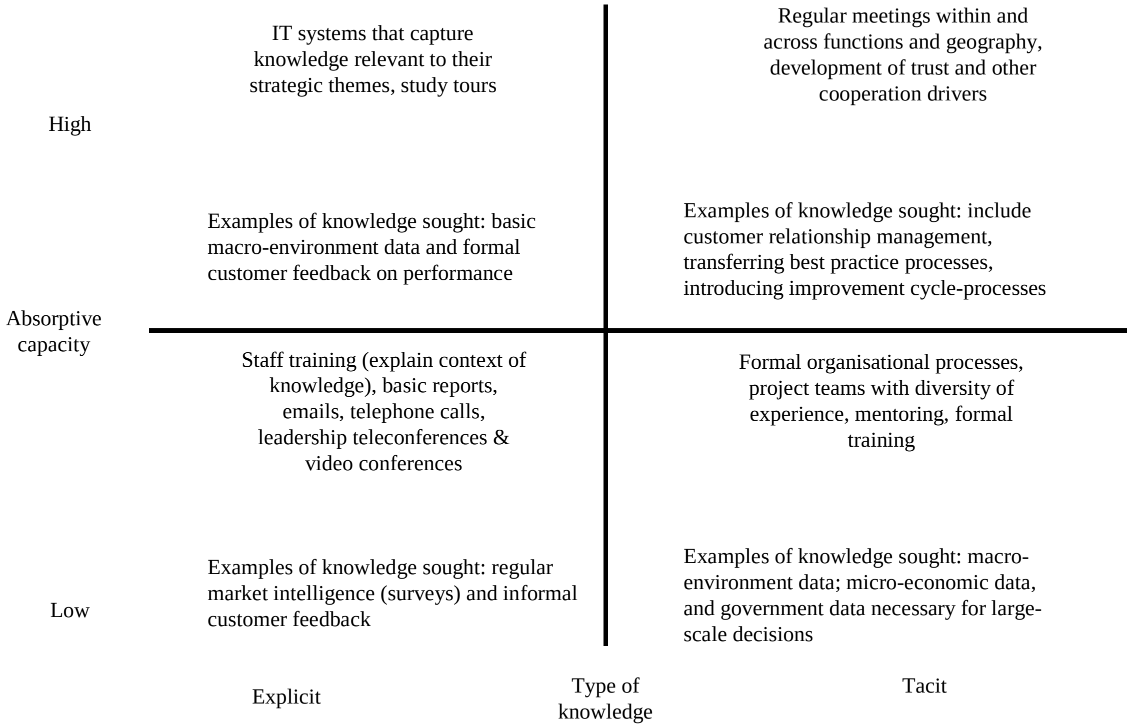

Figure 1.

Appropriate methods for managing international knowledge transfer

Table 2: THE CONTRIBUTION OF KNOWLEDGE RESOURCES: SOME EXAMPLES

Activity	Performance indicator	Contribution
Business development	Business excellence	• Improved working capital turns and debtor days will result from more efficient business models
	Customer satisfaction	• Increased sales growth will result from identifying the best market opportunities • Increased gross profit will result from identifying profitable market segments and customers
	Profitability	• Improved EBIT margin will result from making the correct investment decisions
Strategic theme: Build the franchise	Safety	• A critical risk factor that must be addressed before any proposal can proceed • Understanding of staff and environmental risks enables them to be managed or the project to be discarded
	Human performance	• Staff development will occur by involving people in the business development process • Staff satisfaction will occur through the confidence resulting from the business growing by making the correct investment decisions
Customer	Business	• Reduce inventory turns through understanding of lead

relationship management Strategic theme: Create Customer Value	excellence	times • Improved inventory turns through understanding customers purchasing and sales patterns
	Customer satisfaction	• Improved delivery performance through understanding of lead times • Improved sales growth through being a total solutions provider • Increased gross profit through being able to charge a premium due to superior service • Increase gross profit through having a more efficient, integrated supply chain • Increased gross profit through customer profitability analysis
	Profitability	• Lower conversion costs to sales if production staff increase productivity through understanding the importance of customer work batches • Lower conversion costs to sales through reducing waste and unnecessary product features from understanding customer requirements • Lower overheads to sales through flexible staffing from understanding customer demand
	Safety	• Improved safety through understanding customer delivery interface
	Human performance	• Improved staff development and satisfaction through learning how to deal with customers and having satisfied customers

Specifically, several methods for enabling organizations to manage their international knowledge resources are listed in the table: including identifying strategic themes, identifying important activities, understanding the nature of important knowledge, developing absorptive capacity, creating value that addresses the strategic themes, and measuring the performance outcomes. In addition, each method is put into practice through the use of several supportive actions. For example, the identification of strategic themes is achieved through action steps such as determining and agreeing on corporate and business level strategy, identifying what needs to be done to achieve this strategy, categorizing these actions within the strategy theme definitions, i.e. build the business, customer intimacy, operational excellence, and corporate citizenship. Such efforts should ensure the organization understands what it needs to do and know to implement its strategy. Together these methods and supporting actions can help establish an international knowledge management approach that will enable mangers to make knowledge resource decisions with confidence.

Organizations seeking a sustainable competitive advantage in today's dynamic international business environment must ensure they understand the value of their most important resource – knowledge. They need to manage knowledge transfer, by understanding the characteristics of their knowledge resources and the absorptive capacity of their subsidiaries. Finally, managers should measure the contribution of their knowledge resources to the organization's performance within the context of progress towards their strategic themes. Knowledge is now the organization's most important resource. Understanding why knowledge is important will become the international manager's most important skill.

References

[1] Aharoni, Y. 1966. *The Foreign Investment Decision Process*, Harvard University Press.

[2] Anand, V; Glick, W.H. and C.C. Manz. 2002. Thriving on the knowledge of outsiders: Tapping organisational social capital, *Academy of Management Executive*, 16(1): 87-101.

[3] Andersen, Otto. 1993. On the Internationalization Process of Firms: A critical analysis. *Journal of International Business Studies*, 24 (2): 209-224.

[4] Barney, J. 1986. Strategic factor markets: expectations, luck and business strategy, *Management Science*. 32: 1231-1241.

[5] Barney, J. 1991. Firm resources and sustained competitive advantage. *Journal of Management*. 17: 99-120.

[6] Barney, J. 2001, Is the resource-based "view" a useful perspective for strategic management research? Yes; *The Academy of Management Review*, 26 (1): 41-57

[7] Bartlett, C. A. and Sumantra Ghoshal. 1989. *Managing Across Borders*. MA.; Harvard Business School Press.

[8] Bresman, Henrik; Julian Birkinshaw; and Robert Nobel. 1999. Knowledge transfer in international acquisitions. *Journal of International Business Studies*. 30 (3): 439-462.

[9] Chatterjee, S. and Wernerfelt, B. (1991) "The Link between Resources and Type of Diversification: Theory and Evidence", *Strategic Management Journal*, 12:33-48.

[10] Cohen, W. M. and D.A. Levinthal. 1990. Absorptive capacity: A new perspective on learning and innovation, *Administrative Science Quarterly*, 35(1), pp 128-152.

[11] Conner, K. 1991. An historical comparison of resource-based theory and five schools of thought within industrial organizational economics: do we have a new theory of the firm? *Journal of Management*. 17: 121-154.

[12] Eisenhardt, K.M. 1989a. Building Theories from Case Study Research. *Academy of Management Review*, 14 (4): 532-550.

[13] Eisenhardt, K.M. 1989b. Making fast strategic decisions in high-velocity environments. *Academy of Management Journal*. 32: (3) 543-576.

[14] Ghoshal, S.; C.A. Bartlett & P. Moran. 2000. Value creation: the new millennium management manifesto. In S. Chowdhury, editor. *Management 21C*. Prentice Hall.

[15] Goh, S.C. 2002. Managing effective knowledge transfer, *Journal of Knowledge Management*, 6 (1):23-30.

[16] Grant, R.M. 1996. Toward a knowledge-based theory of the firm. *Strategic Management Journal*, Winter Special Issue, 17, pp 109-122.

[17] Hamel, G. Y. Doz and C.K. Prahalad. 1989. 'Collaborate with your competitors, and win', *Harvard Business Review*, 67(2), pp 83-103.

[18] Johanson, Jan and Finn Wiedersheim-Paul. 1975. The internationalization of the firm - Four Swedish Cases. *Journal of Management Studies*, 12 (3): 305-22.

[19] Johanson, Jan and Vahlne, Jan-Erik. 1977. The internationalization process of the firm - a model of knowledge development and increasing foreign market commitments. *Journal of International Business Studies*, 8 (1): 23-32.

[20] Johanson, Jan and Vahlne, Jan-Erik. 1990. The mechanism of internationalization. *International Marketing Review*, 7 (4): 11-24.

[21] Kaplan, R.S. and D. P. Norton, 1996. *The Balanced Scorecard*. Harvard Business School Press. Boston, Massachusetts.

[22] Kaplan, R.S. and D. P. Norton, 2001. *The Strategy-Focused Organisation*. Harvard Business School Press. Boston, Massachusetts.

[23] Kogut, B. and U. Zander. 1992. Knowledge of the firm, combinative capabilities, and the replication of technology. *Organization Science,* 3 (3): 383-397.

[24] Kogut, B. and U. Zander. 1995. Knowledge of the firm and the evolutionary theory of the multinational corporation. *Journal of International Business Studies*. 26(4): pp 625-644.

[25] Lam, Long W. and Louis P. White. An adaptive choice model of the internationalization process. *International Journal of Organizational Analysis*; 7 (2): 105-134.

[26] Mansfield, E. and A. Romeo. 1980. Technology transfer to overseas subsidiaries by U.S. based firms, *Quarterly Journal of Economics*, 95: 737-750.

[27] Massingham, P.R. and G. Gregory. 2002. Purchasing knowledge resources in the internationalisation of the firm, paper presented at the *Strategic Management Society Conference*, Paris, France.

[28] Nonaka, I. 1994. A dynamic theory of organizational knowledge creation. *Organization Science*, 5: 14-37.

[29] Nonaka, Ikujiro and Hirotake Takeuchi. 1995. *The knowledge-creating company*. New York: Oxford University Press.

[30] Oliver, C. 1997. Sustainable competitive advantage: Combining institutional and resource-based views; *Strategic Management Journal*, 18 (9): 697-719

[31] Priem, R.L. and J.E. Butler, 2001. Is the resource-based "view" a useful perspective for strategic management research? *Academy of Management Review,* 26 (1): 22-41.

[32] Schulz, Martin. 2001. The uncertain relevance of newness: organizational learning and knowledge flows. *Academy of Management Journal*, 44 (4): 661-681.

[33] Simonin, Bernard L. 1999. Ambiguity and the process of knowledge transfer in strategic alliances. *Strategic Management Journal*. 20: 595-623.

[34] Stopford, N. and L.T. Wells. 1972. *Managing the Multinational Enterprise: Organization of the Firm and Ownership of the Subsidiaries*, Longman.

[35] Szulanski, G. 1997. Exploring internal stickiness: Impediments to the transfer of best practice within the firm. *Strategic Management Journal*, 17 (Summer Special Issue): 27-43.

[36] Teece, D.J. 1976. *The multinational corporation and the resource cost of international technology transfer*, Cambridge, Massachusetts: Ballinger.

[37] Tsai, W. 2001. Knowledge transfer in intra-organizational networks: effects of network position and absorptive capacity on business unit innovation and performance, *Academy of Management Journal*, 44 (5): 996-1004.

[38] Van Maanen, J. 1979. Reclaiming Qualitative Methods for Organizational Research: A Preface. *Administrative Science Quarterly*, 24: 520-526.

[39] Wernerfelt, B. (1984) "A Resource-Based View of the Firm", *Strategic Management Journal*, 5:171-181.

[40] Yin, Robert K. 1993. *Applications of Case Study Research*. Newbury Park, California, Sage Publications.

[41] Zander, U. 1991. *Exploiting a technological edge: Voluntary and involuntary dissemination of technology*. Stockholm: Institute of International Business.

[42] Zander, U. and B. Kogut. 1995. Knowledge and the speed of the transfer and imitation of organizational capabilities: An Empirical Test, *Organization Science*, 6(1): pp 76-92.

Business Communication Across Cultures

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Abstract

More and more organizations are finding themselves involved in communication across cultures because they are doing business in foreign countries or sourcing from other country, seeking finance from another country or having an increasingly multicultural workforce. Yet few understand or recognize the structure of cultural diversity.

One of the major problems is perceiving other cultures from the sender's own cultural mindset. Classifying cultures on the dimensions like context of communication, concept of time etc. help in vocalizing and labeling cultural differences and similarities. Values are an integral part of culture and yet values of one culture cannot be used indiscriminately in another culture as they may become meaningless or positive values may turn into negative values. Communication is not about words and translations but about meaning. Different culture may give different meaning to identical words as language and culture are inter twined. Another dimension is nonverbal language, which may again differ across cultures. Culture also affects how messages are organized.

This paper seeks to provide following understanding:

1. **An understanding of culture and how culture impacts communication.**
2. **The application of intercultural communication skills to specific business communication tasks.**

The globalization of today's marketplace makes many new demands on a marketer. A critical issue for management is knowing not only what a company should do but what it **can** do – one of the major fundamental dimensions is **culture** which acts as a significant visible force affecting market demand and managerial behavior.

Culture and its effects

Culture has 2 main effects on global marketers

First is effect on demand – varying needs different economic constraints, contrasting choice criteria, different social norms. The second is Soft skills – what people skills are needed to deal with employees, customers etc. Herein comes the issue of cross-cultural communication.

Cultural differences are market entry barriers that can be overcome with sensitivity and hard work. However, time and again, there have been examples of how companies have failed because of their lack of understanding of the culture of the other country and the communication aspects associated with it. Cultural misconceptions can easily become costly for global marketers. Some of the possible liabilities for cultural faux pas include embarrassment, lost customers, legal consequences, missed opportunities, damage control and tarnished reputation. Our own culture could be counter productive for understanding another culture. What then is culture and how does it affect communication?

What Is Culture

Culture is the underlying value framework that guides an individual's behavior. The framework encompasses objective reality as manifested in societal institutions and subjective reality as socialized predispositions and beliefs.
Culture is the sum total of learned beliefs, values and customs that serve to direct the behavior of members of society. To acquire a common culture, the members of a society communicate with each other through a common language and symbols.

Cross-Cultural Analysis

Cross-cultural analysis helps to determine how people in two or more societies are similar and how are they different. Such an understanding of the similarities and differences that exist between nations is critical to the global marketer. The greater the similarity between nations, the more feasible it is to use relatively similar strategies in each nation. To understand cross-cultural differences, anthropologists have traditionally observed the behavior of members of a society and inferred from such behavior the dominant or underlying cultural values of the society. In recent years, however there have been a gradual shift to measuring cultural values directly by means of survey (questionnaire) research, using value instruments such as Rokeach Value Survey (RVS) and List of Value (LOV) to ask people how they feel about basic personal and social concepts. The Rokeach Value Survey, a self-administered value inventory consists of 18 terminal value items which are designed to measure the relative importance of end-states of existence (i.e. personal goals) and 18 instrumental value items, which measure basic approaches or means an individual might take to reach the end-state values. It is the ranking of the values which differentiate one culture from another.

There are a number of frameworks that have been propounded to differentiate cultures.

1. **Hofstede[1] –** differentiated the cultures on 5 dimensions.

   a) **Individualism v/s Collectivism –** In a collectivist society, the identity and worth of an individual is rooted in loyalty to the group and less in individual achievement. eg. Japan is a collectivist society while USA is an individualistic society.

   b) **High v/s Low power distance –** High power distance societies tend to be less egalitarian and tolerate high social inequalities, while democratic societies exhibit low power distance e.g. India, Arab countries, Mexico are high power distance societies while US, UK, Germany are low power distance societies.

   c) **Masculine v/s Feminine –** captures the degree to which a culture is dominated by male values of assertiveness, success, competitive drive, achievement rather than female values of solidarity, quality of life, preserving the environment eg. Japan is masculine while Indonesia is feminine.

   d) **Uncertainty avoidance –** is the level of risk tolerance or risk aversion among people. In societies with low uncertainty avoidance, people tend to be easy going (eg. USA) while people are rigid and risk aversing in high uncertainty avoidance cultures (eg. Japan, France, Mexico).

   e) **Confucianist dynamics –** is the long term orientation eg. among Asian people v/s short term outlook of Western societies (eg. USA, UK) Societies that are long term oriented have values centered around future (eg. perseverance, thrift). Short-term cultures are concerned about values that reflect past and present and thus have respect for tradition.

   Edward Hall[2], an anthropologist described cultures as high v/s low context cultures. High context cultures were defined as those where importance and meaning of individual behavior and speech changes depending on situation, and non-verbal messages are full of important meaning. The interpretation of messages in high context cultures heavily rests on contextual cues like nature of relationship between sender and receiver (gender, age, balance of power) time and site of communication. China, Korea, Japan, Saudi Arabia are examples of high-context cultures. In low context cultures, intentions are expressed verbally and context conveys little or no information eg. Germany, USA. Hall also pointed out to silent languages. 5 different silent languages pertain to – space, material possessions, friendship patterns, agreement across cultures and time.

a) **Space –** One's conception of space relates to matters such as distance between two people conversing. Americans, English & Japanese prefer greater distances and little touching while Italians, Arabs get extremely close.

b) **Material possessions** - reflect a need to clearly identify one's position in society with signals other people understand and what signifies as status could differ from culture to culture.

c) **Friendship patterns –** involve questions of trust and responsibility. An American will assure a prospective partner that a third person will agree because he is my friend. By contrast, in a country like Japan, the person might well say "I cannot speak for him, because he is my friend".

d) **Agreement across cultures –** Western business people rely on explicit contracts, Eastern cultures rely more and more on general agreement and basic intent of partners.

e) **Perceptions of time –** Cultures differ in their attitude toward time. Hall makes a distinction between culture with a monochronic and polychronic notion of time. In monochronic culture, people do one thing at a time. Their agendas are well organised, they tend to be punctual, they don't waste time. Monochronic (linear) time emphasizes schedules, promptness. eg. Americans, Germans are doing oriented. In short, they are "time is money" kind of people. Polychronic people are less organised, less rigid regarding their schedule, less punctual. Polychronic (circular) time stresses involvement of people and completion of transactions rather than adherence to present time scheme. e.g. Japanese, French are being oriented and less concerned about how long process takes. Instead they prefer to focus on end result. They do several things at once. For them, business is a form of socializing, not the other way round. e.g. In business luncheon meeting in France, it is considered rude not to while away a couple of hours and finish off a least one bottle of wine. Monochronic time cultures often are low-context cultures, while polychronic time cultures are usually high context cultures.

Different perceptions of time and its use are responsible for many problems in business negotiations. Latin Americans' perception of their being on time even when 30 minutes late is counterbalanced by East Asians who think it is safest to show up 30 minutes early just to be on time. While northern people might not like to waste time on small talk in a business meeting, Latins tend to spend more time on non-business conversation.

Time has an additional dimension. In Germany super markets close at 6 p.m. and no checkouts are done after 6 p.m. Hence customers have to line up by 5.45 p.m., whereas in most other countries customers already in the store are checked out.

Cultures also differ in their degree of homogeneity. At one extreme are homophilous cultures where people share same beliefs, speak same language and practice same religion e.g. Japan, Korea. Most countries are heterophilous cultures. Differences in cultural homogeneity underlie differences in adoption rates for new products or services. There is strong evidence that new products diffuse more rapidly in homogeneous countries.

Gannon[3] proposed a novel way of looking at cultures. He suggested the use of descriptive metaphors for different cultures, suggestive analogue that characterized culture in such a way as to help managers anticipate what people's reactions might be in different situations. The metaphors offer a mental anchor for the manager who has to deal with a new culture. According to Gannon, learning "don'ts" of a culture is likely to create confusion when more than one culture is covered. Gannon argues that it is more effective to develop a holistic sense of culture through images (metaphors). If the metaphor is correct and fairly deeply understood, one's own reactions and responses can become more genuine and instinctive. Gannon suggests that by planting the image in the back of one's mind, one can more comfortably interpret what someone in that culture is trying to say or do. eg. America is described through metaphor of football which captures many of the features of American culture, with its emphasis on competition, specialization of individual functions, strong leaders, and desire for individual recognition. By contrast, Italians are described in operatic terms where all are given time to shine in spotlight. German culture is characterized by classical symphony, with its strict discipline under a leader and skilled individuals performing together like a well-oiled machine. The Indian culture is metaphorised as cyclical Hindu philosophy.

Kluckhorn[4] considered following dimensions of cultural factors which he felt could create havoc with cross-cultural management and communication.

a) **Human nature** – evil, mixture or good. Good means believing people are basically good and can be trusted.

b) **People –** nature relationship **–** subjugation, harmony or mastery.

c) **Time sense –** past oriented (tradition bound), present oriented (situational), or future oriented (goal orientated).

d) **Activity** – being (spontaneously express impulses), being in becoming (self-actualization) or doing (stress action and accomplishment).

e) **Social relations –** lineal (authoritarian), collateral (group oriented), or individualistic (each person is autonomous).

In addition it is important to understand the role that religion plays in a culture. Social behavior could also vary in various cultures for e.g. Americans view noisy eating and belching as unacceptable behavior, while in some other cultures they are expected as evidence of satisfaction. Conversely, behavior Americans accept as innocuous, such as showing the sole of one's foot, using the left hand to deliver an object, or speaking first, may be deemed inappropriate in other cultures.

When cultural misassessments do show up, it is usually after the fact. Cultural adaptation is absolutely necessary to make decisions in line with host culture. Such adaptation is hampered by tendency to use Self-Referencing Criterion, (SRC) a term comed by **J.A. Lee**[5], a cultural anthropologist.

Even more dangerous than SRC interference is to fall into trap of enthnocentrism, the belief that one's own culture is superior to another culture e.g. Toy maker Mattel's experience with Barbie dolls in Japan for 8 years was unsuccessful until the dolls were changed to Japanese chinky features and physical statistics.

A no-nationality global culture

An argument that is constantly debated is that with globalization there is a common culture across nations and that there is no need for adaptation. However, many cross cultural studies including Hofstede's analysis of IBM management value survey across various countries indicate that there is no convergence of cultures and in fact there is increased ethnic awareness. As **Naisbitt**[6] commented "The more homogeneous the lifestyles become, the more steadfastly we shall cling to our deeper values-religion, language, art and literature. Naisbitt calls this cultural nationalism.

Hence standardization of communication does not appear to be a realistic strategy. Cultural values determine consumer buying motivation and hence the communications. e.g. Sony's Walkman had different communication strategy in USA, Japan and India.

Culture & Consumer Behavior

When marketers find it difficult to understand a customer from a different culture, one must remember one universal truth. People buy what they buy for their reason. Buyers do not choose product or service for no reason, even in the most fatalistic of cultures. In other worlds buyers are goal oriented. Behavior has hidden motivation i.e. the reason for one's behavior is not obvious. A second consideration is that the socio-cultural context within which buyer acts influence not only behavior but also the perception of its motivations e.g. In the West, choice is essentially a result of individual decision-making. In the Eastern culture, purchase is not outcome of individual deliberation alone but is justified at group level. A third complication is the means ends relationship in buying can be more subtle than simply functional – i.e. it can satisfy a variety of emotional needs. eg. McDonalds in India not just satisfies the hunger need but also the need to appear Western.

The term "perceived risk" was coined by Raymond Bauer in early 1960 to describe the tension in choosing and Leon Festinger from Stanford brought out the related concept of "cognitive dissonance". Both **Bauer & Festinger**[7] emphasized peer groups support in the way individuals handled risk. When society is internally strong and orderly, social and other environmental influences on purchases are necessarily stronger. The weak social structure of USA creates a bias in American marketing towards individual choice which may not be true for a collectivistic society like India.

Having understood the framework for cross cultural analysis, let us look at implications of culture on communication.

Culture & Communication

Culture and cross cultural differences can be seen in a variety of human interactions include language, non-verbal communication including body language, symbolism of numbers, colors. A country's language is key to its culture. Language expresses the thinking patterns of a culture eg. Eskimos have many words for snow because of importance that forms of snow play in their lives. The major blunders in language come from mistranslation eg. Cue toothpaste introduced by Colgate Palmolive in France was an embarrassment because the word Cue is pomographic in French. Creap (Japanese Coffee Creamer) and Super Piss (a Finnish product for unfreezing car locks) introduced in USA failed for obvious reasons. Apart from translation, another problem is multiple meanings eg. Parker Pen Company's slogan in Latin America "Avoid embarrassment – use Parker Pens" caused embarrassment for the company. Because Spanish word for embarrassment also means pregnancy. Body Language varies across cultures. Showing sole of feet to Arabs or using left hand when conducting business to a devout Muslim is bad. In America, looking away is lack of respect for speaker. In India, it is a sign of respect. Colors carry their own meaning. In China & Japan, grey communicates that the product is inexpensive unlike in US where it is a color of sophistication. Even numbers carry their own meaning. Number 4 should be avoided in Japan as the Japanese word for 4 "sfrih" sounds like Japanese word for death and hence packs of 4 are never sold.

Symbols could have different meaning in different countries eg. snakes symbolize danger in Sweden and wisdom in Korea. P&G's blundered in Japan by showing a stork delivering Pampers diapers at homes. In Japan, babies arrive in giant peaches that float on river to deserving parents as per popular folklore.

Cross-Cultural Communication

Four verbal communication typologies were suggested by **Gudykunst & Ting Toomey**[8] which can be used for cross-cultural communication.

a) **Direct v/s Indirect** – refers to degree of explicitness of verbal message of culture. eg. Chinese use indirect style associated with feelings of others. This is due to China's high context culture and collectivist dimension.

b) **Elaborative v/s Succint** reflects quantity of talk that people feel comfortable with in a culture. Succint style is where quantity of talk is low and reflects high uncertainty, avoidance and high context culture.

c) **Personal v/s contextual –** Contextual focuses on role of speaker and role of relationships. This is reflected in form of address and words used. This type of communication reflects high power distance, collectivism and high context cultures like Japan.

d) **Instrumental v/s affective** defines orientation of the speaker. In affective verbal style speaker is process oriented and is concerned about interpretation. Thus it is a reflection of high context, collectivist culture.

Advertising styles that are effective in certain cultures can be counter productive in other cultures eg. In high context cultures eg. Spain, Italy, Japan, communication style tend to be more indirect, subtle, less copy, more symbols. Low context cultures tend to use more copy, factual data and reasoning.

Messages must be adapted according to local culture Japanese advertising suggest rather than persuade, vague indirect message are used. Competitive advertisements in Japan are not considered good taste and testimonials are seen as pushing and phony. Content of advertisements within a society mirrors culture of the society-advertisements in countries high in collectivism contain more group-oriented situations. Cultures high on power dimension have more advertisements with characters of unequal status. Asian cultures get more information from contextual items than Europeans do Verbal advertisements used by low-context culture is boring to high-context cultures. Local cultural taboos and norms also influence advertising communication style eg. while sex is a favourite theme in French ads, it does not work in India. Indian visuals contain disproportionately high percentage of children, French use aesthetic visuals. Korean – advertisement mention price upfront, US has more competitive advertising. P&G found that its ads for Camay soup did not work in Japan because the ads featured men complimenting women on their appearance, the directness was not well received.

The figure below shows that culture affects values which in term affect consumer behavior through its effect on motivation and social contextual influences explained earlier. This in turn affects the communication style that is followed but also keeping in mind the specific nuances of verbal languages symbols and body language which are again culture specific.

To sum it up the following figure will be useful-

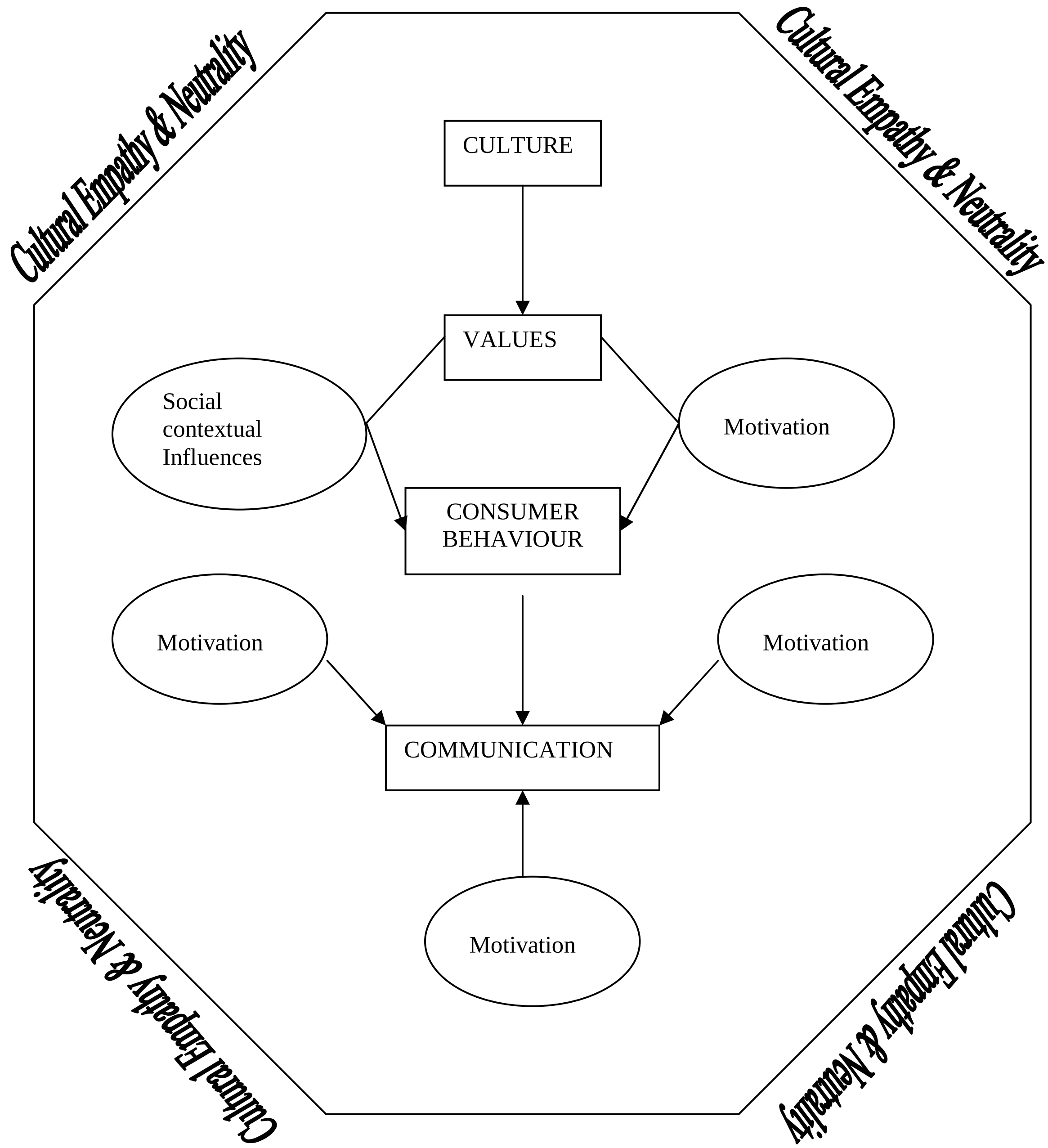

Fig. 1: UNDERSTANDING CULTURE FOR COMMUNICATION

Indian Culture & Communication Strategy

A lot of companies that came to India post liberalisation failed because of lack of understanding of Indian's cultural ethos, unique symbols and communication needs – eg. Kelloggs, Baskins, Pierre Carolin, Mexxs, Mercedes, Daewoo, Nike and others.

India can be defined on Hofstede's dimensions as moderate to high on power distance, low on uncertainty avoidance (because of strong belief in fatalism), moderate to high on collectivism, moderate on Masculinity and long-term oriented. As per Edward Hall's dimensions, India can be defined as a high-context culture, with polychronic time orientation. The Indian values of concern for family, respect for elders, monogamous sexual relationships, investing in children's future, value seeking and of course, wanting to ascend the socio-economic order are all fairly deep rooted.

Today's generation are considered confident, pragmatic, risk-taking, investment-oriented, debt open, seeking job satisfaction, instant gratification, acquisitive lifestyles, impulse decision-making, experimentative, wanting to be better off than parents, with diffusion in man/woman role definition and human as icons.

There is a need to understand Indian cultural values, motivations, social contextual influences and communication needs otherwise the communication will fail. Taking the example of health and hygiene, the desire for protecting oneself from the hostile external environment is perhaps a universal one. However, the Western concern for germs is not shared in precisely the same way by Indian consumer. The Indian notion of hygiene is closer to that of symbolic purification and is unlike the Western desire for hygiene defined in a clinical way. Hence the existence of brands like Ganga, in India.

Some of the early advertisements of Nike in India featured Michael Jordan indulging in "Just do it". This brand scored high on the aspiration count but missed out on the connection front. The average Indian perceived Nike to be a brand for the selfish go-getter who stops at nothing to gain his ends. This theme perception pitted it against traditional Indian values of selflessness, generosity and magnanimity.

While Dove's global format of testimonial advertising is same, contextually for India it was changed. A foreign advertisement showing a priest commenting on the glowing complexion of a woman could not show a pundit doing the same.

The Pillsbury' Doughboy could not evoke the same set of associations in India as it did in England.

Conclusion

Cultural values affect buying motivations and social context and hence communication. Cross-cultural analysis can help understand and adapt to culture of the host country. For this what is necessary is cultural empathy and neutrality i.e. ability to identify the differences that exist without making value judgements about better or worse culture, will increase the accuracy of cross-cultural analysis.

References

[1] Assael, H. (1992), “Consumer Behavior and Marketing Action”, PWS-Kent Publishing.

[2] Acharya, Vijayendra. (3-01-2001), “The Prahalad Prescription”, www.Domain-B.com

[3] Desai, Santosh, (March-April’2002), “Indianising the Western Brand”, Strategic Marketing - Brand Equity – Economic Times.

[4] Dhar, Amrita. (29-01-2002), “Serial Topping for Killer Strategy”, The Strategist – Business Standard.

[5] Doole Isobel & Lowe Robin. (1999), “International Marketing Strategy”, 2d ed., International Thomson Business

[6] Press, ISBN 1-86152-472-2

[7] Engel, J.L., Blackwell, R.D. & Minniard, P.W. (1990), “Consumer Behavior”, The Dryden Press.

[8] Hawkins, D.I., Best, R.J. & Coney, K.A. (1992), Consumer Behavior: “Implications for Marketing Strategy”, 5th edn, Library of Congress Catalogue-in-Publications,

[9] Herbig, Paul A. (1998), “Handbook of Cross-Cultural Marketing”, The International Business Press.

[10] Jain, Deepali. (28-02-2002), “Master Key”, A&M.

[11] Jeannet, J.P., & Hennessey, H.O. (1993), “Global Marketing Strategies, 2nd ed., Houghton Miffin.

[12] Johansson, Johny K.(2000), “Global Marketing”, 2nd ed., Irwin McGraw-Hill, ISBN 0-07-116961-X

[13] Kohli, Vanita, {21-06-1999), “Think India to Win India”, Business World.

[14] Kotabe, Masaaki & Helsen, Kristiaan, (2001), “Global Marketing Management”, 2nd ed., John Wiley & Sons, Inc., ISBN 9971-51-373-0

[15] Kotler, P. (1995), Marketing Management, Analysis, Planning, Implementation & Control”, Prentice Hall.

[16] Loudon, David L. & Della Bitta, Albert J. (1993), “Consumer Behavior”, 4th ed., McGraw-Hill International, ISBN 0-07-112511-6

[17] Mohanty, Praggyan. (22-01-2002), “Habits Needn’t Die Hard”, The Strategist – Business Standard.

[18] Pande, Bhanu, (9-10-2001), “Why Benetton Lost Its Color”, The Strategist – Business Standard.

[19] Sangameshwaran, Prasad. (30-10-2001), “Crunch Time for Kellogg’s”, The Strategist – Business Standard.

[20] Schiffman, Leon G. & Kanuk, Leslie Lazar, (1997), “Consumer Behavior”, 6th ed., Prentice Hall International, Inc., ISBN 0-13-719501-X

[21] Schutte, Helmut, (19-10-2001), “Asian Culture and the Global Consumer”, Mastering Marketing – Business Standard.

[22] Terpstra, V. & Sarathy, R. (1997), “International Marketing”, 7th ed., Dryden Press.

End Notes

1. Hofstede,Geert. “Culture’s Consequences”. Beverly Hills, CA: Sage, 1980.
2. Hall, Edward T. “Beyond Culture”. Garden City, NY: Anchor, 1976.
3. Gannon, Martin and Associates, “Understanding Global Cultures: Metaphorical Journeys through 17 Countries”. Thousand Oaks, CA: Sage 1994.
4. Clyde Kluckhohn, “The Study of Culture,” in Daniel Lewer and Harold D. Lasswell (eds.), The Policy Sciences, Stanford University Press, Stanford, CA, 1951, p.86.
5. Sujan, Mita; James R. Bettman; and Hans Baumgartner. “Influencing Consumer Judgments Using Autobiographical Memories: A Self-Referencing Perspective.” Journal of Marketing Research XXX (November 1993, pp.422-36.
6. Naisbitt, John and Patricia Aburdene (1990). Megatrends 2000: “Ten New Directions for the 1990s”. Avon Books: New York.
7. Solomon, Michael R. “Consumer Behavior” : 2nd ed. Needham Heights, MA: Allyn & Bacon, 1994.
   Festinger, Leon, “A Theory of Cognitive Dissonance” (Stanford, CA: Stanford University Press, 157).
8. Gudykunst, W.B. & S. Ting-Toomey (1988) “Cultural and Interpersonal Communication”, Sage Publications.

Change Process in Growing SMEs in Vietnam and a Human Resource Approach to Organizational Restructuring

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Abstract

In the transformation of Vietnam's economy, change management is always required for both organizational survival and sustainable development. This research takes the human resource perspective to consider change process and corporate responses to change in small and medium enterprises (SMEs) in Ho Chi Minh City, Vietnam.

The research shows that SMEs' managers at present have not yet looked over changes in systematic and process-oriented approach. They are still prior to result-oriented manners, and ignore the risk of passive and pessimistic attitudes, which are also obstacles to change. Thus, communication is necessary to reduce misunderstanding and equip people with sufficient information about any new things in their job. However, for further vision, training must be an effective tool in long-term to facilitate people for change, especially in terms of organizational culture, to change people's perception about change.

Introduction

One of the characteristics of SMEs in Vietnam, particularly in Ho Chi Minh City (HCMC), is that they have grown quite fast in recent years thanks to the renovation of government's policies (since 90s), but now their human resources cannot catch up the requirements of their business growth in the markets. The growth therefore seems to be out of control. Change for sustainable development become a frequent topic in most of the meetings in these companies, but then goes fade when the practices incur frustrating.

Actually, it is not the problem only in Vietnam. Harvard Business Review (June, 2000) provided a statistic of 70% of change initiatives that failed in practice. Failure or success of a change can be conceptualized, metaphorically as a DNA that includes two strands (Robert French, 1999): positive capability that refers technical aspects of the change process, and negative capability that refers psychological aspects of the change process. Most of resistance to change come from the latter. Change is ultimately human dimension. It is emotional. People resist to change because of inertia, fear of uncertainty, of economic or power loss, of losing face due to social disruption, or because of their "big assumptions" that are contrary to the change (Kegan and Lahey, 2001), etc.

This paper therefore researches into the change process with taking human behavior to change. The paper covers two main objectives: (1) to describe a conceptualized change process in growing SMEs in Vietnam by common changes and common attitudes to change, both for and against; (2) to suggest a human resource approach for organizational restructuring as an important change of these companies.

Scope of the research

Ho Chi Minh City is the center of cultural and business activities of Vietnam. Therefore studies and researches into business and management have been conducted in this City initially. According to some previous researches of HCMC's government (1999-2001), it was reported that SMEs would be those facing biggest challenges to the integration of Vietnam into the region in the upcoming years. Moreover, those SMEs at 10% growth per year and above (in the context of the City's GDP growth approximately 10% over the last few years) were identified as the growing enterprises that were facing difficulties due to the gap between their business growth and their human resources' growth. For a clear cut of a cluster of SMEs in HCMC, the research therefore focuses on those SMEs of 10% growth per year and above in average during the last three year.

Methodology

This paper is based on some important results from an exploratory research in HCMC, March-April, 2002. The research composed of two steps: of 12 managers at different managerial levels previously (in 2 large companies which are Holcim and Unilever Vietnam, and 4 SMEs as a preliminary benchmark), and then, an exploratory survey. It reports the perception of 60 managers in 28 out of these SMEs about change process in their own companies. The questionnaire was designed based on information from the in-depth interviews. The approach to change process in common prior to human factors which support or resist to change is described in Figure 1.

Change Process in Growing SMEs in Ho Chi Minh City, Vietnam

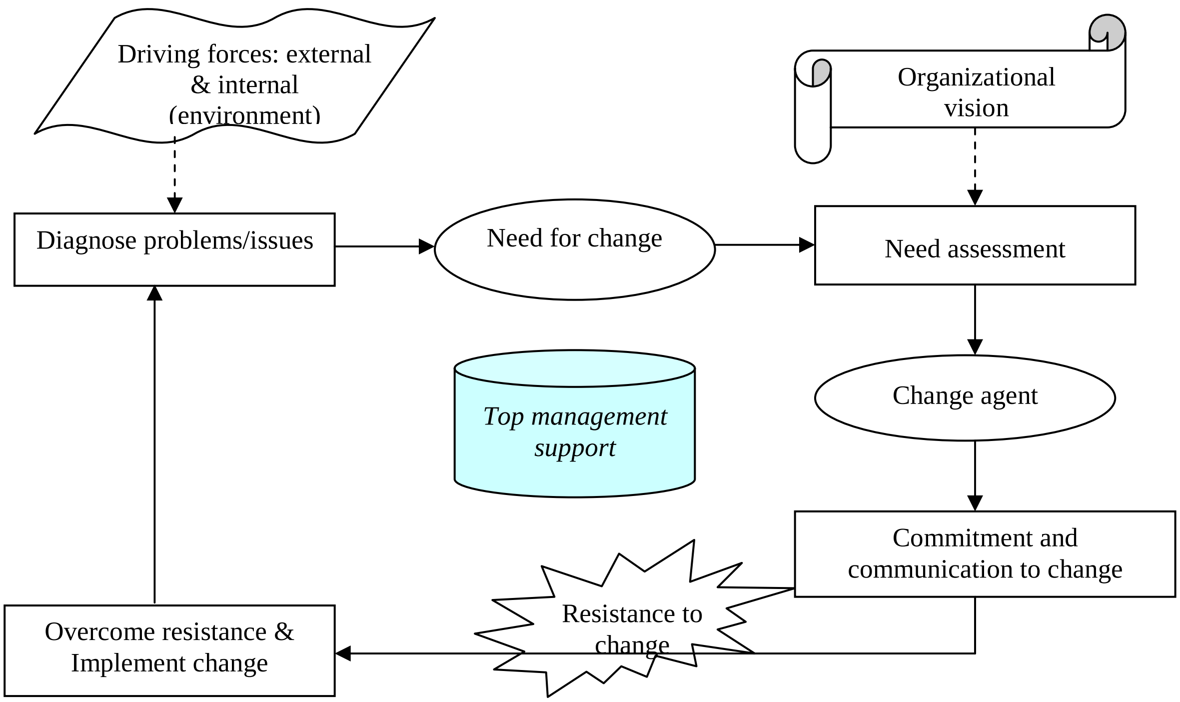


Fig 1: A CONCEPTUALIZED CHANGE PROCESS FROM HUMAN APPROACH

Driving Forces of Change

External forces

Trends of globalization (WTO), regional integration (APEC, AFTA, Vietnam-U.S. Trade Pact, etc.) challenge Vietnamese business circles with larger and more diversified markets as well as business environment. Competitive dynamics are increasing in both domestic and international markets. This leads to increasing demands for qualified products. Especially industrial customers of Vietnamese companies (e.g. those from European, American, Japanese, etc.) often consider such accreditability of quality control system as ISO 9001:2000, HACCP, GMP, and recently of social accountability like SA8000, etc.

In addition, government's restructuring programs in industries (e.g. SOEs' consolidation of Vietnamese government with equitization, downsizing, merging, etc.) encourage as well as challenge SMEs with a business environment of more flexible and dynamic entities.

Internal forces

Technological changes booth the companies' growth and hence enlarge the gap between technology and human resources appropriateness. Employee turnover increases in SMEs due to work stress, "shocks" caused by changes, "head hunting" by large companies, etc. Cultural change happens spontaneously as results of increasing employee turnover and diversity.

Such forces drive many companies to need for a synchronic change rather than just technological change as before. Figure 2 and Table 1 indicates the most common changes in the repondent companies perceived by their managers. The shaded cells show the answer from the large companies in the initial interviews.

There are various types of change perceived by respondent managers which vary from incremental changes to radical changes. All of the managers in the interviews have experienced the increasing in "shocks" caused by changes from their subordinates. There must be a question about the role of communication in these company: do they have any communication programs to have their people ready for change? More important, do they themselves

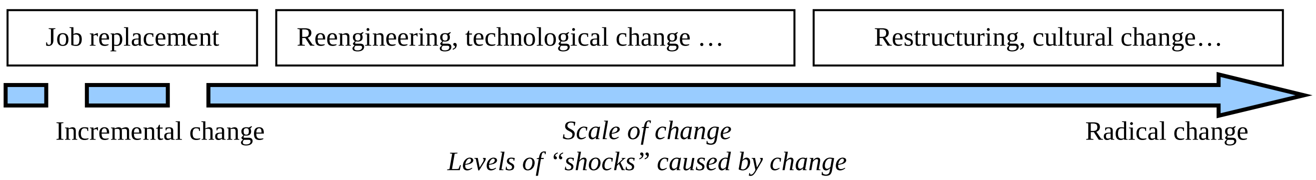


Fig 2: TYPES OF CHANGE

perceive to which scale that these changes impact on their companies?

They agree with those changes in policies, regulations, corporate or business strategies, philosophy, culture, or restructuring, etc. which are in organization wide. But the problem here is their perception about reengineering or process improvement, and even technological change which are just in individual or task wide. Such limited assumption may lead to less total involvement of all stakeholders of the change, and more resistance to change from those who are not the process owners or technology majors in the company.

Table 1: TYPES OF CHANGE PERCEIVED BY THE RESPONDENT MANAGERS

List of Changes	**Scale of changes in your company (*)**		
	Organization wide	***Division/Depart -ment wide***	***Individual/ Tasks wide***
Policies or regulations change	**72%**	20%	8%
Corporate or business strategies change	**60,9%**	26,1%	13%
Restructuring	**58,3%**	25%	16,7%
Change in business philosophy, culture, management style, etc.	**54,2%**	29,2%	16,7%
Reengineering or process improvement	30%	26,7%	**43,3%**
Technological change	*27,3%*	*27,3%*	***45,5%***
Replacement, modifying or creating new jobs	25,7%	**51,4%**	22,9%

(*) The results were computed via distribution of different scales in each type of change listed (rows).

Organizational Vision and Who perceive Needs for Change

Most of the managers perceive these driving forces being true to their companies. But this "feeling" is not clear and keen enough to stimulate them to volunteer as pioneers in change initials. Nearly 60% of the respondents just follow what their top managers have schemed for change. The centralization in management style in these SMEs restricts operational people to initiate and call for change. Only 14% of the respondents realize that needs for change may be derived from senior staff or professionals, even worse, just 7% from middle and line managers, and 6% from workers and staff. This perception about sources of needs for change may lead to misunderstand between top managers and their subordinates from the beginning of change program. Hence, top managers often find it difficult to motivate and direct their people toward desired results because they are just the top managers' needs not the employees. Organizational vision therefore affects needs for change just from the top management's point of view and is not sold down to the lower levels.

Change agents

Again most of the respondents do not sufficiently realize the role of change agents in change programs of their companies, just attribute it to their top managers because they have all "authority to make decisions" (Table 2). Hopefully in the future, those operational process owners such as line managers will emerge to be change agents thanks to their expertise to identify and solve problems of these processes (nearly 43% agree). There is still 13% of the respondents who perceive staffs and workers being conservative or opposite to change. Such passive attitudes to change from operational levels may be due to lack of communication about individual benefits from change as well as training to prepare for change down to the frontline.

Table 2: ROLE OF CHANGE AGENT IN MANAGERS' PERCEPTION

Change agents	**Roles in the changes (**)**			
	Have authority to make decisions	***Have considerable influence to other people***	***Have the expertise to solve problems***	***Be too conservative or opposite to change***
Top managers	**90%**	28%	20%	*0%*
Middle managers	17%	31,3%	**34%**	*8,5%*
Line managers	17%	17%	**42,6%**	*8,5%*
Senior, professional people	12,8%	**27,7%**	**27,7%**	*2,1%*
Staffs, workers	4,3%	4,3%	19,6%	13%

(**) Multiple choices in the questionnaire, total in column/row may be larger than 100%). The shaded cell shows the answer from the large companies in the initial interviews.

Furthermore, while there is *no identification of external change agent* in both the interviews and survey most of managers can list out a lot of consultant organizations which have helped them to operate new technology, carry out ISO9000, solve their quality or human resources problems such as SGS, BCC, ICC, Arthur Andersen – KPMG, PriceWaterhouseCooper, Dragon Capital, Ernst&Young, NetViet, L&A, SMEDEC, etc.

Common Reponses to change

As *Vietnamese culture is high context* (Geert Hofstede, 1998), employees' responses to change in practice are very diversified. They mostly expose their attitudes to change through activities rather than speaking out what they think of the change. They show their sympathy and support to change through active responses like high responsibility and commitment to their stakes in change projects (Table 3). However, the necessary concern should be those *passive responses* which are common in daily works such as turning to be "forget-it" people who ignore or deny to access change activities, even spreading out distorted rumors about disadvantages of the change, etc. This negative attitudes may become more dangerous if the change managers forget to keep eyes on the informal communication channels in their companies.

Table 3: COMMON REPONSES TO CHANGE – FOR AND AGAINST BEHAVIORS

Support to change	Resist to change
Be highly responsible for accomplishing the assigned job of change	Be ignored, "forget-it" people to change
Often give constructive opinions to change and problem solving	Make no effort for the assigned job of change, keep silent on purpose even when realizing problems in change
Volunteer to take part in the job of change, call other people for involvement in change	Argue others out of doing change, create distorted rumors, incite others to ignored change
Be risk takers and assertive to make decision of change	Give destructive opinions, oppose to change, create conflicts, sue change agents for any problems happened
	Sabotage, play dirty tricks to change

In comparison to large companies, SMEs face more complex responses to change due to their neglecting of training and communication to facilitate change beforehand. Psychologically, in such competitive environment for SMEs as in Vietnam, they are so eager to change technically that they do not allow time for their people who are mostly not high educated to digest the change ideas and benefits. Hence, sabotage or playing dirty tricks to the change implementation can happen in these companies.

A planned Change Process for Human Resource Restructuring

It is experienced that the most critical factors to overcome resistance to change process are human related: (1) *Top management's commitment*, and (2) *Change agents' capability*. Employees often question about whether their top managers will retain their promise of support to change during the change process. They even do not know who are the change agents so that they can rely on whenever they have problems in change. That lead to lack of people's readiness to change. Therefore, *training and communication beforehand and during the change process* should be an important core of a planned change.

Building Employees' Readiness to Change

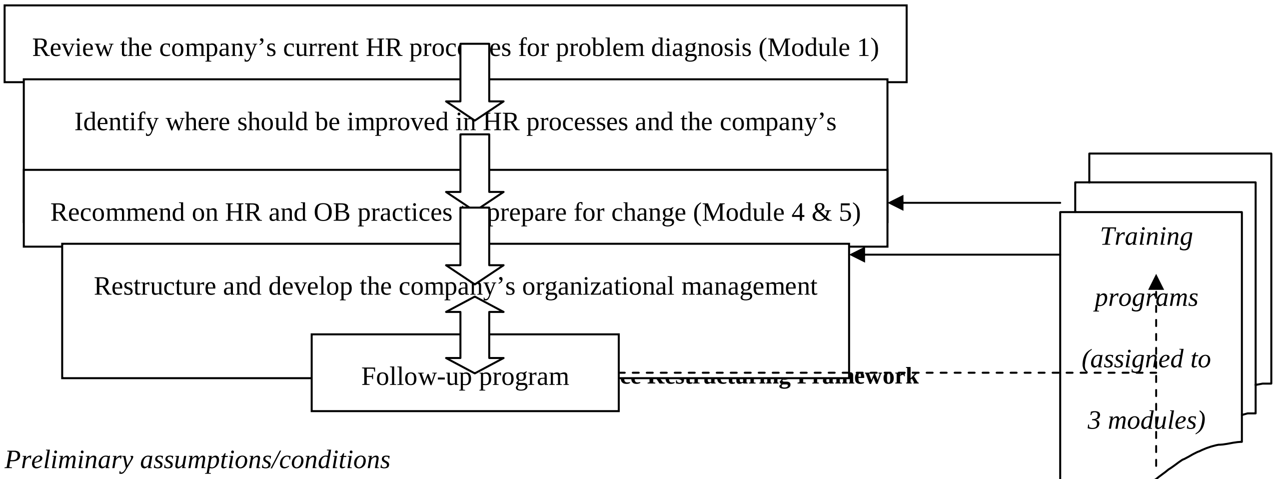
Building organizational culture that facilitate change

In order to facilitate change process in companies, the initial job is to inspire people to be more open to change as a part of their daily works. Then the first challenge is to positively influence or even change their perception about change. People there should open to listen to different or new ideas. Building or even change such culture takes time. But when people become more opened to change, in other words change become a constant requirement of company's people, the company can reduce time for its people to digest the change's ideas and benefits before the change project is carried out because people are ready to change.

Training and development are effective tool for preparing and communicating change in long-term

It is necessary that managers' perception about change should be in readiness to plan for proactive changes. Like researching and development in new product launch, training and development should be scheduled and conducted before the change event. Hence, the operational levels will not endure shocks caused by change in their daily works. Training is not only for providing employees with necessary knowledge and skills to occupy new tasks or procedures or technology but also for gradually changing their ways of thinking and behaviors to fit the coming situation. The following human resource (HR) restructuring plan is suggested as a framework for tracking HR problems periodically. In practice, this plan has been applied in a medium company in HCMC in 2002, and intended to repeat every two years. There must be two types of change agent: a consultant firm (in the real project, supported by MPDF) as external change agent, and a HR manager as internal change agent who will build up his/her team for monitoring change process according to problem identification.

Human Resource Restructuring Plan (Framework, Figure 3)



Preliminary assumptions/conditions

- *Change agents must be empowered*. One HR manager should be appointed to be the internal change manager. This manager will conduct some of the change modules and cooperate with the consultants if the company asks for an external change agent. Therefore, this manager must have appropriate authority, responsibility, and accountability to conduct the change plan and cooperate with the consulting firm, apart from his/her daily work.
- *Top managers must prove their commitment and involvement* in the planned change their tracking plan on the change process and periodical events.
- *Training is considered a compulsory tool to communicate and facilitate changes*. Training needs therefore should be identified beforehand.

Step1. Review the Company's current Human Resource Processes for Problem Diagnosis

<u>Module 1</u>*: Human resources review and "Road Map" for going forward (Table 4).*

Table 4: SCHEME FOR HUMAN RESOURCES REVIEW

Issues	Respondents
The corporate strategy and Human resource strategy	Top managers
HR strategy and HR core processes	HR people
HR core processes and key HR transactions in the company The current role of HR and the interaction between HR and other processes in the company.	HR people Middle and line managers, employees
Root cause analysis and strategic business impact: from "downstream" perspective (root cause analysis) and "upstream" perspective (i.e. strategic business impact). Linkages between the strategic business impacts and the key transactions: to find out where the "bottle neck" in processes are.	Managers at all levels.
Priorities of HR processes and transactions for levering successes and remedying difficulties.	Top manager and HR managers.

_ Methodology: system approach by in-depth interviews, focus groups, and exploratory survey.

_ Expected outputs:
- Description of how HR processes integrate in the company; statement of HR's key transactions (both successful and difficult transactions);
- Root cause analysis and strategic business impact by HR transactions, with preliminary levering and remedying to pave the way from the organization's current state to their desired state; (this should be documented, communicated, and referenced on at least a monthly basis);
- Diagnosis of HR problems.

_ Suggested module conductor: HR change manager with assistance of external consultant.

Step 2. Identify Where should be improved in HR processes and the Company's Organizational Behavior and Performance

Module 2: Human resources assessment (Table 5)

Table 5: SCHEME FOR HUMAN RESOURCES ASSESSMENT

Issues	Respondents
Job satisfaction and performance	Employees
Affects of HR policies and equity (internal and external)	Employees and managers
Relationships	Employees and managers
Operations of the HR core processes	Top managers and HR people
Management techniques and HR skills assessment	Managers at all levels and HR people

_ Methodology: problem approach by attitude surveys and gap analysis.

_ Expected outputs:
- Assessments of the current HR core processes (e.g. job description and specification, HR planning, recruiting and orientation, training and development, performance appraisal, compensation and reward systems, etc.);
- Assessments of employees' satisfaction in the company;
- Management training needs;
- Conclusions with quantitative illustrations about areas to be improved, how much they should be improved, and the priorities.

_ Suggested module conductor: consulting firm.

Module 3: Organizational behavior assessment (Table 6)

Table 6: SCHEME FOR OB ASSESSMENT

Issues	Respondents
Individual processes	Employees
Group/Team processes (team working, leadership, goal setting, decision-making styles, conflict management …)	Employees, team leaders
Organizational processes (organizational culture, resistance changes …)	Managers at all levels
Organizational structure and design	Top managers

_ Methodology: problem approach by attitude surveys and gap analysis.

_ Expected outputs:
- Employees feedback about the quality of worklife and morale in the company (which are the consequences of the company's HR strategy);
- The gaps between desired and current behaviors at the three levels (individual, team, and organization) in the company;
- Assessment of possible obstacles to change (cultural, management/priorities, and technical obstacles);
- Where should be improved in terms of organizational culture, structure, and what should be planned for organizational change;

- Interpersonal training needs

_ Suggested module conductor: consulting firm.

Step 3 and 4 are the "hands-on" steps of this plan. Training courses are provided beforehand by the consulting firm according to the areas to be checked up of each module. Then HR change agents are empowered to be in charge of each area in compliance with the schedule for organizational restructuring action plan designed by the change manager. This schedule consists of 3 modules (Module 4, 5, and 6). During the "hands-on" periods, the consultants should be available for alternatives in practices. By the end of each module (according to the schedule), consulting firm will provide several appraisal tests in order to evaluate the effectiveness and efficiency of the practices. A follow-up program for each module will be designed based the report of these appraisals (see Step 5).

Step 3. Recommend on Human Resources and Organizational Behavior Practices to prepare for Change

Training courses are defined and provided based on those skills identified in module 2 and 3 (training needs). These training courses should be skill-oriented and schemed for motivating participants to understand those problems raised from the assessment, and even for further problem shooting.

Module 4: Workforce requirements and development (Table 7)

Table 7: WORKSHOP DESIGN FOR MODULE 4

Areas to be checked up	Suggested module conductor
HR planning and policies Recruitment programs Orientation and socialization Training and development Promotion system Compensation and rewards system Regulations and discipline system Communication systems in the company Executive coaching and Mentoring programs	HR change manager

Module 5: Performance management (Table 8)

Table 8: WORKSHOP DESIGN FOR MODULE 5

Areas to be checked up	Suggested module conductor
Performance appraisal and feedback Employee assistance program and performance counseling Reinforcement policies and skills Recognition and Motivation (financial and non-financial tools)	HR change manager. Consulting packages may offer customized training for supervisors and executives in this module.

Step 4. Restructure and Develop the Company's Organizational Management System

Module 6: Organizational restructuring (Table 9)

Table 9: WORKSHOP DESIGN FOR MODULE 6

Areas to be checked up	Suggested module conductor
Refine the company's mission, vision, business philosophy, strategies. Redesign organizational structure. Job analysis and rearrangement Refine/create the company's system of job descriptions and specifications Inspire the organizational culture to the new venture	HR change manager

Step 5. Follow-up Programs

Follow-up programs are designed for module 4, 5, and 6. Top management track feedback of the restructuring based on these programs. A specific communication channel should be set up to transfer upward feedback about the change. Several formal and informal events such as achievement ceremonies, “bingo men and ladies”, “the best cheer-leaders” rewards, etc. in order to celebrate short-term wins. There is also a database of training needs that emerge during and after the restructuring process.

Conclusion

In sum, when technical aspects of the change in SMEs are positively conducted, their human aspects cannot keep with them. This illustrates the concepts of Robert French about the negative capability of change. In that context, managers’ perception and commitment to change should be the key to open the first door that locks their company to change. They should be the ones who communicate, make decisions, and play the role of the first-movers in change toward their staff and workers. Top management commitment and appropriate change agents should be illustrated beforehand and during change process. Such HR restructuring plan should be conducted periodically (usually per two years) for an incremental change.

References

[1] Carnall, Colin. (1995), Managing Change in Organizations, 2nd edition, PrenticeHall

[2] Carr, A. and Gabriel, Y., The psychodynamis of organizational change management – An overview, Journal of Organizational Change management, vol. 14, No. 5, 2001, pp.415-420

[3] Feely, Daniel P. (2000), Achieving REAL, TANGIBLE and SIGNIFICANT Breakthroughs with Human Resources Processes, Strategy and Technology, Transforming Solutions Inc.

[4] Hammer, Micheal & Champy, James. (1994), Reengineering, Harvard Business School Press

[5] Kegan, R., & Lahey, L. L. (2002), The Real Reason People Won't Change, Harvard Business review on Culture and Change, Harvard Business School Press

[6] Kotter, John P., Leading Change – Why Transformation Efforts Fail, Harvard Business Review on Change, Harvard Business School Press, 1998.

[7] Truong, T. Lan Anh. (Dec. 2000), unpublished lecture, Change management - Case study: Changes in Saigon Plastic Company, School of Industrial Management, HCMC University of Technology

Competing in the Global Era

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Abstract

This paper provides a context for understanding the implications of the emerging globalization era which is transforming the world economy. The globalization era is characterized by its focus on economic competition, the growing importance of knowledge as a resource, the increased power and influence of private sector organizations, particularly multinational enterprises, and perhaps, most of all, the growing interdependency between nations and markets. The paper discusses the development of competitive eras, the distinctive features of the global era, and contrasts between the global and the cold war eras. The likely impact of the terrorist attacks on the future of globalization is also discussed. We conclude that globalization will undergo a process of restructuring to address the growing problem of inequality, the increased role of government in economic activity, and the new trade-off between liberalization and security. Some of the key managerial implications of this era are developed.

Introduction

This paper provides a context for understanding the implications of the emerging globalisation era which is transforming the structure and operation of the world economy. We argue that this new era, which emerged in 1989, is much more than a transitory stage in the evolution of the world economy; rather it represents a radical but sustained departure from the Cold War system that existed for much of the latter half of the last century. The globalisation era is characterised by its focus on economic competition, the growing importance of knowledge as a resource, the increased power and influence of private sector organisations, particularly multinational enterprises, and perhaps most of all, the growing interdependency between nations and markets. At this stage of its development there is much confusion surrounding the globalisation era. We seek to clarify some of the debate by differentiating between the facilitators of globalisation, its various manifestations and the driving forces behind globalisation. In the following section we discuss the historical evolution of competitive eras in the world economy. The third section describes the emerging global era and provides a contrast between the Cold War era and the current era of globalisation. This is followed by a discussion of some of the major implications of globalisation for business competitiveness. The final section briefly discusses possible future paths of globalisation following the terrorist attacks of September 2001.

Competitive Eras and Economic Competition

The major powers of the world have long been engaged in competition on an international scale. This competition has been prompted by a range of considerations: economic, political, military and ideological. It has also been characterized by distinct eras within which specific manifestations, institutions and processes have been apparent. Over the last one hundred or so years, three distinct eras are apparent. These might be termed the Imperial Era, the Cold War Era and the current Era of Globalization.

Competitive Eras and Economic Competition

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The first, the Imperial Era, which existed from around the 1870s to 1945, was characterized by imperial or colonial competition. In this period, the colonial powers including Britain, Germany, France, Italy and Portugal expanded their spheres of influence - economic, political and military - around the world. The end of the Second War World in 1945 saw a widespread recognition of the unacceptability of imperialism. As the system was dismantled a new set of international concerns emerged. These focused as much on ideological and strategic issues as purely economic concerns. The dominant economic power at this time was the United States. It assumed a two-fold role in the reconstruction of the post-war world economy. First, the US undertook to provide the necessary resources to help to rebuild the devastated economies of Europe and Japan. This occurred through foreign direct investment as US firms expanded their productive operations in Europe, for example, and through licensing as the preferred form of resource transfer to Japan. The second role assumed by the United States was the creation of a system of international regulatory bodies designed to manage various aspects of the world economy in an interventionist form.

This era, which ran from 1945 to 1989, has been termed the Cold War Era, so-called because these arrangements set in place a new form of competition in the latter half of the twentieth century. This competition was based on contrasting ideologies and the exercise of integrated economic, political and military power. Effectively the world was divided, on ideological lines, between the superpower blocs of the United States and the Soviet Union. The end of this era, which occurred in 1989, has been the subject of much debate. What emerges is an acceptance that communism failed primarily as an economic system. It failed to deliver the sorts of goods and services that a populace, increasingly able through information and communications technology to view the rest of the world, thought desirable.

The post-Cold War period has seen a radical restructuring of the world economy. The void created by the demise of communist economic systems has been filled by a new period of informal economic competition that has been apparent for the last decade [10]. To understand the new dynamics of the world economy we need to consider the way that the world has restructured since 1989. We have shifted from a bipolar world built around the two superpowers (the United States and the Soviet Union) competing on the basis of ideology, to a world where there are three major blocs (North America, European Union and Japan and South East Asia) competing largely in economic terms. Each area, whilst capitalist in nature, displays subtle differences. The position of other economies has also been restructured. In the cold war scenario, the majority of the world's economies were divided by the ideological differences that drove policies. Since 1989, many countries have realigned themselves. The emerging structure tends to favor those countries geographically close to the Triad blocs. For economies that lie outside of these groupings, the future is less clear.

The Emerging Global Era

This paper contends that the period since 1989 has been more than simply a transitory phase or period of adjustment. Rather, it suggests that we are experiencing the early stages of a new era in the world economy, the era of globalization. This era, like previous ones, displays a number of distinctive traits. Furthermore, it displays evidence of robustness in the sense of integrated elements that in combination define a new system.

The Distinctiveness of Globalisation

We start by defining globalization and highlighting some of its distinctive traits. Globalization is defined by cross national flows of resources and processes of accumulation that are no longer tied to the confines of the nation state and which result in markets and national economies becoming linked, integrated and consequently interdependent. The critical defining feature here is the growing interdependency between markets and economies. Globalization is not simply an economic process; it has its impetus in the economic realm, but can be readily identified in the areas of politics, culture, science and the media.

The era of globalization is characterized by the growing importance of international production (economic activities under the governance of multinational enterprises) and this has brought both a widening and a deepening of economic integration. The widening is simply a reflection of the growing number of countries that are now part of the international economy. As indicated above, the post-Cold War period has seen a substantial realignment of nation states and the number adopting market-based systems and engaging in the international economy is unprecedented. The deepening of integration is a little more complex. The dimensions of this process are set out in Table 1.

Table 1 shows that sales of foreign affiliates (a widely used measure of international production) are now double those of exports, and constitute 49 percent of the value of international economic activity (as measured by GDP at factor cost). This suggests that international production is by far the most significant form of overseas market servicing and that this shift in mode has brought about a much deeper integration of markets.

The percentage growth rates, which are also shown in Table 1, show that the domination of MNEs in the world economy is not likely to decline in the foreseeable future as growth rates of FDI and foreign affiliate sales far exceed those of trade or GDP growth. More general attempts to measure globalization, such as the Globalization Index [7] also suggest that integration is both increasing and deepening.

Facilitators of Globalisation

There is considerable confusion in the literature between factors that have facilitated globalization, manifestations of globalization and the drivers of globalization. We need to clarify the distinctions between these terms and their determinants. There is often confusion between globalization as an aggregate process (the focus of this paper) and globalization as a strategy at the level of the firm.

The term facilitator refers to those conditions that have enabled the emergence and development of the era of globalisation. The key facilitators of globalisation are the information and communications revolution, market liberalisation and the relative peace of the post-war period. All of these factors have helped to create the conditions which have enabled globalisation to flourish.

Table 1: SELECTED INDICATORS OF INTERNATIONAL PRODUCTION 2000

Item	**Value at current prices US$ billion 2000**	**Annual growth rate 1996-1999**
FDI inflows	1271	40.8
FDI outflows	1150	37.0
Sales of foreign affiliates	15680	10.4
Royalties and fee receipts	66	4.0
Exports of goods and non-factor services	7036	1.9
Exports of foreign affiliates	3572	11.0
GDP at factor cost	31895	0.7

Source: [11]

Manifestations of Globalisation

The manifestations of globalization are simply the ways in which economic activities have developed during this era. The principal manifestations are in trade, financial flows, FDI, strategic alliances and migration. In all of these there have been significant increases in the volume, significance and integration of these activities globally.

Drivers of Globalisation

The drivers of globalization are those forces that are propelling the deeper integration of activities around the world. Globalization is fundamentally a firm driven phenomenon, resulting from operations that firms undertake across borders in order to organize their research, development, production, marketing and financing activities. This is characterized by, and manifests itself through the routes of trade, knowledge agreements, foreign direct investment and strategic alliances. In the highly competitive global era, MNEs develop strategies to maximize their competitive capability through a judicious mix of the benefits of globalization (lower cost, locational differentiation, flexibility, global learning) and of being locally responsive (understanding market needs, product or service adaptation, positive host country relationships).

Contrasting the Cold War and the Globalisation Eras

Table 2 presents a summary contrast of the two eras. Significant differences are apparent. The first is that the globalization era is considerably more complex than that of the cold war period. This is evident from the multiplicity of key actors, the dynamic nature of the system and its global scope. Nation states are no longer the sole locus for activity, particularly commercial activity. The growing power of MNEs, intergovernmental organizations and international non-governmental organizations has brought a multiplicity of interests which have to be addressed. The security of a static system has been replaced by considerable insecurity and the search for flexibility to accommodate constant change. Second, the globalization era represents a quantum shift in the importance of economic activity. The competitive focus of the major nations is no longer ideological, it is economic. States now assess their power and influence in terms of wealth and competitiveness not nuclear capability. Third, the globalization era coincides with a major change in technological competition. The knowledge age sees technology as the key driver of change, greatly increasing the return on human capital and placing knowledge at the very centre of the economic development process.

Table 2: CONTRASTS BETWEEN THE COLD WAR AND GLOBALISATION ERAS

Item	**Cold War Era 1945-1989**	**Globalisation Era 1989....**
Key actors	Superpowers; nation states	Multiplicity. Nation-states, multilateral organisations, MNEs, NGOs
Competitive focus	Ideology	Economics
Global divisions	High geographically Bi-polar world	Low geographically Tri-polar world Emerging digital divide
Power play	Military non-encroachment Economic isolation	Military indirect encroachment (NATO, UN) Economic globalisation
State power/influence	Size of the state	Quality of the state
State focus	Tradition, security	Innovation, flexibility
System properties	Static	Dynamic
Policy level	National, insular	Global, supra-national and local level
Ideological debates	Capitalism/communism Democracy/authoritarianism	Type of capitalism Form of democracy, neoliberalism?
Defining technology	Nuclear; second industrial revolution	Economic technologies; knowledge revolution
Defining measurement	Nuclear capability	Economic competitiveness/adaptability

Migration patterns	South to north; political motivation	Global, rural to urban; economic motivation Turbulent, unpredictable
Business environment	Slow changing, predictable	Primarily global. Restructuring, outsourcing, network structures
Business strategy/structure	Primarily national. Hierarchical, bureaucratic structures	Knowledge
Key resource	Capital	Technology
Change driver	Ideological debate	

Source: Inspired by [3]

New partnerships are being forged between the state, regional and local authorities and business organisations. In a number of cases, redistribution of resources has occurred to favour business interests and to support globalisation. This has taken the form of increasingly regressive taxes, increased expenditure on corporate entitlements such as subsidies, incentives, infrastructure development, and a dismantling of social welfare entitlements. These processes have been encouraged by neo-liberal ideology and structural adjustment policies.

It should be apparent that the globalisation era represents a significant departure from the cold war era of the second half of the last century. The new era has considerable implications for business and we now turn to a more detailed discussion of these.

Business Competitiveness in the Global Era

A defining characteristic of the global era is the paramount importance of economic competition and this has significant implications for business enterprise. The evolving business environment has brought changes to both business strategy and organization. The magnitude of the change is illustrated by the extent to which many organizations have been forced to restructure their activities. The relative stability of the cold war era encouraged the development of large, integrated and bureaucratic organizations. These businesses were predicated on growing markets, incremental overseas expansion and modest levels of competition. Globalization has changed all this. Constant, accelerating change and fierce competition are now the norms. Such a world rewards flexibility, innovation and change as opposed to size, efficiency or market domination. The massive restructuring that US, European and, to a more limited degree, Japanese firms have undergone, is a manifestation of how different the global era is [1].

Business in the global era will require new forms of competitive advantage. Globalization and the growth of competition have rendered traditional forms of advantage (cost, quality, technology) increasingly precarious. Within global industries cost structures are easily matched through overseas relocation, global sourcing, or the judicious application of technology. Competitive pressure, particularly from Japan, has pushed up quality standards to the point where it is difficult to see quality as a competitive variable; rather it has become a hurdle that any serious competitor must surmount. The accelerating rate of technological change means that technology is increasingly a transitory advantage.

The emerging forms of advantage are less likely to be locationally bound, and often take the form of tacit know-how. Knowledge increasingly provides opportunities for building competitive advantage. Considerable resources are now devoted to creating corporate advantages in the form of reputation, product differentiation, and corporate culture. The 'bundled' form of much of this knowledge (combining product technology, process technology and market understanding), favors MNEs.

Third, the global era places a premium on flexibility. High rates of change, and change that is often unpredictable, means that flexibility and adaptability are often the best forms of preparation for the future. Such flexibility manifests itself in a number of ways. One is the dismantling of corporate bureaucracies and the outsourcing of non-core activities. A second manifestation is the growth in new, non-traditional operating modes such as strategic alliances and cooperative agreements. The inevitability of competitive strategy has given way to a mixture of competitive and cooperative options. A similar pursuit of flexibility is evident in the area of organization structure, where businesses have flattened structures, moved towards network type organizational models and attempted to internalize continual learning as responses to a turbulent environment [4].

Fourth, in a number of industries, traditional competitive rules have been abandoned and new models forged. In part, this reflects the new economics of knowledge-intensive industries. Companies such as Microsoft and Intel enjoy high levels of market share. Others, such a Swatch, CNN, Pfizer and E-Bay have created completely new industries or business models. This illustrates the superiority of innovation over efficiency in the global era.

Fifth, the marketing and management functions are undergoing transformation in the global era. Increased competition and consumer power as a result of the widespread availability of information are forging new relationships between buyers and sellers. Value is likely to become a short term concept as products are rapidly displaced. Increased consumer choice may encourage brand loyalty as 'brands' are expanded to encompass lifestyle choices and producers move further forward in the value chain. The implications for management are equally significant. Creating, managing and utilizing knowledge will emerge as perhaps the key management task. This function will encompass creativity, managing innovation and highly skilled yet mobile employees, as well as sustaining customer relationships.

The Future of Globalization

While the global era has been associated with high rates of economic growth and increased prosperity for many, it also has a number of disadvantages. Two key concerns have been the fact that the global era has coincided with US hegemony and a growth of income inequality. The demise of the Soviet Bloc has resulted in the US as the remaining superpower. While this has brought commercial advantages, it has also elevated the US business profile and, in some cases, attracted negative attention. The increase in economic inequality between nations, particularly in the last two to three decades, has been widely noted [2]; [8]; [12]. The last couple of years have seen growing protest against globalization, and this may have culminated in the terrorist attacks of September 11. The nature of the targets, particularly on the World Trade Centre, and various statements linking the attacks to US economic and foreign policy mean that there may be a link between terrorism and globalization.

If this is the case, then the future path of globalization will be significantly affected by the response to the attacks of September 11. We can distinguish three possible scenarios. The first is the possibility of de-globalization. Under this scenario the advanced economies driving globalization decide that such a path is no longer in their best interests. They, and their multinational enterprises, increasingly disengage from the world economy and focus back on protecting their domestic interests. We suggest that such a scenario is extremely unlikely. It is unlikely because continued globalization (albeit in a modified form) is necessary to maintain the living standards of the advanced economies and to lift income levels in developing countries. This suggests that continued globalization is not just in the best interests of the United States, it also serves the needs of emerging economies such as China and India.

A second scenario is that the so-called 'wild globalization' [9] characteristic of much of the 1990s resumes after a brief interlude during which a successful war is waged on terrorism. In this scenario, terrorism is simply a temporary aberration on a path of largely unregulated globalization. We see this scenario as equally unlikely. Its fundamental flaw is that it assumes that a 'solution' to the problem of terrorism can be found without tackling the underlying causes of terrorism and these appear to be deeply intertwined with processes of globalization.

The third scenario entails some form of restructured globalization. Indeed, there is some evidence that this is already occurring. The core manifestations of globalization, growing interdependency and an emphasis on efficiency as opposed to equity, are being reconsidered. As [6] recognizes, the focus of an international order based on market liberalization is the containment of political not economic power. We should not be surprised then by the growth in economic inequality apparent in the last decade or so. In a range of influential forums, there is now considerable debate over the merits of trying to create a more 'humane' form of globalization [5]; [11].

The future path of globalization depends crucially on which of these scenarios comes to pass. We believe that the third is by far the most likely; However, at this stage we cannot say what shape the restructuring will take and how this will affect the globalization process.

Conclusion

This paper has argued that we are witnessing the early stages of a new era in the world economy; the era of globalization. This emerging era is distinctive in a number of ways and is fundamentally changing the nature of the world economy. It is driven by business activities; particularly the global spread of multinational enterprises. It is more than simply an adjustment period in world history; rather it has sufficient inertia and coherence to restructure international relations.

Globalization as a system brings both opportunities and threats. The opportunities arise from the breaking down of conventional barriers, whether geographical, industrial or temporal. Size, location and previous experience are declining in importance as constraints on business activity. At the same time these developments represent threats to organizations unable to understand or respond to environmental change. Globalization is also associated with growing economic inequality and US hegemony. Anti-globalist sentiment and the terrorist attack of September 11 are likely to significantly influence the path of globalization. We have argued that the most likely scenario involves a restructuring and more humane form of globalization where the benefits of globalization are shared more widely and more fairly.

The global era has enormous implications for international relations and our understanding of the business environment. We have briefly outlined some of the most significant of these.

References

[1] Best, M. (1990). The New Competition: Institutions of Industrial Restructuring. Cambridge: Polity Press.

[2] Bornschier, V. (2002). Changing Income Inequality in the Second Half of the 20th Century: Preliminary Findings and Propositions for Explanations. Journal of World-Systems Research Vol VIII, p100-129.

[3] Friedman, T.L. (2000). The Lexus and the Olive Tree. New York: Anchor Books.

[4] Galbraith, J.R., Lawler, E.E. and Associates (1993). Organising for the Future: The New Logic for Managing Complex Organizations. San Francisco:Jossey-Bass.

[5] Gorringe, T. (1999). Fair Shares: Ethics and the Global Economy. London: Thames and Hudson.

[6] Held, D. (2001). Violence and Justice in a Global Age After Sept 11: Perspectives from the Social Sciences. New York: SSRC.

[7] Kearney, A.T. (2001). Measuring Globalisation.Foreign Policy. January/February p56-65.

[8] Sachs, J.D. (2001). The Strategic Significance of Global Inequality. The Washington Quarterly. 24, p187-198.

[9] Schwartz-Morgan, N. (2001). Wild Globalization and Terrorism: Three Scenarios World Future Society.

[10] Stallings, B. (Ed) (1995). Global Change, Regional Response. The New International Context of Development Cambridge: Cambridge University Press.

[11] UNCTAD (2001). World Investment Report 2001: Promoting Linkages. Geneva and New York: United Nations Conference on Trade and Development.

[12] World Bank (2001). World Development Report 2000/2001: Attacking Poverty Oxford: Oxford University Press.

Controlling within the Scope of New Management System: Introduction to the Public Administration in Germany

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Abstract

A new boom of discussions how to modernize the state can be felt also in Germany as early as from the beginning of nineteenths years. Nevertheless, all this is much less about a new stipulation of the state role or about the state politics influence range than about the administrative and organizational means of pushing ahead the role of state tasks by means of public services. The conception of „Public Management“ presupposes the solution of the generally observed lack of management within the public management system by creating decentralized organizational structures, by applying the effect yielding procedures, and by redirection of activities in personnel policy.

The greatest progress in these endeavors can be seen on the communal level. Pilot projects for new management systems are introduced practically in every larger German city. Within the period of some few years, the new management system recommended by KGSt has been promoted to a leading strategy for internal modernization of municipal administration.

New public administration management system

The basic structural constituents of the new management system:

- creation of a decentralized management and organizational structure of an entrepreneurial character by means of a decentralized responsibility of resources,
- achievement of outputs and costs transparency,
- central controlling system,
- checking the public services performance thoroughness,
- creation of a product directed sectoral organization,
- contractual management stipulating sharp responsibility limits between politics and administration, whereby the characteristic feature of these limits should be the fact that the politics shall be concentrated on the principal decisions and appropriate controlling activities.

These measures should be accompanied by:

- activating various competitive factors (intercommunal comparison of services, authority internal quasi markets, market competition),
- means of personal development in form of education and adult education, remuneration system based on output results, demand for labor forces movement possibilities, availing of employees and of their capacities, changes in administration aimed to a steadily improving process, and
- by paying more attention to customer by means of orientation on products and by quality management.

Definition, aims and purposes of the controlling

Controlling is a form of management improvement enabling to regulate the effectiveness, efficacity and consumption of financial funds by means of collecting and processing information and putting it to disposal of administration management on various levels.

From the business economy point of view, the administration management must face these issues:

1. What kind of administration services (products) are needed to meet the demands - the quality and quantity of services being taken into consideration?
2. How does the efficiency production process influence the demands for financial funds, and how could these financial means, or possibly products (obligatory or optional ones) be distributed among the individual authorities/departments?
3. How to achieve as inexpensive production as possible without reducing the quality standards?

The following requirements are arising out of the above-mentioned issues for the particular organizational unit:

1. The unit must be effective (useful, efficacious), i.e. it must provide the „right“ services. (Target group)
2. The unit must be efficient (economical), i.e. it must provide products for as favorable prices as it is possible. (Efficiency)
3. The unit must have possibilities to be financed, i.e. its products must be produced within the scope of the financial and personnel capabilities of the unit.

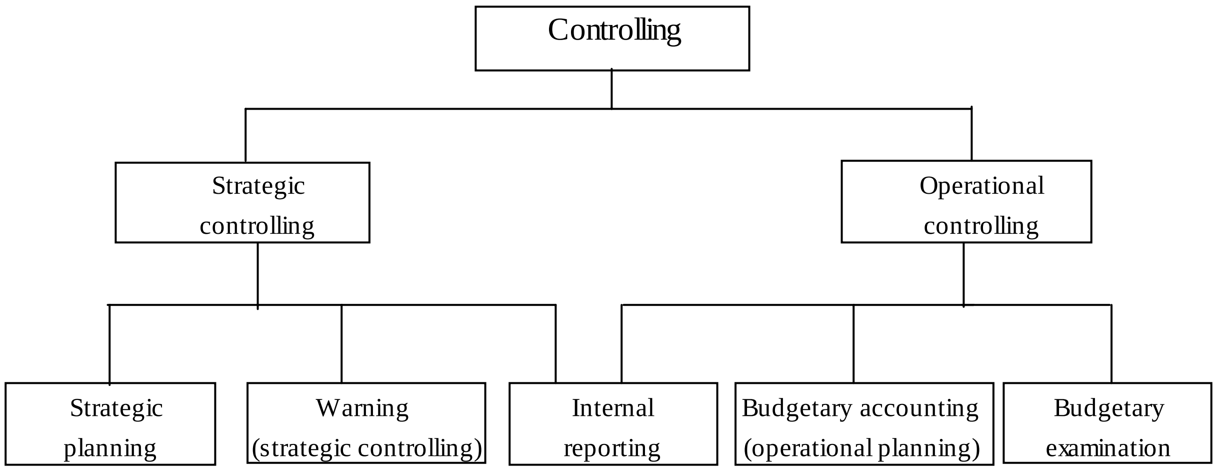
The said requirements are mutually associated, influencing each other.

Thus, the function of controlling is to attract the attention of the governance bodies on various levels to the impact of their decisions on the effectiveness, efficiency and on the financial needs resulting thereof on one hand, and to fulfillment of reporting obligations on the other hand. In addition to it, the controlling system is to report about the development of the effectiveness, efficiency and financial needs (credit – debit – balance), and on the possible measures that are to be taken in order to correct, or to eliminate possible misguided development.

Table 1: SPECIFICATION: CONTROLLING – CAMERALISTICS

Controlling	Cameralistics
specification of aims, planning and inspections are dominating	bookkeeping is dominating
regular communication with respective authorities/ departments	"secret" work
flexible and permanent adaptation to the requirements of decision bearer	„fossilized“ directives (e.g. budgetary law, acts),
getting new information and its propagation	accounting reports (accountancy department, audit bookkeeping department, federal accountancy department...)
activities related to future prospects	mostly retrogressive point of view applied
activities carried out with respect to customer	activities concentrated on quantity
reports containing summarizations, prognosis, proposals	delivery of cipher materials only

Controlling differentiation



Operational controlling (Do we do the things right?)

The operational controlling has been introduced for a short time period. It is concentrated to monitor the services performance process in run of years. The purpose of the operational controlling is to regulate the costs, and to ensure the short and middle term product quantities, their costs and quality.

Strategic controlling (Do we do the right things?)

The strategic controlling deals with long term development. Within the scope of the strategic controlling, the middle and long-term demands on product, on groups of products and on products spheres are subject to analysis from the point of view of future changes in social, economic, environmental and general terms.

Types of controlling

1. Interests controlling

The communes are not only the interests' owners, but they are charged with obligations as well. The communes are both obliged and entitled to manage and to check their interests, as it arises out of their position of owners, and out of their common responsibilities for local politics. The necessity to have at disposal a special type of politics related to the communes involvement is resulting from the impact of their involvements on the state budget, and from the fact that the interests units cannot, and may not be managed as standard administration units (authorities). For that reason, such politics of interests units showed to be needed that would have features of a planned influences much more than having a character just of a response to situation. At the same time, the relation between the independence of interests on one hand and the management and supervision by the communes on the other hand must be equilibrated. Management and supervisions must be, first of all, related to interests outcomes.

2. Financial controlling/ Administration controlling

The financial controlling stands for any activities aimed to secure a persistently balanced budget. An enterprise is under a balanced budget if it is able to meet all its financial liabilities (payment obligations) at any time. From the long-term point of view, it means not only the ability to fulfill the actual obligations, but it is much more important to prevent the financial aspect hindering the fulfillment of liabilities, and in such a way hindering also the future development. The structural balance requires also an open door for arrangement of sufficient capital income from outside (e.g. loans, companies investments...)

Within the scope of new management system, and similarly also within the scope of financial controlling, the administration controlling can be defined as follows:

”Supply of information and cooperation in form taking into account the future state of affairs, with the aim to support the management when being in stage of finding the decisions on commune finances“.

Financial/administration controlling provides data on incomes and expenses, and in this way, appropriately to the administration responsibility, also the information on resource usage in form of expenses/costs, resource contributions and related services.

3. Costs controlling

With reference to this, controlling means planning and checking the costs, e.g. the production costs examination within the scope of costs bearer accounting or within the system costs - indexes-accounting.

4. Personnel controlling (personnel management)

Since the personnel costs in the public administration constitute about 60 – 90 % of total costs, this file of expenses is worth paying it the greatest attention. The following partial fields are representing the essential spheres of personnel management:

a. Planning the demands on personnel

- How many employees will be necessary for tasks fulfillments? (Quantity aspect)
- On what a quality level should the employees be? (Quality aspect)

b. Choice of personnel

c. Employee development

On what kind of education and adult education is it necessary to concentrate the attention, in order to achieve the set up qualification targets?

d. Employee assessment

Have the targets been achieved? Which kind of stimulation must be ensured to fulfill the set up targets?

e. Personnel information systems

By means of a personnel information system, it is possible to elaborate various assessment methods, e.g.

- educational level/ capabilities of every worker,
- health,
- vacations,
- overtimes,
- indexes,
- etc.

5. Project controlling

The active management of project performance is understood under the term “project controlling”. The clearly defined project targets, the appropriate and adequate project planning and structure are important presuppositions for adequate project controlling. The planning must include:

a. Time period

- Before what term the aims are to be achieved?

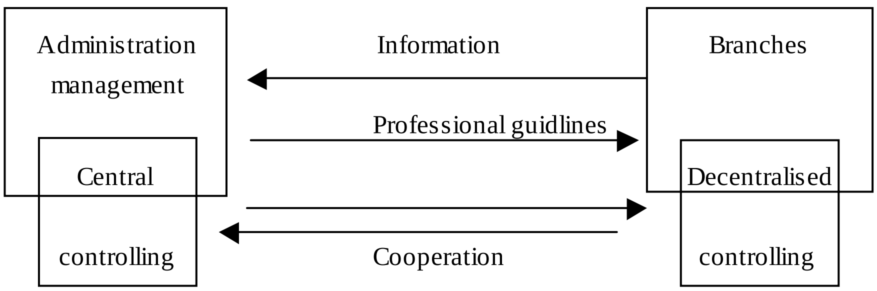
b. Budget

- What kind of financial means is to be used for the individual project purposes achievement?

c. Contents

- How is it possible to ascertain that the target has been already fulfilled?

Controlling organization



Central controlling

The administration management is accompanied by a common responsibility for the administration and for the communal interests as well. The central controlling as an integration of political and administrative function, should be placed on the upper level of administration management taking the function of a power promoter. The central controlling supports administration management by coordinating the branch activities and the communal interests.

In this position, the central controlling takes over other supporting function inevitable for fulfillment of the said role: it is the coordination of planning and activities of branches and those of communal involvements, of central reporting, of directives and standard drafting, variances analysis, etc. upon the agreements with administration management. The ties on the lower hierarchy levels, e.g. on the level of separate branches result, in this reference, in foregrounding the individual interests, so the target goals may disappear, and the coming information can be filtered or even no at all.

Decentralized controlling

The decentralized controlling is rooted on the branch level, where it takes over the respective control tasks promoting the inferior hierarchy level. Basically, the decentralized controlling is competent for operative planning and management on the subordinated level (this time branches, authorities, departments). The development and application of procedures influencing the possibility to provide economical and operative offer of services constitute one of assignments, with which this type of controlling is charged.

Controlling instruments within the scope of new management system

1. Costs and output calculation

The costs and output calculation deals with financial appraisal of management activities. These measures enable to carry out a permanent economic control by these means, and to create the basis for the accountancy directed towards outputs (disbursement budgets).

2. Portfolio analysis

The portfolio analysis is an instrument for strategy procedures specifying, possibly it is also an instrument for trade guidelines, as the original sphere of portfolio analysis utilization was just the financial economy. Within this field, this kind of activities ensures an optimal mix of securities portfolio. Portfolio of various investments is to be balanced from the point of view of risks on the one, and of profits on the other hand. Within the scope of products portfolio, these efforts are transferred to the strategic entrepreneurial planning to achieve a balanced status. The portfolio analysis, based and coming out from the sphere of securities has been used also to solve various problems within the whole economy. Many specialists recommend applying this kind of analysis also in public administration.

3. Tasks assessment

The tasks assessment is understood to be a method of a strategic controlling (the political one), and it is a complementing function to portfolio analysis procedure, or possibly also to other procedures. It is an instrument supporting the resources combination or their division. In addition to other purposes, the task assessment is used when specifying the assumptions for tasks fulfillment planning.

The public task can be defined also as a sphere of missions specified by political rules. These tasks are fulfilled by a process of services providing, within the scope of which various factors are mutually interrelated – personal, regional, technical, informational or financial by measures taken by administration management. Moreover, it is just the process of services providing, to which the tasks assessment is focused. The responsibility for a critical assessment of political targets lies on the political leading system.

The following questions can be picked up as the basis for tasks fulfillment evaluation:

- Which tasks are the essential ones?
- Are there any surplus tasks?
- Should these tasks be observed by the actually competent organizational unit?
- Which tasks can be arbitrarily, i.e. not by any act, binding ordained?
- Of what significance are such tasks, and how can we utilize them?
- Are there any tasks providing a possibility to reduce their strength?
- Which task can be split and transferred to other public or private organizations?
- How much of rationalization capacity inheres in holding over key tasks?
- Are there any tasks that would be wanted by some target groups, if they were not implanted anymore?
- What would happen in case of non-implementation of certain tasks?
- How great is the capacity portion within such surplus tasks?
- How can these tasks be reduced?
- What can you personally add to it, or how can you contribute thereto?
- Who should be the person within the organization to implement it?

The assessment of the services performance process is the duty of a person on the administration level. The purpose of such orientated targets is the economic carrying out of the provided services under simultaneous observing the other conditions, e.g. lawfulness, deadlines, etc. (quality indicators).

The assessment of performance processes should be focused on costs, the internal information resources should be used in order to ensure the tasks fulfillment. The range of tasks assessment instruments is so large that they can be implemented within both the strategy and operational controlling.

4. Output focused budgetary accounting

The planning and checking of financial resources is carried out in accordance with an output focused budgetary system, i.e. the determination and allocation of financial means do not depend on the organizational entities providing the services. There are the economic budgetary results from the previous year being taken for the issue point determining the financial funds allocation, or determining their across-the-board reduction, possibly also the reduction due to an increasing inflation rate. Nevertheless, this type of budgetary accounting is not adjusted to boost the performance effectiveness and efficiency of organizational units; this is possible to achieve only by means of output oriented budgetary accounting. The output oriented budgetary accounting is aimed to allocate the financial means in accordance with justified needs (personnel, material and investment means) depending on the services/products carried out by the organizational unit. It is possible to take also a justified procedure within the scope of financial means curtailing.

Output focused budgetary accounting consists of the following constituent factors:

- Product characterization.

The product specification gives the possibility to define products, and to give a concrete form of their specific features such as target group, quantity and quality.

- Product costs and revenues.

The data is collected based on expenses and outputs calculation.

- Product organization (product sector organization).

The product-oriented organization makes the allocation of resources easier, and on this basis, it creates exactly definable budget responsibility fields.

- Product budgets.

Output oriented budgetary accounting makes the relation between input and output resources more transparent, so it is possible to make exact decisions on quantity and quality of outputs and on the use of resources, and vice versa.

5. Indexes/ indicators

Indicators systems belong to those instruments of operational controlling that are already implemented within the public administration. Indexes and indicators are used to quantify the resource applications, performances and their impact. Through the indexes and indicators, the quantitative features are presented, and on this basis, also the retrogressive conclusions and quality points of view are to be taken.

6. Reporting

The reporting, being a primary instrument of operational controlling system, and enabling to secure an inevitable transparency, represents a measure supporting the administration, but even the politics to take optimal planning and decisions. Using the systematic reporting, the leading employees become competent to take addressable, prompt and systematic decisions concerning the management measures necessary to be taken. The reporting system deals with the product pyramid established based on matter-of-fact reasoned criteria on one hand, and on the organizational structure on the other hand.

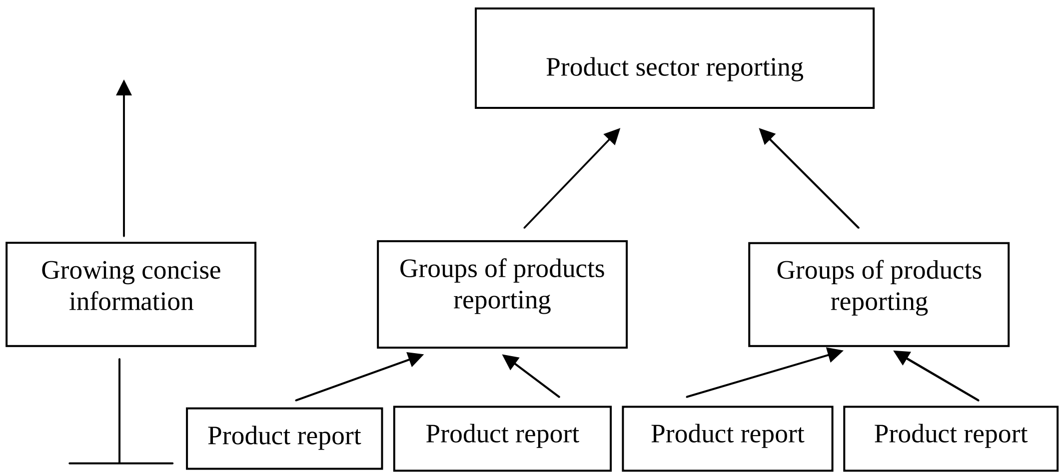
In addition to information flowing out from cost accounting, the reports are presenting also the interrelation of this data in form of indexes. There are, e.g. the rate of costs covering, or personnel expenses per one product piece. By means of these indexes, there is a possibility to make comparisons with other administration results (intercommunal comparisons). Therefore, it is possible to recruit the basic data information about the products, or products groups/fields, whether these are showing higher or lower rates of costs covering, compared with products of other administrations.

Reporting reflects information on operational economic management, and on new developed elements (costs placing, products, targets agreements).

Reporting specifications:

- The costs bearers (products) and costs placing create the basis.
- Hierarchy structure.
- Concise information for recipient.
- Flexible system.
- It is central controlling, that cares for system.
- No stacks of papers or data „cemeteries“, as far as possible.
- Actual and matter-of-fact information.

Product hierarchy reporting



Type of report	Recipient	Time period	Main content
Product reporting	Department management Authority management	Standard month reporting	Costs - Budget- and indexes to separate product
Groups of product reporting	Authority management	Quarterly and ad hoc standard reporting	Costs – budget data for separate products within one group of product (or classified according to the greatest variance „is / is to be“) and indexes of product group
Product sector reporting	Branch management	Half year and ad hoc standard reporting	Costs – budget data for separate products within one group of product (or classified according to the greatest variance „is/ is to be“) and indexes of product sector
Administration reporting	Administration politics	Half year and ad hoc standard reporting	Costs – budget data for separate products within one group of product (or classified according to the greatest variance „is/ is to be“)

Conclusion

After introduction of the new management system, and upon the substitution of the input oriented administration by the output oriented one, the administration management in future should become superior to contracts (targets agreements), and it should be placed in center of attention, in relation to results to be achieved.

The controlling supports this process (targets and results orientation) by means of the systematic confrontation of tasks to be solved (aims, results), and by checking the actual state of affairs condition (costs, quantity, quality) by means of the systematic reporting. The systematic reporting has to bring the administration management, branch and authority managements to the situation, in which they will waive the system „is to be / is" and they will take appropriate management counter measures. The information processing is supposed to be addressee oriented.

Nevertheless, the character of controlling is not purely monetary /payment one, but it is aimed also towards the organizational changes.

Instead of a bureaucratic type of administration concentrated on the execution of state will and law rules, as it exists so far, the controlling system is to be understood as a kind of organization characterized by a steadily developing system oriented towards the needs of both clients and employees. It is a system of an organization steadily asking, whether the right tasks are pursued, and whether these tasks are performed right.

Controlling means also a steady motion as far as planning process is concerned. No aim, no work processes are "per se" accepted as unchangeable. Briefly said: Exaggerating the case, the „spirit of controlling" can be described as a counter term to administration conception, generally labeled with mark „clerical mentality". With reference to it, the process of organizational development will thus take more years.

In order to achieve this target, it is necessary to ensure that all instruments of new management system (decentralized responsibility for branch and resources, personnel management, quality management...) are implemented en block, and not just partially.

In addition to it, it is required that everybody plays an active role in this process, and thus he/she helps to enforce the project of „administration modernization" successfully. Beside this, another precondition is necessary to be fulfilled in order to manage this administration modernization: the needs and demands of people must be taken into account during this modernization process.

References

[1] Bandemer, S.: Qualitätsmanagement und Controlling in der öffentlichen Verwaltung. Berlin.1997

[2] Blanke, B.; Bandemer, S. v.; Nullmeier, F.; Wewer, G.: Handbuch zur Verwaltungsreform. Opladen. 1998

[3] Bogumil, J.: Binnenmodernisierung des Staates am Beispiel Deutschland. Hagen. 1997

[4] Brüggemeier, M.: Controlling in der öffentlichen Verwaltung. München. 1998

[5] Budäus, D.: Public Management - Konzepte und Verfahren zur Modernisierung öffentlicher Verwaltungen. Berlin. 1998

[6] Hopp, H.; Göbel, A.: Management in der öffentlichen Verwaltung. Stuttgart. 1999

[7] Horváth & Partner: Das Controllingkonzept. München. 1995

[8] KGSt Dezentrale Ressourcenverantwortung - KGSt-Bericht Nr. 12/91. Köln. 1991

[9] KGSt: Das neue Steuerungsmodell Begründungen, Konturen, Umsetzungen - KGSt-Bericht Nr. 5/93. Köln. 1993a

[10] KGSt: Budgetierung: Ein neues Verfahren für die Steuerung kommunaler Haushalte - KGSt-Bericht 6/93. Köln. 1993b

[11] KGSt: Das Neue Steuerungsmodell - Definition und Beschreibung von Produkten - KGSt-Bericht 8/94. Köln. 1994a

[12] KGSt Verwaltungscontrolling im Neuen Steuerungsmodell - KGSt-Bericht 15/94. Köln. 1994c

[13] KGSt: Das Verhältnis von Politik und Verwaltung im Neuen Steuerungsmodell. KGSt-Bericht 10/96, Köln. 1996

[14] König, K.: Modernisierung von Staat und Verwaltung. Baden-Baden. 1997

[15] Spiess, W.: Öffentliche Verwaltung im neuen Jahrtausend. Regensburg. Berlin. 2000

[16] Weber, J.; Tylkowski, O.: Controlling in öffentlichen Institutionen. Stuttgart. 1998

[17] Ziegenbein, K.: Controlling. Ludwigshafen. 1992

Development and Modification of the Assessment-Centers

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Abstract

The increasing international orientation of companies is one of the central economic trends. New potentials for business activities of globally operating companies arise from this development worldwide. Against these backgrounds, today it is of immense importance to cope with the demands of an international presence orientated market entry. An internationally experienced and competent management that can successfully realize the strategic and operative objectives on the worldwide market is required to take these chances. The hitherto traditional strategies are not sufficient to guarantee success and efficiency also abroad. An important instrument of personnel selection and development, the Assessment-Center, was often reputed to be dead in recent years. Indeed, regarding the business practice, an increased application of Assessment-Centers can be recognized. Especially evident is the increasing individualization: As the ACs were utilized by the companies, as it were, according one uniform standard up to now, today they are significantly more made to suit the particular needs of the company and are constantly developed and modified. More and more companies realize that ACs can serve as an important instrument of forming and changing the corporate culture, what will, against the backgrounds of increasing internalisation and growing amount of company mergers, attach even more importance to them in the future. Thereinafter in this study, the latest trends in the development of the ACs are more closely examined, discussed and analysed: Mainly the international ACs referred to as Cross-Cultural-AC as well as the so called 360-Degrees-View, the Management Appraisal.

The AC was established in recent years as an important instrument of personnel selection and development. The most successful companies use commonly the Assessment-Center-Methods or appoint an external personnel consultant for this purpose. However, the world Assessment-Center (AC) itself sends shiver down the spine of many people. None of personal selection or development methods causes so much emotion as the ACs. But indeed it is only an assessment method, by which the companies assess the potential of the job applicants. The non-professional competencies of the candidate constitute the core of the procedure - their assessment actually should not cause such emotional reactions as shown by the ‘aggrieved’ concerning the ACs, because in the often dreaded job interviews not only the professional skills are scrutinized, but also the non-professional competencies are assessed by the staff managers (Brenner/Brenner 2000; Gloor 1997).

Historically viewed, the ACs were developed at first in Europe, Germany, where they were used for selection of officer offspring. In the fifties, the method was further developed by the US-Americans, who have recognized its potential, and since eighties make the ACs an ongoing triumphal procession through Europe. Meanwhile, a multitude of various forms arose that are already spread worldwide. Noteworthy is the fact that the more intensive the discussion about the significance of the non-professional competencies is, the more the ACs are utilized. For present managers, it means to experience an AC sooner or later in the course of their professional career or even already when joining the company. Not every company uses here the name AC, meanwhile many synonyms are used e.g. selection or assessment seminar, presentation or information day as well as recruiting day (Leciejewski/ Fertsch-Röver 2000).

Following description would be the most appropriate to define the AC: An AC is a one or more days lasting seminar that serves to selection or development of personnel. The size of the group ranges between eight and twelve participants observed and assessed by specialized staff and management. In role-plays, case studies, group discussions, tests, in-basket exercises and presentations the participants deliver a sample of their professional skills. All the tasks are set with regard to existing or possible future working situation or working fields. The strengths and weaknesses of every candidate should be assessed with the help of the AC. There is a possibility to consider the expertise and professional skills of the job applicant in various manners. The success in an AC means e.g. taking up an executive position, entering a new scope of duties or taking up a position in a subsidiary abroad. The ACs are utilized both for selection of suitable candidates and for promotion of already appointed employees within the framework of human resources development (Hesse/Schrader 1998; Obermann 1992; Scholz 1994).

The methodology of the ACs comes under a standard repertoire on the field of personnel selection and development. This method has prevailed in general despite all controversial opinions and doubts, although it is predominantly used by large corporations in only certain forms and only for certain personnel groups. A look at European leading economic countries shows intensive utilization of the ACs methodology in Scandinavia, Benelux-states as well as in Switzerland and Austria. These methods are established also in Great Britain, though the bandwidth of usage here is a little bit limited. In the states of central and south Europe, personnel development approaches based on the classic job- and behaviour training are at the time constantly developed and thus they attach the same importance to the individual variants of the ACs as to other instruments (Kleinmann 2001).

Although the companies still mostly use the ACs for selection of first-time job applicants - the graduates, further-more the ACs are increasingly utilized in the personnel development, for example if the company wants to realize, which one of its managers suits best for particular scope of duties, when the working place is to be technically newly-arranged or when the overall organization of the company is subject to a change. The companies using ACs aim mostly at so-called “high potentials”, i.e. the graduates with a predicate examination, the ones who studied or practiced abroad, the ones with a lot of practical training and interesting beside activities. It is obvious that every company wants the best ones. The AC serves here as an objective selection method by which the examination grades play only a minor role. High rate of objectivity of the AC is of course an advantage for the company. The hit ratio of selecting a candidate that suits best the needs of the company is thus increased. During an AC the company can e.g. make the candidates go through a fine tooth comb in a direct comparison or adjust the selection procedure to special needs of particular fields or functions of the company - the objectivity in the selection of individual job applicant is also generally increased (Coelius 1998).

After considering the advantages of the ACs it is appropriate to find out what cannot be achieved with this instrument. Although the AC provides indicators of a possible performance in a future working situation, they cannot guarantee it with 100% certainty. It would be indeed daring to assume that some selection procedure could cover all the personal qualities and background of a candidate. But after all the AC provides a better prognosis of the future professional success of the candidate than any other instrument. A man is a complex personality and the other people can realize always only a part thereof. The personal environment is also very complex and can be understood only partially, too. The AC shows the beholder only some partial aspects of the candidate’s personality. The results give at best the indicators of the substantial partial aspects of the personality. The AC does not consider the learning aptitude of a person, but on the other side it gives clues to its strengths and weaknesses.

The AC raises many questions by the outsiders and the creators of the AC put their cards on the table only with a great reluctance. Many companies use standard tests that were already discussed and analysed in the psychological literature. On this account, companies do not want the candidates to create a clear picture about the realization of the AC already in advance. The tests taken on various ACs are very similar - the ways the tasks are set vary according the particular company, but the basic structure is more or less the same. The explanation is at hand: Because the ACs often assess managers from various business fields and with various education background, the tasks have to be kept as general as possible to be manageable for every participant. The danger that a candidate only play-acts and behaves in the everyday life at work differently forces the companies not to release too much information about the realization of the AC. But the primary subject of the AC is not the natural but a situation-specific behaviour. That has nothing to do with play-acting - the aim is to find out if a candidate possesses a repertoire of methods applicable in the management of working tasks (Brinkmann 1999; Knebel 1999; Nicolai 1990).

As a result, the development of non-professional competencies is vital also for the internal business development activities. The managers regularly take part in various seminars and training to improve a multitude of techniques, their potential and to develop their motivation and leadership ability. These seminars give them clear guidelines on the desired performance. Finally, the objective is to achieve a higher level of own competencies. In comparison to these development seminars, the ACs lack such guidelines. It is not clear to the participants, which behaviour is desired in the particular test by the company realizing the AC. The participants do not receive feedback about their performance until the end or none at all. Therefore they cannot rate their performance after every task and assess their success or think about possible improvements. Due to these facts, the AC is to be considered also critically. It is hardly possible to codify explicit criteria for a professional success and even less to put them into form of an exercise to make them suitable to be performed and tested, not mentioning the deduction of the future professional development behaviour prognoses. Also the theoretical background of the AC is often highly questionable. But these weak scientific fundamentals cause statements and predictions with great consequences: the success in an AC means a future professional success, a failure means zero entry or promotion prospects. Also the everywhere eulogized notion, that ACs select according to objective criteria, is dubious and questionable, because also costly trained AC-observers are people and therefore see others through the eyes of their own personal and social value judgments (Sarges 1996; Siewert 2000).

But why then do the ACs win more and more supporters? First of all it is their high and reliable quality of prediction of future professional ability and future success. That constitutes the real strength of the ACs. The ACs provide the applicability for one selected area of work or work position more than any other form of job applicants selection. In the practice it means that the utilized procedures are modified from case to case according to the particular work position.

Assuming, that the AC provides a sample of behaviour, it becomes of importance for the company. It can thus assess the candidate in the AC more precisely than just according to certificates, diplomas or by means of a job interview. The work position can be directly simulated in the AC, the acquired performance and data are practice-based and are compiled anew in every pass. And another advantage of the ACs: All performances can be sequenced and ranked, so that only the really qualified applicants get the job. In an ideal case, the observed features match the job description or the job specification of the company. The contractor of an AC assumes that those, who actually personally know the business reality, can best appraise the applicant. The role of the observer is usually in various situations assigned to the managers and the assessment errors are avoided by multiple observations. That should guarantee the reliability of the final decision (Brenner/ Brenner 2000; Hesse/Schrader 1998).

An AC consists of separate tasks, which put the candidate into a situation typical for the target position. The observers reach an inference about the future performance of the test person according to the performance shown in the tests. It is proven that the hit-certainty based on the AC-results is substantially higher than in case of a simple interview. The companies are therefore ready for the high time and money expenses connected with the realization of an AC. The objective of an AC is to acquire reliable and objective prognosis regarding the anticipatory productivity and work disposition of a candidate. But one can't forget that an AC provides the indicators of the candidate’s qualities, however, on the other side it does not consider the learning aptitude, it just solely provides clues to its strengths and weaknesses. Despite some sources of errors, the ACs remain the most significant instrument of the personnel selection (Kleinmann 2001).

When the company wants to find the most suitable job applicant, the suitable standards have to be used. A profile of an ideal candidate has to be developed, which serves as a standard for assessment of candidates. When preparing an AC, the company first has to answer questions like: What tasks does the company have to deal with now and in the future? What kind of employee does the company want to hire? What desired qualities and skills does the company expect from the job applicant? What are the differences in the requirements of the various departments of the company? What are the tasks the candidate has to deal with during the first year in the company? What career prospects are in store for the candidate in the company (Leciejewski/Fertsch-Röver 2000)? Common requirements criteria like personal manners, speaking manners, leadership and activity, logical-systematic decision making, communicativeness as well as team integrative behaviour are examined in the AC in the form of intelligence tests, activity-concentration-tests, personality tests or psychological tests (Gloor 1997).

The intention of this test procedure for the company is to find answers to the questions e.g.: Can the candidate think logically? Is the candidate more a lone wolf or a team player? Can the candidate persuade others to act on his/her ideas? How fast can the candidate understand complex connections? What is the social competence of the candidate? Can the candidate set the direction for a team? The attributes of quality of a psychological test are its objectivity (independence on the subject), reliability and validity, but decisive for its effectiveness is the validity. The higher is the validity, the higher is the probability of taking the right decision. Here is an interesting survey regarding the hit-certainty of the selection methods (Leciejewski/Fertsch-Röver 2000, page 27):

Selection Method:	Validity:
Application Documents	0,14
Job Interview	0,14
Personality Test	0,14
Biographical Questionnaire	0,37
Certificates / School Grades	0,43
Assessment-Center	0,45

The position of an observer in an AC is very demanding and complex. The observer must keep an eye on different candidates during the whole AC and at the same time concentrate equally on each one of them. That means that the individual preferences have to be suppressed. The rule is to follow the actual aim of the AC. The priority assignment of the observer is thus to acquire as neutral results as possible. Therefore the observer should concentrate only at two or three persons during a test and then he should be changed for the next test to prevent unilateral assessments. The most common assessment errors are, above all: sustainability of the first impression - that means that the first impression is so strong it stays in the mind and undesirably affects the final assessment; the halo-effect, by which the single outstanding qualities are overestimated; the middle-tendency - the tendency to level the assessments to an average; stereotyped thinking - the candidate is classified according to existing stereotypes; and projection mistake - the observer assesses the qualities of the candidate in relation to own qualities (Coelius 1998; Sarges 1996; Scholz 1994).

The ACs were often reputed to be dead in recent years. Indeed, regarding to the business practice, an increased application of Assessment-Centers can be recognized. Especially evident is the increasing individualization: While the ACs were utilized by the companies up to now according to one uniform standard, today they are significantly more made to suit the particular needs of the company and constantly developed and modified. Thereinafter in this study, the latest trends in the development of the ACs are more closely examined, discussed and analysed: mainly the international ACs referred to as Cross-Cultural-AC as well as the so called 360-Degrees-View, the Management Appraisal (Kleinmann 2001; Püttjer/ Schnierda 2001).

In case of a classic AC, there are separate tasks that are not linked together. A new trend in relation to future design of the ACs aims towards the cross-linking of the structure, which should be always individually designed for one company. Tasks are tried to be set in accordance with the reality of everyday business life, and afterwards linked to each other. The candidate plunges during an AC into a particular function inside the company and deals with individual tasks using the information gained by solving the previous tasks. Linking the various tasks together into one complex task enables assessment not only of the performance from the individual partial tasks, but also assessment of the ability of networking, strategic thinking by which the decisions made affect the initial conditions of the next tasks. The relation to real life is thus substantially increased. The requirements on the ability to work under pressure and concentration are significantly increased comparing to a classic AC. The rule is to gain information from recent task and to consider and integrate it into the decision-making.

Computer-aided ACs are another innovation of the ACs. The computer utilization enables implementation of brand new tasks into the ACs. Computer simulations or business games are really an innovative development of the ACs. They enable creating case scenarios and the decisions made affect directly the following tasks. The well-known tests are often just transferred to a new medium to gain miscellaneous advantages. Meanwhile, there is a multitude of methods using the technical potential of the computers to perform new kinds of tasks, e.g. adaptive behaviour - the computer adapts itself to performance level of the candidate and alternates simple and more complicated tasks in accordance to the feedback from the candidate. A computer simulation is an innovation enabled by the computer usage - it has to deal with control of a complex system, where the relations of the various influencing factors are not recognizable or just indirectly deducible. These methods feature immense and multifarious variables and their realization may take couple of hours. The ability to work under pressure as well as strategic and contextual thinking is required from the candidates. Hence it is of great importance for the applicant to consider the decisions made in the further processing of the task.

The so-called Recruitment Workshops constitute a new trend in relation to the future design of the ACs, too. Basically, there are company- and branch-specific Recruitment Workshops. Especially in the recruitment of junior managers this method is more and more prevailing. Company-specific Recruitment Workshops create a platform consisting of company tailored testing of candidates, presentations of the companies and group discussions. Such procedure meets much more an approval of the candidates than a classic AC, because it is to a greater extent a process between equal parties. Branch-specific Recruitment Workshops are usually realized on a large scale where mostly 10-15 companies meet with pre-selected candidates during a 2-3 days long event. The candidate has here the possibility to establish contacts with various companies and to present himself within the framework of the tests. Beside that, company presentations and individual interviews take place. However, the personal contact is not very intensive due to the size of the event. Despite the loose atmosphere the candidate is still under examination. The assessment criteria of the exercises remain the same as in the case of a classic AC (Knebel 1999; Hesse/Schrader 2000; Siewert 2000).

The increasing globalisation makes the business world smaller. That brings cooperation between people from various cultures speaking various different languages. Based on this development, international ACs, also called the Cross-Cultural-ACs are being designed. The intercultural competencies are here increasingly in the centre of the attention, regarding the selection of the candidates (participants from various countries or cultures) and the design of the exercises. This form of ACs is aimed, above all, at selection of an employee for activities abroad. Selected parts of such AC are often realized in a foreign language. The candidate has to prove a sensible approach to various cultural specialties, an especially strong empathy and, of course, a good knowledge of a foreign language. An optimal candidate is able to deal with various culture groups and is keen on establishing and maintaining contacts with people from abroad. Personnel selection and development on the international level affects also increasingly the design of the ACs. A successful transfer of methods of assessment of the potential of the employees successfully used at national level into intercultural instruments requires a wide spectrum of competencies and concrete practical experiences of managing the sensible cultural differences. What is a reliable selection criterion in contact with people from one culture, can in another country and context cause massive misinterpretations. Because of the rapidly increasing need of valid methods that enable the assessment of the capability to work abroad and the cultural flexibility of the employee, the methods of the ACs have to be re-developed and modified (Kleinmann 2001; Püttjer/Schnierda 2001).

As mentioned, the increasing international orientation of the companies is one of the central economic trends. The national economies in Eastern Europe and many threshold countries show a rapid economic growth together with increasing purchasing power and demand for internationally available products. New potentials for business activities of globally operating companies arise from this development worldwide. Against these backgrounds it is today of immense importance to cope with demands of a market entry orientated on international presence. An internationally experienced and competent management that can successfully realize the strategic and operative objectives on the worldwide market is required to take these chances.

The hitherto traditional strategies are not sufficient to guarantee success and efficiency also abroad. Many failed attempts of the companies to establish a subsidiary abroad or enter into a partnership or alliance serve as a proof of the above stated. The requirements on a successful activity in a foreign culture are accordingly high and also qualitatively different. The fundamental cultural characteristics of a country like values, norms, taboos, customs, behaviour patterns and attitudes influence every stage of the business relations. It is of great importance that the employees working abroad are able to react adequately when confronted with significantly different behaviour patterns and situations than in their home country. The future design of an AC in this case shows itself in the concentration on the international AC-methods (Siewert 2000; Brenner/Brenner 2000).

Development of a detailed culture- and task-specific profile of requirements always constitutes the base for identification of a suitable employee. Necessary specialized knowledge, core competencies and general conditions have to be identified and defined together with a cultural profile. The strategic business objectives and various perspectives have to be considered and integrated. The next step is the identification of instruments and methods that are suitable to assess the competencies defined in the profile of requirements. Special importance should be attached to an analysis of professional and private history of the candidate, because past interests, features and skills should be assessed. The ACs offer the possibility to simulate realistic working situations based on the culture of the particular country. In relevant situations the behaviour spectrum of the candidate is revealed. A high level of the reality-closeness of the simulations is in the international environment of a crucial importance for the quality of the prediction. It is recommended to include managers from foreign companies into the realization of an international AC. The utilization of an international AC optimises the intercultural selection process (Brenner/Brenner 2000; Kleinmann 2001; Brinkmann 1999).

Management Appraisals are increasingly used due to the continuing mergers and takeovers of the companies. The question to answer here is which one of the candidates would adapt best to the new constellation. The basic principle is so-called 360-Degrees-View - the assessment of a person from many different points of view - how is the candidate assessed by the superiors, colleagues, other employees or the customers. An attempt to create an overall picture of a person is made with the help of questionnaires and interviews and then completed with a self-assessment of the candidate. The scrutinized criteria are leadership quality, communicativeness, team attitude, business thinking and the innovation potential. In contradiction to a classic AC, the Management Appraisal does not use moment observation based on the solving of tasks, but it is much more a retrospective observation based on real-life situations and impressions from everyday practice. The prediction quality of this method is relatively high. The self-assessment has to be reviewed whether the candidate presented a realistic picture about himself/herself. A realistic self-assessment that resembles to the assessment given by the superiors, colleagues, other employees, presents one of the most significant attributes of the personality.

The managers face in their everyday working life more and more complex problems, where the 360-Degrees-View can especially serve as an instrument to assess the performance from all points of view and constitute a significant step regarding to the strategic integration of the personnel management into the development of the company. The 360-Degrees-View is a complex, realistic and towards performance orientated assessment method that offers many advantages that increase its potential within the framework of an integrated personnel development concept for the participating managers. In addition, there is a multitude of starting points for the overall strategic development of the organization. A design and realization harmonized with the requirements of the company enables realization of differentiated objective-settings.

An implementation of a business strategy realized by the management of the company covers various fields. These mostly complex tasks settings demand equally complex method of the performance assessment. The 360-Degrees-View for the managers means an individual assessment of performance and potential from all points of view. That means that feedback from all groups of people interacting with the managers during the everyday working life: superiors, colleagues, other employees as well as the internal and external customers is compared with the self-assessment of the manager. This method has significant advantages compared to conventional methods of performance assessment. The superiors experience other aspects of the behaviour of the managers than e.g. employees. The colleagues have a good view of the methodological competence, while the internal and external customers can better assess the service orientation. Additionally, more feedback sources significantly increase the objectivity of the assessment (Siewert 2000; Hesse/Schrader 2000). The comparison of the self-assessment and external assessment within the 360-Degrees-View offers precious starting points, where the differences and correspondences between own perception and actual performance can be uncovered. However, the procedure can be meaningful only if the acquired information is implemented and support the following personnel development measures. A consequent harmonization of following measures from the feedback results can make the 360-Degrees-View an integral part of a strategic orientation of whole personnel management.

The crucial points of the 360-Degrees-View are as follows: the candidate is assessed by all relevant groups of people from his working environment, i.e. superiors, colleagues, other employees and external and internal customers. This external assessment is compared to the self-assessment. After acquiring the feedback results, the next step is a detailed personal feedback-interview as well as detailed written report. Afterwards, measures for personnel and company development are taken. After a determined time a short follow-up-questioning is realized in order to assess the success of the taken measures. With the 360-Degrees-View it is possible to pursue accordingly extensive objective-settings in terms of the company as a whole.

Additionally, long-term advantages can be achieved by regular utilization of the 360-Degrees-View in the company. The company can strengthen the cooperative culture and make way to really dialogical management by a deliberate and careful realization with the adequate follow-up. The 360-Degrees-View contributes to an open, feedback-friendly and conflict-compatible communication culture in the company and thus builds the fundaments of a self-learning and self-optimising performance of the management. The general readiness to assess and to be assessed together with the positive experiences within the 360-Degrees-View makes the managers - also on their own initiative - more often ready to get feedback from employees, colleagues, superiors or customers. And due to the positive experience, the readiness and ability to give constructive feedback is also increasing. The extensive pre-information of all participants, a secure anonymity of the feedback-givers, participation of all participants in all relevant phases as well as open and comprehensive information about the results secure a successful realization of the 360-Degrees-View (Brenner/Brenner 2000; Kleinmann 2001; Leciejewski/Fertsch-Röver 2000; Püttjer/ Schnierda 2001).

The main objective of the realization of an AC is increasing the hit-certainty of personnel decisions - whether it be selection or development of employees. However, other aspects are important, too. The companies realize to greater extent, that ACs can also serve as instrument of forming or changing the company culture, what will be of great importance due to the growing internalisation and increasing amount of company mergers also in the future. Increasing demand for international or multicultural design of the ACs indicates also other trends. The implementation of new media like Internet will be also integrated into the ACs. For the company, it is important to find a way to make use of this development at a right time. The final insight is that only harmonized methods lead to a success. The orientation on practice, acceptance and significance will be conclusive for the ACs in the future. A strict adherence to the textbook-like, purely scientific standard-AC will not suffice to the majority of the companies. The function of personnel management - and therewith the classic personnel department - has to find a new position as a more competent advisor, as an engine of the processes of change and as a strategic business partner.

References

[1] Brenner, D.; Brenner, F.: Assessment-Center. München 2000.

[2] Brinkmann, R. D.: Techniken der Personalentwicklung. Heidelberg 1999.

[3] Clutterbruck, D.; Kernaghan, S.: Empowerment - So entfesseln Sie die Talente Ihrer Mitarbeiter. München 1999.

[4] Coelius, C.: Fit fürs Assessment Center. Hamburg 1998.

[5] Doppler, K.; Lauterburg, C.: Change Management. Frankfurt 1994.

[6] Freund, D.; Galinski, K.; Sternecker, P.; Wollsching-Strobel, P.: Auf der Suche nach innovativen Instrumenten der Potential- und Leistungsanalyse. Wiesbaden 1996.

[7] Gloor, A.: Die AC-Methode. Zürich 1997.

[8] Goldstein, D.: Four keys to cross-cultural success. In: Silberman, M.: The 1997 McGraw-Hill Training and Performance Sourcebook. New York 1997.

[9] Gomez, P.; Hahn, D.; Müller-Stewens, G.; Wunderer, R.: Unternehmerischer Wandel. Wiesbaden 1994.

[10] Hamel, G.; Prahalad, C.: Wettlauf um die Zukunft. Wien 1995.

[11] Hesse, J.; Schrader, H.-Ch.: Assessment-Center für Hochschulabsolventen. Frankfurt 1998.

[12] Hesse, J.; Schrader, H.-Ch.: Testtraining. Frankfurt 2000.

[13] Imai, M.: Kaizen. München 1992.

[14] Kleinmann, M.: Assessment-Center. Stand der Forschung. Göttingen 2001.

[15] Knebel, H.: Taschenbuch Personalbeurteilung. Heidelberg 1999.

[16] Kozminski, A.: Looking ahead - skills and competencies in the new. In: Sattelberger, T.: Human Resource Management im Umbruch. Wiesbaden 1996.

[17] Leciejewski, K. D.; Fertsch-Röver, C.: Assessment Center. Planegg 2000.

[18] Lenzen, A.: Erfolgsfaktor Schlüsselqualifikationen. Heidelberg 1998.

[19] Neuberger, O.: Personalentwicklung. Stuttgart 1994.

[20] Nicolai, C.: Assessment-Center in der Personalentwicklung. Berlin 1990.

[21] Obermann, Ch.: Assessment Center. Wiesbaden 1992.

[22] Probst, G.; Raub, S.; Romhardt, K.: Ressource Wissen - Wissensmanagement für die Unternehmenspraxis. Wiesbaden 1997.

[23] Püttjer, Ch.; Schnierda, U.: Assessment-Center-Training. Frankfurt 2001.

[24] Sarges, W.: Weiterentwicklung der Assessment Center - Methode. Göttingen 1996.

[25] Schircks, A. D.: Management Development und Führung. Göttingen 1994.

[26] Scholz, G.: Das Assessment-Center. Göttingen-Stuttgart 1994.

[27] Schuler, H.: Die Validität des Assessment-Centers. In : Schuler, H. : Das Assessment-Center-Verfahren der Eignungs-Beurteilung. Heidelberg 1989.

[28] Senge, P.: The Fifth Discipline - The Art and Practice of the Learning Organization. New York 1990.

[29] Siewert, H. H.: Spitzenkandidat im Assessment-Center. Landsberg 2000.

[30] Twisk, T. F.: Assessment von internationalen Managern. In: Scholz, J. M.: Internationales Change Management. Stuttgart 1995.

[31] Veil, C.: Wohin geht die Assessment-Center-Entwicklung? In: Zeitschrift für Personal. 1995.

Emotional Intelligence and Leadership Behaviour of Indian Executives – An Exploratory Study

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Abstract

The world today is under going a change more profound and far reaching than any experienced since the dawn of the modern age. Rapid environmental changes are causing fundamental transformations that have a dramatic impact on organizations and present new challenges for human resources management in general and leadership in particular. The transformations do represent a shift from traditional intelligence to new paradigm of emotional intelligence. It has been human nature to desire stability even in the ever-changing professional lives. The system of life - and organizations – is fluid, dynamic, and potentially self-renewing wherein today's best leaders are learning to "go with the flow" to accept the inevitability of constant change and recognize change itself as a potential source of energy. Research studies have shown that the leaders with higher emotional intelligence see changes as opportunities for something better, and they cherish not stability but ongoing development of individual workers and of the organization itself. This entire phenomenon paradigm shift led the author to conduct a research on the above-mentioned title. This paper delves into the concept of emotional intelligence and leadership behaviour. The basic contention of this research is to develop a generalist view about the impact of emotional intelligence on leadership behaviour of Indian corporate executives. The paper unfolds the existing leadership frame vis-à-vis emotional intelligence level of Indian executives, drawn with help of standard scales on the subjects. The paper concludes with certain important guidelines for enhancing leadership effectiveness through emotional intelligence specifically tailored to Indian industrial environment.

Introduction

The world today is under going a change more profound and far reaching than any experienced since the dawn of the modern age. Rapid environmental changes are causing fundamental transformations that have a dramatic impact on organizations and present new challenges for human resources management in general and leadership in particular. The transformations do represent a shift from traditional intelligence to new paradigm of emotional intelligence. It has been human nature to desire stability even in the ever-changing professional lives. The system of life - and organizations – is fluid, dynamic, and potentially self-renewing wherein today's best leaders are learning to "go with the flow" to accept the inevitability of constant change and recognize change itself as a potential source of energy. These profound changes cannot be cuddled and integrated without addressing the deepest thoughts and feelings of Indian managers. This requires the manager to open up the heart and deal with the emotions, welcoming them into the workplace to ensure success in this ever-changing industrial environment. Various research studies have unraveled that the leaders with higher emotional intelligence see changes as opportunities for something better, and they do not cherish stability but ongoing development of individual workers and of the organization itself become their prime agenda. This phenomenon of paradigm shift has led many researches in the area and the present one is also an attempt in the line.

That powerful pair set of chain reaction i.e. the leader's mood and behavior drive the moods and behavior of everyone else in the chain is showing its strong presence in the organizational setting. An irritable and callous boss creates a deleterious organization filled with under achievers who ignore opportunities; on the contrary an inspirational and inclusive leader spawns acolytes for whom every challenge is an opportunity and that way surmountable. The observation about the overwhelming impact of leader's emotional style, as we call it, is not a wholesale departure from any research into emotional intelligence. It does however; represent a deeper analysis of our assertion that a leader's emotional intelligence creates a certain environment or work culture. Since it is felt by thinkers of different era that 'human resource is the most important asset of any organization, hence due care should be taken while hiring and developing them. Today, the rules of workplace are rapidly changing and a new yardstick is being used to judge people. This is not merely in terms of how smart are you or what your academic qualifications are or what your expertise is, but also how well you are able to handle yourself and others. This yardstick is increasingly applied in selecting who will be hired and who will be not, who will be dismissed and who will be retained, who will be ignored and who will be promoted (Singh, 2001). That is why the recruitment and other human resource management activities are typically done only after rigorous tests of intelligence and intellectual capabilities.

For decades, a lot of emphasis has been put on certain aspects of intelligence such as logical reasoning, math skills, spatial skills, understanding analogies, verbal skills etc. Cumulatively known as Intelligence Quotient (IQ), was the thrust area of judgment as far as a person's suitability to a particular job was concerned. But the researchers were puzzled by the fact that while IQ could predict the academic performance and to some degree, the professional and personal potential, yet there was something missing in the equation. Some people with fabulous IQ scores were doing poorly in the professional life; one could say that they were wasting their potential by thinking, behaving and communicating in a way that hindered their chances to succeed, and the major missing part in the success equation was identified as cognitive skills. The discovery of cognitive skills and abilities though appears to be outside the scope of IQ yet is unquestionably important for. If there are some critical ingredients of human intelligence independent of those measured by IQ, their discovery and elucidation will contribute a better, more complete theory of human success with proper blend of Emotional Quotient (EQ). It states that high levels of emotionally intelligent leaders create a climate in which information sharing, trust, health, risk-taking, and learning flourish. The basic message, that effectiveness in organizations is at least as much about EQ as IQ, resonated deeply; it was something that people knew in their guts but that had never before been so well articulated. Most important the idea held the potential for positive change. Instead of being stuck with the hand they'd been dealt, people could take steps to enhance their emotional intelligence and make themselves more effective in their work and personal lives (Druskat & Wolff, 2001). Taking note of this all, research was initiated in the area with an attempt to develop a generalist view about impact of emotional intelligence on leadership behavior of Indian executives. The paper unfolds the existing leadership frame vis-à-vis emotional intelligence level of Indian executives. For more details in the area let us first consider the theoretical background of the concepts i.e. emotional intelligence and leadership, which can be considered as the pillars of success in a person's professional and personal life.

Emotional Intelligence – An Overview

Scales fell from the eyes of managers when they heard the of emotional intelligence concept as coined by two American psychologists, Peter Salovey of Yale and John Mayer of the University of New Hampshire. Managers were not ready to accept as to how the human qualities such as empathy, self-awareness and emotional control could be of any use in organizational setting. But the entire storm of controversy on the subject came to an end with the Daniel Goleman's bestseller *Emotional Intelligence: Why It can Matter More than IQ*. In fact he gave the world a new dimension of emotional intelligence while stating that EQ accounts for about 80 percent of a person's success in life. Though emotional intelligence might have marked its presence as an academic catch phrase, yet it is fast developing the main psychological mantra of organizational development in the recent times.

The concept emotional intelligence came out of the term emotion, which refers to a feeling with its distinctive thoughts, psychological and biological states, and ranges of propensities to act. So it may be an agitation or disturbance of mind, passion, any vehement but definitely related to the person's mental state. There can be a number of emotions like anger, sadness, fear, enjoyment, surprise, love disgust, and shame etc. A manager's ability to balance the emotions with the reason to maximize long-term happiness i.e. capacity of effectively recognizing and managing one's own emotions and those of others may be termed as emotional awareness or emotional management skills. In the words of Daniel Goleman emotional intelligence is "The ability to motivate oneself and persist in the face of frustration; to control impulse and delay gratification; to regulate one's moods and keep distress from swamping the ability to think; to empathize and to hope". In fine the concept of emotional intelligence is an umbrella term that captures a broad collection of individual skills and dispositions, usually referred as soft skills or inter or intra personal skills that are outside the traditional areas of general intelligence and technical or professional skills (Ravi, 2001).

The latest researches in neurobiology have brought out that human beings operate from two minds i.e. the rational mind and the primitive mind, which is purely the emotional mind. The rational mind is centered in the neo-cortex, the outer part of the brain and allows human beings to plan, learn, remember, love, care and also to make moral and ethical distinctions. On the contrary the emotional mind is the source of basics emotions like anger, sadness, fear, lust, surprise, disgust, etc and help the individuals in attaining emotional competence. Emotional competency is the learned capability that leads to outstanding performance in life. This means that emotional intelligence actually contributes to rational thought. It is now believed that your feelings take precedence over your thoughts in making decision, because a rational mind take littler longer to register and respond than the emotional mind. In this kind of emotional reaction, there is an extended appraisal of the situation, both thoughts and cognition plays a key roulette determining what the emotion be aroused.

The ability of an individual to monitor one's own and other's feeling and emotions, to discriminate among them and to use the available information in steering one's own as well as other's behavior has attained much significance even in the information age. A growing body of research on the human brain proves that, for better or worse, leader's mood affects the emotions of the people around them. The reason for that lies in what scientists calls the open loop nature of the brain limbic system, our emotional center. A closed loop system is self-regulating, where as an open loop system depends on external source to manage itself. Our limbic system's open-loop design lets other people change our very physiology and hence, our emotions. In organisations mood start at the top tends to move the fastest because everyone watches the boss/leader, and the subordinates take their emotional cues from him. Thus the entire phenomenon creates a strong link between emotional intelligence and leadership effectiveness irrespective of the leadership style or leadership frame of the leader, which have been described in the ensuing section.

Leadership Frames and Behaviour

Leadership studies have remained and still are an emerging discipline of research and thus the leadership styles and behaviour will continue to evolve. However one unified version on leadership is that it is an influence relationship between the leader and the followers who intend real changes that reflect their shared purposes (Rost, 1993). Workforce diversity has made the task of leader more challenging thereby the leader has to adapt to varying leadership frames and consequent behaviour. There is no single, best leadership pattern that produces outstanding results. Instead, numerous pattern of leadership strengthens promote great results. New concepts of leadership like side-by-side leadership are emerging which advocates that this leadership produces 20 to 30 percent improvement in business results because it involves people in two-way communication, shared decision-making, and high cooperation. It contrasts sharply with the top-down leadership approach that is characterized by one-way communication, authoritarian decision-making, and internal competition (Romig, 2002). Many leaders are transforming their organizations into something called learning organization, a fluid, flexible system almost like a biological entity, capable of continuous learning and adaptability. In a learning organization there are four perspectives or frames of reference, as shown in Exhibit-1, through which leaders can view the organization as a whole and determine how situations are defined and what actions are to be taken.

STRUCTURAL FRAME **Mind-set:** Machine, economics, plans **Emphasis**: Goals, systems & procedures **Dangers**: Rigidity & tyranny	**HUMAN RESOURCE FRAME** **Mind-set**: Family, belonging, clan **Emphasis**: people, support, empowerment **Dangers**: Lack of content or substance
POLITICAL FRAME **Mind-set**: Jungle, power, schemes **Emphasis**: Resource allocation, negotiation, coalition building **Dangers**: Power plays for purpose of self-interest	**SYMBOLIC FRAME** **Mind-set**: Theater, spiritual meaning, dreams **Emphasis**: Vision, culture and values, inspiration **Dangers**: "Messiah" complex

Source: Compiled from Lee G. Bolman and Terrence E. Deal, *Reframing Organi*sations (San Francisco: Jossey-Bass, 1991) and Richard L. Daft, *Leadership: Theory and Practice* (Orlando: The Dryden Press, 1999).

Exhibit 1: FOUR ORGANIZATIONAL LEADERSHIP FRAMES OF REFERENCE

It can be viewed from the Exhibit-1 that in the structural frame the leader emphasizes the clear job descriptions, specific policies and procedures, and the view of the organization as a rational system. Though this system brings order and logic to organization yet it brings rigidity and even tyranny among the leaders. People are the most valuable resource of the organization as per the human resource frame wherein the leader values relationships and feelings, lead through empowerment and support, and encourage open communication, teamwork, and development of others. The political frame of reference views organization as an arena of ongoing conflict or tension over the allocation of resources. Carried to an extreme, the political frame of references can lead to deception, dishonesty and power play for the purpose of individual self-interest. However, effective political leaders typically use negotiating, bargaining, and coalition-building skills to serve organizational needs. The symbolic leader focuses on the shared vision, culture, and values in the leading organization and frequently inspires people to higher level of performance and commitment. The danger of relying too heavily on symbolic frame is that leaders may develop" a *messiah* " complex. Thus each of the four frames provides significant possibilities for enhancing leadership effectiveness, however, clinging to a single vantage point is like imprisoning one self in a frustrating, self-made and narrow intellectual jail cell. The complex nature of learning organization requires that all four frames come into play so that wise leaders understand their own strengths, work to expand them, and build teams that together can provide leadership in all four modes-- structural, human resources, political and symbolic (Bolman and Deal, 1991). Creating and communicating a shared vision and values for the organization becomes even more critical in any organization made up of diverse individuals with differing beliefs, ideas, and ways of thinking and behaving. Diversity presents many challenges for the leader as people in the organizations vary in their sensitivity and openness to other cultures and ways of doing things. Herein the emotional state of the leader impacts the entire group, department, or organization, and the leaders who are able to maintain balance and keep themselves motivated are the positive role models to help motivate and inspire those around them, and thereby presenting a picture of positive correlation between emotional intelligence and leadership effectiveness.

Emotional Intelligence and Leadership Effectiveness

In Indian business CEO's are often seen saying 'business done by brain and not by heart'. They view that people with low emotional intelligence lead to low productivity and poor management. Indian professional approach at large could be felt to be much traditional i.e. non-emotional approach devoid of personal relations. Many fatal flaws are related to classical emotional failures, such as poor working relations, authoritarianism or excessive ambition and conflict with top management. It is healthy for mind, body, heart and spirit to experience feelings as and when they arise. Leaders who are attuned to their own feelings and the feelings of others can use their understanding enhance the organization. Daniel Goleman who has elaborately researched on the concept identifies five elements viz. self-awareness, self-regulation, self-motivation, empathy, and social skills (Goleman, 1995). Self-awareness is concerned with oneself i.e. emotional awareness. Accurate self-assessment will definitely lead to self-confidence. Leaders with higher awareness level can be in touch with their emotions in order to interact effectively and appreciate emotions in others. They learn to trust their 'gut-feelings' and realize that this feeling can provide useful information about difficult decisions, and when the solutions are not available from external sources; leaders have to rely on their own feelings.

Self regulation is managing and handling impulses, distressing feelings and upsets which can be attained through self control, developing trustworthiness, conscientiousness, adaptability and through innovation. Self-regulation will help a leader stay composed, positive and unflappable even under adverse circumstances. Self-regulated leaders are more reliable, authentic, accountable, innovative, creative and open to new information, and they can easily build rapport with the subordinates. Achievement drives, commitment and initiative and optimism are the three important tools of self-motivation. Leaders with achievement drive and commitment fosters the culture of innovation and optimism, and the followers in this culture emerge out as pioneers in their professional life. The age of the day appreciates the empathetic leaders instead of sympathetic leaders. These leaders have the better capacity of understanding others and leveraging the diverse situation. Full of service orientation the leaders tend to develop the followers even in and from diverse cultures. A social skill is an ability to build rapport with various sections of society and create a network of people. The socially skilled leaders are more influencing and change catalysts with excellent communication skills. They believe in conflict management and leading from front. Leaders use social skills to understand interpersonal relationships and bind people for common purpose. The ability to build relationships is not only essential in modern age of team -based organizations, but is also very important for effective leadership.

Scope and Methodology

Planning is an important part of any study to keep the researcher on path .An appropriate methodology with clear-cut objectives could only lead to accurate results of any study. The study at hand has been conducted to examine the leadership frame of Indian executives, their level of emotional intelligence, and also to ascertain the impact of emotional intelligence on leadership orientation and behaviour of the executives. The study also aims at suggesting guidelines for enhancing leadership effectiveness through emotional intelligence. Though study has been conducted in the Indian subcontinent yet its findings can be equally useful for rest of the Asian countries due to similarities in the work cultures.

In the present study an exploratory-cum-descriptive research design has been followed to reach at the abovementioned objectives. Data has been collected from 250 executives by applying convenience-cum-purposive sampling. Though data has been collected from the executives working in different organizations of the National Capital Region, Delhi, yet due care has been taken to pick up the respondents from diverse geographical regions and religions to make the sample representative. The data has been collected with the help of three scales/inventories developed by three distinct authorities in their respective fields. The first scale on Leadership Orientation helps in studying the four-leadership frames i.e. structural, human resource, political and symbolic frames of a learning organization. This scale consists of six questions with four options of each and the respondents were asked to rank them from four to one to ascertain their leadership frame. Lawrence Otis Graham has developed the second research instrument on Leadership Development that aims at knowing the Passive Bias of a leader. This instrument consists of twelve statements to be answered in yes or no, and gives a leader's behaviour in his surroundings and its impact on decision-making, as a leader should definitely consider ways to become more diversity aware and culturally sensitive. The third instrument i.e. Emotional Intelligence Test has been developed by N.K. Chadha, a psychologist at University of Delhi. This test consists of fifteen different situations with five options of each to measure the level of emotional intelligence in a leader.

The data collected with the above mentioned there research instruments has been duly analyzed, interpreted and correlated to reach at the objectives of the study. The data has been analyzed by applying statistical tools techniques like tabulation, ranking, percentage, and averages as per the requirement of the study. Results obtained out of the data analyzed have been represented graphically to draw conclusion and correlation among various factors and interpreted to get some concrete conclusion about the study and also to suggest guidelines for effective leadership with more emotional stability even in the age of cultural diversity.

Results and Discussion

The data collected with the help of research instruments has been analyzed and interpreted in this section on the basis of different demographic factors like age, sex and marital status. As the organizations of the day are operating in the global world, hence it calls for dealing with diversity on a broader stage than ever before. Dimensions of diversity are both primary such as gender, age and secondary such as marital status, religion etc. There are several reasons for organizations for recognizing the need to value and support the prevailing cultural diversity. This phenomenon of diversity has made the task of the present day business leaders much challenging. Only those leaders with higher amount of emotional stability are expected to be more effective and gain competitive advantage. The ensuing discussion deals with unfolding the existing leadership frames, passive biasness towards diversity, and emotional intelligence level of Indian executives on the basis of three variables i.e. age, gender, and marital status to ascertain the leadership styles in relation to emotional intelligence in learning organizations.

Impact of Age on Emotional Intelligence and Leadership Behaviour

Age wise respondents were categorized in four age groups i.e. executives with less than 25 years, 26-35 years, 36-45 and above 45 years of age. Fig. 1 which presents the results on the leadership frames reveal that personnel below 25 years of age and those in the age group of 26-35 are of multiple type leadership frames, while those in age groups of more than 35 years are of humanistic frame. This connotes that the young generation of executives have long-range vision and they recognize and support a diverse organizational community. It also signifies that lower age group executives are more willing to work in global world and trap opportunities from various cultures by capturing unique characteristics of others. However the personnel above 35 years of age have been found less prone to multiple orientations as their experience has turned them to be humanistic and ensnare the opportunities in the same culture instead of diversified one.

Fig. 2 illustrates the level of passive biasness of executives in relation to their age. It can be gauged that the personnel above 45 years of age have high passive biasness. Absolute passive biasness is totally absent from any of the age group. Though medium level of biasness has been recorded significantly in every age group yet it is highest in the executives who are less than 25 years of age. Hence it can be concluded that the degree of passive bias increases with age, which in turn indicates that the executives with growing age resist changes, and like to work in their own manner. The phenomenon of resistance to change increases the biasness, which is neither appropriate nor desirable for the individual, organization and the society at large. Fig. 3 demonstrates the emotional intelligence level of the executives in relation to their age and reveals a parabolic trend. It means that a person's emotional intelligence level first increases with the age, reach at a peak and than start decreasing. In the age group of below 25 years about 50 percent respondents have an average level of emotional intelligence; those in the age groups of 26-35 years and 36-45 years have recorded high level of emotional intelligence to the tune of 39 percent and 54 percent respectively. 80 percent of personnel above 45 years of age have shown an average level of emotional intelligence. Thus the respondents above 25 years but less than 45 years of age have witnessed comparatively more emotional stability.

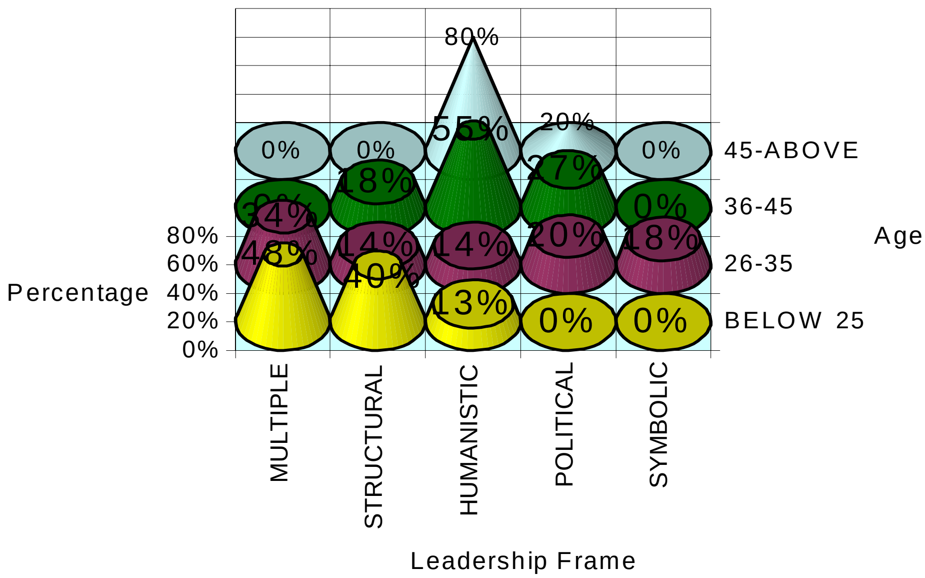

Figure 1: LEADERSHIP FRAMES ACCORDING TO AGE

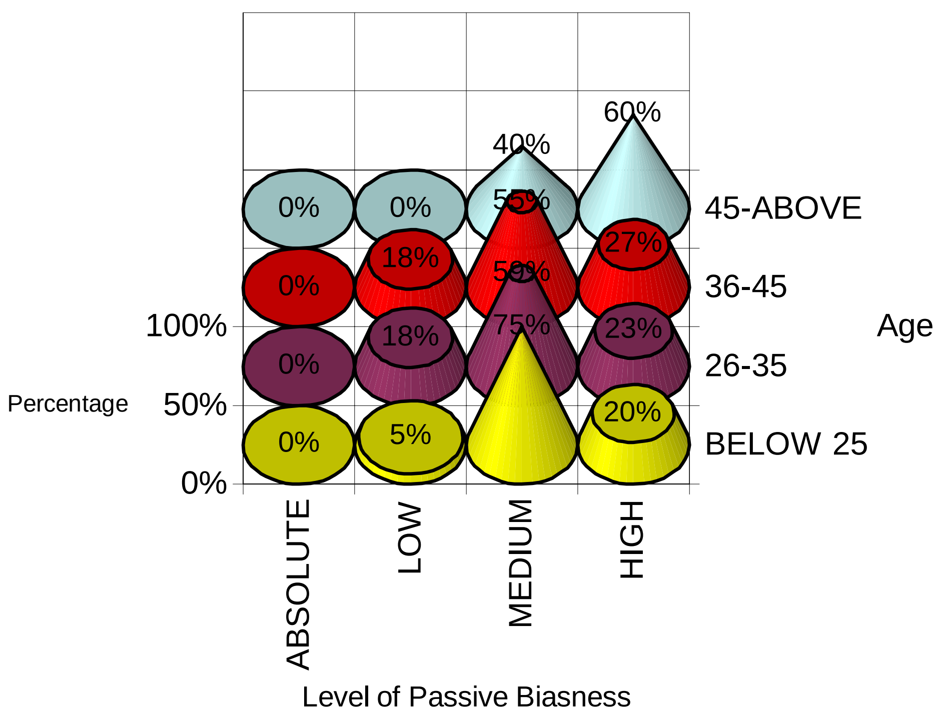

Figure 2: LEVEL OF PASSIVE BIASNESS ACCORDING TO AGE

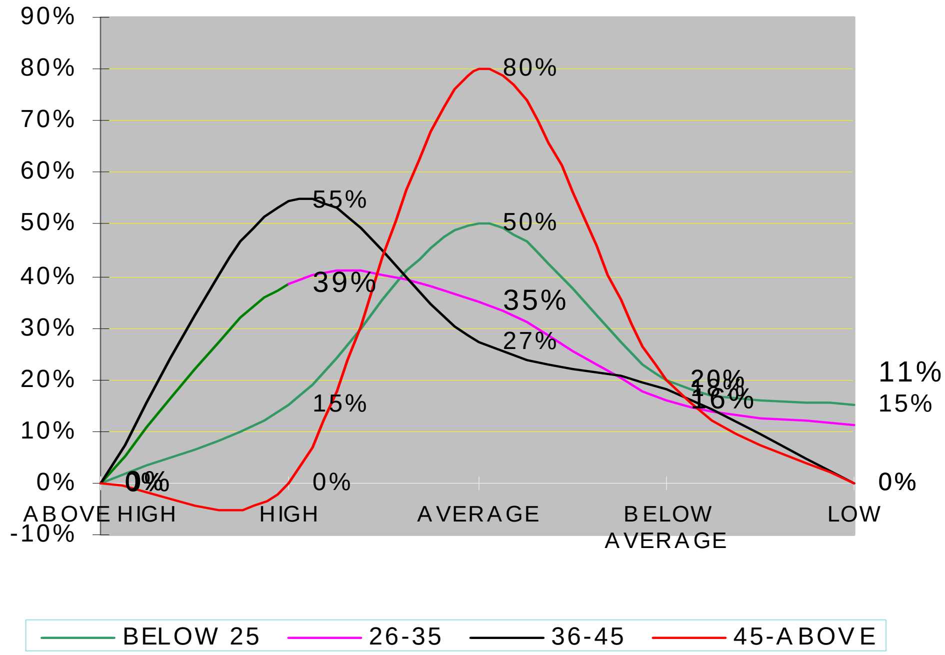

Figure 3: EMOTIONAL INTELLIGENCE LEVEL ACCORDING TO AGE

The analysis of above helps the researcher in concluding that the person's leadership style changes with age. As and when a person is less willing to adapt to changes and bring diversity, it will lead to biasness. The reason behind this lies in the fact that with growing age though a person's emotional stability increases, but after peak it starts declining thereby creating proportionate relationship between emotional intelligence and leadership behaviour of the executives.

Impact of Marital Status on Emotional Intelligence and Leadership Behaviour

It is general belief that a person's life gets a sea change after marriage due to additional responsibilities, changes in the priorities, interchange of culture etc. This occurrence of change is bound to affect the performance of the person at the work place as well and the industry executives who are already burdened with the office work cannot be an exception to it. Therefore, to what extent the marital status affect the emotional stability, leadership frame and the biasness of executives at work place is very relevant and timely in this milieu, and the same has presented in this section.

Fig. 4 divulges some differences in the leadership frame of the married and unmarried executives. Unmarried executives generally opt for multiple frames followed by structural frame of leadership. Married executives give equal preference to multiple and humanistic frame of leadership. It is also worth noting fact that unmarried executives did not register their option for humanistic and symbolic frame at all. This difference in the leadership frames perhaps may be due to other factors and additional responsibilities and not because of marriage. Though the degree of biases is affected least according to martial status yet the Fig. 5 manifests that married executives are comparatively biased as compared to unmarried executives. Though the difference is very minor yet need further research on the subject, which is very wide and out of the track of the present research.

Though emotional intelligence does not seem to be dependent on the marital status of a person yet the Fig. 6 gives some interesting findings on the subject. The level of emotional intelligence in both the categories i.e. married and unmarried executives has been found to be high or average, however unmarried executives have registered higher amount of emotional stability. Comparatively lower emotional intelligence in the married executives seems to be an outcome of overwork and additional and diverse type of responsibilities. The analysis of above lead the researcher to conclude that there is not significant correlation between martial status, emotional intelligence and leadership behaviour. Whatever little variations have been observed seem to be an outcome of other factors and not that of marriage.

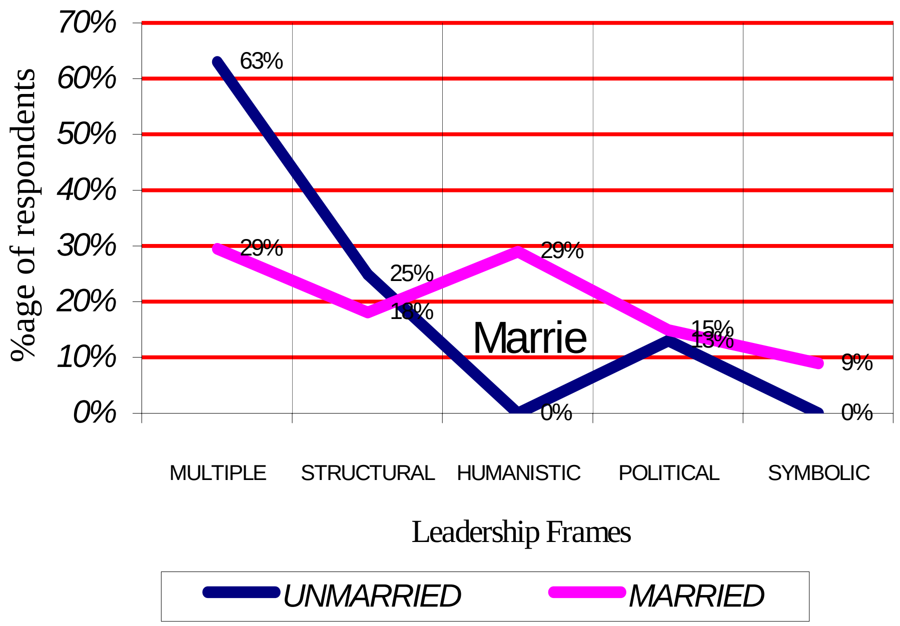

Figure 4: LEADERSHIP FRAME ACCORDING TO MARITIAL STATUS

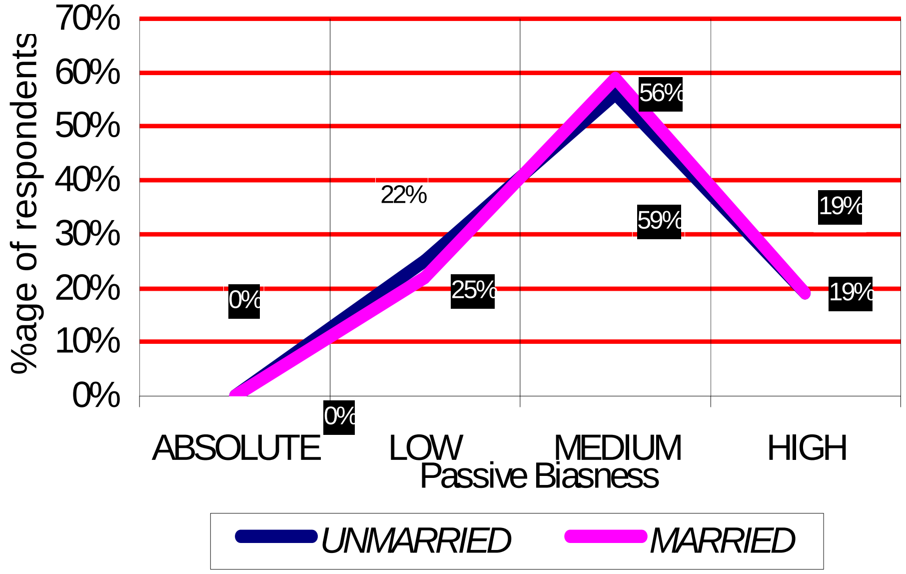

Figure 5: PASSIVE BIASNESS ACCORDING TO MARITIAL STATUS

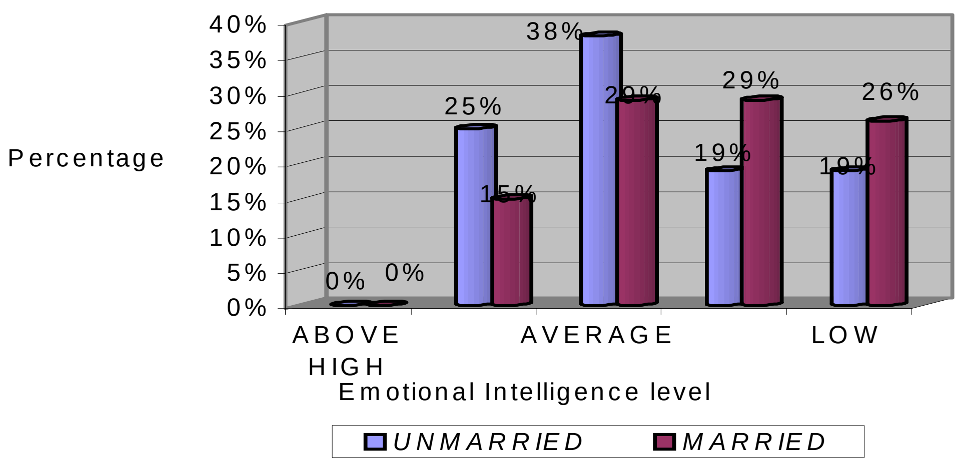

Figure 6: EMOTIONAL INTELLIGENCE LEVEL ACCORDING TO MARITIAL STATUS

Impact of Gender on Emotional Intelligence and Leadership Behaviour

Men and women are two equal partners of the society, and even Indian constitution does not permit to discriminate on the basis of sex. However Indian women generally have to face discrimination due to her being female. Though this tendency is disappearing with advancement of the society yet it has not fully liberated from it. The change in the attitude of the society has also led the corporate world to change its outlook and attitude towards women executives. Many research studies have been conducted and the growing organizations' philosophy towards gender equality has come in the form that today women are expected to *"look like lady and act like man"*. Moreover the organizations of the day are now emphasizing on the women leadership due to specific advantages of the same and we find hardly any organization/department where women are not leading. May be it is service sector, manufacturing sector or any other administrative assignment women have marked their presence in bold. In spite of this all certain misgivings with regard to leadership styles of women executives are still present in the Indian minds. So whatever variations emerge on emotional intelligence and leadership behaviour executives on the basis of gender is the subject of discussion for this section.

Fig. 7 clearly brings out the leadership frames as adopted by the executives. It can be envisaged that men executives generally go for multiple frame of leadership in contrast to female executives who are more oriented towards structural and humanistic frame. This supports the fact that male executives are accepted more as the marketing, production personnel and are developed as such. While women executives are more acceptable in human resource management, financial management (office job) departments due to her leadership frame and orientation of being structural or humanistic. The wide difference on the basis of sex has made the Indian women to believe that the marketing field is not her first cup of tea and that is why the number of women executives in this field are comparatively less but those who have established themselves herein are very successful. Fig. 8 portrays the level of passive biases in both the genders and can be observed that male executives are more prone to biasness as compared to the female executives. Female executives being more humanistic and tolerant have been found less biased in decision-making.

In the Indian culture it is the general saying that female is another name of sacrifice and patience, which in turn speaks about her emotional stability. Fig. 9 represents the gender wise level of emotional intelligence. It can be glimpsed that women are more emotionally stable due to their high level of emotional intelligence. EQ of majority female executives has been found high and average, where as the male counterparts are low in the EQ level which gives us an idea that women are more capable of handling the persons and recognizing their needs as compared to men. Hence it can be concluded from the above discussion that women executives go for humanistic or structural frame of leadership in contrast to male executives with larger amount of multiple frame. Male executives' decisions are generally more biased as compared to female executives and women executives have been found more emotionally stable making them effective leaders.

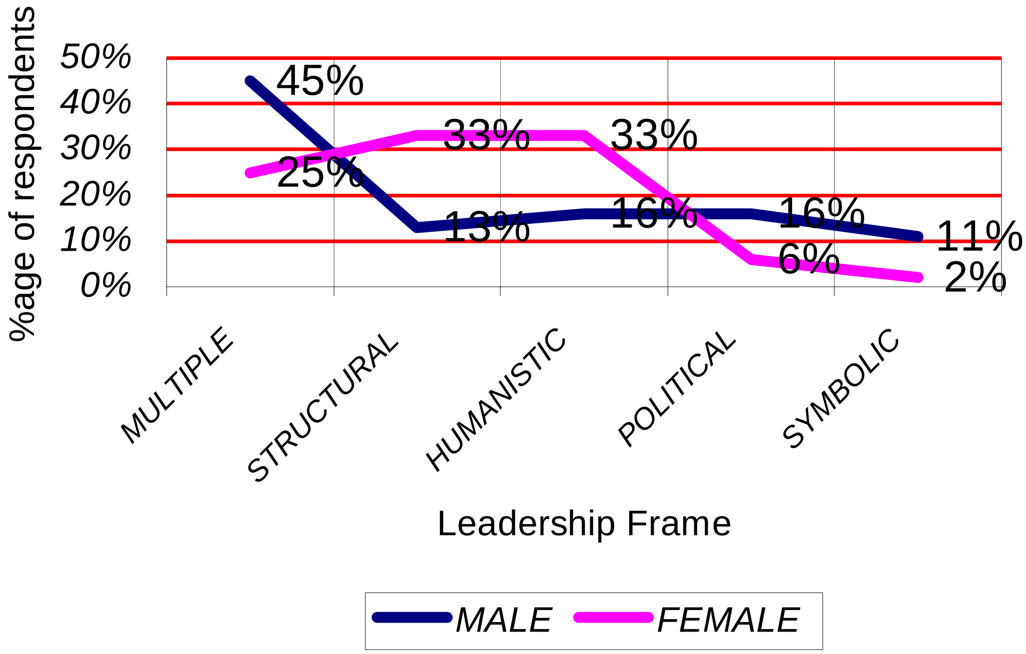

Figure 7: LEADERSHIP FRAME ACCORDING TO SEX

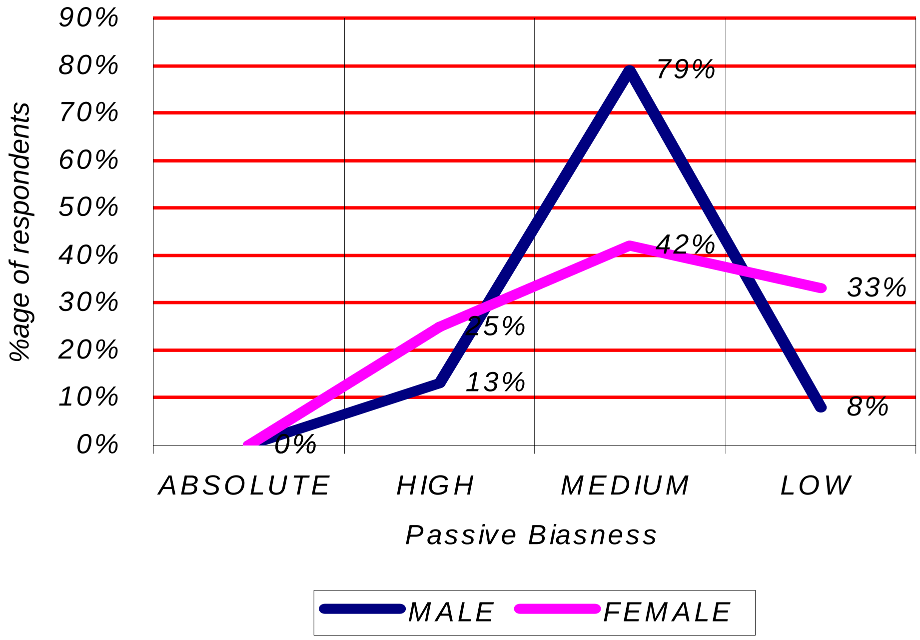

Figure 8: PASSIVE BIASNESS ON THE BASIS OF SEX

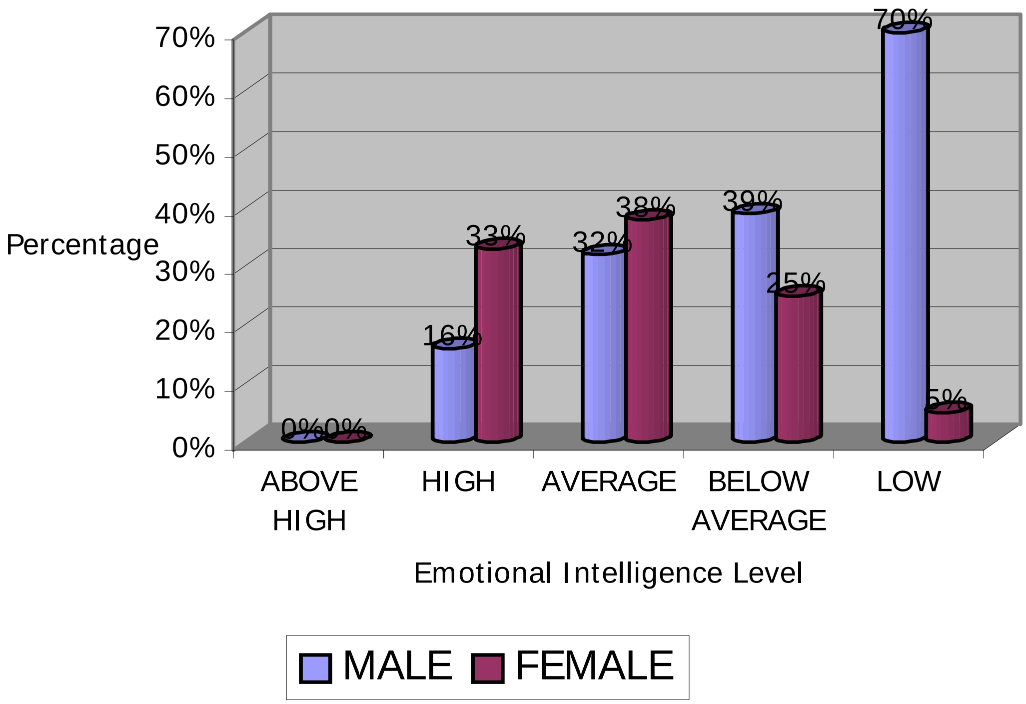

Figure 9: EMOTIONAL INTELLIGENCE LEVEL ACCORDING TO SEX

Suggestions

Data documentation on the linkage between emotional intelligence of leader and the performance indicates a positive correlation. When a leader exhibits competencies like initiative, nurturing attitude, team building, self-confidence, achievement motivation, and empathy etc, the performance is bound to be more effective. The results of the study can be translated into specific suggestion to enhance leadership effectiveness and that through emotional intelligence. Under mentioned are some recommendation/suggestions that stem out of the study, and if implemented in letter and spirit can go a long in enhancing leadership effectiveness with more emotional stability among Indian executives.

- A leader's passion for work reasons less for money or power and his ability to pursue goals vigorously and persistently are more important. Instead of securing short-term gains, achievement for the sake of achievement should be the goal of every manager and which in turn need high level of achievement motivation in the leader to help him in leading from the front.
- Every leader should be aware that his job is as much about getting people to work together as a team, as it is about motivating individual member of the team. Thus, the leader's aim should be to build a team, which is cohesive, self-supporting and must know where it is going. In order to develop a team spirit, high morale and induce a feeling of shared responsibility for achievement, the leader must foster an environment of mutual trust and confidence and create a feeling of interdependence amongst the team members.

- Assertiveness is a highly desirable trait for every leader. But assertions with aggression will lead to negative results. Hence the leaders of the day should be assertive instead of being aggressive.
- Empathy means being able to read and respond to the emotions of others i.e. putting one's foot in other's shoe. Effective industry executives need to follow the principle of empathy instead of sympathy to get optimum results out of the team members.
- Happiness /optimism have long been perceived as more desirable traits associated with executive effectiveness. Emotional self-awareness, complement to empathy, means knowing yourself, and reading and managing your own emotions. Hence the leaders of the day must develop emotional stability to ensure physical and mental health of the self and that of the serving organization.
- Problem-solving skills of the executives are in the top agenda for the success of any organization. This has become more prominent in the wake of global developments in the industry and trade. Logical thinking and emotional stability go hand in hand hence need to be practiced with care.
- The myths like gender, marital status, age and geographical area etc. should be done away with from the minds of executives. Till the point these will prevail in the mind of the executive, his thinking and decisions will be biased which itself is very negative on the part of a successful executives.
- Executive effectiveness requires several essential competencies in the form of increased self-esteem, greater self-disclosure, higher self-confidence, and more receptivity to feedback. Emotional intelligence offers guidance on how to deal with interpersonal trust. Interpersonal trust and influence is best way of effective communication without which organizational effectiveness will be like sailing on the sand.

Conclusion

The opening up of the Indian economy through liberlisation, privatization, globalization and natural thrust towards information technology had made the task of Indian managers more demanding. The challenges get multiplied when the industry executives have to work in diversified work cultures. The workforce diversity has not only affected the emotional stability of the executives but has also come on the way of leadership behaviour and effectiveness. In the present study it is found that a person's leadership style changes with age. As and when a person is less willing to adapt to changes and bring diversity, it will lead to biasness. The reason behind this lies in the fact with growing age though a person's emotional stability increases, but after peak it start declining thereby creating proportionate relationship between emotional intelligence and leadership behaviour of the executives. Marriage does not come much on the way of a leader in terms of his behaviour, and emotional stability. Women executives have been found with humanistic or structural frame of leadership. Male executives' decisions are more biased as compared to female executives but women executives have been found more emotionally intelligent. In nutshell tomorrow is the day of those industry executives who are more emotionally stable and show leadership effectiveness even in diverse circumstances irrespective of their age, marital status or gender.

References

[1] Albert, Shoba, K.S. Rajeswari and R.N. Anantharaman (2001) “Measuring the Potential for Emotional Competence: Development of a Scale”, *Management & Change*, 5(1), January-June, pp.21-30.

[2] Allio, Robert J. (2000) *Leadership: Myths and Realities*, New Delhi: Tata McGraw-Hill Pub. Co. Ltd.

[3] Bedi, Daljeet Singh (1999) “Emotional Intelligence-The Management Tool”, *Employment News*, 25 September-1 October, pp.1-2.

[4] Bennis, Warren (2002) “Leaders in Transition”, Executive *Excellence*, June, p.13.

[5] Bolman, Lee G. and Terrence E. Deal (1991) *Reframing Organi*sations, San Francisco: Jossey-Bass,

[6] Cooper, Robert and Swaf Ayman (1997) *Executive EQ: Emotional Intelligence in Leadership and Organizations,* London: Orion Books.

[7] Draft' Richard L. (1999) *Leadership-Theory and Practice*, Fort Worth: The Dryden Press.

[8] Druskat, Vanessa Urch and Steven B. Wolff (2001) “Building the Emotional Intelligence of Groups”, *Harvard Business Review*, March, pp. 81-90.

[9] DuBrin, Andrew J. (1998) *Leadership: Research Findings, Practice, and Skills*, Chennai: All India Publishers & Distributors.

[10] Goleman Daniel, Richard Boyatzis and Annie McKee (2001) “Primal Leadership”, *Harvard Business Review*, December, pp. 44-49.

[11] Goleman, Daniel (1995) *Emotional Intelligence*, London: Bloomsbury.

[12] Goleman, Daniel (1996) *Emotional Intelligence: Why it can Matter More than IQ,* New York: Bantam Books.

[13] Goleman, Daniel (1998) Working *with Emotional Intelligence,* New York: Bantam Books.

[14] Hughes, Richard L., Robert C. Ginnett and Gordon J. Curphy (1999) *Leadership*: *Enhancing the Lessons of Experience*, Singapore: Irwin/McGraw-Hill.

[15] Jacobson, Ralph (2001) *Leading for a Change*, Boston: Butterworth-Heinemann.

[16] Kellerman, Barbara (2001) “Required Reading”, *Harvard Business Review*, December, pp.15-16.

[17] Macintosh, N.J. (1998) *IQ and Human Intelligence,* New York: Oxford University Press.

[18] Mariadoss, S.J. (2000) “Emotional Intelligence-Tool of Credibility”, *University News*, 38(12), March 20, pp.7-11.

[19] Mathur, D.M. (2000) “Emotional Intelligence in Effective Management”, *Indian Management*, 39(11), November, pp.19-21.

[20] Mishra, Anupam (1995) "Age of Intelligence", *Indian Management*, 34(8), September, pp.64-67.

[21] Pagnois, William G. (2001) "Leadership in Combat Zone", *Harvard Business Review*, December, pp.109-111.

[22] Peace, William H. (2001) "The Hard Work of Being a Soft Manager", *Harvard Business Review*, December, pp. 99-104.

[23] Pegg, Mike (1996) *Positive Leadership: How to Build a Winning Team*, New Delhi: UBSPD.

[24] Pradhan, Rabindra Kumar and Samina Bano (2000) "The Credo of Emotional Intelligence", *Employment News*, 14-20 October, pp.1-2.

[25] Punia, B.K. (2001) "A Paradigm Shift in HRM From IQ to EQ", *Souvenir, UGC Sponsored National Seminar on "HR-Today and Tomorrow: Emerging Trends and Strategies*" organised by the Department of Business Administration & MHRM Prog., M.L.Sukhadia University, Udaipur (India), March 17-18, p. 53.

[26] Ravi, D. (2001) "Emotional Intelligence-A Sine Qua Non of Leadership", *8M-The Journal of Indian Management & Strategy*, 6(4), October-December, pp. 39-43.

[27] Romig, Dennis (2002) "Side-by-Side Leadership", *Executive Excellence*, June, p.14.

[28] Sachdev, Radhika (2000) "Branding Emotions", *The Hindustan Times-HT Careers*, September 21, p.1.

[29] Sadler, Philip (2001) *Leadership*, New Delhi: Kogan Page India Pvt. Ltd.

[30] Singh, D.N. (1998) "Emotional Quotient-The Emerging HR Planning Benchmark", *Indian Management*, 37(11), November, pp.76-80.

[31] Singh, Dalip (2001) *Emotional Intelligence at Work*, New Delhi: Response Books.

[32] Srivatsava, M.P. (2001) "HRD Strategy to Balance People, Firm Needs", *Indian Management*, 40(1), January, pp.52-55.

[33] Verma, Harsh (2000) "Is Emotional Intelligence a Fad", *The Hindustan Times-HT Careers*, December 28, p.5.

Examining LDC Firms' Competitive Advantage from the Resource-Based and Institutional Perspectives

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Abstract

This research examines LDC firms' competitive advantage from the resource-based and institutional perspectives. The specific case of the Korean environment is examined more closely with an application of these two perspectives. Networking capability and conformity and response to the signals from the government are identified as key determinants of competitive advantage, leading to export performance of Korean firms. In addition, government supporting policies is introduced as a moderator of the relationship between the aforementioned concepts and competitive advantage. Our conceptual framework should apply to firms in other transitional economies. Implications and suggestions for future research are provided.

Introduction

There is a growing body of empirical research adopting resource-based and institutional perspectives to help gain much insight for achieving competitive advantage and performance (Barney, 1991; Peteraf, 1993; Oliver, 1997; Hoskisson, Eden, Lau, and Wright, 2000). In the current market environment, establishing effective strategies is a key to success, which allows corporations to survive and compete with competitive advantage in the market. Most of the research discussing firms' strategies has usually studied the case of MDC (More Developed Country) corporations. Studies on competitive advantage and strategies of firms from LDCs or transitional markets seem sparse indeed. This paper examines Korean firms, their capabilities and institutional links to the government for explaining their competitive advantage and performance based on the resource based view and the institutional theory. In general, firms from have limited resources and capabilities compared to their MDC counterparts. In order to be globally competitive, LDC firms need to develop unique capabilities and strategies. Here, we focus on two aspects: networking with the government and conforming to institutional support environment. We hope that our conceptual work here will be useful for explaining firms in other LDC markets as well.

Interestingly, resource-based and institutional perspectives have different viewpoints to explain competitive advantage and performance. Institutional perspective emphasizes homogeneity with institutions such as conforming to predominant norms, traditions, and social influence, in order to achieve competitive advantage and performance (Oliver, 1997). In contrast, resource-based perspective argues that rare, specialized, and inimitable resources allow corporations to achieve competitive advantage under the two assumptions: resources are heterogeneously distributed across competing firms, and resources are imperfectly mobile (Barney, 1991; Oliver, 1997). Nevertheless, both perspectives can complement each other for explaining more fully competitive advantage and performance of LDC firms. We will first highlight the two theoretical perspectives before applying them to the Korean situation.

Strategy, Competitive Advantage, And Performance Of Korean Firms

Establishing effective strategies is a key for corporations to survive and compete in the dynamic market environment. Porter (1996) presents the definition of strategy through a comparison of two concepts: operational effectiveness and strategic positioning. Porter (1996) argues that operational effectiveness means better performance than what does rivals have in similar activities. Reducing defects in products or developing better products faster can be included in the operational effectiveness. In contrast, strategic positioning means *performing different activities from rivals or performing similar activities in different ways* (Porter, 1996). Therefore, choosing to perform activities differently than rivals considering customers' needs, customers' accessibility, or the variety of a company's products or services can be included in the strategy (Porter, 1996).

In Korea, there are a large number of international companies that are active in exporting and foreign investment, most of which are small or medium enterprises (SMEs). Yet, it is the small number of large conglomerates, or *chaebols* have been the engine of Korean economic growth with the strong government export driving policy (Reynolds, 1999). In 1996, 40 percent of Korea's total output was accounted by the 30 largest chaebols such as Samsung, Hyundai, Daewoo, and LG (Chang and Hone, 2000). Among possible competitive factors, the government policy based on centralization and export promotion was certainly critical for Korean corporations to be successful in the market. Further, the ability for firms to network closely with the government also contributes to success in Korea.

In the early days, these firms' economic scale with low labor and production costs were key to their competitive advantage and performance. However, it is no longer enough for global competitiveness, especially since the 1997 economic crisis. Chang and Hong (2000) represent two critical factors caused in the success of Korean corporations including chaebols: internalization caused by market imperfections (Khanna and Palepu, 1997; Leff, 1978 cited in Chang and Hong, 2000) and an increased export performance supported through the aggressive export driving policy by the government (Change and Hong, 2000).

Applying The Resource Based View And Institutional Theory To Korean Firms

In this section, we highlight main premises and assumptions of the resource-based view and institutional theory. We then apply them to the unique situation facing Korean firms.

The Resource-Based View

The Resource-based view (RBV) and competitive advantage

Based on the RBV, resources can include assets, capabilities, information, knowledge, firm attributes, and organizational processes, and can be classified in terms of physical, human, or organizational capital (Barney, 1991). Among them, human and organizational capitals have been emphasized, because they are not easily imitated or acquired. The resource-based view (RBV) represents an internal analysis, which examines the linkage between a firm's internal characteristics and performance (Barney, 1991). The RBV theory has concentrated that idiosyncratic resources that create superior market position and comparative advantage allow corporations to generate competitive advantage (Barney, 1991; Hunt and Morgan, 1995). Hunt and Morgan (1995) discuss the role of resource as a capacity to generate competitive advantage contending that a firm's competitive advantage can be achieved through the firm's market position, which is generated not by neoclassical approach (perfect competition) but by competitive advantage. However, the RBV theory cannot fully explain competitive advantage and performance. First, there are certain assumptions; that resources are heterogeneously distributed across competing firms and resources are imperfectly mobile with the four attributes: value (productivity) resource, rareness, imperfect imitability, and non-substitutability (Barney, 1991). In addition, Peteraf (1993) presents four conditions in which RBV theory can generate competitive advantage: superior resources (heterogeneity within an industry), ex post limits to competition, imperfect resource mobility, and ex ante limits to competition, all of which must be met in order to generate competitive advantage. Further, Dickson (1996) argues that the RBV theory cannot always allow corporations to generate competitive advantage as well as to enhance performance based on the existing assumptions and conditions due to the dynamic characteristics of the current market environment in which consumers taste, preferences, and behaviors are always changing together with the offerings of suppliers' means. Next, we will apply the RBV to the Korean case.

Resource-based View and Korean firms

Some unique characteristics of Korean firms include: managerial system based on family, unique organizational culture, dependence on the government assistance, weak financing structure, and high degree of concentration (Ungson, Steers, and Park, 1997 cited in Chang and Hone, 2000). Sometimes, these unique characteristics can be regarded as weaknesses of Korean corporations. However, they are also viewed as resources for generating competitive advantage, which are not so easily imitated by foreign competitors especially from western firms in an MDC. Here, we elaborate on one particular resource, networking capability with the government.

Networking is regarded as an important factor in business. A growing body of empirical research contends that networking is a critical resource for corporations to enhance performance (Black and Boal, 1994). Firms are usually required to develop various networks in local and global markets relating to production, marketing, and management. A few studies discuss the importance of networking in the global market to generate competitive advantage. Networking in the local market is also important for corporations to generate competitive advantage, because generally the competitive advantage in the local market forms the foundation of the competitive advantage in the global market. The case of Korean corporations can be applied to explain the importance of networking in the local market relating to generate competitive advantage, which allows Korean corporations to enhance performance.

Over the 40 years, Korea's strong economic growth was tied closely with the role and policies of the (Lee and Miller, 1996). The Korean economy is defined as political economy (Hwang, 1996). Korean corporations have obtained help from the government in various forms of subsidiaries, tariffs, and other invisible ways, which were critical factors for their success (Lee and Miller, 1996). A unique managerial strategy of Korean corporations was created by the government intervention; following government policy allows corporations to be successful even if they do not follow the recommendation of the strategic contingency theories in matching strategy to environment (Lee and Miller, 1996). The government allowed Korean corporations to enjoy diverse benefits from tariff, invisible barriers, debt guarantee, and tax advantage, which could protect them from foreign competitors in the domestic market (Hoskisson, Eden, Lau, and Wright, 2000). The local market benefits can be a base for Korean companies to succeed in the world market. The importance of home country government for corporations to generate competitive advantage has been examined only in a few recent studies. Ramamurti (2001) contends that the effective relationship between host and home country can lead to the bargaining power of MNCs (Ramamurti 2001). Considering the approach of Ramamurti (2001), the networking capability what Korean firms have with the government can generate their bargaining power in the global market as well as the local market. Therefore, we view networking capability with the government is a superior resource for these firms to achieve competitive advantage and performance.

Proposition 1: The networking capability with the government leads to more competitive advantage and enhancing export performance.

The Institutional Perspective

The institutional theory and competitive advantage

Organizations are surrounded by various institutions--regulatory, normative, and cognitive institutions (Scott, 1995; Grewal, 2001). The institutional perspective has both an economic orientation (Clague, 1997; Coase, 1998; North, 1990) and a sociological orientation (DiMaggio and Powell, 1983; Scott, 1995). Institutional theory suggests that institutionalized activities are interrelated among three levels: individual, firm, and interorganization. At the individual level, conforming to managers' norms and habits is regarded as institutionalized activities (Berger and Luckmann, 1967). At the firm level, corporate culture, shared belief systems, and political process supporting given ways of managing perpetuate institutionalized structures and behaviors (Oliver, 1997). At the interorganizational level, conforming to pressures emerging from government, industry alliances, and social expectations is regarded as institutionalized activities (rules, norms, and standards about product quality) (Oliver, 1997).

In its early stage, institutional rules, myths, and beliefs were emphasized by the institutional perspective (Berger and Luckmann, 1967; Selznick, 1949, 1957 cited in Olive, 1991). The contemporary approach of the institutional theory focuses more on the nature and variety on these institutional processes (DiMaggio and Powell, 1983; Meyer and Rowan, 1977; Zucker, 1977, 1988 cited in Oliver, 1991). The interaction between firms and institutions resulting from market imperfection is also emphasized (Harris, Hunter, and Lewis, 1995). The role of institutions in an economy is also regarded as decreasing transaction and information costs through reducing uncertainty among institutions, increasing economic performance (Hoskisson, Eden, Lau, and Wright, 2000).

Conforming to social expectations has been regarded by a growing body of research as a key of the institutional perspective contributing to organizational success and survival (Baum and Oliver, 1991; Carroll and Hannan, 1989; DiMaggio and Powell, 1983; Oliver, 1991). Moreover, conformity to social expectations allows corporation to get reward through increased legitimacy, resources, and survival capabilities (Oliver, 1997). These findings of the empirical research illustrate the positive aspects of the institutional environment. However, on a negative side, Peng and Heath (1996) contend that the growth of corporations in transitional economies is limited by institutional constraints. Palmer, Jennings, and Zhou (1993) represent the institutional constraints on strategies in U.S. firms. Oliver (1997) argues that economic choices are constrained not only by the technological, informational, and income limits but by institutional factors such as social norm, habits, and customs. Further, Zukin and DiMaggio (1990) argue that the institutional view extends beyond economic optimization. Therefore, the institutional environment can be a constraint to as well as an opportunity for firm's competitive advantage, which allows corporations to enhance performance. Next, we discuss one key dimension of the institutional theory, institutional signaling and response.

Oliver (1991) states the need for firms to be proactive in responding to the institutional process. Institutional theory has been criticized for its assumptions of organizational passivity and its failure to address strategic behavior to institutional process (Oliver, 1991). He stresses the importance of proactive identification of a range of strategic and tactical responses to the institutional environment.

The process between the institutional processes and responses is also related to the concept of signaling. In general, signaling is an important communication method. In the marketing area, it has been regarded as a strategic means for communication among organizations. Through signaling, organizations transit or seek information (Heil and Robertson, 1991). Porter (1980) views the concept of signals as combining with two types: preannouncements of market actions and the market action themselves. At all three levels of institution (individual, firm, and inter-organizational), parties transmit and seek signals. To stay competitive, companies must be proactive in both seeking and transmitting signals among institutions. In addition, effective strategic responses to the signals should be followed.

Institutional Theory and Korean Firms

Korean corporations have benefited from various other government policies such as tariff, invisible barriers, debt guarantee, and tax advantage (Hoskisson, Eden, Lau, and Wright, 2000). In the more competitive sectors, corporations and industry performance seem to have become more attributable to the institutional support from government subsidiaries, regulation or protection. Lee and Miller (1996) argue that protection and support of the government allow Korean firms to perform quite well up to the financial crisis. The strong government supports help firms decrease transaction and information costs through removing uncertainty. In other words, the success of Korean corporations has been depended not only on good strategies to meet customer satisfaction but also on obtaining governmental help by conforming legitimated norms (Lee and Miller, 1996). Therefore, under the Korean market environment, proactive conforming to the institutional processes and proactive responding to the institutional signals can be effective strategies for Korean corporations to achieve competitive advantage, which allows them to enhance performance, especially export performance. Therefore, in Korea, a well-established relationship with institutional factors is less of a constraint, and more of an opportunity for companies to enhance performance beyond economic optimization at least in a short run.

In summary, a proactive response to the institutional signals can be an effective strategy for corporations to achieve competitive advantage and performance. We therefore propose the following:

Proposition 2: A proactive response to the institutional signals from the government leads to more competitive advantage, enhancing export performance.

Given a rather high degree of governmental supports to firms in Korea and other LDCs, we also propose this concept as positively moderating the relationship between the two determinants and competitive advantage, as follows:

Proposition 3: The higher degree of the government supporting policies, the stronger link of networking capabilities and institutional response with competitive advantage of Korean firms.

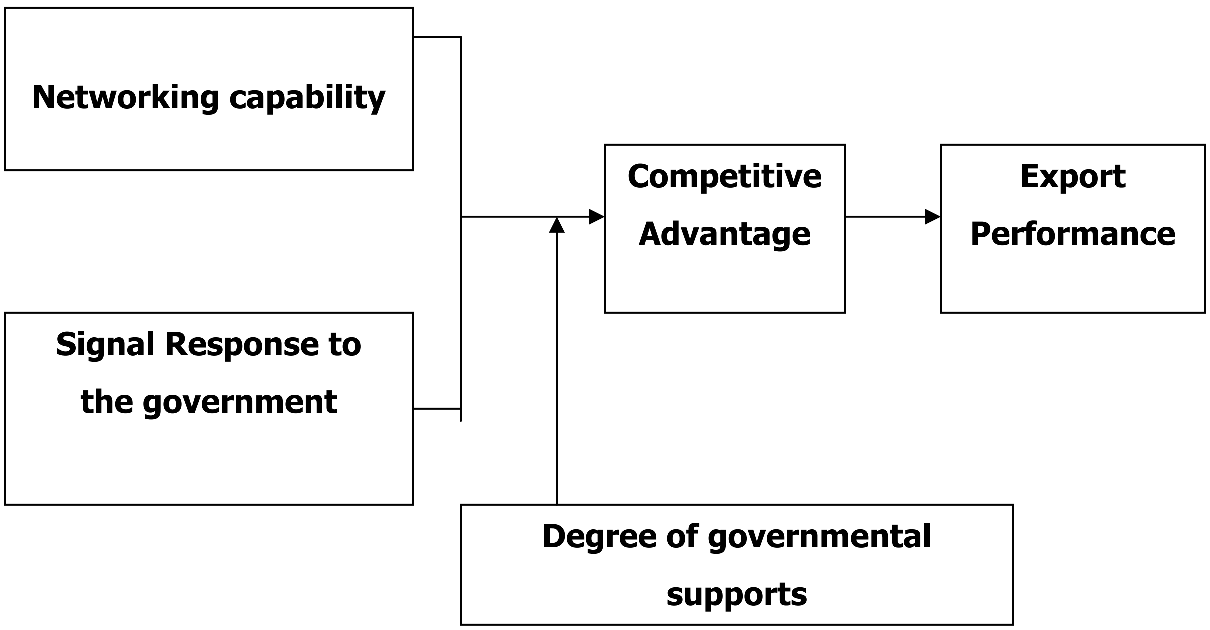

Fig. 1: A CONCEPTUAL MODEL OF KOREAN FIRMS' COMPETITIVE ADVANTAGE AND EXPORT PERFORMANCE

Conclusion

This paper provides a conceptual model of Korean firm's competitive advantage and performance. Future studies should include other resource and institutional determinants appropriate for LDC firms. Empirical tests should be based on data from firms in various LDC countries. As LDC firms like Korean corporations become more important players in the world economy, researchers, governments, and business communities should pay attention to their activities. We would like to call to international business researchers' attention to further examine strategies of LDC firms for achieve competitive advantage and performance, the topic that is touched upon only at the surface by this research.

References

[1] Barney, Jay. 1991. Firm resources and sustainable competitive advantage. *Journal of Management*, 17 (1): 99-120.

[2] Baum, Joel A. C. & Christine Oliver. 1991. Institutional linkage and organizational mortality. *Administrative Science Quarterly*, 36: 187-218.

[3] Black, Janice A. & Kimberly B. Boal. 1994. Strategic resources: Traits, configurations and paths to sustainable competitive advantage. *Strategic Management Journal*, 15: 131-150.

[4] Berger, Peter L. & Thomas Luckmann. 1967. The social construction of reality. Doubleday, New York.

[5] Carroll, Glenn R. & Michael Hannan T. 1989. Density dependence in the evolution of populations of newspaper organizations. *American Sociological Review*, 54: 524-541.

[6] Carpenter, Gregory S. & Kent Nakamoto. 1989. Consumer preference formation and pioneering advantage. *Journal of Marketing Research*, 26 (August): 285-298.

[7] Chang, Sea Jin & Jaebum Hong, J. 2000. Economic performance of group-affiliated Companies in Korea: Intragroup resource sharing and internal business transactions. *Academy of Management Journal*, 43 (3): 429-448.

[8] Clague, Christopher. 1997. Institutions and economic development: growth and Governance in less-developed and post-socialist countries. Baltimore: Johns Hopkins University Press.

[9] Clifford, Mark. 1990. No place like home: The chaebol will find the world less Friendly. *Far Eastern Economic Review*, 147 (9): 49-51.

[10] Coase, Ronald. 1998. The new institutional economics. *American Economic Review*, 88: 72-74.

[11] Dickson, Peter Reid. 1992. Toward a general theory of competitive rationality. *Journal of Marketing*, 56 (1): 69-83.

[12] Dickson, Peter Reid. 1996. The static and dynamic mechanics of competition: A Comment on Hunt and Morgan’s comparative advantage theory. *Journal of Marketing*, 60 (4): 102-106.

[13] DiMaggio, Paul .J. & Walter W. Powell. 1983. The Iron cage revisited: Institutional Isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48: 147-160.

[14] Han, Jin K., Namwoon Kim & Hong-Bumm Kim. 2001. Entry barriers: A dull-, one, or Two edged sword for incumbents? Unraveling the paradox a contingency perspective. *Journal of Marketing*, 65 (January): 1-14.

[15] Harriss, John, Jane Hunter & Colin M. Lewis. 1995. The new institutional economics and third world development. London: Routledge.

[16] Heil, Oliver & Thomas S. Robertson. 1991. Toward a theory of competitive market Signaling: A research agenda. *Strategic Management Journal*, 12: 403-418.

[17] Hwang, Kelley K. 1996. South Korea’s bureaucracy and the informal politics of economic development. *Asian Survey*, 36 (3): 306-321.

[18] Hoskisson, Robert E., Lorraine Eden, Chung Ming Lau & Mike Wright. 2000. Strategy in emerging economies. *Academy of Management Journal*, 43 (3): 249-267.

[19] Hunt, Shelby D. & Robert M. Morgan. 1995. The competitive advantage theory of competition. *Journal of Marketing*, 59 (April): 1-15.

[20] Grant, Robert M. 1991. The resource-based theory of competitive advantage: implications of strategy formulation. *California Management Review*, 33 (3): 114-135.

[21] Grewal. Rajdeep. 2001. The role of the institutional environment in marketing channels. Working Paper: 1-54.

[22] Khanna, Tarun & Palepu, Krishna. 1997. Why focused strategies may be wrong for emerging markets. *Harvard Business Review*, 75 (4): 41-51.

[23] Lee, J. & Miller, D. 1996. Strategy, environment and performance in two technological contexts: Contingency theory in Korea. *Organizational Studies*, 17 (5): 729-750.

[24] Leff, Nathaniel. 1978. Industrial organization and entrepreneurship in the developing countries: The economic group. *Economic Development and Cultural Change*, 26: 661-675.

[25] Matsuno, Ken & John T. Mentzer. 2000. The effects of strategy type on the market orientation-performance relationship. *Journal of Marketing*, 64 (October): 1-16.

[26] Meyer, John W. & Brian Rowan. 1977. Institutional organizations: formal structure as myth and ceremony. *American Journal of Sociology*, 80: 340-363.

[27] Narver, John C. & Stanley F. Slater. 1990. The effect of a marketing orientation on business profitability. *Journal of Marketing*, 54 (4): 20-35.

[28] North, Douglas C. 1990. Institutions, institutional change and economic performance. New York. Cambridge University Press.

[29] Oliver, Christine. 1991. Strategic response to institutional processes. *Academic of Management Review*, 16 (1): 145- 179.

[30] Oliver, Christine. 1997. Sustainable competitive advantage: Combining institutional and resource-based views. *Strategic Management Journal*, 18: 697-713.

[31] Peng, Mike W. & Peggy Sue Heath. 1996. The Growth of the firm in planned economies in transition: Institutions, organizations, and strategic choice. *Academy of Management Review*, 21: 492-528.

[32] Palmer, Donald A., P. Devereaux & Xueguang Zhou. 1993. Late adoption of the multidivisional Form by U.S. corporations: Institutional, political, and economic accounts. *Administrative Science Quarterly*, 38: 100-131.

[33] Peterraf, Margaret .A. 1993. The cornerstones of competitive advantage; a resource based views. *Strategic Management Journal*, 14 (3): 179-191.

[34] Porter, Michael E. 1996. What is strategy? *Harvard Business Review*, November-December: 61-78.

[35] Ramamurti, Ravi. 2001. The obsolescing bargaining model? MNC-host developing country relations revisited. *Journal of International Business Studies*, 32 (1): 23-39.

[36] Reynolds, C Christopher. 1999. The value of the Asian model in the aftermath of the crisis and the implications for APEC. [Online] from http:www.auckland.ac.nz/apec/papers/Reynolds.html.

[37] Scott, W. Richard. 1995. Institutions and organizations. *Thousand Oaks*, CA: Sage.

[38] Selznick, Philip. 1949. TVA and the grass roots. Berkeley, CA: University of California Press.

[39] Selznick, Philip. 1957. Leadership in administration. New York: Harper & Row.

[40] Szymanski, David M., Sundar G. Bharadwaj & P. Rajan Varadarajan. 1993. An analysis of the market share-profitability relationship. *Journal of Marketing*, 57 (3): 1-18.

[41] Szymanski, David M., Lisa C. Troy & Sundar G. Bharadwaj. 1995. Order of entry and business performance: An empirical synthesis and reexamination. *Journal of Marketing* 59 (October): 17-3.

[42] Ungson, Gerardo R., Richard M. Steers & Seung-Ho Park. 1997. Korean enterprise: The quest for globalization. Boston: Harvard Business School Press.

[43] Zucker, Lynn G. 1977. The role of institutionalization in cultural persistence. *American Sociology Review*, 42: 726-743.

[44] Zukin, Sharon & Paul J. DiMaggio. 1990. Structures of capital: The social organization of the economy. Cambridge University Press, Cambridge, UK: 1-56.

Governance Structures for Competition Policy: A Case Study of the Philippines

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Abstract

Competition policy has become one of the key elements of national economic policy in many countries around the world. This is due to the important role that competition plays in ensuring that markets efficiently produce goods and services that best meet the evolving demands of consumers. This paper explores the rationale for a comprehensive competition policy and sets out the principles of governance and a suggested governance structure that would deliver an effective competition policy in the Philippines. It also explores the difficulties in implementing competition policy in a developing country where public policy governance structures are not well resourced.

Introduction

Throughout the 1970s and much of the 1980s, Philippine economic policies were largely directed towards an inward-looking protectionist trade regime and an industrial structure characterized by high levels of market concentration. The economic policies embraced (i) import-substitution; (ii) a political economy of distorted incentives, subsidies, and vested interests that impeded the efficient functioning of markets; and (iii) a bias towards capital-intensive industries despite a comparative advantage in labour (IMF, 1999). In particular, competitive neutrality was undermined by a governance structure of socio-economic elites with effective political linkages which resulted in a multiplicity of imperfectly competitive markets. The results were the capture of economic rents by the few and a very unequal distribution of wealth (Rijnsburger & Wijers, 1995).

Though growth was achieved (averaging over six per cent during 1975-80), it was accompanied by macroeconomic instability and driven by capital accumulation rather than growth in multi-factor productivity (MFP). Capital was the chief source of growth, contributing almost three fourths between 1980 and 1998. The contribution of MFP, on the other hand, was virtually negative (Cabalu et al., 2001, pp. 1-2).

There were two fundamental problems with the country's growth strategy. On a macroeconomic level, the excessive build-up of external debt, while contributing to economic growth, proved untenable, exposing the country to the vagaries of financial shocks. This resulted in a debt crisis, fiscal deficits, and high inflation. At the microeconomic level, the deeply entrenched protectionist and misdirected trade policies and an economic milieu of anti-competitive behaviour and political linkages contributed to inefficiencies and the misallocation of resources which retarded productivity growth (IMF, 1999). For instance, while there were incentives and subsidies for export promotion, they were mostly directed towards capital and import-intensive industries for which the country had no clear comparative advantage. Investments were mainly in import substituting industries and nontradables. Secondly, marketing boards were established which instituted producer price controls in agriculture. In the case of sugar and coconuts, two of the country's major exports, these marketing boards led to excessive rents being captured by a relatively small number of industry participants. Structural and policy-induced barriers to entry were created and these weakened the contestability of markets, effectively hindering competition.

By the first half of the 1980s, the flaws inherent in inward-oriented, competition-inhibiting growth strategies and political patronage (which came to be known as 'crony capitalism') began to unfold. Exacerbated by exogenous external shocks and domestic political turmoil, the country plunged into a recession. Output during 1980-85 failed to grow. The 1980s were viewed by many as a lost decade and the country earned a derisory reputation in many critics' eyes, as a growth failure despite its potential (for example, its relatively high level of educational attainment, see Lucas, 1993).

Early Economic Reforms

Economic reform in the Philippines began in earnest by the late 1980s. The Aquino administration introduced several notable reforms. These included the gradual phasing out of quantitative restrictions on imports, the liberalization of foreign investments, and the dismantling of protected monopolies. The country embarked on a program of liberalization, deregulation, demonopolization, and privatization aimed at transforming the economy from an essentially inward-oriented growth strategy characterized by trade protectionism and imperfectly competitive markets to one where economic policy is more directed towards competition, macroeconomic stability, and a political economy of meritocracy and accountability.

The steady improvement in growth during the 1990s was supported by a host of pro-competitive economic reforms implemented by the Ramos administration. The government's strong policy advocacy of openness and competition occurred during a period of robust growth and relative resilience to external shocks. Enhanced private sector participation was the major growth driver. From the mid-1980s to the present, the share of government-owned and controlled corporations in the sales of the top 1,000 largest corporations fell from about 20 per cent to six per cent (World Bank, 2000). Economy-wide growth was complemented by the growth performance of merchandise exports, which increased from an average annual growth of four per cent during the 1980s to 16 per cent in the 1990s. This was due, in particular, to investments in semiconductor exports by multinational corporations in the country.

The significance of the structural reforms was demonstrated when the country was able to weather the impact of the Asian crisis, escaping relatively unscathed the severe declines in output experienced in the region.[i] The economic growth achieved by the country has been bolstered by a platform of enhanced private sector participation and competition in industries such as telecommunications, shipping, and banking, among others. The challenge confronting the country is to sustain the momentum, by extending the various pro-competitive reforms in a well-defined and transparent process through the adoption of a comprehensive competition policy.

The Need for a Comprehensive Competition Policy

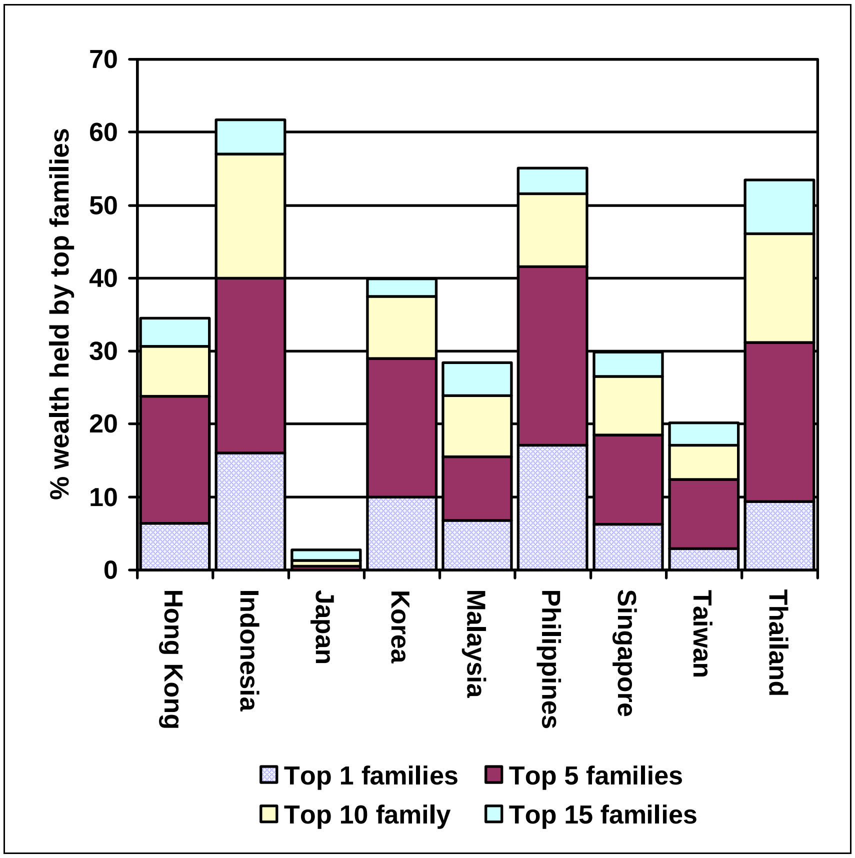
The need for a comprehensive policy framework containing the core principles of competition is evidently suggested by the declining trend in the country's international competitiveness, despite the achievements of the late1980s and the 1990s. The Philippines' competitiveness ranking has deteriorated in four key areas relative to many similar countries in the region (e.g. Malaysia, Thailand and Singapore). These are in overall competitiveness, domestic economy performance, internationalization, and restructuring of the economy. Indeed, only Indonesia seems to have performed worse in recent years (see Cabalu, et al., 2001, Figure1.1, pp. 7-8). While the country may have introduced policy reforms fostering competition, the competitiveness rankings highlight that the achievements so far are still below par with regional performance.

Challenges to competition must, therefore, be given careful policy focus. The pro-competitive reforms that have been established remain potentially weak and vulnerable in scope and governance. The economic reforms need to be established in such a way that not only are they broad-based but also have an adequate legislative and regulatory framework to rely on. This requires an adequate institutional framework, one which is adequately resourced, in order to both research competition issues and to investigate and prosecute breaches of competition policy. In short, the liberal reform agenda requires a comprehensive competition policy framework (Cabalu, et al., 1999).

The challenge is substantial. The Philippine corporate sector is dominated by a relatively small number of family-based conglomerates (World Bank, 2000). The ultimate control of the corporate sector rests in the hands of a small number of families. For example, around 17.1 percent of total market capitalisation can be traced to the ultimate control of the Ayala family (Claessens et al, 1999, p. 3). The largest 15 families control half of the corporate sector in terms of market capitalisation and the largest 10 control over 40 per cent, which as shown in

Chart 1, is a very high proportion in comparison with other countries in the region. The top 5.5 per cent of all landholding families have controlling interest over 44 per cent of arable land and the richest 15 per cent of all families captures more than 50 per cent of all national income (PHILEXPORT, 1998). In addition, there is a high degree of cross-ownership. According to a 1997 survey, 757 of the largest corporations (ranked by sales value) were Philippine owned and of these 216 belonged to just 39 corporate groups. These groups accounted for over 51 per cent of all corporate sales (World Bank, 2000, p. 41).

Chart 1: CONCENTRATION OF FAMILY CONTROL OVER CORPORATIONS



Source: Claessens et al., 2000, 'East Asian Corporations: Heroes or Villains?', *World Bank Discussion Paper*, No. 409.

Competition Policy

Before we address the application of competition policy in the Philippines, it is necessary to examine briefly the broad principles of competition policy and its enforcement. This we do in the next two sections of the paper.

Competition policy is a cornerstone of microeconomic policy. Approximately 80 countries have implemented competition policy to date. A number of international agencies, such as the World Trade Organization (WTO), The United Nations Conference on Trade and Development (UNCTAD), Asia Pacific Economic Cooperation (APEC), the ASEAN Free Trade Area (AFTA) and the European Union (EU), are moving slowly towards global competition laws (or at least adoption by increasing numbers of jurisdictions of harmonized competition laws). International aid agencies increasingly make adoption of competition policy a condition for ongoing aid, as competition policy is a powerful weapon in removing barriers to entry and structural inefficiencies within economies, making aid more effective in promoting development.

Competition policy starts with legislation and regulation to limit uncompetitive behaviour by firms, especially that which comes from monopoly power. In the U.S. and in many other jurisdictions, this comes under antitrust law. Competition policy is designed to protect *competition* not competitors. The failure of an individual firm in competition with other firms is not necessarily indicative of a failure of competition policy, and may indeed indicate that an effective policy is in place.

Competition policy also includes the regulation of the conduct of the government as it affects business, especially the conduct of government business enterprises and the capacity of government legislation and regulation to affect economic efficiency. An important part of competition policy is to take into account the public interest where competition does not achieve economic efficiency or conflicts with other social objectives.

The core element of competition policy is the removal of as many barriers to entry in as many sectors as is practically possible, as long as this is in the public interest (Singleton, 1997). The reason is that barriers to entry essentially protect firms from the forces of competition and lead to monopoly power. Barriers to entry may be usefully divided into three components.

Artificial Barriers refer to barriers created by firms to prevent other firms from entering or operating within an industry. These ultimately impact on customers through the higher prices and/or lower product quality that result from the lack of competition. They are welfare reducing in that they distort relative prices away from the opportunity cost of resources. Examples of practices include price fixing, cartels, discrimination between different markets, exclusive dealing, tie-in arrangements and third line forcing, retail price maintenance schemes and predatory pricing. They are the preserve of traditional antitrust policy, which addresses issues arising when firms treat each other in an egregious manner. Policy is directed at prohibiting anticompetitive agreements (both horizontal - i.e., between firms in the same market, or vertical - i.e., between firms in different markets but part of the same supply chain), prohibiting abuses of market power and scrutinising changes in industry structure (through, for example, corporate mergers and acquisitions) which may result in abuses of market power.

Natural Barriers refer to barriers which are intrinsic to sectors of the economy with high sunk costs. Natural barriers to entry occur because the minimum efficient scale of production is a single firm. Such conditions of supply are often prevalent in national infrastructure, such as electricity and gas provision, water, transport systems, telecommunications, and the like. However, these barriers can be ameliorated through the provision of third party (or open) access regimes and the regulation of assets which exhibit natural barriers to entry. Access regimes ameliorate the barriers to entry for new market entrants associated with industries upstream and downstream. An important part of competition policy in this area is to scrutinise such industries for elements where natural monopoly elements are not present and to introduce competition in these elements, where feasible. For example, it may well be that the distribution of electricity ("the wires") may be a natural monopoly, but generation and retail sales are not. Competition policy is directed at creating competitive markets (often through sophisticated market design) to introduce competition and contestability wherever possible.

Government Imposed Barriers refer to barriers to entry which exist due to both legislative and policy decisions and the actions of government owned business enterprises. They include two elements. The first of these is legislation and administrative directives which create barriers, such as licenses and government franchises. The second is conduct by government which raises barriers to entry, such as policy decisions favouring one set of firms over others and/or activities by government-owned business enterprises which disadvantage private competitors. Government barriers can be addressed by legislative reform and competitive neutrality programs and through the application of antitrust measures to the public sector. An important aspect of competition policy in respect of reducing government imposed barriers is the restructuring of government business enterprises through corporatisation or privatisation.

The Enforcement and Administration of Competition Policy

Enforcement and administration are critical components of an effective, comprehensive competition policy. Effective enforcement requires effective institutions to convert legislative intention into policy action. There are two aspects to enforcement – the legal system and the role of the courts and the nature of the governance of competition policy by the state institution designed to implement competition policy and industry regulation.

In most jurisdictions, the predominant role of the courts is in the areas of antitrust and access to infrastructure (see Cabalu et al., 2001, chapter 6). A key issue is the extent to which a country's standard court system is the best judicial vehicle to deal with antitrust matters or whether a special court should be introduced to deal with antitrust and industry regulatory matters. Largely, this hinges on the capacity of the conventional court system to consider detailed economic argument, and to make judgements based on economic criteria in the context of proficient law. Whereas the U.S. has developed a tradition of the marriage of the disciplines of law and economics and thus its courts seem able to make sophisticated economic judgements, albeit not without controversy, this is not true in many other jurisdictions. Often, good economics is sacrificed for reasons that are not apparent to economists, but which may satisfy other interests.

For these reasons, some jurisdictions have developed specialist judicial bodies to deal with antitrust. However, a consideration in respect of such arrangements is to guard against the possibility of regulatory capture. It may well be that a specialist court would run the risk of becoming too close to the protagonists and not be sufficiently mindful of the public interest.[ii]

Nevertheless, given the role of the standard court system generally as the supreme adjudicatory body in democratic societies, it is appropriate that they have a role in hearing appeals against the decisions of any quasi-judicial enforcement body that may be created for the purposes of antitrust and other aspects of regulatory adjudication. This occurs in many countries, including the EU. Given the issue of the inter-jurisdictional nature of competition cases, this is typically the role of the highest court in the judicial system (e.g. the Supreme Court in the US.).

Turning to the key design issues for state institutions charged with implementing competition policy and industry regulation, there are four key design issues:

Independence: Critical for the enforcement agency is its ability to remain independent from the political process, but with sufficient safeguards to ensure transparency and accountability.

Investigatory Powers: Critical to enforcing antitrust is an ability to successfully investigate cases. The enforcement agency should have sufficient powers to conduct thorough investigations.

Separation of Investigation and Adjudication: There are two key roles to be performed by a competition authority - investigation and adjudication. The essential issue involved where investigation and adjudication occurs within the same organization is a concern about the independence of the process.

Funding: Adequate resourcing is required and can be provided either by the state, or through the fines and other penalties imposed for breaches of competition policy and from other fees. Ideally, funding should be primarily be provided by the state through general taxation revenues. Fees should still be charged for services to reduce vexatious or spurious use of the agency's resources, however they should not become a major source of revenue.

Research Capability: Competition policy is a rapidly evolving field of both academic study and practice. Ideally, the agency should have the capacity to thoroughly research competition issues. This is to ensure that the best contemporary theory and evidence is at hand to evaluate issues as they arise.

Implementation of Competition Policy in the Philippines

The Philippines has in place many of the preconditions to achieve the goal of successful implementation of a comprehensive competition policy. However, the pursuit of policy to increase the degree of competition has not been as effective as is possible. Partially, this has been due to poor formulation of the laws and a lack of a centralized enforcement agency with sufficient powers and responsibility to pursue its tasks.

Legislative Issues

It is considered that House Bill 1373, the *Fair Trade Act of 1994*, presented by Hon Gerardo S Espina and House Bill 183, the *Fair Trade Act of 1998*, presented by Hon Rolando A Briones, represent good solutions to the development of an appropriate competition policy in the Philippines currently being proposed. The bills are almost identical. However, they do require some improvement in order to achieve a comprehensive approach to competition policy. (For an extensive discussion, see Cabalu *et al.*, chapter 8.) Areas where improvements might usefully be made include:

- Definitions of Terms (Section 3) especially the definitions of "monopoly", "oligopoly" and "cartel".
- Unlawful Business Practices (Section 4) which addresses unlawful business practices – monopolization, mergers and collusion, and other issues. A greater degree of clarity is required and there is a need for several additions and/or changes.
- Divestment (Section 5) requires the divestment of a certain portion of any monopoly, regardless of its conduct. If, however, the prohibitions described in Section 4 are properly applied, there should be no reason to apply Section 5, as the activities of entrenched monopolies can be effectively controlled. There are also dangers related to the incentive to invest and sovereign risk.
- Fair Trade Commission (Section 6) action in respect of fines for breaches and the relationship with court action requires further clarity. In addition, it is recommended that the bills be amended to require the publication of detailed guidelines on enforcement which would be a useful "code of conduct" for business; and for the enforcement agency also to offer informal guidance to business as well. Also, there is need for clarity and/or changes with respect to the scope of work, reporting requirements, qualifications of senior officials (section 8) and funding.
- Penalties (Section 14) and Award of Damages (Section 15) both need further clarification and/or changes.

In order to implement a comprehensive competition policy, there are also a number of issues not addressed by the Espina and Briones Bills. The most important ones are:

- Legislative Reviews
- Competitive Neutrality
- Restructuring of Public Monopolies and Privatization
- Access to Critical Infrastructure

Appropriate legislation needs to be drafted and appropriate administrative arrangements need to be put in place to cover these crucial areas of a comprehensive competition policy. Also, care must be taken to repeal any legislation which conflicts with the proposed new legislation.

Because there is a current lack of experience and knowledge in competition policy matters in the Philippines it is crucial that there are sufficient training arrangements in place for judicial and administrative officials in the theory and specific practice of all aspects of competition policy. International agencies and strategic arrangements with other countries (such as staff exchanges) may fill this gap.

Institutional Issues

There is also the need to set in place an appropriate institutional structure to implement the policy, once legislative requirements are met. The institutional framework is as important as the detail of the policy itself. Key tasks associated with implementation involve both policy analysis and advice, and administration. A comprehensive study by Cabalu et al., (1999, 2001) sets out a framework and a suggested institutional structure. A guiding principle of that framework is to suggest an economy wide approach with a single regulatory agency, the proposed Philippine Competition Commission. An economy-wide approach, rather than a sector-by-sector approach is recommended for two reasons.

Apart from administrative savings, first, it is argued that there are more economic similarities between industries than differences. Consequently, a single competition agency would have the virtue of ensuring consistency in regulation across sectors. This would lead to greater economic efficiency than would be the case where different industries faced different regulatory incentives and strictures. Secondly, an economy-wide institution is less likely to be subject to regulatory capture, a real possibility in single industry regulatory institutions.

It is proposed that a new institution the Philippine Competition Commission (PCC) be set up under a specific Act of Congress. The Philippine Competition Commission (PCC) would oversee the conduct of competition policy in the Philippines. The PCC should have two separate (but complementary) functions: one function is policy analysis and advice, and the other is administration and enforcement. Two Offices within the PCC are envisaged:

- The Office for Policy Analysis and Advice (OPAA); and
- The Competition and Consumers Welfare Administration (CCWA).

The OPAA within the PCC would be in charge of policy analysis and have the following *characteristics*[iii]:

- It would be advisory in nature and would not perform any administrative functions.
- It would be independent of any government department or authority. However, its activities should complement and be consistent with the work program of the other department within PCC.
- It would adopt an integrated, economy-wide perspective of competition policy issues rather than be restricted by industry-specific matters.
- It would focus on facilitating practical reforms in the short-run, whilst examining reforms for the longer term.
- It would open channels of communication to all affected interests to present their views.
- It would recognize the existence of skills and resources of other agencies and hence, not duplicate them. It would draw on their expertise for analytical work.

Its major *functions* would be[iv]:

- To provide advice to government departments or agencies on policy questions concerning the content of the rules of competitive conduct and legislated exemptions.
- To provide advice to government departments or agencies on the development and implementation of agreed principles governing regulatory restrictions on competition, structural reform of public monopolies, access rights, pricing matters, competitive neutrality; and other issues associated with transition towards a more competitive environment.
- Implementation of the agreed principles would rest with individual government departments, with the OPAA playing a support role in terms of policy development.
- To provide advice on the development and implementation of the national competition policy. To undertake or coordinate economy-wide reviews of regulatory restrictions on competition and of structural reform issues relating to public monopolies, in particular, proposed privatizations that involve the transfer of a significant public monopoly to the private sector.

The *functions* of the CCWA in charge of administration of competition policy would be:[v]

- To enforce compliance with competitive conduct rules.
- To monitor compliance with conduct rules and report legislated and regulatory exemptions regularly.
- To administer the prices oversight function of the competition policy, in particular, monopoly pricing.
- To oversee the administration of the national access regime and the implementation of pro-competitive safeguards. And, finally,
- To disseminate information and provide public education on the general conduct rules and other competition issues.

It is essential that the PCC be adequately staffed and resourced to discharge its duties to implement and oversee national competition policy. The PCC should be seen as being one of the most prestigious economic agencies, with remuneration and conditions sufficient to attract an expert and dedicated staff. Importantly, the PCC would build up a fund of economic and social policy expertise which, over time, will prove to be an effective knowledge base for policy advice and administration to ensure the development of the Philippine economy as a dynamic and internationally competitive market.

The Political Economy of Competition Policy in the Philippines

One of the major barriers to implementing a comprehensive competition policy in the Philippines is the nature of the interaction between economics and politics in the Philippines. The Philippines does not rate well in international surveys of opinion of key business people, government officials and academics concerning economic and political interaction. Among other things, its values and legal system are seen as being relatively detrimental to international competitiveness, government decisions are not seen to be transparent or effectively implemented, the public service is not perceived to be free from political interference and hinders business and a high level of bribery and corruption is seen to exist. In Table 2, the ranking of the Philippines relative to the 49 countries covered in the 2002 IMD international survey for a number of measures of international competitiveness in terms of the interaction of economics and politics are shown. The Philippines has languished near the bottom of these rankings for over a decade (IMD, 2002).

Table 2: GOVERNANCE AND INTERNATIONAL COMPETITIVENESS: RANKING OF THE PHILIPPINES

Governance Issue	**Ranking** (from 49 countries)
Bribery and Corruption Not Prevalent	45
Public Service Is Independent of Political Interference	44
Transparency of Government Policy Is Satisfactory	37
Government Decisions Effectively Implemented	43
Bureaucracy Does Not Hinder Business	41
Competition Legislation Prevents Unfair Competition	43
Protectionism Does Not Affect Business	48
Legal Framework Favourable to International Competitiveness	45
Political Parties Understand Economic Challenges	39
Tax Evasion Not Prevalent	46
Values of Society Support Competitiveness	38

Source: IMD, *IMD World Competitiveness Year Book 2002,* Institute for Management Development, Lausanne, 2002.

However to speak of corruption in the Philippines as interpreted from the perspective of North American or Western European values is to misunderstand a vital component of Philippine culture and the value system of the Filipino people. As is the case in many Latin American countries and possibly many African countries, too, at all levels of Philippine society, there is a system of mutual obligation which spreads out from the extended family to the local community – 'the Barrio', and from there to the Province and ultimately to national politics. To participate in the economic and political sphere, there is an obligation on to those who succeed to repay through favoured treatment those that supported their rise. Similarly there is an obligation on each person to support members of their extended family in their quest to succeed by assisting them financially and supporting them as best he or she can. When this system of mutual obligation is combined with the concentration of economic resources in a relatively small number of family based conglomerates, the scope for what has become known as 'crony capitalism' is very great.

As we saw in section 3 of this paper, the Philippine economy is very concentrated. The Philippine corporate sector is dominated by a relatively small number of family-based conglomerates and control over the major corporations is exercised by an economically privileged few. In agriculture, the top six per cent of all landholding families have controlling interest over nearly 50 per cent of arable land. The richest 15 per cent of all families captures more than 50 per cent of all national income. There is also a high degree of cross-ownership. Of the largest corporations (ranked by sales value) that are Philippine owned, nearly 30 per cent belong to just 39 corporate groups and these groups account for over 50 per cent of all corporate sales. By regional standards, the Philippines has one of the highest degrees of ownership concentration of industry.

The Philippines is a very democratic country, and politics is a very vibrant, popular process. But formal participation in the political process requires considerable resources. Part of the reason is the necessity to build and maintain extended political alliances. Political parties are not pervasive and well disciplined structures when compared with North American or Western European party systems. Rather politics consist of complex alliances of family and regional groupings, held together by mutual obligation and extended Barrio and family connections as much as by ideology. Added to this is a history of domination by political elites, both in terms of the autocracy of the relatively recent Marcos years, and prior to that, extended periods of colonial domination by, first, Spain and then the U.S.

This system has given rise to a version of 'crony capitalism' that entrenches political and economic power. This politico-economic system is illustrated in Figure 1. Crony capitalism is, in this scheme, an extended system of rent exchange.

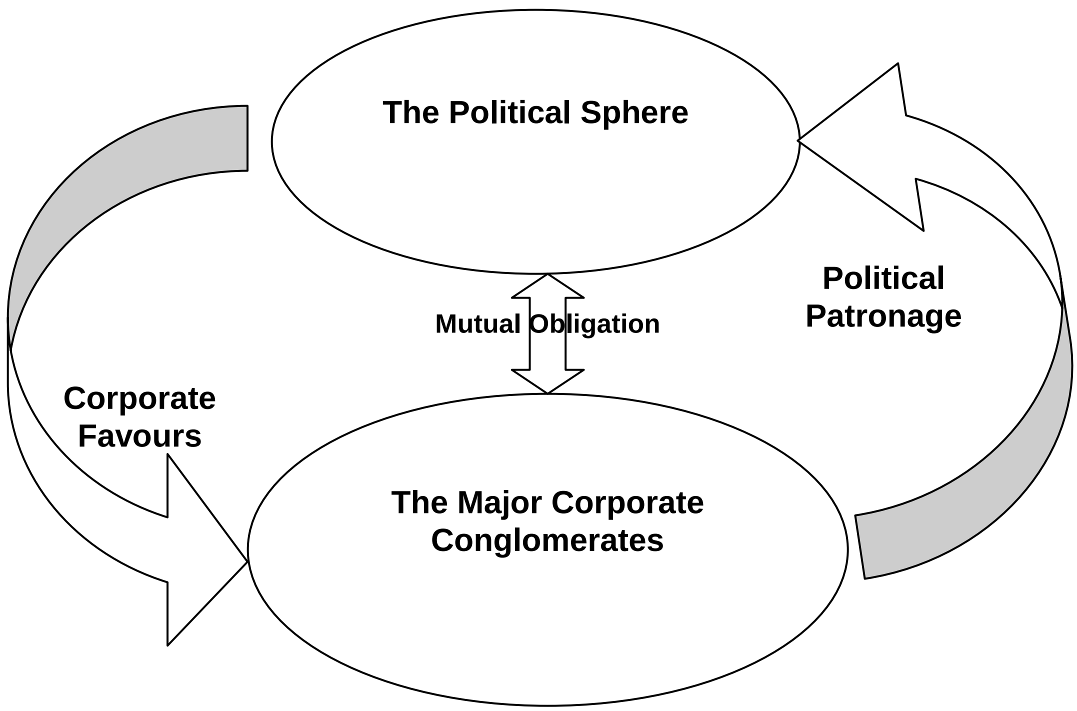


Fig 1: A Model of 'Crony Capitalism'

In such a politico-economic system, the will to implement competition policy is weak, not because of the lack of power in the ideas, nor even the lack of a widely held belief that such a policy would ultimately lead to better economic outcomes in the Philippines. Rather the issue is that the whole purpose of competition policy is to break down economic power and to spread economic power to the extent that individual economic agents cannot by their own actions control market outcomes. This means that the implementation of competition policy is unlikely to gain favour with the political and economic elites currently in place. The greatest advocates for competition policy in the Philippines are not 'big business' but rather the relatively powerless – the consumer advocacy groups, student activists, academics and those outside the corridors of power.

Therefore, is competition policy in the Philippines a lost cause? We do not think so. The reason is that the Philippines sees itself and wants to be seen as a 'good regional and global citizen.' That is, the Philippines takes its obligations under regional and international economic and political alliances seriously and, increasingly, implementing competition policy is becoming a major part of being in the forefront of international organisations and alliances.

The international context is important. A number of international agencies are moving towards global competition laws (or at least adoption by increasing numbers of jurisdictions of harmonized competition laws). International aid agencies, such as the World Bank and the Asian Development Bank, increasingly make adoption of competition policy a condition for ongoing loans and aid, as competition policy is a powerful weapon in removing barriers to entry and structural inefficiencies within economies, making aid more effective in promoting development.[vi] For example, For example, Asia Pacific Economic Cooperation (APEC) –of which the Philippines is a member - has shown an interest in competition policy for some time and the Pacific Economic Cooperation Council (PECC)[vii] has developed for APEC the *PECC Competition Principles,*[viii] to formalize ongoing dialogue into a series of non-binding principles for APEC members. PECC recommends that APEC economies embrace a number of measures which go a long way down the comprehensive competition policy path.[ix] According to the recommendations, member countries are to:

- Re-evaluate all relevant government legislation and regulations to ascertain the extent to which these distort competition, particularly in sectors of relative economic importance in the domestic economy;
- Develop an action plan for this re-evaluation with a view to minimizing distortions of market mechanisms, including efficiency-reducing barriers to market entry;
- Implement that action plan for the domestic economy, including the development of appropriate criteria for future government interventions in globalizing markets;
- Promote the maximum degree of transparency with respect to substantive provisions, procedures and decision-making in legal, administrative and regulatory regimes;
- Minimize the risk of anti-competitive business conduct through appropriate competition disciplines on business conduct and effective surveillance and enforcement of those disciplines, including appropriate deterrent measures and in this context, consider enactment of at least a modest domestic competition law that:
    i. embodies the explicit objective of promoting the process of competition in order to enhance efficiency in the marketplace;
    ii. contains provisions with respect to 'hard core' horizontal cartel activity (price-fixing, bid-rigging, market allocation and group boycotts), egregious abuses of a dominant position, and mergers or takeovers of large firms;
    iii. contains as few sect oral and other exemptions as possible;
    iv. is ultimately administered and enforced by an independent agency.
- Explore the benefits of engaging in international cooperation among competition agencies and authorities.

Therefore, in terms of its participation in many regional and international groupings, the Philippines will be increasingly under pressure to be taking active steps to implement competition policy. Competition policy, in this sense, is part of the process of globalisation.

Conclusion

In this paper we have argued that the Philippine economy would benefit by the introduction of a comprehensive competition policy that minimises artificial, natural and government induced barriers to entry. This is because the Philippine economy is characterised by extreme concentration. We have suggested legal changes that are necessary and a governance structure for the implementation and operation of competition policy. However, we note that the pervasiveness of mutual obligation in Philippine political life together with high levels of economic concentration do not provide a fertile environment for the adoption of competition policy by the Philippine political elites. If competition policy is to progress in the Philippines, we argue that the impetus will come from the external obligations of the Philippines to regional and international economic alliances and organisations.

References

[1] Cabalu, H., Doss, N., Firns, I., Jefferson, T., Kenyon, P., Koshy, P., Lee, K.L., (1999), Issues in the Implementation of Competition Policy in The Philippines, IRIC, Curtin University of Technology, Perth, Australia.

[2] Cabalu, H., Doss, N., Fryer-Smith, S., Kenyon, P., Koshy, P., Valencia, V. & Wills-Johnson, N., (2001), Issues in the Implementation of Competition Policy in The Philippines, IRIC, Curtin University of Technology, Perth, Australia.

[3] Claessens, S., Djankov, S. Lang, L., (1999), "Who Controls East Asian Corporations," World Bank Working Paper No 2054, February.

[4] Claessens, S., Djankov, S. Lang, L., (2000), East Asian Corporations: Heroes or Villains? *World Bank Discussion Paper*, No. 409, January.

[5] Hilmer, F.G., Rayner, M.R. and Taperell, G.Q. 1993, *National Competition Policy: Report by the Independent Committee of Inquiry*, AGPS, Canberra.

[6] IMD, (2002), *IMD World Competitiveness Year Book 2002*, Institute for Management Development, Lausanne.

[7] International Monetary Fund (IMF), (1999), *Philippines Selected Issues*, IMF Staff Country Report No. 99/92.

[8] Lucas, R. E., (1993), 'Making a Miracle,' *Econometrica*, Vol. 61 (2), pp. 251-272

[9] PHILEXPOPT, (1998), *Setting the Agenda for Competition Policy in the Philippines*, Free Trade Asia Consulting, The Asia Foundation, Author No. 26-017, Grant No. 26-09801.

[10] Rijnsburger, W. and Wijers, K. H, (1995), *The Impact of the GATT-Uruguay Round on Agriculture in the Asia- Pacific Region*, Rabobank, Netherlands.

[11] Singleton, R.C., 1997, 'Competition Policy for Developing Countries: A Long Run, Entry Based Approach' *Contemporary Economic Policy*, Vol. 15, No. 2, pp.1-11.

[12] World Bank, (2000), *Philippines Growth with Equity: The Remaining Agenda*, A World Bank Social and Structural Review Report No. 20066-PH.

End Notes

[i] Output in the country declined by 0.5 per cent compared to the regional experience of six to 14 per cent in 1997-98. If it were not for the six per cent drop in agricultural output brought about by the El Niño phenomenon, the country could well have avoided the contraction.

[ii] It is instructive that Australia's quasi-judicial system for the conduct of industrial relations was vehemently criticised by many commentators as being captured by peak union and employer bodies, to the detriment of economically advantageous industrial relations and the public interest. For a representative argument, see P.P. McGuiness, *The Case Against the Arbitration System*, Centre for Independent Studies, Sydney, 1985.

[iii] These characteristics were adapted from the Hilmer Report (1993) describing Australia's National Competition Council.

[iv] Adapted from Hilmer (1993).

[v] Adapted from Hilmer, (1993).

[vi] For an in-depth review of this subject, see UNCTAD (United Nations Committee on Trade and Development), 1999, *Experiences Gained So Far on International Co-operation on Competition Policies and the Mechanisms Used* Report by the UNCTAD Secretariat, June, Geneva, Available from http://www.unctad.org/en/subsites/cpolicy/index.htm October 24th 2000.

[vii]PECC is a partnership of senior business, government and research individuals working in a non-official capacity on policy issues. It is the only non-government, official observer of APEC, and has a seat at all meetings of the APEC ministers and officials.

[viii] PECC (Pacific Economic Co-operation Council), 1999, *PECC Competition Principles: PECC Principles for Guiding the Development of a Competition-Driven Policy Framework for APEC Economies* PECC, Singapore. Executive Summary and background information available from http://www.pecc.org/ie.html 22nd February 2001

[ix] PECC, 1999, ibid.

HR Diversity as a Source of Competitive Advantage in Transitional Economies

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Abstract

In the last decade the CEE countries were subject to a huge transformation from planned to market economy. In most of them this change had a strong impact creating a negative conjuncture on the local demand. Some of the economies started to grow after the slump, but some of them are still in a stalling position.

The entrance of foreign companies, either as joint-ventures, or as 100% foreign investments, is among the measures which would lead to recovery. As all of them must rely on local work-force, totally or partially, they must face the problem of intercultural management, which is becoming a central point of the management practice in operative FDIs in CEE countries.

The diversity of values, attitudes, approaches and methods between expatriates, who normally cover higher organizational ranks in the international company, and locals, could be a sizeable threat to development. It could provoke internal conflict situations, leading to negative business results, losing the competitive advantage.

There could be two types of problems: the endogenous one, i.e. problem of intercultural diversity management within the company, and the exogenous one, regarding the relationships between company's management and the local environment.

But, as we know from SWOT analysis, an inventive management is sometimes able to transform threats into opportunities.

Therefore, we would like to investigate, whether the effort of recognizing and facing such kind of conflicts, can be, in the first place, managed, and, in the second place, even exploited in order to create a competitive advantage for the company.

Our research will try to find out what is actually happening in the CEE joint-ventures: do they recognize this problem, do they manage it properly, and are they able to transform it in an opportunity?

Research Design

In order to answer to these questions, we will try to implement the following research schedule:

1. Situation of the transition process in the CEE economies;
2. Quantitative and qualitative characteristics of the FDIs in the CEE countries;
3. HR management in the observed companies;
4. Main working hypotheses of the research:
    1. HYPOTHESIS 0: Foreign companies in CEE countries recognize conflict situations caused by cultural diversity;
    2. HYPOTHESIS 1: Foreign companies in CEE countries are able to manage conflict situations which are caused by cultural diversity;
    3. HYPOTHESIS 2: Foreign companies in CEE countries are able to exploit cultural diversity for the creation of specific competitive advantage.
5. Research method:
    1. Examination of the relevant literature
    2. Formulation of the basic statement of the investigation
    3. Preparation of the questionnaire.
    4. Interviewing a preliminary sample of companies in order to check the validity of the questionnaire and to improve the method.
    5. Main research will contact sizeable sample of companies in order to test the formulated hypotheses.

Implications of the Results of the Study

The final result of the research shall be an indication for the:
Main management problems of the international companies in CEE countries,
Suggestions of how to overcome and manage problems,
Policy proposals of what should be done in order to exploit the cultural diversity for the improvement of the competitive advantage of the company operating in the CEE environment.

Introduction

It is a fact that people bring their cultural background and ethnicity into organizations, along with professional role, gender, age or race differences. According to Hofstede[1], 50% of work-force behavior and attitude differences in international corporations derive from national culture. Moreover, Laurent[2] found that managers employed by multinational companies maintain and even strengthen their cultural peculiarities compared to their domestically employed colleagues: working abroad, Germans become more German, Italians more Italian, Australians more Australian, and so on. According to Adler[3] this may be due to resistance to conform to the organizational culture of the foreign-owned company, or, a somewhat different explanation, it may be due to deep incorporation of ethnic characteristics in adults that are in vain challenged by company's organizational efforts.

The problem looks complex: if resistance on ethnic redoubts would be total, it would be difficult to explain the phenomenon of globalizing on individual level, i.e.: why people across the world are becoming increasingly similar, as a general observation. We put the hypothesis that globalization exists and it is a virulent force, but some ground structures of the single person also resist to it, maintaining individual identities, in front of its leveling force[4].

The final result may be an individual with double identity: a global and a local one. Mankind's conscience potential has an enormous information absorption room; an individual can contain double or even several cultural stocks: local and global cultures can stay in parallel. Another problem is if, and how, they interact, but observations show that they can do it. Conflicts, if they arise, are managed in the direction of a stepwise cultural melting.

In an organization happen similar phenomena, with the remarkable difference that cultural harmonization and unification is obtained between rather than within individuals. If the organization is a business, this activity asks also for an added task given by the benchmark of corporate business goals: less costs, more revenues and profits. And here we can put the hypothesis that a particularly clever management can get this result even enhancing the effectiveness of the organization in pursuing its goals, obtaining also a competitive advantage, in comparison to other organizations, which are less capable to that regard. An individual who masters different cultural backgrounds undoubtedly has a competitive advantage[5]; the same can be said for a company which is able to manage different cultural stocks. Of course, strategies to that regard can be legion, many are existing and many others could be imagined. An ingenuous corporation can find new ways of how to exploit cultural diversity in order to enhance its position on the market.

To that regard[6] Cox says that a corporate goal must be: "planning and implementing organizational systems and practices to manage people, so that the potential advantages of diversity are maximized, while its potential disadvantages are minimized … maximizing the ability of all employees to contribute to organizational goals and achieve their full potential unhindered by group identities such as gender, race, nationality, age, and departmental affiliation"[7].

The study area dealing with this problem is HRM[8], which is becoming recognized as a major source of competitive advantage in globalization[9] [10]. Traditional HR strategies to manage diversity have not been very effective until now, as they have been lacking integration with other functions, and also because there are still not at hand valuable explanatory and forecasting models (theories) of the phenomenon.

But, as globalization proceeds, there is increasing presence of people with different cultural backgrounds in business organizations[11] across the world, and the problem grows in importance. Hence, also the sensitivity[12] of the management to this problem is growing[13]. At a more mature stage of the process may come the application of cultural audits[14], trying to study the characteristic of the diversities, in order to describe and model it, with the goal of a more rational managerial approach to it.

As we already told, in the conscience of locals employed in international organizations two (or more) cultures start to coexist. If they just coexist, they may be hampering each other. The creative move comes if they start to change and to melt, creating a culture on a new, higher level, i.e., giving also a better response to corporate needs[15]. But more than often this happens casually, as no HR methods have been applied in order to direct the cultural change. Problems with traditional HR methods are also connected with the fact that they are introduced as isolated parts, with no links to other relevant HR systems, particularly if we assume in-group homogeneity, i.e., it is given for granted that all members of the group have the same HR needs.

A new approach to diversity management[16] provides theoretical framework that integrates environmental drivers such as labor market, global economy, quality focus, political and legal forces encouraging scholars to view managing diversity as a mean to achieving organizational ends.

Organizations build their own responses to cultural diversity. In many cases these responses are based on intuition, and it is hard to make an exhaustive typology of them. According to Adler[17], there are three types of organizational responses to cultural diversity, but if we generalize a little bit, we could say that there are only two of them: an approach trying to extend the culture emanating from the centre to the periphery, without taking into account local diversities and a more sophisticated and democratic one, handling with care local cultural diversities, without deleting the central influence, hoping that precious elements of behavior and knowledge, which could be innovative to the whole[18] could be found in the periphery. Similar considerations could be carried out also regarding other Authors[19]. An effective response to local diversities could enhance the following areas[20]:

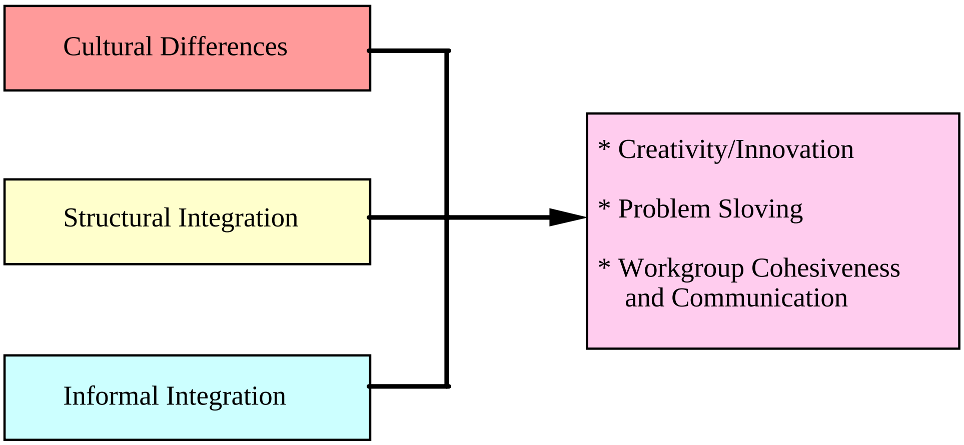
- Labor costs
- Access to superior HR
- Market expertise
- Improvement of problem solving and creativity
- Shortening response time to environmental change.

Florkowski[21] simplifies the problem to a two dimensional one: production factors versus products. In the global environment labor, one of the traditional production factors, is becoming increasingly diverse, as it originates from different countries, but products, on the other hand, and production methods, are becoming increasingly homogeneous, because of technology, economics and needs of the consumers, which are more and more homogeneous[22]. The outputs are exercising unifying cultural pressure on labor, whereas single workers try to resist, anchoring themselves to their deepest local values, in order of not being totally homologated to the one standard. But workers are also consumers, and hence we are again with the original model of the individual person, absorbing two (or more) types of culture, one global and the other one local, with the need of making a deal between them, trying to compensate for the flaws, but trying also to create a new and better response.

Other Authors[23] have tried to describe the responses which should be an outcome of managing HR diversity. As far as individual workers are concerned they should be: better commitment and motivation to work, improved competence in local markets, perceived quality of work and products, improved communication inside the company, better performance. On organizational level they are: increased profitability, adaptive and flexible systems, multicultural balance, increased effectiveness.

According to (inserire citazione, che manca), an interactive model of the impact of diversity on individual career outcomes and organizational effectiveness cultural differences, structural and informal integration can bring to the outcome of creativity/innovation, enhanced problem solving and work-group cohesiveness and communication, as shown in fig. 1.

Fig. 1.: The desired outcomes of cultural differences managed by structural and informal integration



We tried to carry out a research on the field, in order to check the described theoretical elements, choosing the area of CEE[24], where a lively activity of founding and developing international companies is now on the run.

The countries of this area are now in the stage of the so called economic transition, i.e., the shift from the previous plan economic system[25] to market economy. For practical[26] reasons, we started with two smaller countries of the CEE area: Slovenia and Montenegro.

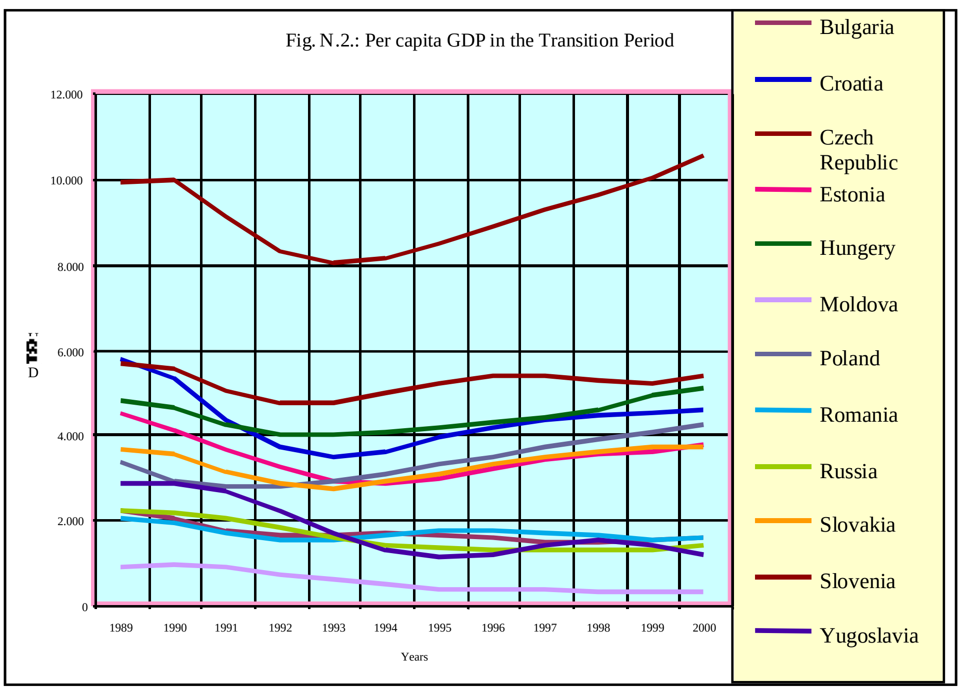


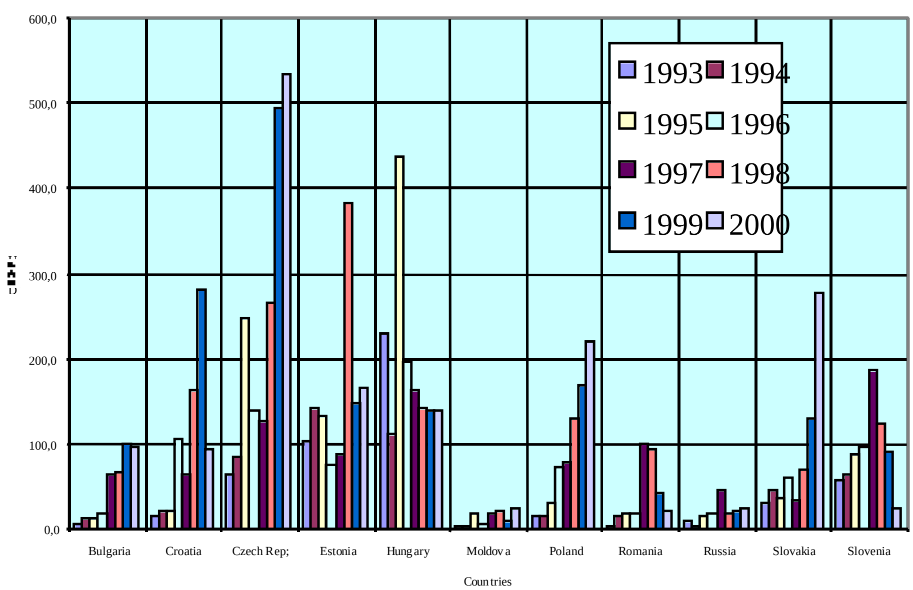
Fig. N.2.: Per capita GDP in the Transition Period

The results of the transition process in CEE can be seen in fig. 2, showing the perequated value of the per capita GDP expressed in USD in the period 89-00. We see that the effect of transition for the countries involved[27] was at the beginning of the process a rather sharp drop in GDP, due to negative economic growth in the first stages of the turnaround, then countries reached a “transitional minimum” and finally we may observe recovery, with per capita GDP data again at the 89 start point. Few countries crossed this benchmark until 2000: Poland, Hungary, Slovenia and Slovakia. Some countries, as it is shown from figure 2, didn’t reach transitional minimum yet, and some others exhibit wavering patterns, showing redirections in the economic policy of the authorities during the process. From the curves, we notice that Slovenia is the best performer within the transition group, exhibiting at the end of the period a per-capita GDP which is more than 2 times better[28] than the average of the group which follows on the next lower level: Czech Republic, Hungary, Croatia, Poland, Slovakia and Estonia. The data of this group is 2 times better than that of the next followers: Yugoslavia, Russia and Romania. On the bottom there is Moldova, which still didn’t reach transitional minimum. The causes of a better or worse transitional outcome depend on several factors, most of them connected with the economic policy of the state, like, for instance inflation control, fiscal policy and the policy regarding the situation of the current account, but also, of course, it depends on the starting point and on the geo-political position of the country.

One of the strongest drivers to improvement in the transitional process is given by the inflow of FDIs[29] in the given country. They enhance the current account balance, either directly, representing a plus item when they inflow, or indirectly, if they are accompanied by productive or trade know-how, creating export flows. But they improve also internal competition, representing a lowering push on prices and creating a wider offer, attracting foreigners (tourists) to the country. For these reasons, structural investments are considered more valuable than portfolio ones, which may speculate on the economic trends of a given country, and would leave the country, if things turn bad, provoking a mess in the country’s accounts.

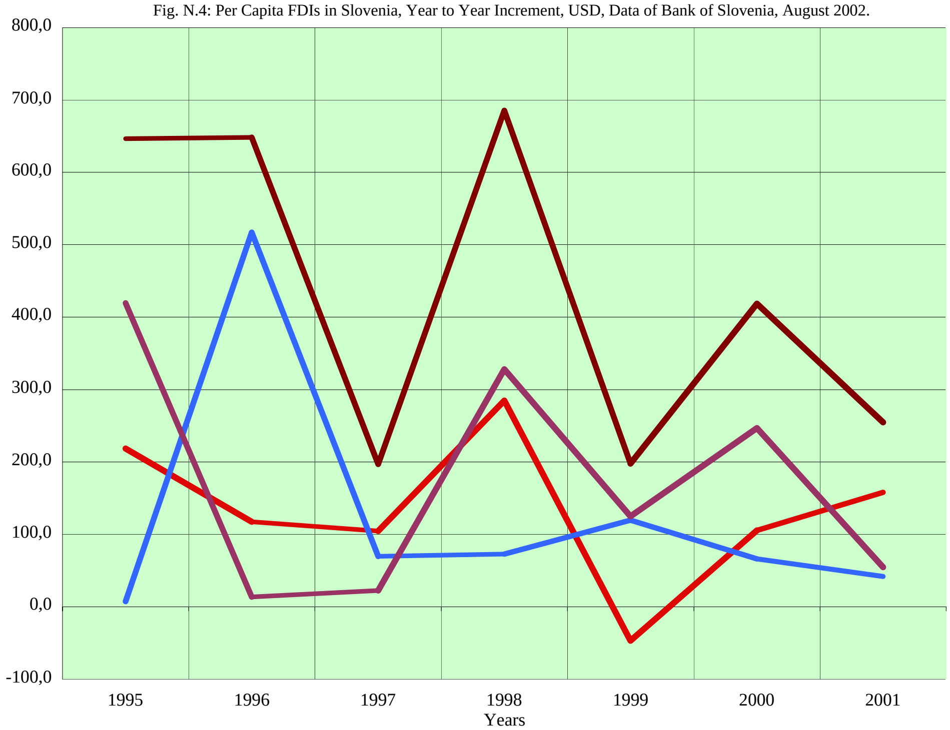
Some Authors consider the FDI inflow in CEE as the most important factor of transitional success. What

Fig. N.3.: Per capita FDIs for several Transitional Countries. Sources: EBRD, EIU, WIIW, national statistics, Business Central Europe, The Annual 2001



happened on the field we can see from fig. 3, showing per capita FDIs for the same group of countries as shown in fig. 2. But comparing results shown in figures 2 and 3, we see that correlation between per-capita FDIs and growth results is not so direct: Slovenia, for instance, the best per capita GDP performer has not very good per capita FDI data, in the same period. But we have to be cautious to this regard: a country may have endogenous growth-drivers and the effect of FDIs is to be sensed with a time shift, as it takes time to develop a full winged productive activity, after the first inflow of funds. FDIs inflows depend also on the opportunities given by a country. Good opportunities started to materialize, for instance, in Slovenia only in 01, when the privatization process was ended, and local share-holders were freer to sell their stocks. Figure 4 shows FDI and other investment data in Slovenia on the basis of statistics of the S. National Bank.

Fig. N.4: Per Capita FDIs in Slovenia, Year to Year Increment, USD, Data of Bank of Slovenia, August 2002.



We can see that FDIs in 00 and 01 are growing again, after a 99 slump.

In order to check which are the problems of managing international companies in Slovenia we used as a research instrument a questionnaire. Because of time and financial resources shortage, the preliminary questionnaire was tested only on 3 companies. Anyway, we collected some very important feedback from interviewees, and the preliminary questionnaire was submitted to correction. In the final version of it, questions were organized as shown in Fig. 5.

Fig. N. 5.: Structure of the Questionnaire

1. Manager data
1.1. Foreign manager data
1.2. Local manager data
2. Company data
3. HRM data
3.1. Culturally diverse work-force data
4. Direct questions.

The research was carried out during July 2002, and is bound to be continued after vacation stop. Until now, some 20 to 30 company managers were interviewed. Furthermore, the part of the questionnaire that regards cultural differences was submitted to local managers from lower levels. Almost all interviews were carried out by both Authors together.

Fig. 6.: Selected questions from questionnaire with answers as percentage dat						
What is your sex						
Male	Female					
95	5					
How old are you?						
<20	21-35	36	0	>50		
0	15	55	30			
What is your position in the company						
CEO	STAFF					
65	35					
You are local, foreigner?						
Local	Foreigner					
75	25					
Where do you live (only for foreign managers)?						
In parent country	In local country					
80	20					
Do you speak local language (only for foreign managers)?						
Mother tongue	Fluent	Good	Basic	No		
40	0	0	20	40		
Do you consider a local language knowledge fo						
Very Important	Important	Not important				
100	0	0				
Which type of Investment Strategy did you adopt?						
Green field	Brown field	Joint-Venture	Other			
25	55	15	5			
Reasons for investing in Slovenia						
Production costs	(transportation)	natural resources	Customer access	advantages	Trade barriers	incentives
18	16	12	15	13	14	12
What is the precentage of foreign capital in your firm?						
0-10	11-24	25-50	>50			
5	5	5	85			
What is your general opinion about West-East investments?						
importantImporta	Important	Not important				
40	60	0				
How long does your company plan to stay in Slovenia?						
For ever	Period	No plans				
65	20	15				
In general your business in Slovenia is						
Growing rapidly	normally	Stagnating	Decreasing	rapidly		
50	35	10	5	0		
What type of coordination with headquarters (foreign investors) do you have?						
controlled by	stratetgic	decision making	Other			
0	90	10				
How do you describe your relationship with foreign investors? (only for slovene managers						
constructive	Constructive	Neutral	Conflicting	Very conflicting		
20	73	7	0	0		
How does foreign investor supervise your activity?						
foreign managers	foreign	Audits	Advisory board	Reporting system	None	Other
0	7	0	7	87	0	0
Did you notice any of the following advantages from work-force diversity in your company						
creativity	problem-solving	flexibility	None	First three		
8	8	17	25	42		
Does managing this company mean dealing with conflict caused by cultural differences?						
Potential	Present	No				
20	35	45				

In fig. 6 we put some selected questions with percentage answers, which may be interesting in order to outline some results of the research. We see that most interviewees are males, middle-aged and CEOs. 75% of them are locals, but 80% of the foreigners live in parent country. This is interesting and is due to two reasons:

1. Slovenia is so small a country that many foreign managers can commute from home in the parent country to their working place and

2. foreign companies are planning to appoint Slovenes to those positions as soon as possible, either for cost reason, or because they are potentially enough good to carry out the task.

For the same reason the foreign managers are not much interested into learning Slovene, even if they consider it paramount for local business. Most used strategy of these companies is the acquisition of a local existing business. There are a lot of reasons for investing in Slovenia, but low labor cost is the most important. The investors prefer to get a firm control of the company with a high percentage ownership, considering important and very important East-West investments. Most of them are planning to stay indefinitely on the spot and their businesses in the local country are doing fairly well. They are leaving the local subsidiaries fairly autonomous, just timely checking some synthetic indexes and audits about them. The relationship between parent and locals is constructive and the cultural diversity adds to flexibility and problem solving of the company, even if, as a matter of fact, cultural differences don't look as being insurmountable.

In a very first and fairly hypothetical modeling of the research findings we could summarize[30] three groups of factors as influencing the management of cultural differences of international companies in Slovenia:

1. Mother-company origin and capital ownership;
2. Top manager involvement in the business;
3. Kind of business.

As far as the first point is concerned, it looks like if the cultural gap between Slovenes and Austro-Germans is much smaller than that between Slovenes and Latins (Mediterraneans). This brings to easier communication and better trust between the two groups of nationals. It is interesting to note that 80% of the key positions of the companies originating from Latin countries are occupied by expatriates, whereas companies originating from the German cultural environment rely much less on them, only by 11%. German speaking investors in Slovenia have it also easier to build a common organizational culture, for instance using socialization moves, like once or twice yearly picnics, Christmas and Easter parties, to which also family members of the local employees are invited, and similar.

It depends also on the top management involvement in the business. Family enterprises rely on trustworthy expatriates, acting as local proconsuls of the mother company. But in such cases the locals don't seem to feel like being colonized. On the contrary, they seem to be happy that someone with real power, as representative of the equity, is taking in his hand the destiny of the business, probably, as a contrast to the previous "social" mess, where it was difficult to find somebody responsible of anything[31]. If the company is more public in nature, this aspects are less relevant.

And also the kind of business matters: if the joint-venture is an outsourcing business for final product producers, the problematic of cultural diversity is not so relevant. What matters is only some kind of technical knowledge and labor costs. On the contrary, if it is an international retail organization which is offering the product-service to final buyers, cultural diversity and barriers could result as paramount.

Anyhow, the combination foreign property/local workforce seems to work pretty well in Slovenia. Slovenes don't resist foreign guidelines, if they see that they are bringing to the common good. They learn quickly, adapting to them and often become work motivated by the presence of foreigners, being eager of demonstrating them that they are not inferior to them.

The study splitters in a multitude of single cases, one diverse to the other, from which it is hard to draw general considerations. In one case, we found a reverse situation: the German mother company went bankrupt and the Slovene affiliate took it over, in order of not loosing grip on the EU market. The Slovene CEO lady told us that the loosing of the German owners was a pity because now the work force in Slovenia feels less motivated. In another case, nothing changed in the ex-socialist company, only the owner, who is not even German, but a Slovene emigrated to Germany. He comes back only for periodical checks, and this sole move improved work discipline and motivation, turning around to the better the attitude of local labor by 360 degrees.

From the words of a French business owner, who has been in Slovenia already more than three years, and doesn't still speak a word of Slovene[32] and other CEOSs, we would list cultural diversity aspects in Slovenia as follows:

1. Positive:
    a. Individuals like to learn, doing it quickly and effectively,
    b. they like to work and do it methodically and systematically,
    c. they dispose of a pretty vast knowledge, especially in the linguistic area. In this field often they are better than their masters, and
    d. they don't have problems to fit into the organization.
    e. In front of strangers they like to demonstrate their value;
    f. culturally they are more akin to the Germans and North-Europeans than to the Latin-mediterraneans.
    g. Workers carry self-organizing capability. Smaller working groups are able to solve the encountered working problems without a rigid direction from the top. Sometimes they can replicate a behavior similar to the Japanese lean production methods[33], without formally posing the problem, just by application of common sense and sensibility to social values.
2. Negative:
    a. Individuals don't like to bear a lot of responsibility,
    b. they don't like decision-making and bargaining.
    c. Often they use sick-leaves in order to escape periodically the shop-floor working stress.

Considering the described aspects, we can conclude saying that the main cultural difference between locals and expatriates could be the following one: locals have a good working morale (save for the sick-leaves) and knowledge, and they learn easily what is needed to jump ahead in their specialization, but they are not risk-taking decision takers. Therefore, they combine well with trustworthy foreigners having entrepreneurial characteristics, who are eager to play the decision taker roles, and have also some special knowledge, mostly regarding world markets. This seems to be a good mixture for creating a competitive advantage. Of course, these considerations must be understood in a general and prejudicially sense, individually we may find quite opposite situations. Moreover, we will verify if the described outline of a model regarding cultural diversity and integration would be confirmed by further research.

References

[1] [1] Hofstede, Greet (1980) Culture consequences: International Differences in Work-Related Values, Beverly Hills CA: Saga Publications

[2] [2] Laurent, André (1983) The Cultural Diversity of Western Conceptions of Management, International Studies of Management and Organization, Vol. 13, no.1-2, pp. 75-96

[3] [3] Adler, Nancy J. (2002), International Dimension of Organizational Behavior, South-Western, Thomson Learning: Cincinnati, Ohio

[4] [4] Essentially it is the problem of not loosing one's identity. In old times one would say: "not loosing one's soul". Identity (or soul) is what makes everybody of us a person and not a commodity. Sometimes people prefer to die rather than loose it.

[5] [5] If he knows several languages, he can seek job in different cultural environments, for instance. This is yet the simplest strategy that comes to one's mind how to exploit cultural diversity present in the conscience of one individual.

[6] [6] Cox , T. (1993), Cultural Diversity in Organizations: Theory, Research and Practice. San Francisco: Berrett-Koehler

[7] [7] It is something similar to the well known SWOT analysis: reducing the impact of weaknesses, enhancing strengths, cancelling threats and finding opportunities.

[8] [8] Human Resource Management.

[9] [9] Pucik, V. (1993) Globalization and Human Resource Management. In V. Pucik, N. Tichy, and C. Barnett (1993), Globalizing Management: Creating and Leading the Competitive Organization. New York: John Wiley

[10] [10] Cox, T. (1991), The Multicultural Organisation, Academy of Management Executive, Vol. 5, No. 2Cox, T. and Blake, S. (1991), Managing Cultural Diversity: Implications for Organizational Competitiveness, Academy of Management Executive, Vol. 5, No. 3

[11] [11] Kossek, E., Zonia, S., and Young, W. (1985), The Limitation of Organizational Demography. Proceedings of the October 1994 Conference "Work Team Dynamics and Productivity in the Context of Diversity". Centre for Creative Leadership and The American Psychological Association. Greensboro, NC: Centre for Creative Leadership

[12] [12] Ferdman, B. (1989), Affirmative Action and the Challenge of Color-Blind Perspective. In F.A. Blanchard and F. Crosby (eds), Affirmative Action in Perspective (169-76). New York: Springer-Verlag and Morrison, A., Ruderman, M., and Hughes-James, M. (1993). Making Diversity Happen: Controversies and Solutions, Greensboro, NC: Centre for Creative Leadership.

[13] [13] The delay may be due to the fact that at first the mother companies try simply to impose their culture to the subsidiaries. Sensitivity arises when the mother company becomes aware that also local cultures may be contributive to their goals rather than disruptive.

[14] [14] Morrison, A., Ruderman, M., and Hughes-James, M. (1993). Making Diversity Happen: Controversies and Solutions, Greensboro, NC: Centre for Creative Leadership; Cox , T. (1993), Cultural Diversity in Organisations: Theory, Research and Practice. San Francisco: Berrett-Koehler

[15] [15] An example would be the creation of the Lean Production method an innovation brought by the Toyota corporation. American production methods applied by Japanese culture brought to this method, which latter proved winning the competition. Another such example would be the introduction of Quality Circles, also in Japanese companies: Deming, an American professional taught Japanese quality control and Japanese, based on their more collectivistic approach invented Quality Circles, small sub-groups of the company, discussing and solving quality issues.

[16] [16] Kossek E., Lobel, S (1996), Managing Diversity: Human Resource Strategies for Transforming the Workplace. Blackwell Publishers: Cambridge, Massachusetts

[17] [17] Adler, Nancy J. (2002), International Dimension of Organizational Behavior, South-Western, Thomson Learning: Cincinnati, Ohio.

[18] [18] As a matter of fact, it is the central problem of globalisation in itself: the antiglobals fear that globalization will bring to a general homologation.

[19] [19] Cox , T. (1993), Cultural Diversity in Organisations: Theory, Research and Practice. San Francisco: Berrett-Koehler.

[20] [20] Cox, T. and Blake, S. (1991), Managing Cultural Diversity: Implications for Organizational Competitiveness, Academy of Management Executive, Vol. 5, No. 3; Ellis, C., and Sonnenfeld, J.A. (1994), Diverse Approaches to Managing Diversity. Human Resource Management, 33, pp. 99-109.

[21] [21] Florkowski, G.W. (1996), Managing Diversity within Multinational Firms for Competitive Advantage. In E. Kossek and S. Lobel, (1996), Managing Diversity: Human Resource Strategies for Transforming the Workplace. Blackwell Publishers: Cambridge, Massachusetts

[22] [22] The global consumer

[23] [23] Kossek E., Lobel, S (1996), Managing Diversity: Human Resource Strategies for Transforming the Workplace. Blackwell Publishers: Cambridge, Massachusetts

[24] [24] Central East Europe

[25] [25] Vulgo, socialist, or communist.

[26] [26] Slovenia is only some 20 km from our university and Montenegro is the home country of one of us two.

[27] [27] It is only a sample of them, but they encompass Slovenia and Yugoslavia, including Montenegro there are no data for Montenegro alone, as until now it is part of Yugoslavia), all the countries bound to next EU enlargement, plus some other characteristic countries.

[28] [28] As a matter of fact it is estimated on a level which is some 60% of the EU average.

[29] [29] Foreign Direct Investments.

[30] [30] But they are to be considered only preliminary, as the research will be continued in the future.

[31] [31] If we follow Schumpeter, also some kind of racist theories could be used to that regard. In his opinion, Slavs lack leadership character, preferring to be led than to lead.

[32] [32] He let us understand that he is not going to do it even in the future. Learn Slovene is to big a task for such low convenience, you can use it with less than 2 million people, less than half of the Paris population. But we added in our head,: it is a bit different if you are planning to stay there for your life. You'll meet few parisians here in the future.

[33] [33] The point was stressed by the CEO of a JIT company, working as outsourcer for a car producer.

HRM in a Changing World: Balancing Effectiveness and Equity in People Management Practices

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Abstract

The paper proposes a stakeholder systems model of corporate governance to address issues of contribution and commitment with particular focus on human resource management (HRM) contexts. Its theme is that effective governance can be aligned with social responsibility, and incorporating stakeholder views in decision-making processes enhances performance and commitment in contemporary organisations. A stakeholder analysis of performance management systems in UK academic institutions is used as a case study. This illustrates the value of the approach as a mode of organisational enquiry, and as a method of arbitrating between stakeholder claims. The paper advocates a stakeholder systems model of HRM as a means of developing robust and ethical systems. The model delineates design, operation and evaluation stages of HR systems, links these to distributive and procedural dimensions of organisational justice, and suggests how quantitative and qualitative measures can be combined to assess system effectiveness.

Introduction

A particular form of personnel management constitutes the dominant approach to managing people in developed economies at the beginning of the 21st century. Its proponents claim that in title and philosophy 'human resource management' (HRM) is fundamentally different from the old style personnel management that preceded it. Initially in the USA, then later in the UK HRM became so widely adopted as to be described as the new orthodoxy [45]. To many, the advent of HRM marked the coming of age of human resources (HR) as a management discipline- distancing it from inauspicious beginnings as a welfare activity and long periods as a low level, second order function acting at the behest of more established management specialisms [32]. To achieve this HR practitioners had to give greater importance to operating in a way that would gain them acceptance as 'business partners' by management colleagues [39] than to their alternative role of 'employee champions'. However this instrumental focus on utilising people for maximum commercial advantage was regarded as an acceptable price to pay in the battle for recognition and status. Personnel practitioners could at last take their place at the top management table, and it was HRM philosophy and practices that made this possible. However, in any battle there are casualties, and in this campaign it was employees, trade unions, communities and the environment that bore the brunt of these. Downsizing, de-recognition, and plant closure were the price many had to pay in HR's drive for competitiveness and profitability [14] and issues of ethical conduct and employee voice were often sidelined when HRM was debated [17]. The paper questions the relevance of the dominant form of HRM- termed 'mainstream HRM'- to contemporary organisations, and advocates an alternative form of employee governance. The concept of 'mainstream HRM' [23]- defined later in the paper- is used as an ideal-type for discussion purposes but the author acknowledges many different forms of HRM exist in practice.

Effectiveness and Equity in People Management Practices

The paper argues that, in spite of 'mainstream HRM's undoubted impact, its approach to managing people does not represent personnel management in its final or optimum form. Rather HRM's individualist and overly managerial stance is regarded as a necessary stage in the profession's drive to achieve influence in the business climate of the 1980s and 1990s. However, the paper contends mainstream HRM ignores the reality of 21st century organisations, and is therefore a less appropriate mode of employee governance for today's business environment. It suggests an alternative view of HR systems as the negotiated outcome of salient stakeholder groups facilitates more democratic forms of representation and accountability. Organisations need to identify, consult and manage a number of internal and external stakeholders to operate successfully in the new business context, and thereby combine effective corporate governance with social responsibility [27]. The paper emphasises the importance of viewing employees as a significant stakeholder group, and demonstrates that incorporating employee views in the design of HR systems can enhance performance and commitment. This is especially important in organisations reliant on the contribution of professionals who have significant autonomy and discretion in their work roles, and are potentially mobile if they feel the psychological contract with their employing organisation has been violated [49].

In its first section the paper identifies mainstream HRM's central tenets together with 'hard' and 'soft' modes of implementing these. The appropriateness of this form of HRM to contemporary organisations is then assessed from ethical, methodological and effectiveness standpoints- prior to offering an alternative stakeholder systems model of corporate and employee governance. A performance management case study is used to illustrate the benefits of the stakeholder systems approach to both researchers and practitioners. For researchers, the study confirms stakeholder analysis as a robust and ethical method of organisational analysis. For practitioners, it provides a way of identifying and arbitrating between stakeholder claims that incorporates effectiveness and organisational justice considerations. The paper then demonstrates how a stakeholder systems model- incorporating design, operation and evaluation stages- can facilitate effective and ethical HRM. The model also offers a vision of how stakeholder-accountable organisations might operate in the new millennium. Finally, the paper identifies issues for a continuing HR research agenda that include: factors influencing stakeholder saliency, issues of stakeholder representation and accountability, and methods of promulgating stakeholder-accountable business and HR practice.

Mainstream HRM- Core Beliefs

'Mainstream HRM' is concerned with the effective deployment and management of people to achieve organisational goals and competitive advantage [9]. Its central tenets are: HR policy and practice should derive from and contribute to corporate strategy; employees and employers have common interests; line managers have a significant role in the implementation of HR policies at the operational level; and HR should make a demonstrable contribution to organisational effectiveness and profitability [2]. Variants of mainstream HRM differ somewhat in their view of people as 'human resources' and how they should be managed. One version- 'hard HRM'- makes little distinction between people and other resources utilised by the organisation. All are regarded in the same calculative manner- to be leveraged to achieve maximum added value, then discarded or replaced when requirements change [64]. In contrast, 'soft HRM' aspires to a longer term, more developmental view in its belief that investing in people results in greater contribution and commitment from what may be the organisation's only long-term source of competitive advantage [56]. While the merits of hard and soft variants are debated [58], HRM's central beliefs are common to both and seen as axiomatic if HR's role in strategic decision-making is to be maintained.

However, in spite of the impact and current standing of mainstream HRM, trenchant criticisms of it continue. Those in the 'ethical HRM' school view it as prescriptive and universal in its stance, unitarist and individual in its philosophy, and positivist and managerial in the research approaches that underpin it [24]. Even 'soft' HRM variants are derided as 'the iron fist in the velvet glove' that lure, then exploit gullible employees [5]. Mainstream HRM is regarded by many as a morally questionable form of management [31 & 62]. Its view of people as means to an end rather than having intrinsic value results in short-term concern for profitability and effectiveness overriding the development of longer-term sustainable relationships within a wider constituency of organisation stakeholders. In developing this theme the paper delineates three distinct but interrelated criticisms of mainstream HRM prior to demonstrating how an alternative stakeholder systems approach to the design, operation and evaluation of HR systems addresses these.

The paper's central proposition is that stakeholder systems approaches enable effective governance to be combined with social responsibility in a way that avoids twin extremes of employee exploitation and utopian ethical stances. In this it acknowledges that, while employing those on the basis of their contribution to organisation effectiveness is fundamental in market economies, both justice and effectiveness rationales are served by providing employees- and another salient stakeholder groups- with a voice in HR decision-making [47]. This recognises people are employed as means to an end- organisation effectiveness- but not solely for this instrumental purpose. Organisations owe employees- and another stakeholder groups- a general duty of care and a voice in decisions that affect them. Mainstream HRM's inability to provide this is demonstrated by considering its relevance to the contemporary business environment; then by examining three criticisms of it that have particular significance in this context.

Stakeholder-Accountable Organisations in the Twenty-first Century

Organisations of the 21st century must take account of a new business environment [66]. As stakeholder-accountable organisations they require the consent of internal and external groups and greater environmental sensitivity than their 20th century counterparts for effective operation. Negotiated interactions are replacing hierarchical relations among key stakeholders in organisations that have increasingly permeable boundaries [55] Market pressures on them remain- but alongside them organisations should acknowledge the legitimate demands of a range of interest groups. Strong *et al* [59] categorise such groups on the basis of the markets in which they are located: shareholder stakeholders in capital markets, customer stakeholders in product or service markets, and employee stakeholders in labour markets. There are powerful ethical arguments for adding diffuse and non-human stakeholders such as 'the community' and 'the environment' to this list.

The paper addresses the central organisation issue of how to reconcile the attainment of company objectives with stakeholder demands for influence and organisational justice. Within this, it gives particular emphasis to the development of HR systems that facilitate 'employee voice' as the contribution and commitment of knowledge-based workers is an increasingly important issue in HR [3]. The rationale for a stakeholder systems approach to managing people is confirmed by assessing mainstream HRM from methodological, effectiveness and ethical standpoints as hitherto the role of stakeholder theory in this debate has been largely ignored [25].

Mainstream HRM- the Methodological Critique

The paper suggests there are significant limitations in the research studies on which mainstream HRM is based. Conclusions drawn from these large-scale correlational studies claim to demonstrate relationships between particular HR practices and levels of organisation effectiveness or profitability [40]. The implication is that 'bundles' of HRM practices identified as having this positive impact should be introduced in other organisations [28]. However, mainstream HRM's positivist research basis means this kind of 'proof' can be criticised on both epistemological and practical grounds. First, findings of positivist studies are based on meta-analyses of the value of particular HRM initiatives carried out 'at a distance' from the phenomenon studied with the implication that this relationship will hold good in other organisation contexts. Leaving aside the contingency critique that 'particular HR practices have relevance for particular organisations at particular times', there is the more fundamental issue of the way in which this research philosophy disenfranchises key stakeholder groups. It is questionable whether employees will be committed to HR interventions and practices on which they have not been consulted [48].

The paper argues that the philosophy and methods of stakeholder analysis are more sensitive to organisation circumstances and culture, and its interpretivist mode of inquiry involves empowers and empowers interest groups so their views are given serious consideration [51]. When used ethically in an action research context, it seeks consensus between these without recourse to coercion, hidden agendas, manipulating information etc. It is therefore more far reaching than 'issues management' and 'strategic management' in going beyond scanning the environment in order to facilitate stakeholder participation [10]. It aligns with the burgeoning interest in corporate social responsibility- relevantly defined as “understanding and acting upon stakeholder and wider interests in order to deliver obligations to society” [46]-, ethical conduct, and corporate governance. However its potential contribution to developing ethical HR practice has so far been overlooked [69].

Mainstream HRM- the Effectiveness Critique

Ethical critiques of mainstream HRM will have limited impact unless those involved convince practitioners there are practical methods of identifying and resolving ethical issues that do not prejudice organisation objectives. Currently many in HR see ethics as a ‘zero sum game’. They believe the greater the time, expense etc devoted to ethical practice; the greater the drain on an organisation's effectiveness and profitability [20]. There is also the fear that, if they advocate such a policy, HR will be viewed as ‘a soft touch’, ‘unbusinesslike’ or regressing into a welfare role [68]. However, there is growing support for what has been termed the ‘reconciliation thesis’ [22]- demonstrating the value of ethical business and HRM practice by such measures as financial performance [53], customer perception [70], or the attractiveness of the organisation to prospective employees [60]. Studies confirm the provision of employee voice opportunities benefit an organisation’s psychological contract with its employees, and enhance contribution and commitment [34 & 15]. This underlines the message that ethical HRM can also be sound business practice- and that transparency of purpose and organisational justice in the management of people should be key components in an organisation’s HR or social responsibility audit [37]. “Good strategies are…anticipatory rather than reactive and intimately concerned with the cultivation of long term employment relationships” [6].

Mainstream HRM- the Ethical Critique

Given the well-documented negative impact of mainstream HRM philosophy and practice on employment relationships and psychological contracts during the final two decades of the last century [26 & 12], it is surprising that its ethical basis has not been the subject of more critical assessment. Nevertheless some interest has been shown in the relationship between ethics and HRM, and it has to become the focus of serious academic inquiry. However, progressing from this to develop a philosophy of employee governance is challenging in a field of contested concepts, disparate theoretical approaches and unsettling questions [63], and therefore the relationship between justice and HRM is identified as an important area for research [11]. What is lacking in the debate is an ethical philosophy of HRM and an organisation development technique for implementing this. Taking these in turn, a philosophical rationale for the ethical use of stakeholder theory is found in Niebuhr’s concept of ‘the responsible self’[13]. This suggests individuals act responsibly if they consider existing stakeholder relationships and consequences of envisaged actions for them. A development of the theory is to propose the concept of ‘the responsible organisation’. One that recognises its relationships with a range of internal and external stakeholder groups, and establishes systems to facilitate fair discourse with and between them on strategy initiatives the organisation considers undertaking.

While such discourse includes salient stakeholders- those that can facilitate or impede organisation actions- there are powerful arguments that employee stakeholder groups should have particular significance within this. Debates on HR policy have particular significance for employees as the emergent HR systems have the greatest impact on them. The argument for incorporating views of knowledge based employees when designing organisation systems has already been referred to. However, normative ethics and organisational justice extend this and specify a broad deontological duty of care even in respect of ‘silent’ stakeholders- those affected by organisation decisions but who have little impact on them such as local communities or the environment- as it is morally right to do so [22]. Mainstream HRM appears to have little regard for these moral obligations. Ethical critiques of mainstream HRM relate it to the concept of organisational justice, and this is examined in the following section.

HR Systems and Organisational Justice

Organisational justice subsumes members' view of equity in the distribution of organisation resources - distributive justice- and perceived fairness of organisational decision making processes- procedural justice [1]. Perceptions of the latter affect a range of outcome variables with positive links to commitment and job satisfaction [35] and a negative association with turnover [42]. The neglect of organisational justice by researchers and practitioners is seen as a serious weakness in reshaping HR performance management processes [57]. Similar comments have been made in respect of other HR specialisms such as selection, [29] appraisal [18] and payment systems [61]. Employees perceiving a higher level of procedural justice in organisational decision making are likely to demonstrate greater acceptance of organisational goals and values, and be more willing to exert effort to achieve these. Organisations can therefore increase the perceived procedural justice of HR systems by facilitating greater employee involvement in system design and modification. Concern to establish HR systems acceptable to those governed by them and equitable in their operation aligns with a view of organisational justice as a two-dimensional construct incorporating 'system procedural justice' and 'system distributive justice' [16 & 54]. This suggests employees associate knowledge of HR systems and their perceived validity and equity in operation with 'system procedural justice'; while equity of HR outcomes such as salary progression, access to training etc relate to 'system distributive justice'. These organisation justice concepts are incorporated in the stakeholder systems model of HRM described later in the paper. This paper suggests stakeholder group views- including employees principally affected by HR systems in operation- are seldom canvassed when systems are designed or modified.

Towards More Socially Responsible HR Practice- A Performance Management Case Study

This study in question utilised stakeholder analysis to assess performance management systems in UK academic institutions in the context of wider HRM practice in these universities and colleges [49]. Organisational systems were viewed as the negotiated outcome of a number of interested parties or stakeholders. It addressed issues such as: who are the key stakeholders; what are their influences on and expectations of performance management systems; how do these expectations align with system aims and operation; and what insights can be gained from these regarding the development of stakeholder-accountable HR systems in knowledge based organisations?

The study is distinctive as its conclusions are based on the perspectives of key stakeholders or 'expert witnesses' from fieldwork carried out between November 1999 and April 2000. One 'expert witness' group constituted the teaching staff of two UK Business Schools, together with those in line or HR management roles in these institutions. The other comprised academic staff from universities and colleges across the UK whose research interests, professional expertise and teaching responsibilities are in performance appraisal. Measures of performance used to appraise academic staff were identified from appraisal documentation and a review of the literature. Respondents were asked to evaluate these measures in terms of usage and acceptability within their organisation's performance appraisal system, and relate this to the system's overall motivational impact.

A view of HR systems as 'negotiated outcomes' raises the issue of how to achieve stakeholder consensus on system philosophy and process. Incorporating stakeholder perspectives is crucial where the viability of the developed system is dependent on its acceptability to stakeholder groups- or where decision quality or acceptability likely to be enhanced by consideration of different stakeholder viewpoints [4]. One method of developing effective and ethical HR systems is 'stakeholder synthesis' [68]. This 'robust and ethical' approach was used in the British School of Osteopathy (BSO) to revitalise and develop that organisation's performance management system. The process involves: identifying key stakeholder groups; identifying strategic objectives and the extent of consensus and conflict between them; then viewing competing interests collectively and openly in relation to available resources and rival claims to produce a viable system.

Organisational characteristics of BSO have striking similarities to those in universities and colleges. Both have powerful stakeholder groups with different objectives operating within a public service ethos. Both aspire to be ‘learning organisations’ and suppliers of high quality professional services. Staff within each are ‘archetypal professionals’- potentially mobile and not easily controlled by non-specialist managers or administrators. Moreover, both wish to devise and operate effective HR systems that their stakeholder groups will ‘buy into’. The study’s conclusions confirm stakeholder analysis as a robust and insightful method of organisational enquiry that can reconcile disparate stakeholder perspectives on HR systems in an effective and equitable way, and provides principles for a stakeholder systems model of HRM.

A Stakeholder Systems Model of HRM

The model (Fig. 1 below) incorporates ethical and effectiveness considerations within a stakeholder systems model of HRM. The case study described relates to performance management, but the principles apply to other HR systems or to an organisation’s overall approach to HRM. The model delineates design, operation and evaluation system stages and their organisational justice dimensions within a stakeholder-accountable model of HRM. It assumes a range of stakeholder perspectives and agendas in relation to HRM philosophy and process within an organisation that recognises obligations to a number of salient stakeholder groups. Senior managers assess the significance of stakeholder perspectives to the organisation by assessing the legitimacy, leverage and urgency of particular stakeholder claims in relation to organisation objectives [38]. Their decisions mean certain stakeholder perspectives are acknowledged as requiring reconciliation with those of other salient stakeholder groups.

In the model stakeholder groups include line managers, employees, labour representatives, appraisers, appraisees and HR specialists from within the organisation; external ‘fiduciary’ stakeholders e.g. customers and stockholders who influence from a distance via managers’ recognition of their importance- and ‘silent stakeholders’ (e.g. communities and the environment) - who are principally influenced by system outcomes. Stakeholder synthesis processes to reconcile competing stakeholder perspectives and agendas range from management discussion and decision through to more structured and participatory processes such as SWOT analyses, Delphi technique, or soft systems methodology [52]. The extent to which the process produces agreement between stakeholders on HR philosophy and its operation are measures of ‘system procedural justice’. The perceived fairness of HR system outcomes such as access to training, promotion, salary progression etc are measures of system distributive justice. The overall operation of a HR system is evaluated by a range of qualitative and quantitative measures. These include organisation and wider stakeholder satisfaction with the system as well as assessment its process operation, resource utilisation, organisational contribution and overall equity- that comprise an overall evaluation of HRM in the organisation context.

Senior management decisions on stakeholder saliency

Line managers	Employees	HR Specialists	Labour Represen-tatives	'Fiduciary' Stakeholders: Shareholders customers	'Silent' Stakeholders: the community, the environment

Stakeholder perspectives and agendas

↓ ↓ ↓ ↓ ↓ ↓

Stakeholder synthesis- agreement on HR policy
Perceived fairness of / agreement on aims and objectives of HR policy

System procedural justice

↓

HR practice
Perceived fairness of HR systems: fair hearing, access to information, opportunity to challenge etc

System procedural justice

↓

HR system outcomes
Perceived fairness of HR decisions on access to training, placement, promotion, salary progression etc. Impact on motivation and performance

System distributive justice

↓

HR evaluation measures
Organisation and wider stakeholder satisfaction?
Efficacy- do HR systems work?
Efficiency- do HR systems operate cost effectively?
Effectiveness- do HR systems contribute to organisation goals?
Equity – do HR systems embody fairness and integrity?

System evaluation

Fig 1: ORGANISATIONAL JUSTICE CONSIDERATIONS WITHIN A STAKEHOLDER SYSTEMS MODEL OF HRM

Conclusion

Key themes of the paper are summarised below.

The paper advocates stakeholder analysis as a means of recognising competing stakeholder claims within a more democratic, accountable and ethical HR philosophy; and emphasises the significance of employee views within this. Research evidence suggests employee influence on HR systems enhances levels of acceptance, commitment [65], job satisfaction [43], and organisational justice [36] The case study cited aligns with this in confirming employee views of organisational justice are influenced by the acceptability of HR systems and decision criteria as well as by their outcomes. More formalised stakeholder involvement is facilitated by its incorporation within a stakeholder systems model of HRM. These conclusions are significant within a continuing HR research agenda that includes factors influencing stakeholder saliency [30], issues of stakeholder representation and accountability, and methods of promulgating stakeholder-accountable business and HR practice; as well as to practitioners seeking to evaluate and develop existing HR systems.

Organisations' increasing dependence on the commitment of those who work for them places HR philosophy and practice at the heart of corporate strategy. This is especially important in knowledge based organisations where employees represent the only sustainable source of competitive advantage [8 & 44] Acceptance of the stakeholder-accountable view of organisations by those involved in corporate governance, and the significance of employee views within this, gives those in HR the opportunity to lead strategy debates at the heart of the business [33]; to develop sustainable 'high performance HR practices' [41]; and to stimulate due consideration of ethical issues in each of these [71].

A new philosophy of HR and related OD strategy coalesce within the stakeholder-accountable HR system offered. This model incorporates the 'why' and the 'how' of stakeholder involvement when developing effective and ethical HR systems, and provides a framework for organisation analysis and action research. The stakeholder systems model makes a significant contribution where the viability of the developed system is dependant on its acceptability to a number of potentially conflicting stakeholder groups, or where decision quality is likely to be enhanced by consideration of different stakeholder viewpoints.

However, models and techniques for socially responsible HR practice are insufficient in themselves. The more significant question is how to persuade organisations operating in market economies to incorporate a greater ethical dimension in their decision making? Purists who believe weight of moral argument will alter priorities of institutional investors are utopian, while those who seek ethical emphasis through greater regulatory control are unlikely to attract government support [7]. Instead, a coherent, positive, practitioner-focused message that corresponds with the *zeitgeist* of the time is suggested as the best way to influence management discourse and practice. Financial malpractice in organisations and people management concerns regarding employee voice and commitment provide compelling evidence of the need for ethical standards, integrity and transparency at all levels of corporate governance. Stakeholder perspectives can have a similar impact on management thinking in this decade in the way that 'excellence' debates struck a chord with quality management concerns in the 1980's because of the alignment between contemporary business issues and political discourse. Stakeholder based approaches offer both a philosophy and a method of putting this into practice.

The study also demonstrates the integrity and value of stakeholder analysis as a 'middle ground' mode of organisation enquiry. While it leans toward a subjective and interactionist view of organisations, it offers the possibility of incorporating quantitative methods and analysis alongside this. Its scope to combine different research philosophies and methods in a pragmatic but robust way will appeal to those who put dialogue and accommodation between different research paradigms before purity of approach [9].

In summary, the paper identifies methodological, effectiveness and ethical critiques of mainstream HRM as an appropriate way of managing people for organisations of the twenty-first century and suggests an alternative philosophy and practice. It addresses the methodological critique by advocating alternative organisation development processes that respect the characteristics of an organisation and its stakeholder constituencies, the effectiveness critique by proposing that organisation systems are shaped by those who will be subject to them, and the ethical critique by offering a stakeholder-accountable philosophy and system of organisation governance. Conclusions from the paper therefore support the normative or organisational justice case for incorporation of views of key stakeholder groups in HR system design and modification. Progression from the stakeholder analysis stage into a subsequent stakeholder synthesis process accords with an instrumental or managerial use of the theory to achieve organisationally desirable outcomes. It reaffirms the research and managerial benefits of viewing organisations as dynamic coalitions of interest groups, the utility of the stakeholder concept for identifying rival stakeholder claims and arbitrating between them, and the benefit of such stakeholder analysis interventions at corporate governance and HR system level. The effectiveness and organisational justice outcomes of such an approach may enable it to be regarded as a ‘best practice’ model.

References

[1] Andrews, M.C. and Kacmar, K.M. (2001) "Discriminating among organizational politics, justice, and support" *Journal of Organizational Behavior*, 22: 4, 347-366.

[2] Armstrong, M. (2001) *A Handbook of Human Resource Management Practice*, Kogan Page, London

[3] Armstrong, M. (2002) op. cit.

[4] Banville C., Landry M., Martel J-M., Boulaire C. (1998) "A stakeholder approach to MCDA", *Systems Research and Behavioral Science*, 15: 15-32.

[5] Barrett, E. (1996) "Justice in the workplace?" *Personnel Review*, 28: 4, 307-318.

[6] Barrett, E. (1999) op. cit.

[7] Barrett, E. (1999) op. cit. P 309.

[8] Bathmaker, S. (1999) "So what's the deal? The state of the psychological contract in a 'new' university", *Journal of Vocational Education and Training*, 51: 2, 265-281.

[9] Bussell, H. (2000). Review of Symon, G. and Cassell, C. *Qualitative Methods and Analysis in Organizational Research: A Practical Guide,* in *The Learning Organisation*, 7: 3, 169-170.

[10] Carroll, A. (1996) *Business and Society* 3rd ed., Southwestern College Publishing, Cincinnati, OH.

[11] Cornelius, N. and Gagnon, S. (1999) "From ethics 'by proxy' to ethics in action: new approaches to understanding HRM and ethics", *Business Ethics*, 8: 4, 2-13.

[12] Coyle-Shapiro, J. and Kessler, I. (2000) "Consequences of the psychological contract for the employment relationship: a large-scale survey", *Journal of Management Studies*, 37: 7, 903-930.

[13] Dillard, J. F. and Yuthas, K. (2001) "A responsibility ethic for audit expert systems", *Journal of Business Ethics*, 30: 337-359.

[14] Du Gay, P. (1996) *Consumption and Identity at Work*, Sage, London.

[15] Dulebohn, J. H. and Ferris, G. R. (1999) "The role of influence tactics in perceptions of performance evaluation's fairness", *Academy of Management Journal*, 42: 3, 288-303.

[16] Erdogan, B., Kraimer, M. L., and Liden, R. C. (2001) "Procedural justice as a two-dimensional construct", *Journal of Applied Behavioral Science*, 37: 2, 205-222.

[17] Ferris, G. R., Hochwarter, W. A., Buckley, M. R., Harrell-Cook, G. and Frink, D. D. (1999) "Human resource management: some new directions", *Journal of Management*, 25: 3, 385-423.

[18] Flint, D. H. (1999) "The role of organizational justice in multi-source performance appraisal: theory based applications and directions for research", *Human Resource Management Review*, 9: 1, 1-20.

[19] Foote, D. (2001) “The question of hypocrisy in human resource management in the UK and Irish charity sectors”, *Journal of Business Ethics*, 34: 25-38.

[20] Foote, D. (2001) op. cit.

[21] Gibson, (2000) “The moral basis of stakeholder theory”, *Journal of Business Ethics*, 26: 245-257

[22] Gibson, K. (2000) op. cit.

[23] Greenwood (2002) “Ethics and HRM: a review and conceptual analysis”, *Journal of Business Ethics*, 36: 261-278.

[24] Greenwood, M. R. (2002) op. cit.

[25] Greenwood, M. R. (2002) op. cit.

[26] Guest, D.E. and Conway, N. (2001) “*Employer Perceptions of the Psychological Contract*”, CIPD, London.

[27] Haberberg, A. and Rieple, A. (2001) *The Strategic Management of Organisations*, Prentice Hall, Harlow, England.

[28] Hall, L. (2002) “HRM practices and employee and organisational performance: a critique of the research and Guest’s model”, *Proceedings of Performance and Reward Conference*, Manchester Metropolitan University, April.

[29] Harris, L. (2000) “Procedural justice and perceptions of fairness in selection practice”, *International Journal of Selection and Assessment*, 8: 3, 148-157.

[30] Harrison, J. S. and Freeman, E. (1999) “Stakeholders, social responsibility and performance”, *Academy of Management Journal*, 42: 5, 479-485.

[31] Hart, T. J. (1993) “Human resource management: time to exercise the militant tendency”, *Employee Relations*, 15: 3, 29-36.

[32] Hendry, C., Woodward, S., and Bradley, P. (2000) “Performance and rewards: cleaning out the stables”, *Human Resource Management Journal*, 10: 3, 46-61.

[33] Hendry, C., Woodward, S., and Bradley, P. (2000) op. cit.

[34] Lemons, M. A. and Jones, C.A. (2000) “Procedural justice in promotion decisions: using perceptions of fairness to build employee commitment”, *Journal of Managerial Psychology*, 16: 4, 268-280.

[35] Lemons, M. A. and Jones, C.A. (2000) op. cit.

[36] Martin, G. (1994) “Performance related pay in nursing”, *Health Manpower Management*, 20: 5, 10-17.

[37] McDonald, G. and Nijhof, A. (1999) “Beyond codes of ethics: an integrated framework for stimulating morally responsible behaviour in organisations”, *Leadership and Organisation Development Journal*, 20: 3 133-147.

[38] Mitchell, R. K., Agle, B. R., and Wood, D. (1997) "Towards a theory of stakeholder identification and salience: defining the principle of who and what really counts", *Academy of Management Review*, 22: 4, 853-886.

[39] Mondy, R. W., Noel, R. M. and Premeaux, S. R. (2002) *Human Resource Management* 8th ed., Pearson Education, New Jersey, USA.

[40] Patterson, M. G., West, M. A., Lawthom, R. and Nickell, L. (1998) "The impact of people management practices on business performance", *Issues in People Management*, Number 22, Institute of Personnel Management.

[41] Patterson, M. G., West, M. A., Lawthom, R. and Nickell, L. (1998) op. cit.

[42] Pettijohn, L. S., Parker, S., Pettijohn, C. E. and Kent, J. L. (2001) "Performance appraisals: usage, criteria and observations", *Journal of Management Development*, 20: 9, 754-771

[43] Pettijohn, L. S., Parker, S., Pettijohn, C. E. and Kent, J. L. (2001) op. cit.

[44] Randle, K. (1997) "Rewarding failure: operating a performance related pay system in pharmaceutical research", *Personnel Review*, 26: 3, 187-200.

[45] Redman, T. and Wilkinson, A. (2001) *Contemporary Human Resource Management*, Pearson Education, Dorchester, UK

[46] Rosthern, J. (2000) "Business ethics auditing- more than a stakeholder's toy", *Journal of Business Ethics*, 27: 9-19.

[47] Simmons, J. A. (2002) "An 'expert witness perspective on performance appraisal in universities and colleges", *Employee Relations*, 24: 1, 86-100.

[48] Simmons, J. A. (2002) "Learning the lessons of history? 'Expert witness' contributions to the future of performance appraisal in UK universities", *Employee Relations Review*, 20: 10-17.

[49] Simmons, J. A. and Iles, P. (2001) "Performance appraisal in knowledge based organisations: implications for management education", *International Journal of Management Education*, 2: 1, 3-18.

[50] Simmons, J. A. and Iles, P. (2001) op. cit.

[51] Simmons, J. A. and Lovegrove, I. W. (2002) "Negotiating a research method's 'conceptual terrain': lessons from a stakeholder analysis perspective on performance appraisal in universities and colleges", *European Conference on Research Methodology for Business and Management Studies*, University of Reading, April 2002.

[52] Simmons, J. A., Iles, P. and Yolles, M. (2002) "Identifying those on board 'the moving train': towards a stakeholder-focused methodology for organisational decision making", *Conference of the International Society for the Systems Sciences*, Shanghai Jiao Tong University, Shanghai, PR China, August.

[53] Simpson, W. G. and Kohers, T. (2002) "The link between corporate social and financial performance: evidence from the banking industry", *Journal of Business Ethics*, 35: 97-109.

[54] Sminke, M., Ambrose, M. L. and Noel, T. W. (1997) "The effects of ethical frameworks on perceptions of organisational justice", *Academy of Management Journal*, 40: 5, 1190-1207.

[55] Soloman, E. (2001) "The dynamics of corporate change: management's evaluation of stakeholder characteristics", *Human Systems Management*, 20: 257-265.

[56] Stiles, P., Gratton, L. and Truss, C. (1997) "Performance management and the psychological contract", *Human Resource Management Journal*, 7: 1, 57-66.

[57] Stiles, P., Gratton, L. and Truss, C. (1997) op. cit

[58] Storey, J. ed. (1989) *New Perspectives on Human Resource Management*, Routledge and Kegan Paul, London.

[59] Strong, K. C., Ringer, R. C. and Taylor, S. A. (2001) "The rules of stakeholder satisfaction (timeliness, honesty, empathy)", *Journal of Business Ethics*, 32: 291-230.

[60] Taylor, S. (1998) *Employee Resourcing*, CIPD, London

[61] Thorpe, R. and Homan, G. (2000) *Strategic Reward Systems*, Pearson Education, Trowbridge.

[62] Townley, B. (1990) "The politics of appraisal: lessons of the introduction of appraisal into UK universities", *Human Resource Management Journal*, 1: 2, 27-44.

[63] Trezise, E. K. (1996) "An introduction to business ethics for human resource management teaching and research" (review article), *Personnel Review*, 25: 6, 85-89.

[64] Weiss, J. W. (1998) *Business Ethics- A Stakeholder and Issues Management Approach*, The Dryden Press, Forth Worth TX.

[65] Williams, R. S. (2002) *Managing Employee Performance*, Thomson Learning, London.

[66] Wilson, I. (2000) "The new rules: ethics, social responsibility and strategy", *Strategy and Leadership*, 20: 2, 12-16.

[67] Winstanley, D. and Stuart-Smith, K. (1996) "Policing performance: the ethics of performance management", *Personnel Review*, 25: 6, 66-83.

[68] Winstanley, D., Woodall, J. and Heery, E. (1996) "Business ethics and human resource management", *Personnel Review*, 25: 6, 5-12.

[69] Woodd, M. (1997) "Human resource specialists- guardians of ethical conduct?", *Journal of European Industrial Training*, 21: 3, 110-116

[70] Woodd, M. (1997) op. cit.

[71] Woodd, M. (1997) op. cit.

Human Capital- An Examination of the Indicators from Two Perspectives

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Abstract

"The key to the future of any country is not its physical resources or industrial capital, rather, it is human capital that will fund the health and the growth of nations in the next thousand years."
(Rupert Murdoch, 2001)

Intellectual capital of the organizations in the service industry is usually more vulnerable than in other industries. This paper will discuss the concerns on human capital for businesses in the knowledge economy. For service industry, human capital and customer capital are usually the principle assets for business survival. The study analysed the importance of the human capital indicators perceived by the organizations in the service industry and the investment community. The principles described in this article enable organizations to begin to think about the measurements they have identified and against the measurements in which their stakeholders are more interested to know. For example, the research result has shown that most companies regarded staff satisfaction as the main critical determinant. Controversy, the investment groups considered the measurement on staff turnover as the most significant factor. This paper will also briefly discuss the importance of other components of organisational intellectual capital that may affect the organisational values can impact the firm's performances.

Introduction

"We must learn to consider the value of people to be concrete value, the true wealth of nations"
(Rupert Murdoch, 2001)

Intellectual capital of the organizations in the service industry is usually more vulnerable than other industries. In today's economy, this capital reigns supreme (Tafaro, 2001). Human capital and customer capital are usually the principle assets for business survival in the service industry. There are many proceedings in drive to get more businesses to recognise that human capital can significantly boost a company's book value and performance. Author and futurist, Don Tapscott has pointed out that human capital is one of the new foundations of wealth. Moreover, Leif Edvinsson, the guru of intellectual capital study has stated that human capital is one of the key tools of the new value creation. Hence, this paper aims to discuss the concerns on human capital for businesses in the knowledge economy, particularly for the service industry.

Human capital, one of the categories in intellectual capital, is difficult to derive but is easy to depart from the organization. Employees can simply walk off with their knowledge, as the organizations do not really possess its value on which it operates. Hence, the global mobility of human capital may present a critical threat to the performances of the businesses. Many researchers and practitioners have identified numerous human capital indicators and many businesses are putting systems in place to measure and value these intangibles. However no substantial resolution has been derived to signify the major pointers.

Revelation of more information on human capital may have impact on the financial performance of the organization. Organizations with brilliant disclosure practices may increase shareholder value. Despite some additional intangible information revealed by the companies, stakeholders of the firm are seeking for more disclosure of relevant information to assist them with making further investment decisions. Better ways of measuring and reporting human capital information might therefore encourage greater private investment (Olsson, 1999; Boudreau and Ramstad, 1997; Lewis, 1997). The ability to manage human capital can become of great value to organizations as when it becomes the significant differentiator for any successful business that provides them with competitive advantage.

This study analysed the importance of the human capital indicators perceived by the organizations in the service industry and the investment community. The principles described in this article enable organizations to begin to think about the measurements they have identified and against the measurements in which their stakeholders are more interested to know. The paper will address the following research questions:

1. *What is the perceived value of human capital indicators by the companies and investment groups?*

2. *What is the relationship between understanding the human capital indicators (the way it is being measured) and the importance to disclose the human capital indicators?*

3. *Is there a significant difference in the perception of human capital between the companies and investment groups?*

While most organizations have an initial reaction to focus particularly on human capital, there are also other intangible capitals that can impact the performances. It is also important to highlight other categories of intellectual capital in the organizations that may affect the organisational values in general. Therefore, this paper will also briefly discuss the importance of other components of intellectual capital.

Literature Review

A company grows because it has hidden values. To keep growing, you must surface them, care for them, and transfer them through the business…If managers can measure it, they will value it.
(Leif Edvinsson, Former Director of IC, Skandia - the Swedish Insurer)

Intangible assets, such as human and intellectual capacity, are outshining traditional tangible assets as the drivers of growth. Intellectually rich companies tend to be highly dependent on the human capital of one or two key leaders who drive shareholder value (Tafaro, 2001). The Department of Industry, Tourism and Resources (www.industry.gov.au) at its National Innovation Summit held in Melbourne (Australia) on February 2000 highlighted that the solutions of past decades would not suffice in the new knowledge age. Nevertheless, the Department recommended the industry to emphasis on the value of intellectual capital and to develop reporting standards that reflect future directions and non-financial measures. It has also stressed that the contribution of human capital is of fundamental importance to any service industry.

Murdoch (2001) pointed out that in Australia, the intangible asset of the nation is the human capital and there is a need to compete in this globally. In US, the service industry is about 75% of its economy as everyone considers being in the service business, which depends on human capital (Nelson, 2000). Other nations in Europe have supported considered human capital as an important measure for the industry except in Britain. The International Accounting Standards Committee in London has indicated that human assets and related training expenses will probably be one of the last ones being measured in potential new accounting models (Abernathy, 1999).

With the recognition of the change in the economy and the needs to cater for this transformation to a knowledge-based economy, there is an increase emphasis on the human knowledge within the organization. This has eventually led to the development of new corporate roles in the company to be responsible for the development, deployment and managing of the intellectual capital of the company, such as Information Officers, Learning Officers, Knowledge Officers (Stuller, 1998; Eadie, 2000). Some as Director of Intellectual Capital as has seen in Sweden insurance company Skandia and in Australia the Red Cross Society. In July 2001 Australia and New Zealand bank announced the appointment of a Head for its strategic human resources function, People Capital, to oversee its people agenda and building its intellectual capital (ANZ, 2001).

A corporate entity comprises more than merely of land, building, machinery, labour and capital. Valuation of business assets is acquiring more and more refinement (Ramanujam, 2001). The measurement, monitoring, valuation and reporting of knowledge or intangibles, especially pertaining to human capital, are an area of great interest (Abernathy, 1999; Liebowitz and Wright, 1999; Guthrie, 2001). As many knowledge workers no longer belong to any of the traditional disciplinary professions (Garrick and Clegg, 2000), accountants, investors and governments want to be able to measure the value of human and intellectual capital (Watts, 2000). Besides, Traditional accounting processes and conventional financial information fail to recognise investments in human capital (Connors, 1998; Watts, 2000). For example the more a company invests in developing its knowledge, the more its book value is reduced. Nonetheless, human capital goes into the working of a successful corporate house. The following paragraphs will discuss the issues of human capital and address the importance of human capital for the service industry.

Intellectual Capital and Human Capital

"While financial capital is a measure of present and past success,
human capital represents potential for the future." (Rupert Murdoch, 2001)

Research on measuring and benchmarking on human capital by the godfather of human capital, Jac-Fitz-enz, has spanned over three decades. Recently, the discussion on human capital has been more aggressive especially when the issues on intellectual capital arise. Several companies have led the way in developing models to assess their human capital. The early movers are Dow and Skandia (Edvinsson, 1997). Human capital is commonly regarded as one of the components of intellectual capital (Sveiby, 1997; Lynn, 1998; Erickson and Rothberg, 1999; OECD, 1999; Wileman, 1999; Zhou and Sun, 2001), which is a significant part of knowledge management for the knowledge economy.

Intellectual Capital has been used in broad areas of study recently. It has been used in information management, human resource management, financial, accounting practices, business and management, technology innovation, consultancy and economics. It is an important element of knowledge management, and is defined as the intellectual material that has been formalised, captured and leverage to create wealth by producing a higher-valued asset (Stewart, 1997). It also distinguishes a company from its competitors is crucial to the company's strategic planning (Bradley, 1997). Edvinsson describes intellectual capital as a combination of human capital and things like the capital wrapped up in customers, processes, databases, brands and systems (in Cariner, 2000; Dearlove, 2000). Thus, human capital is an importance constituent of the organisational intellectual capital.

Stewart (1995) indicated human capital begets structural intellectual capital, which begets human capital. Grarvan, Morley, Gunnigle and Collines (2001) considered human capital from two viewpoints: individual and organization. From individual, it is the employability, performance and career development whereas from organization, it is the investment, ownership, skills and knowledge management. Human capital has to do with job-specific knowledge (Erickson and Rothberg, 1999). Though human capital is mostly concerned with the internal management and human resources or staff resources within the organization, Guthrie (2001) argued that it has to include the resources external to the organization namely customers and suppliers.

There are many definitions on human capital. Being the information contained in the heads of key staff members (Eiley, 1996), it consists of the stocks of brains, skills sets, insights, knowledge, competence, capabilities, productive capacity and experience of the organization's workforce (Brabazon, 1997; Sveiby, 1997; Lynn, 1998, 2000; Nelson, 2000; Zhou and Sun, 2001). It is the intangibles, un-codified corporate knowledge such as creativity, customer relations and know-how (Gnuschke, 2001). Marti (2001) described it as the force behind the human intellect and innovation of the firm and Thomson (1998) illustrated it as a concept to describe what we think and what we feel. Despite many different definitions of human capital, it is imperative to understand the fundamentals and challenges of its involvement for organizational performance and competitive advantage.

Significance and Challenges of Human Capital

"Intelligence becomes an asset when some useful order is created out of free-floating brainpower" (Stewart, 1997)

Human capital is one of the critical assets in the IC group as the management of human capital often creates and sustains an organization's wealth and competitive advantage (Lynn, 2000). Black (2001) stated that sometimes 'People' are forgotten in the daily hustle and bustle of organisational life and these people are really the organization's most important asset in the final analysis. As people form a very critical part of them, human capital and its management are also the lifeblood of the intellectual capital concept that generates all promising value in the innovation potential internally and externally to the organization (Marti, 2001; Sveiby, 2001). Subsequently, it is the ultimate driver of all successful organizational value growth. (Mayo, 2000; Mergy and Records, 2001). A report from McKinsey & Company revealed 90% of respondents from US companies were unable to claim that they were good at retaining their best people (Peasnell, 1998). Zhou and Sun (2001) argued that without successful human capital management, other value creation activities in the organization are unlikely to work despite having the best technology and systems. Nevertheless, there are other challenging issues about human capital that need to be addressed.

Apart from all the valuable implications of human capital, which much has been said so far, there are always some other considerations necessary. Lynn (1998) discussed that human capital is the most problematic part of intellectual capital to measure and account for in consideration of its incapability to fit into the current conservative, historical cost-accounting paradigm. This is also because human capital is rivalous and is bound by space, finance and time (Bradley, 1997). Besides it has been very difficult to obtain the details of the organization investments in human capital when most companies do not have systems readily for such investments (Bassi and Van Burn, 1998). Consequently, there is a call for more studies and research on the standards of determining and disclosing human capital information.

Research on Human Capital

"Can you clearly explain why you do what you do, or are you simply following industry practice?" (Steward, 1997a)

A previous exploratory study on the degree of voluntary disclosure of IC Indicators in the annual reports of firms (Major Service Industries) using a sample size of sixty randomly selected companies in the service-related industries listed in the Australian Stock Exchange (ASX) as at 1 March 1999 showed that companies from the Bank and Finance sectors disclosure on human focus was low with only 37.5% of the companies reported the human capital indicators. Other sectors such as the Telecommunication, Insurance, Tourism and Leisure, and Transportation sectors had lower rate of disclosure on these indicators. One of the indicators reported was the employee satisfaction index disclosed by Westpac Banking and Burswood Limited. Telstra Corp was the only company to provide information on the percentage of wages with respect to the total cost.

Human capital research is still relatively limited in academic doctoral studies. Overall, few authors have examined the influence of intellectual capital and human capital management on business performance (Pena, 2002) but have provided relevant reading on different aspects of intellectual capital, from knowledge management to measuring intangibles (Bernhut, 2001). For example, Youndt (1998) research showed that human capital exhibited direct effects on performance and indirectly effects on performance through value creation. Dooley (2000) study, which was conducted in the knowledge-intensive context of the software industry, indicated that the human capital of the firm does impact market share that in turn has a significant effect on market value. Another study by Walker (2001) showed that within the industry analysis, there is a positive relationship between the value of firm's human capital and firm's performance dimensions of productivity, profitability, market evaluation and market premium. However, the result did not statistically have a positive effect on this relationship across the industries analysis. Hence, this also indicates that firms in different industries require different dependency on human capital to generate goods and services.

The Industry and Human Capital

"There are opportunities in every industry" (Intellectual Assets, 2000)

According to Quinn (1992), the service economy is growing directly in service industries and indirectly in traditional manufacturing. The rise of the service economy prompted intangibles to become the key critical factor. Service industry is seen on the edge of fundamental restructuring, given the increase in new services, the addition of technological capabilities and the progressively demanding and sophisticated stockholders and stakeholders. The service industry must allocate adequate resources to develop its human capital to increase its competitive edge in an era of more sophisticated and specialised products (AIR, 2000). Service is all actions, dealings and reactions that perceived by external entities. A service is an act, a deed, a performance, rather than an object or a thing. Sometimes it may see as difficult to evaluate. For example, the insurance sector is by the quality of its human capital. Therefore, the development in the area of human capital is crucial to the companies in the service industry.

Companies in the service industry operate in an intensely competitive and dynamic environment. The investment community and financial markets place a value to the intangible determinants. This is because the ratio of companies two decades ago is different from today and is reversed, which now sees 80% of the companies in Australia were service-based intangibles-driven businesses and the balance were mining and resources companies (Watts, 2000). McRae (1996) described most investors as "long-termist" in their perceptions and these investors are happy to back companies with good long-term prospects. The author has also pointed out that the financial markets are prepared to put very high values on firms that develop their human capital. Hence, any absent or report on human capital assessments may affect the decisions of investors who put a premium on them.

Research Methodology

This section provides a discussion detailing the gathering of data, the samples for the research, the measures used in the study and the results of the statistical analysis. Most companies begin to measure and develop what they perceived to be significant human capital indicators for market capitalisation and growth. However, most of them fail to realise that the internally identified indicators may not be perceived as equally important to the investors. Therefore, the aim of this study is to determine the magnitude of human capital indicators perceived from two faces of communities, the public-listed companies (PLC) and the investment groups (IG). It is hoped that this research will serve to influence the organization's performances and worth.

Design

The fields of human capital in intellectual capital and knowledge management are still in the early stages of development as a research area. In Snow and Thomas's (1994) classification, this kind of study fall between the description and explanation stages of theory-building, identifying critical constructs, determining the relationships between them and indicating the conceptual reasoning for them. Hence, this study combined both quantitative method through survey and qualitative method with interested participants using open-ended questions.

The study integrated several stages and the measurements are shown in Figure 1. An exploratory analysis was firstly conducted to determine the extraordinary information disclosed in the annual reports of the companies in the service industry. This was to identify the indicators related to human capital which the companies have disclosed voluntarily. Indicators were then developed with the use of the information collected from the content analysis, including those that were developed by other researchers found in literature, conferences and seminars. Prospective participants were initially asked to express their interest in participating in this research. Several follow-ups were further conducted in hope to generate more responses. Interested participants were sent the survey to indicate their perceived importance to disclose indicators and to specify their level of understanding on how these measurements are evaluated. Participants from the public-listed companies were required to respond to another two dimensions of the research, the importance to measure the indicators and their willingness to disclose these indicators voluntarily if they are given a choice not disclose such information. Lastly, additional discussions and interviews were conducted with respondents who were interested to discuss the research further.

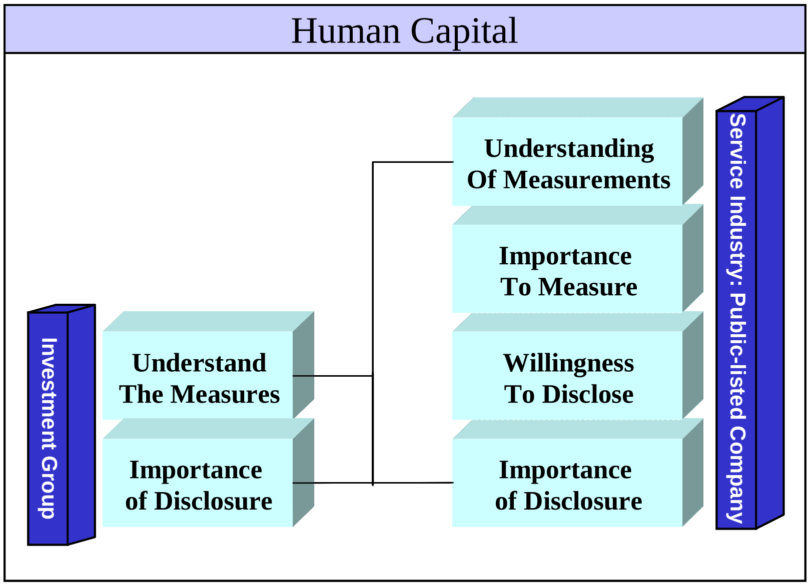

Fig. 1

The research questions for this paper are as follows:

<u>Research Question 1</u>: *What is the perceived value of human capital indicators by the companies and investment groups?*

a. The perceived 'importance to disclose' human capital indicators.
b. The perceived 'understanding of measuring' human capital indicators.
c. The perceived 'importance to measure' human capital indicators.
d. The perceived 'willingness to disclosure' the indicators of human capital voluntarily.

<u>Research Question 2</u>: *What is the relationship between understanding the human capital indicators (the way it is being measured) and the importance to disclose the human capital indicators.*

$H_{2.1}$: The understanding of human capital indicators leads to the perception of the importance to disclose the human capital indicators.

$H_{2.2}$: The perception of the importance to disclose the human capital indicators leads to a better understanding of the measurement of human capital indicators.

<u>Research Question 3</u>: *Is there a significant difference in the perception of human capital between the companies and investment groups?*

$H_{3.1}$: The investment group perceived the importance of disclosing human capital indicators more than the companies.

$H_{3.2}$: Companies understand the measuring of human capital indicators better than the investment group.

Samples

The samples were from two groups of decision-makers, investment groups and public-listed companies. The position level was the key criteria used to select the prospective participants. Consequently around 82 participants involved in the research. Participants came from different States in Australia. Their working experience ranged from 48 to 528 months in duration, with a mean of 266.34. The length of service they had been employed by the company ranged from 4 to 524 months, with a mean of 126.33. The experience they have in the existing industry ranged from 8 to 524 months, with a mean of 204.26.

About 70 potential decision-makers were selected from the assets, funds and investment management groups in Australia. Most of them are dealing with handful of funds under an umbrella of investment. In view of the infancy of this research area, some prospective participants are disinclined towards taking part in this study to avoid being over avant-garde. Hence, total responses of 33 were received from this group. The majority of the respondents have at least 20 years of experiences in the investment industry. Prominently, investors do not create the requests to release intangible information but they helps to make companies realised the unfelt requirements to have these additional information for decision purpose.

The second group for the study was conducted with 49 top management decision-makers in the public-listed companies of service-related industry in Australia. Companies from Telecommunication, Banking and Insurance sectors as listed in the Australia Stock Exchange were short-listed for this study. The participants occupied senior position in the service sectors, such as the executive directors, managing directors and the heads of divisions of the organizations.

Measures

There are many human capital indicators which have been developed by practitioners and researchers (Allee, 2000; Brooking, 1996; CMA, 1999; Edvinsson and Malone, 1997; Gross, Reischl and Abercrombie, 2000; ICM Group, 1998; Roos, Roos, Dragonetti and Edvinsson, 1997; Sullivan, 1998). Based on a list of human capital indicators obtained from intangible information disclosed in Australia public listed service companies and those identified by the above-mentioned authors as well as in consultation with the a group of industry analysts, a set of 15 indicators was preferred (Table 1). Each of these indicators will be examined based on four dimensions using 5-point measurement. This first dimension seeks to determine their knowledge on how the indicators are evaluated and process. The second dimension addresses the importance to disclose such indicators for better decision-making by both internal and external entities. The third dimension and the fourth dimension try to find out more on the importance of measuring these indicators and the voluntarily disclosure of the indicators from the public-listed companies. These dimensions and indicators are tested from the data collected with the two groups of respondents to address the research questions. The descriptions of the measures are briefly summarized as follows:

1. Staff satisfaction index plays a crucial role in supporting the achievements of the organization. Typically this survey of attitudes of staff is conducted annually. Some companies use 5-scale measurements while others use 10-scale measurements for more detailed analysis. E.g. Scale 5 representing most satisfied. When staffs are pleased and contented with the company's management, basically they tend to be more committed with their work duties. Alternatively, if the staffs are disgruntled with how the company treats them, which uncertainly caused the staff to lessen their dedication to the work, the performance of the organization's bottom line may be affected.
2. Practically, companies will employ enough staffs to service their business operation needs. It is the staffing capacity that turned into profitable accounts. However, there are some companies that employ more staffs then required and some companies fail to maximize and utilize the total staff capacity. Failing to do so would increase the cost of the business. Increasing in cost indirectly indicating a loss in profit. For example, some staffs may be working in a company for years and are too contented with the environment of the company despite the lack of challenges and prospects in the company. Similarly like warming up the

chair in the office and be paid monthly without having to do much. They tend to take advantage of the poor management when the company overlooks the needs to monitor and measure the utilization of the staffs in the company. Therefore, by measuring the maximization and utilization of the total staff capacity shows how well managed an organization is especially in terms of its human resources function.

3. The valued added per employee is useful for comparing with other organizations in a similar sector. Usually the value added is the measure of impact and positive change elicited by the training (Abernathy, 1999). However, value-creation in business does not refer solely to selling products or services that customers want but more prominently it depends on the ability of the business to generate the required return to current or prospective investors that is competitive with returns offered from other comparative investments and produce value-adding growth (Web, 2000; Mand and Whipple III, 2001). Edvinsson (1992) indicated that this ratio is a critical ratio to evaluate service leadership.
4. The disclosure of information on the number or percentage of full-time, part-time, contract or temporary staffs identify a company's dependence on the nature of staffs in the company. For instance, if a company has a high ratio of contractual and part-time staff, is it going to affect the operation of the business? The value may show if the company is able to perpetuate itself to carry too much overhead (Edvinsson and Malone, 1997).
5. Staff turnover has frequently been identified to find out the strength of the human resources capability in the company. It is especially in the core group of the company as it is a threat to sustained organizational capital value (Edvinsson and Malone, 1997). This is because human capital investments are firm provided; hence, minimising turnover is of particular concern to the companies (Wynn and Mueller, 1998). Mayo (2001) suggested that perhaps in the future, it would be known as asset losses. The costs of recruitment and selection, the cost to bring the new recruit up to the speed and the cost of replacement can be enormous.
6. Average years of staff working experience are the accumulated average of staff collective experience attained through working experiences from the first day of their career. These experiences that individuals keep inside their heads is a major strategic resource in the business world (Graham and Schwab, 1999).
7. The average age of management and operational staff to see if the management staffs cater to the trends and demands of the industry. It is crucial for the company to have a good mix of its expertise. Recently, the retrenchment of staffs by many companies affected those who are in the late forties. Does this trying to illustrate something? However, Edvinsson and Malone (1997) stressed that the conveyance of corporate philosophy is best done by older employees and youth many not be an advantage.
8. Staff average years of services with the company measurement are in line with staff turnover and the figure is of great importance.
9. The educational level of workforce may help to indicate the basic institutional knowledge of the company and to determine if there is a need to provide more training and education to the workforce in order to be in line with the industry demands and changes.
10. Experts and professional turnover is critical to company. Its leaving of core personnel may be a great risk to the company.
11. Number of men and women management staff to provide social responsibility and show that it creates an equal employment opportunity to all regardless of their sex group. As Edvinsson and Malone (1997) pointed out that new corporation with diverse management needs, company will require different personality types, life experiences and management styles. However, in some industry, it may be seen that more men are being employed than the women.
12. Motivation index of staff is an annual survey of the level of motivation the staff received from the organization to determine their ambitious and energetic level for the organization. It is believed to contribute to the company's success and profitability (Edvinsson and Malone, 1997). Besides, it is also recognised as an important factor to ascertain employee independence.
13. Value of workforce stability index may help to see the stability of relationships between the customers and staff (Mayo, 2001). It also determines the average experiences and services the key players in the team. This is particularly important to company dealing with longer-term projects.

14. Workforce competence profile is the ability that the workforce utilizes the structural capital of the organisational. It includes the knowledge, skills, ability and intentions. This is an important measure as knowledge capital comes from competence. Sveiby (1997) argued that this competence owned only by the employee and goes home with him at 5:00 and leaves the company with him upon termination of service. The value of competence has a critical relationship with the commitment of the workforce. Ulrich (1998) pointed out that companies the competence level and the commitment level would affect the capabilities of talented employees in the company get things done.
15. The ratio of staff salary to the total cost

Table 1

HC_1	: Staff satisfaction index
HC_2	: Maximisation and utilisation of the total staff capacity
HC_3	: Valued added per employee
HC_4	: Number or percentage of full-time, part-time, contract or temporary staffs
HC_5	: Staff turnover quarterly, half-yearly and yearly
HC_6	: Average years of staff working experience
HC_7	: The average age of management and operational staff
HC_8	: Staff average years of services with the company
HC_9	: The educational level of workforce (average of each functional level)
HC_{10}	: Experts and professional turnover quarterly, half-yearly and yearly
HC_{11}	: Number of men and women management staff
HC_{12}	: Motivation index for staff
HC_{13}	: Value of workforce stability index
HC_{14}	: Workforce competence profile
HC_{15}	: The ratio of staff salary to total cost

Results and Discussions

Table 2 shows the reliability analysis of this study using Cronbach's Coefficient Alpha. This method is preferred as it has the most utility for multi-item scales at the interval level of measurement (Cooper and Schindler, 1998). Table 3 displays the descriptive statistics to address the first research question. To conduct a predictive analysis for the second research question, bivariate regression and multiple regression analysis are applied. Results shown in Table 4 to Table 4c. Table 5 illustrates the results for testing the differences in the perceived value carried out through independent t-test.

Table 2: RELIABILITY COEFFICIENT TEST RESULTS – SCALE (ALPHA) N=15 ITEMS

	Important to disclose (ID)	Willingness to disclose (WD)	Important to measure (IM)	Understanding of measurements (UM)
IG	0.9147 (33 cases)			0.8835 (33 cases)
PLC	0.8990 (48 cases)	0.8583 (49 cases)	0.8677 (49 cases)	0.9158 (49 cases)
Overall	0.8994 (81 cases}	0.8583 (49 cases)	0.8677 (49 cases)	0.8947 (82 cases)

Reliability indicates the extent to which research findings would be the same if the research were to be repeated at a later date, or with a different sample of subjects (Ticehurst and Veal, 1999). The results in Table 2 show adequate reliability and sufficient evidence of validity.

Research Question 1: What is the perceived value of human capital indicators by the companies and investment groups?

a. The perceived 'importance to disclose' human capital indicators.
b. The perceived 'understanding of measuring' human capital indicators.
c. The perceived 'importance to measure' human capital indicators.
d. The perceived 'willingness to disclosure' the indicators of human capital voluntarily.

Table 3: PERCEIVED VALUE OF HUMAN CAPITAL INDICATORS

	IM		**WD**		**ID**				**UM**			
	PLC		PLC		IG		PLC		IG		PLC	
	$\bar{x}$	s	$\bar{x}$	s	$\bar{x}$	s	$\bar{x}$	s	$\bar{x}$	s	$\bar{x}$	s
HC1	3.41	0.89	2.88	1.13	2.39	0.79	2.69	1.23	**1.88**	1.19	**2.90**	1.01
HC2	3.02	1.01	***2.10***	1.43	2.55	0.75	2.57	1.15	**1.91**	0.95	**2.67**	1.07
HC3	2.45	1.31	***1.88***	1.45	2.55	0.83	2.00	1.38	2.33	1.05	2.16	1.12
HC4	3.14	1.15	3.31	1.12	2.55	0.87	3.08	1.10	3.55	0.75	3.39	0.86
HC5	3.27	0.88	2.55	1.12	3.00	0.75	2.41	1.32	3.39	0.79	3.14	0.96
HC6	2.20	1.17	***2.24***	1.23	2.58	0.83	1.92	1.22	3.21	0.99	2.71	1.04
HC7	***1.59***	1.00	***1.80***	1.19	1.79	1.02	1.57	0.91	3.15	1.03	2.59	1.31
HC8	***1.88***	1.15	***2.00***	1.29	1.97	0.77	1.67	1.05	3.15	1.06	2.84	1.16
HC9	2.47	1.31	***2.33***	1.31	2.58	0.90	2.39	1.17	3.21	0.89	2.86	1.06
HC10	2.71	1.27	***1.67***	1.55	2.67	1.08	2.20	1.27	2.70	1.19	2.78	1.09
HC11	2.31	1.28	2.84	1.16	2.09	0.91	2.38	1.18	3.09	0.88	2.63	1.20
HC12	2.24	1.64	***2.06***	1.33	1.94	1.17	2.02	1.36	**1.15**	1.06	**2.20**	1.34
HC13	2.37	1.32	***2.29***	1.26	2.27	0.84	2.08	1.40	1.88	1.02	2.43	1.15
HC14	2.59	1.37	***1.88***	1.35	2.06	1.17	2.37	1.41	**1.33**	1.22	**2.33**	1.07
HC15	2.73	1.43	2.80	1.32	2.45	0.90	2.55	1.43	3.09	0.77	3.08	1.15
HC $\bar{x}$	2.56	0.73	***2.31***	0.75	2.36	0.62	2.28	0.80	2.60	0.62	2.71	0.76

Scale: IM → 0: no comments, 1: not important, 2: useful, 3: important, 4: critical
WD → 0: no comments, 1: will not disclose, 2: may not disclose, 3: may disclose, 4: will disclose
ID → 0: no comments, 1: not important, 2: beneficial, 3: important, 4: critical
UM → 0: no idea, 1: somewhat, 2:average, 3: good, 4: very good

The data above indicated that PLC and IG have similar perception towards the importance to disclose the human capital indicators. Two indicators HC7 and HC8 (with values shown underlined) were considered almost near to inconsequential. These two indicators were also judged as not important to measure by the public-listed companies. The investment groups have identified most of the indicators as beneficial and important to disclose. The public-listed companies have similar views, however, when asked if they are willing to disclose such information if it is not a mandatory requirements, the results showed negatively. Most of the indicators will not or may not be voluntarily disclosed. As for the understanding of the measurements, the data clearly showed that HC12 and HC14 require more explanation on the way these indicators are evaluated, especially to the investment group. Hence, this implies that many unusual information reporting by companies require more clarification particularly when indicators are shown.

Research Question 2: What is the relationship between understanding the human capital indicators (the way it is being measured) and the importance to disclose the human capital indicators.

$H_{2.1}$: The understanding of human capital indicators leads to the perception of the importance to disclose the human capital indicators.

$H_{2.2}$: The perception of the importance to disclose the human capital indicators leads to a better understanding of the measurement of human capital indicators.

Table 4: RELATIONSHIP BETWEEN UM AND ID

Model	Parameter (1)	Sig.	Parameter (2)	Sig.
Dependent Variable	ID		UM	
Independent Variable	UM		ID	
Adjusted R Square	0.142	Std. Error 0.6745	0.142	Std. Error 0.6509
Regression F	14.293	0.000	14.293	0.000
(Constant) B	1.231	0.000	1.791	0.000
Indep. Var. Coeff. (B)	0.406	0.000	0.378	0.000

For Parameter (1): The bivariate regression is significant (F=0.000) and the Adjusted R Square indicates that understanding of the measurements explains about 14% of the importance to disclose the indicators. The slope is significant (0.000) and 0.406 in size. The constant is 1.231 as it is significant (Sig.=0.000). The equation is:

$$ID = 0.406\ (UM) + 1.231$$

The importance of disclosing the indicators is the sum 0.406 times the level of understanding the measures plus 1.231. Confidence intervals for predictions at 95% level of confidence will be 1.96 times 0.6745. Therefore the importance to disclose the indicators is beneficial when there is at least an understanding of the measurements.

For Parameter (2): The bivariate regression is significant (F=0.000) and both the slope of ID and constant are significantly zero. The equation is:

$$UM = 0.378\ (ID) + 1.791$$

Confidence intervals for predictions at 95% level of confidence will be 1.96 times 0.6509. The R square is the same as the previous bivariate regression, indicating the same linear relationship. Consequently, the understanding of the measurements is somewhat or averagely clear regardless of whether the indicators are important to disclose.

Table 4A:CORRELATIONS OF DIMENSIONS FROM PLC

		WD	IM	UM	
ID	Pearson Correlation Sig.	.603** .000 48	.468** .001 48	.390** .006 48	
WD	Pearson Correlation Sig.		.579** .000 49	.551** .000 49	
IM	Pearson Correlation Sig.			.702** .000 49	

**. Correlation is significant at the 0.01 level (2-tailed)

High correlations exist between the importance to disclose the indicators and the willingness to disclose the indicators (0.603) and between the importance to measure the indicators and the understanding of the measurements (0.702).

Table 4B: RELATIONSHIP BETWEEN ID, WD, UM AND ID OF PLC

Model	Parameters	Sig.
Regression	17.811	0.000
(Constant)	0.576	0.140
WD	0.535	0.002
IM	0.208	0.283
UM	-0.0225	0.901

Dependent variable: ID

From Table 4b, the multiple regression is significant (F=0.000). The slope for the willingness to disclose the indicators voluntarily is significantly different from zero, but this is not the case for the importance to measure the indicators and the understanding of the measurements. Using stepwise method to excluding the non-significant variables, the output is as follows:

Table 4C: RELATIONSHIP BETWEEN ID, WD, UM AND ID OF PLC

Model	Parameters	Sig.
R	0.603	
Std Error of Est.	0.6448	
Regression	26.261	0.000
(Constant)	0.805	0.011
WD	0.640	0.000
IM (Excluded)	0.179	0.664
UM (Excluded)	0.084	0.698

Dependent variable: ID

The multiple regression is significant (F=0.000) as shown in Table 4c, and the slope of the independent variable is significantly zero, while the constant is not. The high multiple R of 0.603 infers a strong linear relationship with much of the dependent variance explained by the independent variable. Hence, the regression model is simple:

$$ID = 0.640(WD) + 0.805.$$

Using the 95% level of confidence, predictions can be made with confidence intervals of 1.96 times 0.6448 (standard error).

<u>Research Question 3</u>*: Is there a significant difference in the perception of human capital between the companies and investment groups?*

$H_{3.1}$: The investment group perceived the importance of disclosing human capital indicators more than the companies.

$H_{3.2}$: Companies understand the measuring of human capital indicators better than the investment group.

Table 5: GROUP STATISTICS

	Group	N	Mean	Std. Deviation	Std. Error Mean
ID	PLC	48	2.2778	.7996	.1154
	IG	33	2.3616	.6189	.1077
UM	PLC	49	2.7143	.7535	.1076
	IG	33	2.6020	.6170	.1074

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	Sig. (2-tailed)
ID	Equal variances assumed	2.613	.110	-.507	.614
	Equal variances not assumed			-.531	.597
UM	Equal variances assumed	.938	.336	.710	.480
	Equal variances not assumed			.738	.463

Table 5 compares firstly the level of importance on disclosing the human capital indicators by the public-listed companies and the investment groups. For public-listed companies, the average importance is between beneficial to importance (2.2778), and for the investment groups it is slightly higher (2.3616). In this case, t has a value of –0.507 and a significance level of 0.614 (2-tailed). Since 0.614 is way above 0.05, it is accepted that there is no statistical significant different between the two perceptions on the level of importance on disclosing the human capital indicators. The second comparison exhibits the level of understanding the way human indicators are measured by both groups. Both groups have indicated similar higher than average level of understanding with the public-listed companies having a better knowledge (2.7143). t has a value 0.710 and a significance level of 0.480 (2-tailed). Therefore, there is no statistical significant different between groups in the level of understanding the measurements.

Conclusion

Strategic management of human capital is another emerging issue that will impact on financial and information management, business planning and corporate governance. This study is a part of a large study on organisational intellectual capital indicators. Human capital is one of the categories in the strategic management. Human capital continues to be of growing importance for innovation, organizational competitiveness and economic performance. It comprises innovation, employee attitude, experience, efficiency, and knowledge bank (Ramanujam, 2001). Though many have been said about the significance for businesses to underline the inputs of human capital for their performances, it is the intellectual capital, which is vital to the resulting increase in value and economic growth (Bradley, 1997). More critically, business education has not made the study of intellectual capital or human capital central to its curriculum. Government could cultivate the need to emphasis human capital that would help companies to thrive, but could not create that capital (Latif, 2002).

The results of this study showed that human capital is statistically significant for management know-how. The rationale of having a framework for the indicators is to present to the decision-makers, the management of the organizations or the existing and prospective investors of the firm, with appropriate non-financial information for better judgement based on a relative standard. The level of disclosure on the intangible information very much depends on the corporate culture of the organization. Some companies may fear to give away its competitive advantage whereas some companies find that by disclosing more intangible information show that the company is well managed. Nevertheless, the investment community wants to see more commitment of the companies in measuring and reporting the intangible assets, how human capital is enhanced and reinforced, that eventually lead to achieving tangible benefits. Currently, investors estimate a company's value and worth based on market news and company reports. Anderson (1998) argued that it is the shareholder, both institutional and individual, who is the owner of the company and ultimately they have the primary right to determine the form and content of information they would like disclosed, rather than the accountants, auditors, or corporate management. Hence, this study anticipates to lead to a process whereby investors can better value a company's worth because of greater depth of quantitative and qualitative information made available.

References

[1] Abernathy, D. (1999, Feb 01). Thinking outside the evaluation box. Training & Development.

[2] AIR (2000). Malaysia - Industry told to build intellectual capital. Asia Insurance Review. May 15.

[3] Allee, V. (2000). The value evolution: Addressing larger implications of an intellectual capital and intangibles perspective. Journal of Intellectual Capital, 1,1, 17-32.

[4] Anderson, R. H. (1998). Regulating corporate annual reports in Australia. Business and Economic History, 27,2, 22-534.

[5] ANZ (2001, Aug 01) Australia and New Zealand Bank appoints Head of People Capital. Asian Banker,

[6] Bassi, L. J. and Van Buren, M. E. (1998). The 1998 ASTD state of the industry report. Training and Development, 52, 1, 21.

[7] Bernhut, S. (2001). An idea whose time has come. Ivey Business Journal, 65,4, 4.

[8] Black, D. A. (2001). Creating strategic plans with the power to win. Strategy and Leadership, 29, 1, 27-32.

[9] Boudreau, J. Ramstad, P. (1997). Measuring intellectual capital: learning from financial history. Human Resource Management, 36, 3, 343-56.

[10] Bradley, K. (1997). Intellectual capital and the new wealth of nations II. Business Strategy Review, 8, 4, 33-45.

[11] Brooking, A. (1996). Intellectual Capital. London: International Thomson Business Press.

[12] CMA (1999, Apr 16). Focus Group Draft: Measuring Knowledge Assets. Canadian Management Accounting.

[13] Connors, E. (1998, Apr 21). Head Strong: On the road again with a sage coach. Australian Financial Review, 20.

[14] Cooper, D. R. and Schindler, P.S. (1998). Business Research Methods, International Edition. 6th Edition. Singapore: Irwin McGraw Hill.

[15] Dooley, E. (2000). Intellectual capital in the software industry: An empirical test. Doctor of Philosophy thesis, University of Washington.

[16] Eadie, A. (2000, Feb 3). Business file - Title or no title, you still put in a full day - Management matters. The Daily Telegraph, 74.

[17] Edvinsson, L. (1992). Service Leadership - Some Critical Roles. International Journal of Service Industry Management, 3, 2.

[18] Edvinsson, L. & Malone, M. S. (1997). Intellectual Capital: Realising Your Company's True Value By Finding Its Hidden Brainpower, New York: Harper Collins.

[19] Edvinsson, L. (1997). Developing Intellectual Capital at Skandia. Long Rang Planning, 30, 3, 366-373.

[20] Erickson, G. S. and Rothberg, H. N. (1999). Intellectual Capital and Competitiveness: Guidelines for Policy. Global Competitiveness, 7, 1, 270.

[21] Garrick J. and Clegg S. (2000). Knowledge work and the new demands of learning. Journal of Knowledge Management, 4, 4, 279-286.

[22] Gnuschke, J. (2001). Obtaining market value from intellectual capital. Business Perspectives, 13, 4, 4-9.

[23] Graham, A. and Schwab, D. J. (1999). Boost Your Magazine's Intellectual Capital. Magazine Management, 28, 8, 27.

[24] Gross, C. M., Reischl, U., and Abercombie, P. (2000). The New Idea Factory: Expanding Technology Companies with University Intellectual Capital. Columbus (USA): Battelle Press.

[25] Guthrie, J. (2001). “The Management, Measurement and the reporting of intellectual capital”, Journal of Intellectual Capital, v2n1, pp. 27-41

[26] ICM Group (1998). What are the companies currently measuring? Retrieved Jan. 15, 1999 from the World Wide Web: http://www.cimgroup.com/presentpub/LES_MEASUREMENT

[27] Intellectual Assets (2000, Jan 1). Intellectual Assets: Know What You've Got. Inc., 86,

[28] Latif, A. (2002, Apr 27). Making good capital out of human beings. Straits Times Singapore, 61.

[29] Lewis, G. (1997). Building intellectual capital. Management Accounting (UK), 75, 6, 54.

[30] Liebowitz, J. and Wright, K. (1999). Does measuring knowledge make "cents"?. Expert Systems with Applications, 17, 2, 99-103.

[31] Lynn, B. E. (1998). Intellectual capital: key to value added success in the next millennium. CMA - the Management Accounting Magazine, 72,1, 10-15.

[32] Lynn, B. E. (2000). Intellectual Capital. Ivey Business Journal, 64, 3, 48.

[33] Mand, M. G. and Whipple III, W. (2001). The new operating-finance partnership: a potent strategy for value creation. Strategy and Leadership, 29, 5, 21-26.

[34] Marti, J. M. V. (2001). ICBS - intellectual capital benchmarking system. Journal of Intellectual Capital, 2, 2, 148-165.

[35] Mayo, A. (2000). The role of employee development in the growth of intellectual capital. Personnel Review, 29, 4, 521-533.

[36] McRae, H. (1996, May 24). Firms Need To Wise Up To Their Intellectual Assets. The Independent-London, 21.

[37] Mergy, L. and Records, P. (2001). Unlocking shareholder value from shared services. Strategy and Leadership, 29, 3, 19-23.

[38] Murdoch, R. (2001, Oct 11). The human wealth of nations. [Speech delivered by Chairman of News Corporation at Keith Murdoch Memorial Oration in Melbourne]. Retrieved on Oct 11, 2001 from the World Wide Web:

[39] http://www.news.com.au/common/story_page/0,4057,3036459%255E2,00.html

[40] Nelson, M. C. (2000, Dec 15). Intellectual capital of our workforce. Vital Speeches, 67, 5, n.

[41] Olsson, B. (1999). The construction of transparency through accounting on intellectual capital?. Journal of Human Resource Costing and Accounting, 4, 1, 7-10.

[42] Peasnell, R. (1998, Oct 29). Putting staff at the centre of a company brand, Marketing, 79.

[43] Quinn, J.B. (1992). The Intelligent Enterprise, New York: Free Press.

[44] Ramanujam, T. C. A (2001, Nov 17). Grappling with goodwill. Business Line (The Hindu).

[45] Roos, J., Roos, G., Dragonetti, N. and Edvinsson, L. (1997). Intellectual Capital: Navigating in the New Business Landscape, London: MacMillan Business.

[46] Snow, C.C. and Thomas, J.B. (1994, Jul). Field Research Methods in Strategic Management: Contributions to Theory Building and Testing, Journal of Management Studies, 457-480.

[47] Stewart, T. A. (1997a, Jun 23). Why Dumb Things Happen To Smart Companies. Fortune Magazine, 135, 12, 159.

[48] Stewart, T. A. (1997). Intellectual Capital: The New Wealth of Organisations. London: Nicholas Brealey Publishing Limited.

[49] Stuller, J. (1998). Chief of corporate smarts. Training, 35, 4, 28-35.

[50] Sullivan, P. H. (1998). Profiting from Intellectual Capital- Extracting Value from Innovation. New York: John Wiley & Sons Inc.

[51] Sveiby, K-E. (2001). A knowledge-based theory of the firm to guide in strategy formulation, Journal of Intellectual Capital, 2, 4, 344-358.

[52] Sveiby, K. E. (1997). The New Organisational Wealth: Managing and Measuring Knowledge-based Assets. San Francisco: Berrett-Koehler.

[53] Tafaro, E. (2001). Protecting intellectual capital. Advisor Today, 96, 9, 94.

[54] Thomson, K. (1998). Emotional Capital – Capturing hearts and minds to create lasting business success. UK: Capston.

[55] Ticehurst, G. W. and Veal, A. J. (1999). Business Research Methods, Australia: Addison Wesley Longman.

[56] Ulrich, D. (1998). Intellectual Capital = Competence X Commitment. Sloan Management Review, 39, 2, 15-26.

[57] Walker, D. C. (2001). Exploring the human capital contribution to productivity, profitability, and the market evaluation of the firm. Doctoral of Management thesis, Webster University.

[58] Watts, T. (2000, Dec 1). The Intangible Dream. Business Review Weekly, 124.

[59] Web (2000). Web stock analysts go back to basics, Retrieved June 11, 2000 from the World Wide Web: http://straitstimes.asia1.com.sg/money/wrldb1_0611.html

[60] Wynn, T. and Mueller, C. W. (1998). Product Characteristics, Human Capital, And Labor Market Segments: Services and the Distribution of Rewards in Labor Market Transactions. The Sociological Quarterly, 39,4, 597.

[61] Youndt, M. A. (1998). Human resource management systems, intellectual capital, and organizational performance. Doctor of Philosophy thesis, The Pennsylvania State University.

[62] Zhou, A. Z. and Sun, A. L. (2001). Intellectual Capital: Manage it or die!. Journal of Banking and Financial Services, 115 ,1, 18.

Human Resource Management: A Study of Activity Pattern of Nursing Care

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Abstract

In nursing care, shift work is defined as work scheduled, either permanently or frequently, outside normal daytime working hours. Shift work can be e.g. permanent work at night, permanent work during the evening or work hours can have changing assignment patterns. Each type of shift system has its advantages and disadvantages, and each is associated with differing effects on well-being, health, social life and work performance. The principal characteristics of shift work are its continuity, the alternation of shifts and a special work schedule. Shift work involves alternating or successive teams is said to be continuous when it is kept up 24 hours a day, everyday, including weekends and holidays. The main purpose of this study is to look into the pattern activity that the nurses perform in their shift hours. It mainly designed that the activities done by the nurses during their duties. Secondly, it is just to highlight what are the effect for those night shift nurses, any matters will arise during the shift hours or after work. Recommendations for improvements are also highlighted.

Introduction

Individual learning is the starting point from which most theories of learning, in general and organizational learning in particular begin. Marquart asserts that 'individual learning is needed for organizational learning since individuals from the units of groups and organizations' (Marquart, 1996:32). As human beings, we appear to have a drive to learn that is, in part, a survival mechanism : we function more effectively in a world which we have made sense (Hatano and Inagaki, 1987). We also derive pleasure from learning; there is a feeling of dissonance associated with non-understanding which is relieved in a pleasurable way when we make meaning of ambiguous information.

Similarly, it believes that 'organizations learn only through individual who learn. Individual learning does not guarantee organizational learning, but without it no organizational learning occurs' (Senge, 1990a:236) Fiol and Lyles believe that 'though individual learning is important to organizations, organizational learning is not simply the sum of each member's learning' (Fiol and Lyles, 1985:804). Most commentators agree that although individuals are the agents of organizational learning the process involves more than merely the cumulative learning of those individuals. Hedberg argues that : 'as individuals develop their personalities, personal habits and beliefs over time, organizations develop world views and ideologies. Members come and go and leadership changes, but organization's memories preserve certain behaviors, mental maps, norms and values over time' (Hedberg 1981:6) Others defined learning as :

- …… new knowledge is manifested in new structural arrangements, new culture and new collective action. (Normann, R. 1985)
- …… is defined as the process by which knowledge about action outcome relationships between the organization and the environment is developed. (Daft & Weick, 1984)
- Learning results from the adaptive and manipulative interactions between an organization and its environments. (Hedberg, B. 1981)

There are two points to make a distinction – **adaptive** and **developmental** learning (Ellstrom, 1992). The **adaptive** learning is defined as learning under circumstances where the individual has little or no authority to define the work tasks/problems, methods of work or results of solution. Whereas the developmental learning means that the individual has both a formal and a subjective space of action for using her authority in the definition of the work task, methods to use and get the solution. The level of learning is described in Table 1.

Table 1: LEVEL OF LEARNING

Aspects of the Activity Structure	Reproductive Learning	Productive Learning		Creative Learning
		Type I	Type II	
Work Task	Given	Given	Given	Not Given
Methods	Given	Given	Not Given	Not Given
Results	Given	Not Given	Not Given	Not Given

A Taxonomy of Levels of Learning as a Function of the degree of Freedom of the Actor in Relation to Aspects of the Activity Structure

Time-geography – about time and space, are seen as one unit of analysis for studying, among other things, the resources available for an individual to act in a certain situation (Aqvist, 1992). The term trajectory is used to describe each individual movement across time and space. The individual trajectories are elements of activity structure, defined in terms of :-

- work tasks, i.e. What the individual is doing;
- work actions in terms of methods or procedures, i.e. How the work task is done;
- interactions between individuals, i.e. Passing the report;
- distribution of work actions in time and space, i.e. When and where the work takes place.

Nursing Work Design

For a long time, nurses and nursing assistants were among the only women working at night in many countries (Gadbois 1981 ; Estryn – Behar & Poinsignon 1989) They are giving the 24-hour nursing and treatment to the respective patients. The nursing department has a set of written objectives which helps to guide the cause of action of the department.

The objectives :

- reflects the desires to be achieved by the Nursing department
- are developed by members/representative of the department
- are made known to all staff of the department
- are made such that they are achievable and measurable
- are consistent with the objectives of the organization.

Nursing Policies and Procedures

- The nursing department has a set of written and updated nursing policies and procedures which reflect current trends and principles of nursing practice to meet the set of objectives.
- The Head of the Nursing Department shall be responsible for formulating and implementing policies and procedures.
- The policies shall provide clear direction on the scope and limitations of the responsibilities and practice of nursing consistent with the policies of the organization.

Patient Care

The nursing department uses a planned systematic approach to provide patient centered-care. The nurse shall be accountable for the delivery of safe nursing care to her patient and that care given is of the highest quality at all times. The nurse shall:

- provide individualized care of assessing health care needs of her patient.
- plan nursing care based on needs of her patient.

- implement nursing care according to the plan of care.
- evaluate nursing care given.
- protect the patient's right, dignity and privacy.
- collaborate with other health personnel concerning the health of her patient.
- report promptly all abnormal and findings and institute necessary interceptive actions.
- be ethical, professional and caring at all times.
- be proper documentation of all nursing interventions given to the patients.

The Case Study

Putra Medical Center (PMC) is a medium size Medical Center in the northern region of West Malaysia. It has approximately 240 staffs – which divided into supportive and non- supportive staffs. This project is based on the staff nurses in various department of the Medical Center. There are 80 staff nurses in different departments, namely multi discipline wards, labor room, Incentive Care Unit (ICU), nursery, Accident & Emergency (A&E), Operation Theatre, Endoscopic Unit and Dialysis Unit. The activity structures which will be analyzed and described are: ICU, labor room and general ward. The staff nurses of the respective departments were involved in the study . Three shift work will be scheduled for 24 hours – morning, evening and night shifts. The activity pattern will be listed down by hourly.

Methodology

In this research, only time and space is being studied in three different departments – Intensive Care Unit, Labor Room and multi-discipline wards. An observation is done on three shifts in different departments The purpose of chosen those departments are to determine the learning potential of an activity structure, where the space of action of each participants in certain activity of each of departments. Interviewing to all different shifts of the staff nurses is done within two weeks time. It illustrates how the staff nurses experience their actions, interactions, activities and overall work stations. An observation is done on three shifts in different departments.

In order to provide continuous and varied patient care, management has to organize and overlapping, three-shift system in the unit. This currently consists of a day shift – covering 3 session:

a) the morning and early afternoon period (7.30am – 2.30pm)
b) the early afternoon and evening period (2.30pm – 9.30pm)
c) the night till the next morning (9.30pm – 7.30am)

The full-time staff nurses are on day shift whereas the evening shift may staff with part-time staff. The night shift is consisted only a full-time staff. Interviewing to all different shifts of the staff nurses is done within two weeks time. The data were collected from three shift work which are morning, evening and night shifts. It illustrates how the staff nurses experience their actions, interactions, activities and overall work stations.

The framework of the study is shown in Figure 1. It shows that the relationships between rule structure, competence, technology and the activity structure of an employee and learning .

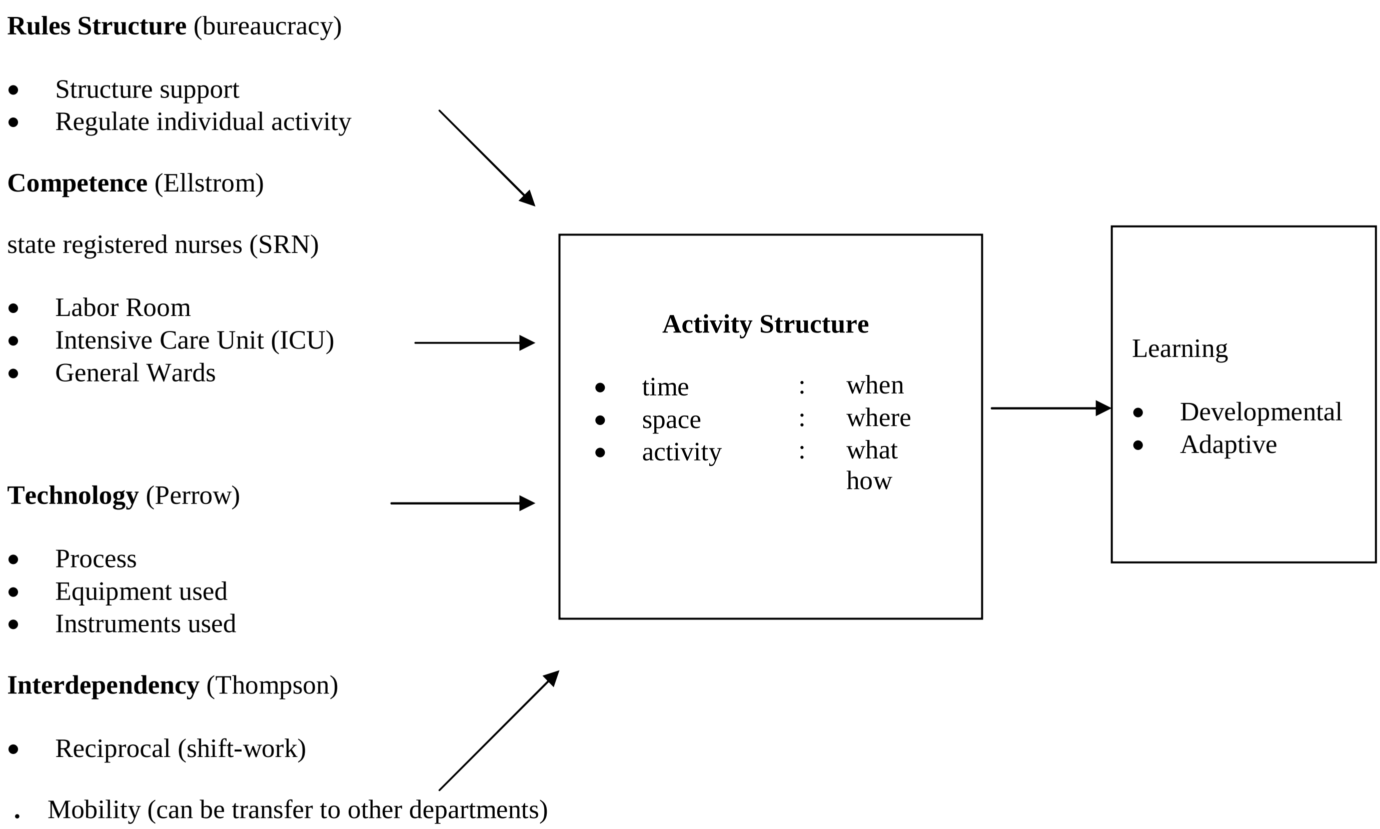


Fig 1: TRAJECTORY: A STUDY OF ACTIVITY STRUCTURE AT WORK SETTING

Findings

There are few ways to analyze and interpret the data. Ellegard (1994a, 1994b) has described two strategies of analysis relating to time-geography – the **objective/analytical** strategy and the **subjective** strategy.

The objective/analytical strategy focuses on the general activity patterns where to record how often a certain activity occurs and sequences of several activities. The general categories are used mainly in relation to time and also to use the space dimension to study what time is available in a certain space. This type of analysis is often expressed as time-geographic graph, where space or activities are situated on the horizontal axis and time is situated on the vertical axis. In this research, only time and space is being studied in three different departments – Intensive Care Unit, Labor Room and multi-discipline wards. The **subjective** strategy focus on the unique description and expression given by each nurses. These descriptions of activities, tools and collaboration add depth to the interpretation process. The following results were from the qualitative and subjective analysis of learning and work.

The Intensive Care Unit (ICU) and High-dependency Unit (HDU)

The ICU or high-dependency unit is a part of the department at Putra Medical Centre. Patients who classified are for critical care. It is defined as the highest level of care required when two or more organ systems fail. High-dependency care is an intermediate level of care between intensive care and the general ward and is suitable for patients who have single-organ failure or those who require close monitoring.

The primary task for the staff nurses in ICU/HDU are maintaining patients' vigorous functions (e.g.: heart/lung activity, nutrition, fluid balances etc). Very ill and critical patients need 24-hour care and monitoring. The work organization is totally task-oriented. The activity pattern of staff nurse in ICU is shown in Appendix 1

The Labor Room

Labor room or maternity unit is a place where the patients give birth. Staff nurses in labor room will be assisted by the midwives and nursing aids. They are more accountable for the quality of midwifery care. The time that they spend onto the patients is move compare to other staff nurses in other departments.
In PMC, there are five beds for normal delivery cases – whether is using ventose forcep or vacuum extraction. If it is an emergency caesarian case, the staff nurse needs to arrange the patient to the operation theatre and do the operation procedures. Four beds are for ante-natal cases and one bed is for the first stage post-natal cases. Therefore, staff nurse cum midwife need to responsible in all the patients in the labor room. The activity pattern of staff nurses in labor room is shown in Appendix 2.

Multiple-discipline wards

PMC has two levels of general wards; there are Level 2 and Level 3.
Level 2 – which is next to ICU, consist of patients whom are admitted by most physician, cardiologist, pediatrician, general surgeon, etc.
Level 3 – most consultants from multiple-discipline such as Orthopedic, Opthamologist, Ear, Nose& Throat Surgeon, O & G, Urologist etc.

Staff nurses from each level 2 or level 3 need to be responsible on their department according to the timetable schedule. The staff nurses need to know multiple knowledge compare to the labor room. The space of time for the staff nurses from wards to close with the patients are less. The activity pattern of staff nurse in multiple discipline wards is shown in Appendix 3
The importance of the amount of time spent by nurses in patients' rooms is demonstrated by the results of a study based on continuous observation of the ergonomics of nurses' work in each of three shifts in 3 wards, multi-discipline ward, Labor Room and Intensive Care Unit. The time spent in patients' rooms accounted for an average of three shifts is in Table 2 below:-

Table 2: TIME SPENT IN PATIENTS' ROOM

	Morning shift	**Evening shift**	**Night shift**
Multiple Discipline Wards	43%	30%	27%
ICU	35%	35%	30%
Labor Room	40%	35%	25%

Average Time Spent in patients' rooms of these shifts in three departments.

Staff nurses' work postures and time spent varied from shift to shift and department to department. Among three departments chosen, staff nurses in ICU spent more time in patients' rooms during the shift work. The pattern of activities are varied from time to time in ICU compare to the wards and labor rooms. Staff nurses in ICU will spent more time and space in concentrating the patients. Activities like blood taking, technical interventions such as monitoring vital signs and medication, transfusions, are done in every of the departments.

Conclusion

Table 3 presents the activity structure of certain jobs in the three case studies. The different aspects of the activity structure (where, when, what and how) are generally characterized in the space of action available to the three departments of the staff nurses.

Table 3: THE RELATION BETWEEN ACTIVITY STRUCTURE AND POSITION WITHIN THE WORK ORGANIZATION.

Activity Structure		**Staff Nurses in**		
		ICU	**Labor Room**	**General Wards**
Time space	Where	bounded	unbounded	unbounded
	When	unbounded	unbounded	unbounded
Activity	What	unbounded	bounded	bounded
	How	unbounded	unbounded	unbounded

* bounded : low degrees of freedom with respect to the different aspects of activity

* unbounded : high degrees of freedom

According to the analysis above, all the staff nurses have the high degree of freedom to require an action. They will be responsible of all the incidents when the consultants are not around. The staff nurse has the competence and experience that enables her to decide what is possible and necessary to do, how and in what situation. Compare to three departments' staff nurses, staff nurse in ICU will have more frequent activities compare to the other two departments. Anyway, all the staff nurses have their own responsibilities to provide the best nursing care to the patients.

Night work also has some advantages even though the nurses will face some health and social problems of the shift work. Night shift staff nurses report a greater feeling of independence and less supervision at night (Brown 1990; Hoff and Ebbing 1991). Furthermore, because it is less easy to obtain work relief for night-shift staff, apparently more "team spirit" (esprit de corps) develops. However, in most cases night shift work is chosen because of the increase in income due to the night-shift allowance (Hoff and Ebbing 1991).

Learning, however, appears to be about more than survival: it is also about human development, the growth of the individual Maslow (1954) proposes that humans have a drive toward self-actualization, Rogers (1961) talks about basic actualizing tendency and Kegan (1982) describes the evolving self. They characterize development as a progression of 'frames' through which we interpret our experiences. In these three cases happened in ICU, labor room and general wards, we would like to suggest that all the staff nurses can be all rounded to all the departments where they can well-worth in every disciplines. When a staff nurse can be all rounded in all discipline, the chances of getting promotion to be nursing supervisor, as well as nursing manager will be much higher. The need to learn serves many important ends for us as human beings, including survival, both as individuals and as a species, career advancement, prestige, etc. Thus, the management must ensure that:-

a) the shift patterns are standardized throughout the unit.
b) there is adequate overlap between shifts
c) there is e socially acceptable shift patterns within the unit.
d) To ensure that shift overlaps and payments for unsocial hours are minimized, resulting in cost savings to the unit.

References

[1] Bateson, G. (1972). The Logical Categories of Learning and Communication. IG. Bateson *steps to an Ecology of Mind*. Northvale, N.J. : Jason Aronson Inc.

[2] Brown, FM. 1990. *Sleep-nap behaviors of three permanent shifts of hospital nurses. In shiftwork : Health, Sleep and Performance*, edited by G. Costa, G. Gesana, K. Kogi, and A. Wedderburn. Frankfurt : Peter Lang

[3] Daft, R.L. and Weick, K.E. 1984 'Toward a model of organizations interpretation systems'. *Academy of Management Review*, 9(2), 284-295.

[4] Derek Adam-Smith and Alan Peacock (1994) *Cases in Organizational Behaviour*, University of Portsmouth London.

[5] Ellegord, K. (1994a). All finga det forgangliga. *Utreckling en metod for studier av cardagslivets skeenden*, Kulturgeografiska Institutionen, Goteborgs Universitet.

[6] Ellegord, K (1994b). *Worker generated production improvements in a Reflective Production System – or "Kaizen" in a Reflective Production System*. Paper presented at GERPISA Senand International Colloquium. The New Industrial models of Automobile Firms, Paris.

[7] Engestrom, Y. (1987) *Learning by expending. An Activity Theoretical Approach to Development Research* : Helsinki : Orienta Konsultit Oy.

[8] Fiol, C.M. and Lyles, M.A. (1985) 'Organizations learning', *Academy of Management Review 10*(4) : 803-13.

[9] Gadbois, C. 1982. *Women on night shift : Interdependence of sleep and off-the-job-activities.* In night and shiftwork : Biological and Social Aspects, edited by A Reinberg, W. Vieux, and P. Andlaver. Oxford : Pergamon Press

[10] Hagerstrand, T. (1974). Tidsgeografisk beskrivning. Syfte och postulat. *Svensk Geografisk Arcbokarg*. 50, Lund.

[11] Hagerstrand, T. (1075). Space, Time and Human Conditions. In : A. Karlqvist, L. lundqvist and F. Snickars (Ed). *Dynamic allocation of Urban Space* Famborough. Saxon How

[12] Hedberg, B-1981. '*How organizations learn and unlearn*' in P. Nystrom and W. Starbuck (eds), Handbook of Organizational Design. New York : Oxford University Press.

[13] Hoff, A and U. Ebbing, 1991. Menschengechte Umsetzung Von Arbeitszeitberkurzungen. *Dortmund, Forschungsanwendung* Fa 25 : Bundesanstalt fur Arbeitsschutz.

[14] Marquardt, M.J. and Reynolds, A. (1994) *The Global Learning Organization : Gaining Competitive Advantage through Continuous Learning*, Burr Ridge – Irwin.

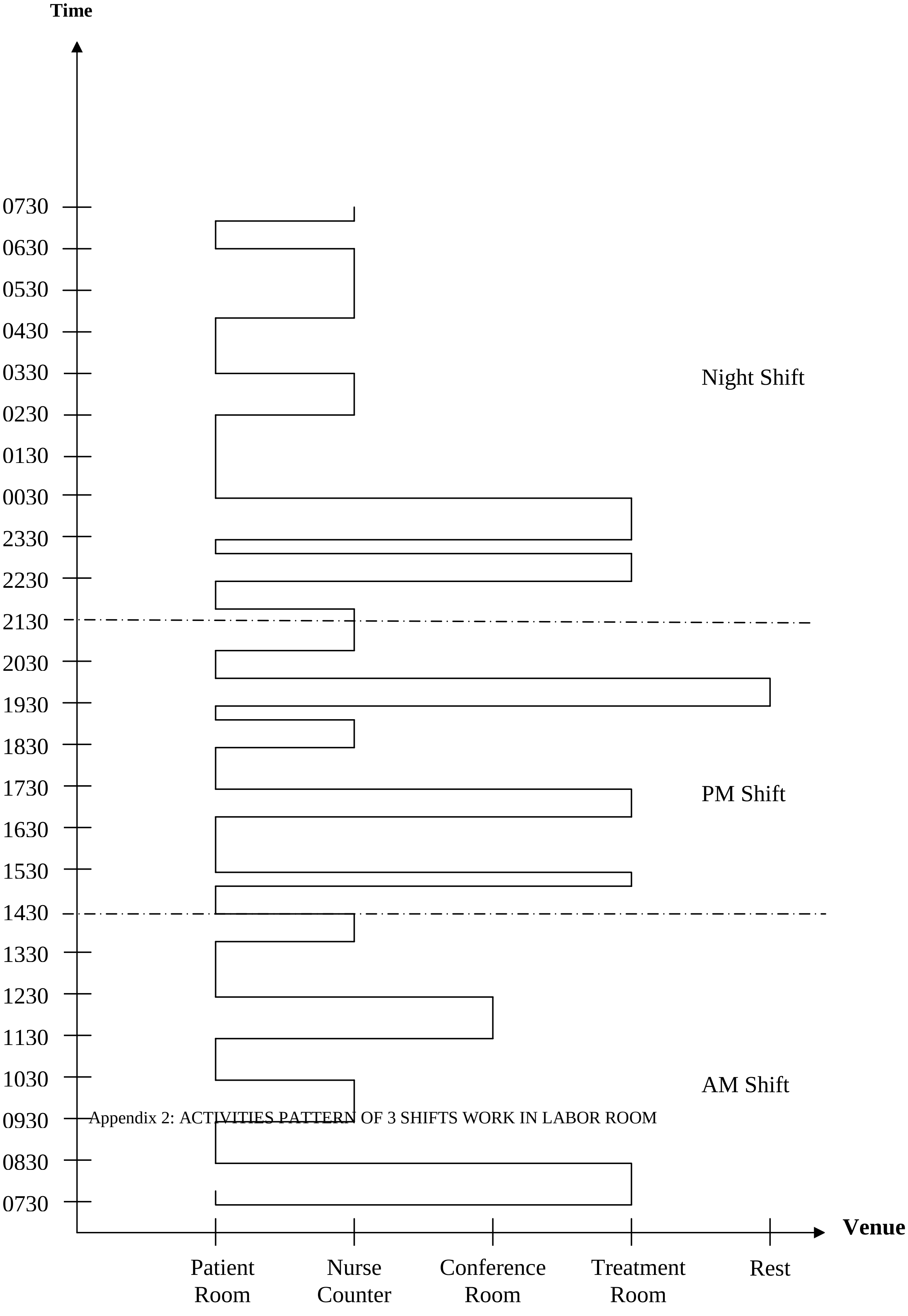
[15] Normann, R. 1985 'Developing capabilites for organizational learning', in J.M. Pennings et al. (eds), *Organisational Strategy and Change*. San Francisco : Jossey-Bass)

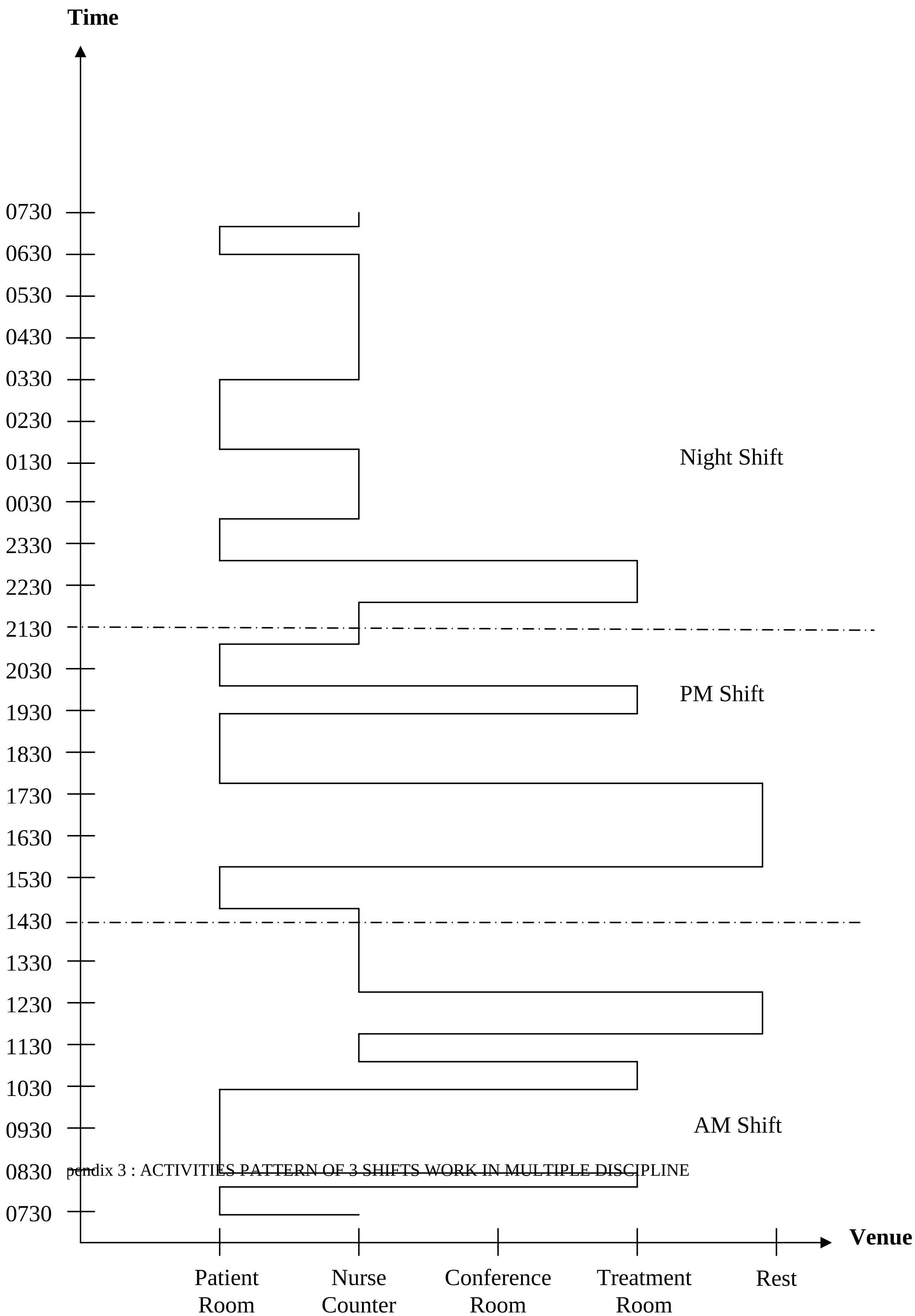
[16] Senge, P.M. (1990a) *The Fifth Discipline : The Art and Practice of the Learning Organization*, New York ; Doubleday.

[17] Steven L. McShane, Mary Ann Von Glinow (2000) : *Organizational Behaviour*, McGraw-Hill

Appendix 1: ACTIVITIES PATTERN OF 3 SHIFTS WORK IN ICU

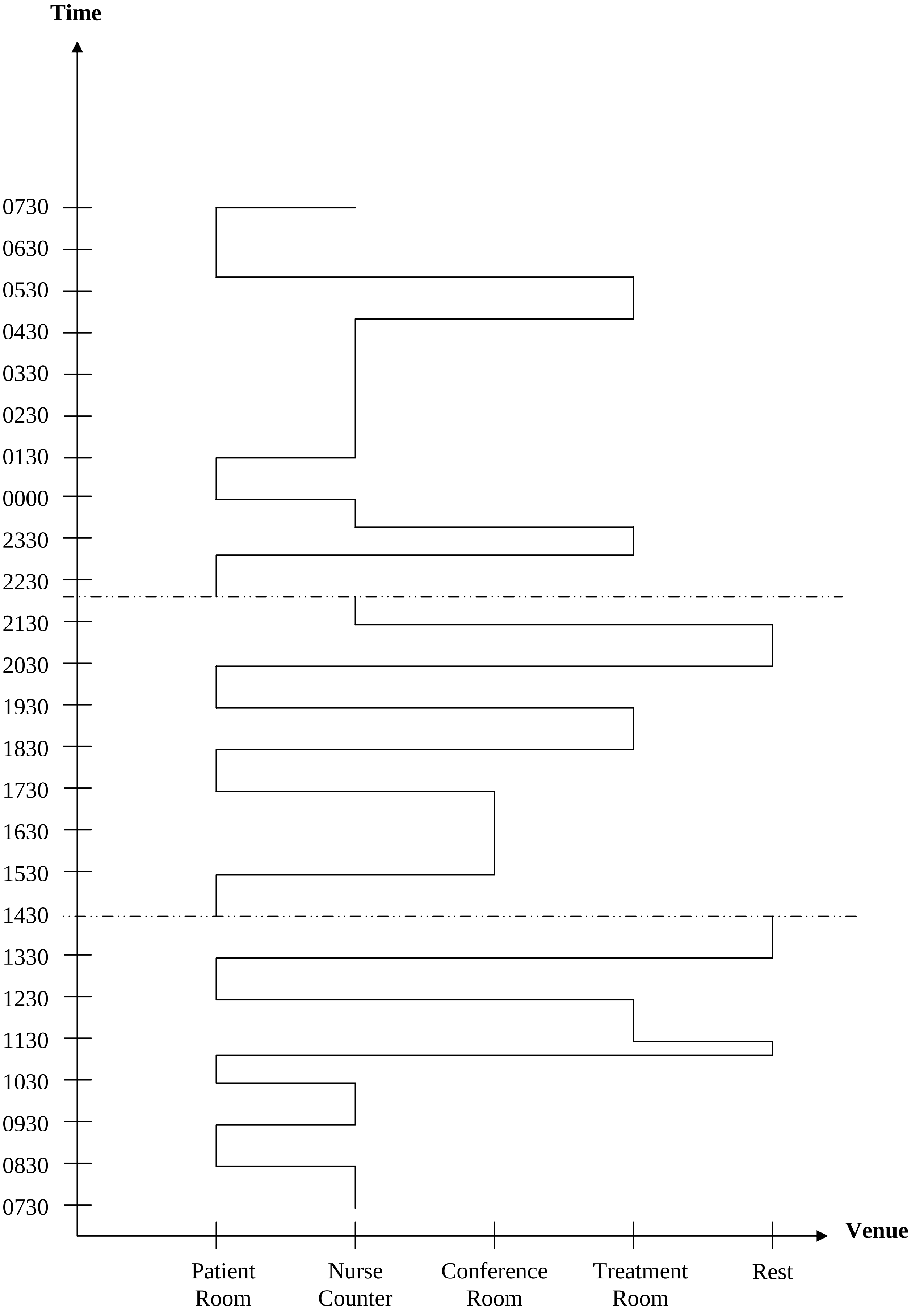
Appendix 2: ACTIVITIES PATTERN OF 3 SHIFTS WORK IN LABOR ROOM





pendix 3 : ACTIVITIES PATTERN OF 3 SHIFTS WORK IN MULTIPLE DISCIPLINE

wards


Time
0730
0630
0530
0430
0330
0230
0130
0000
2330
2230
2130
2030
1930
1830
1730
1630
1530
1430
1330
1230
1130
1030
0930
0830
0730
Venue
Patient Room
Nurse Counter
Conference Room
Treatment Room
Rest

IDEART: A Creative Methodology at the Service of Innovation in Business

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Abstract

IDEART is a new creative methodology, based on analogies and provocations, that consists of the generation of ideas about a determined creative focus using visual stimulation and, specially selected paintings.

IDEART works in six different steps: first, a problem must be identified. Second, we must convert that problem into a creative focus. Third, we need to choose an IDEART painting at random and describe it thoroughly. Fourth, we must "force" connections between the description of the painting and the creative focus. Fifth, an incubation period is recommended. And sixth, we are invited to take some decisions.

IDEART methodology is applicable to the business and organization realities, among many other such fields. Because of its potential provocative power the results that can be obtained from a correct use of this methodology can be spectacular.

Introduction

IDEART[i] is a new creative methodology that consists in using pictures to generate ideas to apply to a concrete creative focus. The paintings have been selected based on a fundamental criterion: to use works of art with a high symbolic content, that can easily generate associations and connections with our creative focus.

During the creative session with IDEART it is important that the individual members of the team contemplate the image in group. To do this will require projecting a slide of the painting on a screen or a white wall. In this way all of the members will receive the same visual impact and share the same reference. Avoid handing out reproductions of the painting when possible. Furthermore, we recommend that you invert the image and change its position. This can be easily done if you use an overhead projector and a slide. If, on the other hand, you use a PC, remember to show the image upside down.

Why paintings?

The association between art and creativity is evident. However, sometimes creativity has been restricted to certain areas (publicity, art etc.) as if a high amount of creative capacity were not also necessary in other areas. Doesn't an engineer need to be creative, or the CEO of a company that has a turnover of hundreds of millions of euros? In addition, and this a key point of IDEART; it has long been thought that artistic creativity and "applied creativity" (in the scientific, business and management spheres) were different. Contrary to this point of view, we believe that:

- Creativity[1] is not exclusive to any field. In the last years there have been some attempts by some groups to co-opt the "creativity". It is evident that the creative process can be applied to anyone who carries out any activity in a creative way: accountants, doctors, street sweepers, Ceo´s, politicians, athletes, teachers, film directors, salesmen…
- There are not different "creativities", especially in the most important moment: the moment of thinking. An artistic stimulus can produce creative movements during a problem solving session dedicated to improving the functioning of an automated assembly line. In the same way, a scientific stimulus (the mapping of the human genome, for example) could produce extraordinary creative ideas for a vanguard architect.

IDEART, therefore, is a methodology based on artistic images and applicable to the business and organization realities, among many other such fields. Precisely because of its potential provocative power (What in heaven's name can be the connection between Boticcelli´s "Birth of Venus" and our problem of an increasing number of client complaints) the results that can be obtained from a correct use of this methodology can be spectacular.

IDEART is very connected with the idea of lateral thinking. The expression "lateral thinking" was coined by Edward de Bono, and refers to the human capacity to think beyond narrow logical limits. Lateral thinking means a different way out, a different path by which we can develop, through provocation and creative challenge, new points of view to a given situation (leading to new solutions). Michael Michalko affirms that to discover things we must search in new worlds. The propensity of some "geniuses" to search in distant fields from their own to find alternative answers to their problems is well known. As we have seen, a provocation is a direct way of using lateral thinking. IDEART works based upon this logic, or, if you will, this leap beyond logic. Through the different images of IDEART, stimuli, that although initially strange, can be found that can produce potent alternative points of view related to our creative focus.

How does IDEART work?

IDEART is not a technique in itself, although it could become one, rather it is an easy to apply, fascinating and fun way to begin working creatively on any subject. In this sense the stimulus (or stimuli) that are used, the paintings are the detonators for a reflection process that can accompany any other complementary creative technique.

We do not recommend that you use IDEART, if you do not have enough available time. The paintings must be analyzed calmly, in a relaxed manner. There should not be any pressure to find immediate solutions. If they arise, Eureka! but very often creative solutions require an incubation period.

Step 1: Define the problem

Think about the problem. Analyze it calmly. Separate the important aspects from the secondary ones. Concentrate on the key aspect. It has been said that once we have circumscribed and defined our problem, 50% of it has been solved.

Formulate the problem in an intelligent way. Ask for help when necessary. Use clear and concise language. For example:

- We are not selling enough.
- We are not marketing our products well.
- Our structure does not adapt to what our clients need.
- We are getting too many complaints.
- Our situation is chaotic.
- We have no alternatives to our star product/ service.
- We need new ideas to connect with our market.
- We have to renovate our portfolio of products/ services.
- Our technology situates us below our competitors.
- We have too many distribution problems.
- Our cost structure is sinking us.
- We do not manage our knowledge well.
- We have problems in the selection of our human resources.

If you think that the real problem is different from what it only appears to be, take time to consult with others, but not only with those who could reasonably be expected to think like you. Also talk to people who you expect have different points of view, with people who know the root of the problem.

Not all the problems we face are as serious as those listed above, but that does not preclude working in a creative way. We should also learn how to solve problems of the following type:

- How can we reduce waiting time for our clients?
- How can we spend less on photocopies?
- We have to improve the packaging in product "X"
- Our sales catalogues could be more creative.

Step 2: Create your problem in a creative focus.

Sometimes the correct formulation of the problem is not enough to provide the creative play we need. As we have seen, the creative focus permits us to direct and concentrate our creative efforts on a concrete point. Below you will find a list of the earlier mentioned problems converted to a creative focus. Notice that to formulate a focus correctly it is recommended to use an expression such as “We want ideas in order to…, or "We need solutions for...”.

- We want ideas to sell more (What?)
- We want ideas to improve the marketing of our products.
- What things can we improve in our organization that would mean a more direct relation with our clients?
- We want ideas that will reduce the number of client complaints.
- We need ideas that will produce better coordination.
- We want to have ideas for innovative products/services that could substitute our star products at medium and long term.
- We need new ideas to connect to our market (in this case only slight changes are necessary)

Now continue with the remaining problems. Remember, try to rewrite the problem in such a way that it converts to a creative formula that helps to generate ideas in a quick and easy way.

Step 3: Choose an IDEART painting and describe it

Now put the problem aside for a while, and individually if you are working alone, or in group, take some time to reflect on the painting you have chosen[2]. Some examples of possible types of refection are:

- What feelings does the painting produce in you? Fear, repugnance, tension, hope, freedom, beauty, order, etc...
- List your ideas that are associated with what is present in the painting. Brainstorming can be used to develop the lists. Remember the importance of listing the ideas that are obtained visibly using blackboard, flip chart etc...
- For example in the case of the "Birth of Venus" (Boticcelli) some ideas could be.

Nudity
Wind
Sea
Loneliness
Virginity
Birth
Pleasure
Genesis
Creation
Femininity
Aurora
Beginning
Unreality
Fantasy

Relation
Impulsion
Shell
Forest

- Try to interpret the painting, putting you in the place of the painter. If the meaning of the painting seems obvious, then analyze the composition, the colors, and the distribution of space; try to determine the school of the painting, etc... the objective is to develop a story based on the content of the painting that is shared by the group. If time permits, it is recommended that you allow a few days for each member of the group to study the painting, its distinguishing characteristics, its perspective, symbolic elements, find out more about the painter.
- To complete this phase, if no additional time is permitted for deeper study, the duration should be between 1 and 2 hours. If time is available for further study by the members of the group or sub-group, this time should be added on.
- Construct stories based on the contents of the painting. What or who does it look like? If it includes people, what are they doing? Try to think about what will happen immediately after the action portrayed in the painting. Think also about the past, what happened before the represented scene?

- Describe the painting in full detail, regardless if it is figurative, abstract, surrealist or classical. Tell what you see in the painting, describe the objects. Imagine the hidden meanings.
- Substitute one element for another. Interchange objects. Complete your perception.
- Modify the painting. Ask " what would happen if…"
- Eliminate objects, persons, colors, lines, shadows. Ask yourself, "what would happen if they were eliminated..."
- Exaggerate: take any element of the painting to its furthest extreme. Magnify some elements.
- Change the order. Put at the bottom what is at the top and vice versa. Imagine how the painting would look with these changes.
- What else might the painting represent apart from what is seen or expressed in the title? Is there any hidden reality? Study the painting carefully. Analyze the details.
- Combine the painting with another image or idea. Mix it with other paintings or images that you know. Comment on these changes.
- Adapt the painting to other styles. How would it look if it had been painted by an impressionist, or by a cubist? If the painting is abstract how could it appear real. And if it is figurative, how could be deformed?
- Turn the painting around. What do you see now? Is there another reality? Has any element changed radically?
- Come close to the painting. Study the details. Now move away. Do you now see something you did not see before?
- Think about the intentions of the painter. What did she or he want to represent? What were her or his intentions?
- Think of the feelings the painting stimulates in you. Take some time to analyze them individually, then share your opinions without judging with the other members.
- Is there a relation between the title of the painting and the content? Why?
- If there are people in the painting, imagine them talking? What would they say, what are they thinking?
- Try to find details that are initially difficult to perceive (hidden things, images with a double meaning, optical illusions etc..)
- What would you change if you painted the painting. What would you improve? Would you start again from a blank canvas, and do something completely different?

Step 4: force connections

Now play at forcing connections between the ideas obtained and the creative focus. This is, without doubt, the most important step in IDEART, as it is in all creative techniques, to connect the work done till now with the creative focus, that is, the formulation of our problem.

The ideas we have obtained must be juxtaposed to our focus, and through analogies and provocations help us to obtain unusual visions of the problem, and generate a great number of ideas and or solutions.

- In the case of the analogies, ask yourself "To what degree is our problem/focus like the painting, or like any aspect or vision of the painting? How would the painter resolve the problem? Is the solution in the painting? Try to connect the painting to the ideas associated with it and the creative focus. To do that, remember, it is fundamental to postpone judgment. Do not criticize any comment. Any association of ideas could be good. Give free reign to your imagination, and allow the other participants to do the same

It is important that the participants have the feeling that the session is a real game. If at any point this feeling is influenced by the pressure to produce results, then this technique will not work, nor will any other. The potential success of IDEART, as with any creative technique depends on the capacity of the participants to let the mind run free looking for unexpected connections, of sudden "Eurekas", and risky ideas.

Keep in mind that it is normal to feel disoriented, if it is the first time you experience this technique. The participants could think they are only wasting their time, or that nothing that is said has anything to do with the problem. Do not lose hope, insist on the idea of playing with the concepts in a relaxed attitude, fomenting the intuition. If the session finishes without any clear results, do not feel discouraged. Perhaps some hours or days later, a very interesting idea might appear, as a result of the incubation in the unconscious mind.

- Write down the ideas that you most liked. Connect them graphically to the creative focus
- Construct mind maps using drawings or idea associations that lead towards solutions or new perspectives of the focus.
- Ask yourself “what relation exists between any of the ideas generated during the analysis of the painting and my problem?”
- Construct analogies: “My creative focus is like (blank) because (blank).”
- Challenge yourself: “Why cannot our product be like (blank). Tend towards the impossible and then analyze if in this utopian situation there are any elements that could be made real.
- Combine ideas, although at first they appear absurd, then reproduce them graphically whenever possible.
- Close your eyes and observe what appears in your mind. Any strange figures of graphic relationships? Any concrete symbols? An abstract idea? Try to see the possible relationship between these mental images and your problem.
- Relax and enjoy the experience.

Step 5: Incubation

In general it is not recommended to take decisions during the session. The symbolic content of the paintings and the forced connections obtained during the session will continue to have an affect on the mind of the participants after the session has finished. It is important, then, to celebrate a second meeting to evaluate and take decisions. At this meeting the participants should be asked if they have any additional ideas to present and if any new thoughts have occurred to them since the first session with respect to the creative focus that they worked at that time. Normally, if the first session was carried out well and the participants are reasonably motivated, there will be new contributions to analyze.

However, if you believe (or the team thinks) that a second session is not necessary, then it is the time to begin making the connections, or at the same time as the description of the painting. There is no “best” way of working. Each team will have to discover its own most effective style.

The session leader will then list on the blackboard the new ideas, and include then with the list developed in the first session.

Step 6: Decision making

It should be time to reap the fruits of the efforts of the group. Ask each member of the group to choose the three best ideas. Then have them distribute 100 points among their choices (e.g. 50, 25, 25) Add the points of all the ideas and rank the ideas. Consult with the members to see if they agree. Do not leave out any ideas. Leave 30 minutes for discussion of the possible disagreements that might arise over the ranking.

References

[1] De Bono, Edward (1992), Serious creativity: using the power of lateral thinking to create new ideas, Harper Business

[2] Mattimore, Bryan W. (1994) 99% inspiration. New York.

[3] Michalko, Michael (1991) Thinkertoys, Berkeley.

[4] Michalko, Michael (1999) Cracking creativity, Berkeley.

[5] Ponti, Franc (2001) La empresa creativa, Barcelona.

End Notes

[1] IDEART was developed in 2001 by Franc Ponti, through mixing and reformulating different pre-existent creative techniques, as Provocations, Analogies, Mindmapping and Creative Drawings.

[2] Creativity can be defined as the capacity of generating multiple ideas for a concrete purpose. Innovation is the capacity of applying these ideas to create something new.

[3] The pictures for an IDEART session can be selected in many different ways. Sometimes it may be interesting to choose them at random. But more often the responsible for the session adapts the selection to the special characteristics of the creative focus.

Industry-Government Relations In A Knowledge-Based Economy: The Role of Constructed Advantage

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Abstract

Mayors of cities and enterprise managers around the world are being challenged by the globalizing knowledge economy. Traditional modes of analysis have long relied on ideas of comparative advantage in which growth and competition was generated on the backs of natural or local resources. More recent modes have emphasized the need for scale, scope and market access. However, neither of these has been sufficient to either assist decision makers in transitional economies (such as those in Central and Eastern Europe) nor have they been of practical use in explaining the emergence as economic forces of locales such as Singapore, Hong Kong or the Republic of Ireland. A central set of resources that does appear to be key to these areas are the abilities of local decision makers and leaders to turn knowledge, skills and competencies into sustainable advantage. This process being one of constructing advantage which we see as the nexus between industry and government at a number of levels. We see this as unpacking the content of the "black box" of knowledge technology, services and manufacturing at the local level within a global context.

An advantage of this approach is that the linkages between the firm, the employed, support institutions such as universities and colleges and local, regional national and supra national governance can be usefully unbundled, their interactions more clearly understood, and their roles more clearly defined. This has significant implications for the formulation of both public policy and firm strategy.

As an example of these regions around the world is themselves are seeking to construct advantage. The European Union has embarked on an eighteen month experiment to identify the defining assets of "smart" cities. In North America thirty-four locales have already been designated as smart towns for example San Jose, California. In Canada the Mayors of the largest eight cities are currently working with industry leaders to identify unique, i.e. region specific strategies for the future based on constructed advantage. Finally, in Korea a series of five year plans have been drawn up to ensure a knowledge intensive and vibrant industry government relationship.

Our paper speaks to the nature of this interaction and to the development of a new framework for understanding them.

Introduction

Today, in the quest for sustainable development and growth, the regional and local dimensions of innovation are receiving far more attention than in the recent past. [de la Mothe and Paquet, 1998; Acs, 2001; Cooke 2001] Numerous authors have ascribed this to a variety of reasons.

Differing Emphases

Some have found that globalization, the changing nature of competitiveness, and the emergence of multi-level governance (such as the European Union) have forced multinational firms to re-evaluate the importance of regional embeddedness as an integral part of their global strategies.

Other [e.g. Krugman 1995] have highlighted that evidence, particularly regarding transformative technologies such as information and communication technologies (ICT) and biotechnologies [de la Mothe and Paquet, 1998; de la Mothe and Niosi, 1999; de la Mothe and Cimoli 2002], strongly suggests that national frontiers constrain economies *less* as they become more geographically specialized.

Still others tend to focus on processes – for example, either on the complexity of economic (socio-technical) processes in the tradition of a Schumpeter or a Boulding [Ryecroft and Kash 1999] or on the specificity of technologies and their investment/ production/or diffusion patterns in terms of trajectories or regimes [Carlsson 2002; Nelson and Winter 1982].

Implicit in most of these analyses is a view of the role of governments, their policies and their impact on the decision making and strategy of firms operating in the environment.

Stanbury [1990] articulates a powerful, traditional yet static, framework of industry-government relations in which conflict and contractual relations prevail In his view, across all fields of industry-government interaction, both represent monolithic and well defined organizations the views of which are intractable and essential – by definition – opposed. This is a nonsense.

Strange [1996], adopting a more comprehensive approach to shifting patterns of hegemony, prefers to more realistically explore the growing role of non-state authorities (including INGOs) whose power or influence deeply affect the shape of industry-government relations. In so doing she fractures several aspects of more traditional approaches

Dunning *et. al.* [1997] prefers to look through the macro-organizational lens. But here, though impressive in scope of coverage, there appears to be very little or no fodder for industry strategists or government decision makers to aid their deliberations. The industry-government interaction is strongly implied but nowhere is it x-rayed or illuminated.

Throughout, we can find politics and outcomes, but analytically we can find no interaction between industry and government. We find no adjustment or cooperation. We find no decision makers.

The Re-Emergence of Regions

In part this is because we are in the midst of an important framework shift.

Comparative Advantage

Until the early 1980s, discussions about industry-government relations were often embedded within a larger macro framework of comparative advantage. This idea, associated most often with David Ricardo and trade theory, essentially said that the trade and production profiles or performances of nations could be explained based on 'what they had'. Thus, notions of value added and thus domestic productivity (predicated on what would now be recognized as a elementary Cobbs-Douglas production function ($Q=f(K,L)$) linked trade with the internal operations of a national economy. This allowed analysts to make the casual observation that Canada would export products that were, for example, 'rich' in natural resources while Portugal, say, would export wine. Each would have an array of natural comparative advantages and each would trade with and export to a variety of nations in order to acquire what they didn't have. The history of imperialism and colonialism is replete with such explanations. However, even though Ricardo himself often spoke eloquently about the role of government with particular attention to technical improvements, the overarching industry-government presumption within comparative advantage is one of laissez-faire market operations and therefore of limited government intervention in the economy.

Competitive Advantage

By the mid-1970s, however, visible cracks were appearing in the economic models and frameworks that characterize pure comparative advantage. Some of the cracks are associated with the so-called Leontiev Paradox.

Wassily Leontiev noted that by considering comparative advantage, countries with a large labor supply would naturally export goods that were labor intensive (e.g. China) while countries that were, say, technologically advantaged (e.g. the United States) produced and exported technologically advanced products. The paradox arose when the modern American economy exported labor intensive goods, along with the other G-5 countries, as well as technologically intensive goods.

Similarly, the Solow Paradox brought questions about comparative advantage to the fore by noting a central weakness of neo-classical economics – which again is prominent in defining decision-makers' assumptions regarding industry-government relations. That weakness is the failure to acknowledge technological change as being endogenous to economic growth. The paradox, as Robert Solow saw it, was that technology was indeed everywhere in the economy, except in the productivity statistics.

Together, these observations (which gained wide recognition in the 1980s) served to help clarify the analytic diaspora of the time of oil shocks, coming off the gold standard and Bretton Woods, the relative flattening of world industrial output and trade at a time of dramatic increasing investments in intangible services, research and development, etc..

However it was the popular work of Michael Porter in the 1980s and early 1990s that help *augment* comparative advantage theory (along with Paul Krugman's work on strategic trade policy). Specifically, in relation to this article, Porter expanded our thinking by looking at *competitive* advantage of firms in which distributed supply chains and the role of large domestic markets became accepted as being central to explanations of inter-firm and firm-market success. This general framework is sometimes as referred to as 'the Porter diamond', while business analysts in smaller domestic markets, such as the case of Rugman and d'Cruz' for Canada, have posited 'the double diamond' in which Canada – which features a high standard of living, economic activity and technological sophistication – can analytically augment its competitive advantage by including the U.S. domestic market as a proxy for a domestic market. (Remember that the US takes 85% of Canadian exports and that the North American Free Trade Agreement of 1989 was importantly oriented towards smoothing intra-firm trade transactions, not increasing inter-firm trade. [This was a goal of the NAFTA.] (de la Mothe and Ducharme, 1990)

But again, no insights into the dynamics of economic activity are really evident from the perspective of competitive advantage. Firms and industries are present, but decision makers are absent, and analytic results are described *post facto*. Trends thus become destiny (as long as, or especially if, you agreed with what happened and it fit into your view of encourageable government intervention and industry-government interaction).

Constructed Advantage

Taken together, neo-Ricardian notions of comparative advantage coupled with a Porter's ideas on competitive advantage do indeed provide more of a view of the new competition. [Best 1990] But they do so more from the point of view of emergence and decline. Their analytic observations do not embrace the new dynamics of innovation and the capability (Grant 1991) to exploit them which are keys to growth.

The New Competition

From	*To*
Prices	Re-definition of manufacturing
Costs	Re-definition of core business
Costs of Capital	Core Competencies
Exchange Rates	Lean (vs craft or mass) production
Productivity	Re-definition of value added
Inward Investment	Changing patterns of innovation
Savings	Social innovation
	Expanded value chain

These new dynamics of competition centrally impose a reconsideration and a re-engagement of industry-government relations. One possible way of exploring this dynamic is through the notion of constructed advantage.

Some Characteristic of Constructed Advantage

A focus on

- Recognition that economic growth and activity is local
- Local industry and multi-level government relations
- Knowledge (research, development, innovation, intangible services)
- Industry-government relationships in which cooperation, partnerships, collaboration, and networking create value
- Role of national government shifts from 'top down picking winners' (subsidies and protectionism) to 'backing local leaders'
- Local leadership
- Availability of both physical and 'smart' infrastructure
- Access to smart money (venture capital, inward foreign direct investment)
- Full variety of skilled people

'Constructed advantage' is both a conceptual approach to the governance of economic growth and activity and an strategic approach of utility to local businesses and policy makers.

Conceptually, it acknowledges that growth is local and lumpy. That is to say that while a nation is expected to grow at a rate of, say, 4%, in the next year, this does not mean that everyone in that nation will experience that benefit. In Canada, unemployment in Toronto might be 5% while that on the west coast of Newfoundland might well be nearer 20% or more. The same could be said for Ireland or various counties in England.

Similarly, foreign direct investment will be attracted to localities that are prepared, that have people, skills, infrastructure, technologies, access to multiple levels of financing (from love capital and angel investors to venture capital), and so on. [Acs 1999; Acs and de la Mothe 2000] In this sort of approach, industrial districts [Marshall 1906] and clusters [Porter 1999] are central sites of activity but they are augmented by focusing on knowledge-based activity. This is reflected in the emerging literature on local innovation systems a la Cooke and Acs.

In a real sense, the constructed advantage approach not only gets well beyond the Porterian requirement for a large domestic market, it gets beyond the Ricardian separation of domestic and export performance, and begins to allow a viable explanation to emerge for the incredible rise of micro states like Singapore, the re-emergence of regions like Ireland, and the construction of corridors like Silicon Valley. All of these examples have rapidly developed into 21st century performers in which industry-government relations are symbiotic.

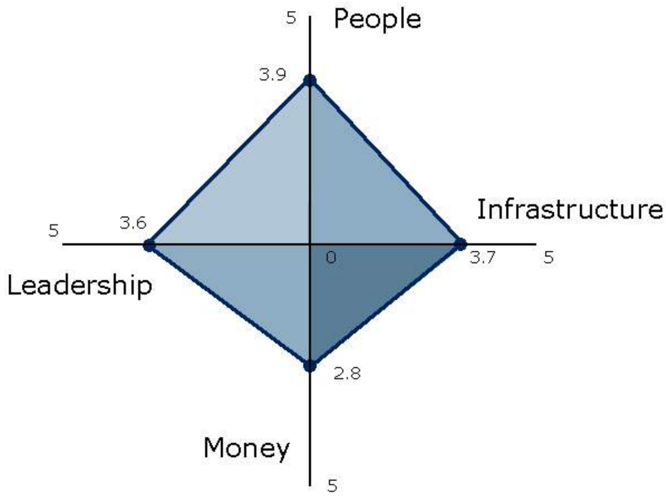
This academic realization has been preceded by local decision makers who were perhaps tired of waiting for national solutions to local slowdowns, unemployed, and the kind of industrial declinism noted by Pavitt [1986], Bluestone[1987], Sabel and Piore [1990], Best [1990] etc..

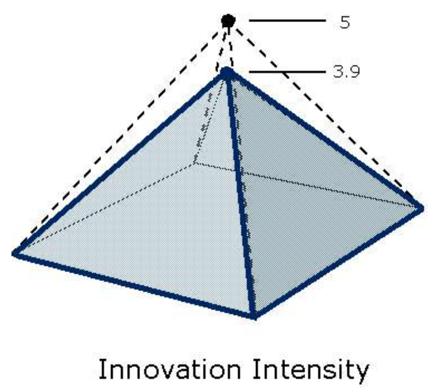
Local leaderships have begun to embrace the idea of 'smart cities' world wide'. Any web search will easily reveal more than 1600 'hits' of smart city projects. Some, such as SMART-Cities.net, promote sustainable development by providing an information exchange of best practices for city renewal between Europe and Asia. Others have given cities like Southampton UK 'pathfinder status' as a leading European city and is focusing on developing smart card technologies for better, more integrated, governance. Still others, like Edmonton Alberta in Canada have developed a vision for the city as an international smart city where businesses chose to locate. Its composite plan involves business and industry plans (focusing on biotech, forestry, high tech, information technology, manufacturing, oil and gas), smart research and technology agencies and councils, a smart workforce, a smart culture (with a vibrant night life, theatre, etc.), and recreation facilities. Here we can see clearly a blend of comparative advantage (with the continuing recognition of natural resources), competitive advantage (with a recognition of the international marketplace), constructed advantage (with the emphasis on created knowledge based activities and value), and the complementary roles of private sector, educational and community agencies, and multi-level government agencies and adaptive programs.

TechAction Town Hall Meetings

In recognition of the importance of constructing advantage in an increasingly competitive knowledge-based international economy, the Canadian Advanced Technology Alliance (CATA), which represents 42 firms, has undertaken a series of TechAction Town Hall Meetings. Organized in conjunction with the city mayors, CATA has – with KPMG and IPSOS (survey specialist) conducted in-depth telephone interviews with approximately 100-150 local CEOs, managers, and firm directors. They have also published one page 'write in' invitations in local papers for anyone in the community that has a view as to the strengths, weaknesses, character, and future of the community. Facilitated Town Hall meetings are then carried out with discussions – by the community, for the community – dealing with four key elements. These are leadership, people, money and infrastructure. Some of the aggregated views for 5 cities are represented below, and these discussions have led communities to share views as to who should do what in their quest to ensure a vibrant future and in their quest to construct advantage through dynamic industry-government relations.

CALGARY ALBERTA





Access to :	People	Leadership	Infrastructure	Money
St. John’s	3.69	3.5	3.5	2.79
Halifax	3.74	3.3	3.3	2.67
Ottawa	3.6	3.89	3.74	3.06
Waterloo	3.99	3.32	3.65	2.89
Calgary	3.9	3.6	3.7	2.8
Vancouver	3.6	2.99	3.37	2.69

Note bene: The optimal score is 5 for each category, and each response comes from the impressions of 150 leading business and government individuals chosen by each city’s mayor in consultation with the Canadian Advanced Technology Alliance (CATA).

Conclusion

This paper while acknowledging the breadth and depth of work related to developing and exploiting sources of advantage of both the nation state and individual firms operating within and between them argues that there has been an artificial or false dichotomy drawn between them. Nation states with few exceptions have focussed on what has been variously termed “industrial policy” or a “development agenda” which seems to us has restricted the scope of the dialogue between the managers of firms and government and focussed discussion of advantage too narrowly. Typically this has led to the separation of domestic and international performance, into protection of domestic firms rather than facilitating the development of a resource and capability base to exploit in international markets.

The notion of constructed advantage, we argue, fractures this dichotomy and goes someway towards explaining the incredible rise in economic performance of, for example Singapore or the Republic of Ireland. By doing so we acknowledge the emergence of local or regional leadership and the more dynamic and constructive policy dialogue which is driving the generation of wealth by producing new sources of advantage.

References

[1] Bo Carlsson, 2002, *Technological Systems in Biotechnology*, Kluwer Academic, Boston

[2] Charles Sabel and Michael Piore, 1990, *The Second Industrial Divide*, Harvard University Press, Cambridge MA.

[3] John de la Mothe and Mario Cimoli, 2002, “Technology, Growth and Development”, in John de la Mothe (ed.), 2002, *Science, Technology and Governance*, Continuum, London

[4] John de la Mothe and Louis Marc Ducharme (eds.), 1990, *Science, Technology and Free Trade*, Pinter, London

[5] John de la Mothe and Gilles Paquet (eds.), 1998, *Information, Innovation and Impacts*, Kluwer Academic, Boston

[6] John de la Mothe and Jorge Niosi (eds.), 1999, *The Social and Economic Dynamics of Biotechnology*, Kluwer Academic, Boston

[7] John Dunning, 1997, *Structural Change in the International Economy*, Routledge, London

[8] Keith Pavitt (ed.), 1986, *Technological Innovation and Industrial Decline in Britain*, Macmillan, London

[9] Michael Best, 1990, *The New Competition*, Harvard University Press, Cambridge MA.

[10] Michael Porter, 1990, *The Competitive Advantage of Nations*, New York

[11] Paul Krugman, 1995, *Pop Internationalism*, MIT Press, Cambridge MA.

[12] Philip Cooke, Patries Boekholt and Franz Tödtling, 2001, *The Governance of Innovation in Europe*, Pinter, London

[13] Richard Nelson and Sidney Winter, 1982, *Economic Theory and Technical Change*, Belkap Press (Harvard), Cambridge MA.

[14] Robert Ryecroft and Don. E. Kash, 1999, *The Complexity Challenge*, Pinter, London

[15] Susan Strange, 1996, *The Retreat of the State*, Cambridge University Press, Cambridge

[16] William Stanbury, 1990, *Government-Business Relations in Canada*, Methuen, Toronto

[17] Zoltan Acs, 1999, *Innovation in Small and Medium Sized Firms*, MIT Press, Cambridge

[18] Zoltan Acs (ed.), 2001, *Regional Innovation, Knowledge and Global Change*, Continuum, London

Influences on Aviation Employees' Performance in South East Asia: A Multivariate Analysis of Job Satisfaction Variables

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Abstract

This study examines the concepts of job satisfaction in relation to the international airline industry in South East Asia, specifically looking at ground crews. The research will identify whether independent variables such as age, education level, length of employment and job security have a significant relationship to an employee's satisfaction with the job whilst cultural variables are held constant.

Literature Review

While much of the traditional job satisfaction research (Seymour and Busherhof, 1991; Carr and Kazanowski, 1994; DeSantis and Durst, 1996) demonstrates that employees generally want stable employment, opportunities for promotion and satisfactory compensation, some recent research of employees (Daley, 1986; Emmert and Taher, 1992) show that such things as flexible working hours, social satisfaction and the characteristics and behaviours of superiors also have an affect on employees' satisfaction levels. The results of such studies support the idea that job satisfaction is a product of many different variables operating on the employee (DeSantis et al., 1996).

A great deal of the research on this issue has been dominated by the purported 'structural' or job related explanation of job satisfaction. Such explanation centres on the attributes of 'good' jobs as the principal factors explaining worker satisfaction. This approach contends that two fundamental categories of job characteristics are of crucial importance in attaining satisfaction among workers: the job's internal rewards such as having diverse and challenging work, and the job's external rewards such as fair compensation and fringe benefits (Hertzberg, Mausner, Peterson and Capwell, 1957; Hertzberg, Mausner and Snyderman, 1959).

Although the Herzberg model is well documented, more recent investigations into job satisfaction have questioned the utility of the two-dimensional model and sought a more interactional approach. Specifically, the works of Kalleberg (1977), Lee and Wilbur (1985), and Martin and Hanson (1985) propose that the characteristics of the employee interact with the internal and external characteristics depicted in the structural model. The realisation that personal characteristics (i.e. age, education, gender and job security) have a distinct affect on job satisfaction implies that job satisfaction may perhaps be more a result of the 'fit' between employee needs and work requirements on the one hand and the actual job characteristics on the other. Blackburn and Bruce (1989), suggest that 'quality of work life' factors have a comparatively diminutive impact on job satisfaction levels as compared to the 'personal' factors of age, length of service and education.

Job satisfaction is a combination of cognitive and affective contentment for an individual within a company. Affective satisfaction is that founded on an overall positive emotional assessment of the employee's job. This satisfaction focuses on their mood when working; i.e., whether the job evokes a good mood and positive feelings while working. Positive feelings or a positive mood displayed by the employee may indicate job satisfaction. Conversely, cognitive satisfaction is satisfaction that is established on a more logical and rational appraisal of the job conditions. Therefore, cognitive satisfaction is an assessment based on comparisons that do not rely on emotional judgments, but are evaluations of conditions, opportunities and/or outcomes (Moorman, 1993).

Social scientists have consistently established that job satisfaction differs with age for both women and men in various occupations (Weaver, 1980; Rhodes, 1983; Lee et al., 1985; Lowther, Gill, and Coppard, 1985; Kacmar and Ferris, 1989; Snyder and Dietrich, 1992; Ang, Goh and Koh, 1993).

Based on a broad review of the literature on age, Rhodes (1983) concluded that overall job satisfaction is positively and linearly related with age. Older workers appear to evince greater satisfaction with their employment than younger workers; however, this form of relationship is not clear. While many studies suggest a linear relationship (Weaver 1980; Lee et al., 1985; Mottaz 1987), other studies (Herzberg et al., 1957; Kacmar et al., 1989) reported a U-shaped relationship. Another alternative is that of Kalleberg and Loscocco (1983) who suggest that satisfaction increases until age 40 then levels off, and then increases again when employees reach their late 50s. According to Doering, Rhodes and Schuster (1983) significant variations frequently are found across age, with older employees tending to report higher job satisfaction than younger employees. Nevertheless, research carried out in the Australian aviation industry by Reudavey (2001) identified no relationship between job satisfaction and age.

Employees express their desire to sustain their position exercising their capabilities such as knowledge, ability and education within the organisation in which they spend most of their time. Employees who do not, or cannot, meet their expectations with regard to their job become dissatisfied, and this dissatisfaction inevitably has an effect on the organisation for which the employee works.

According to Kuntz, Bora and Loftus, (1990) research concentrating on the association between job satisfaction and education has had inconsistent results. Research carried out by Quinn and Mandilovitch (1975) and Glenn and Weaver (1982) reveals a positive relationship between job satisfaction and education. An inverse relationship between job satisfaction and education has been identified in research carried out by Campbell, Converse and Rodgers (1976) and Gruneberg (1980). However, no relationship was found between job satisfaction and education in the research conducted by Reudavey (2001), Wright and Hamilton (1979) or King, Murray and Atkinson (1982).

Comparing the length of employment with job satisfaction raises issues that are important to understand. This relationship is not only indicative of the employee's understanding of how the current employer views the worker, but also how prospective employers can perceive them. According to Shaffer (1987) an employee who has been working for a number of years has qualities and experience that can make one a valuable asset, not only to their present company but also to many other organisations. If employees are praised and rewarded consistently by the current organisation for their work, the employee more often than not takes no action to look for other employment (Shaffer, 1987). When related to job satisfaction, length of employment can also be associated with other variables such as the ability to work and relate with co-workers and customers (Shaffer, 1987). Positive job satisfaction on the part of the employee has been shown to reduce irregular attendance at work, the need for the replacement of workers, resignations and the occurrence of accidents. With such specific benefits, it is not surprising that an employee's job satisfaction within an organisation is closely related to length of service (Lam, Zhang and Baum, 2001). However, according to preceding research conducted by Reudavey (2001) an inverse relationship between job satisfaction and length of service has been demonstrated in the Australian aviation industry.

The most important element of job satisfaction according to Khaleque and Chowdhury (1983) is that of job security. Job security relates to the extent to which an organisation is perceived to provide steady employment for employees (Herzberg, 1968). Job security has also been defined by Greenhalgh and Rosenblatt (1984) and Borg and Elizur (1992) as an employee's expectations about continuity in their job, as well as concerns over a loss of enviable job features, promotion opportunities, present working conditions and long-term career opportunities. It is considered also that the perception of understanding of an employee's job security has increased over the past decade, due to employee reactions to major organisational change such as the situational uncertainty of employees' jobs resulting from globalisation, downsizing, takeovers and or mergers (Brockner, DeWitt, Grover and Reed, 1990).

Throughout major organisational changes such as buyouts, downsizing, globalisation, takeovers and/or mergers, the most threatened set of employee expectations is that of job security. Accordingly, it is crucial for employers to comprehend how a likelihood of organisational change threatens the employee's psychological and cognitive feelings (Davy, Kinicki, Kilroy and Scheck, 1988). Research evidence supports the stance that job security is one of many variables which is positively correlated with job satisfaction (Reudavey, 2001; Arnold and Feldman, 1982; Oldham, Julik, Ambrose, Stepina and Brand, 1986).

Research Methodology

The purpose of the present study was to undertake an examination of job satisfaction of ground crew members in the international aviation industry in Singapore; this is a preliminary investigation as a precursor to a broader study of job satisfaction in the South East Asian aviation industry.

A quantitative research methodology was applied in the study, specifically to assist in finding answers to the research questions via a mailed survey. After an examination of the literature and the empirically tested questionnaires available to the researcher, the Minnesota Satisfaction Questionnaire (MSQ) was chosen for use in this research. Numerous researchers have provided support for the validity and reliability of this questionnaire (Warr, Cook and Wall, 1979; Cook, Hepworth, Wall and Warr, 1981; Kulik and Oldham, 1988).

The major research questions to be resolved are:

(1) Is there any relationship between job satisfaction and the employees' age?
(2) Is there any relationship between job satisfaction and employee's education level?
(3) Is there a relationship between the job satisfaction and employees' length of service?
(4) Is there a relationship between the job satisfaction and employees' job security?

Data analysis and Interpretation

This section contains analysis and interpretation of data obtained during the present research project. As mentioned previously, a quantitative method has been utilised in this study, to allow the researchers to test specified hypotheses derived from the research questions. The specific hypotheses and overall results after testing of the hypotheses was conducted using non-parametric correlations, are detailed in Table 1.

Table 1: STATISTICAL TEST RESULTS

Hypotheses		n	Test	Significance	Correlation Coefficient	Decision
H_o 1:	There is no relationship between job satisfaction and age.	200	Spearman correlation	.532	.045	Reject
H_o 2:	There is no relationship between the job satisfaction and education level.	200	Spearman correlation	.059	-.136	Accept
H_o 3:	There is no relationship between job satisfaction and length of service.	200	Spearman correlation	.229	.123	Reject
H_o 4:	There is no relationship between job satisfaction and job security.	200	Spearman correlation	.000	.510	Accept

A detailed discussion on the methods used to either accept or reject each hypothesis follows.

Job Satisfaction and Age

The first research question examined whether there was any relationship between the job satisfaction and employee's age. This was investigated using Spearman's correlation (see Table 2). Spearman's correlation coefficient between job satisfaction and age was .045 with a significance value (p-value) of .532.

Table 2: JOB SATISFACTION AND AGE

Correlations

			MEANSAT	Age of respondent
Spearman's rho	MEANSAT	Correlation Coefficient	1.000	.045
		Sig. (2-tailed)	.	.532
		N	197	194
	Age of respondent	Correlation Coefficient	.045	1.000
		Sig. (2-tailed)	.532	.
		N	194	196

Thus, there is no evidence of any relationship between job satisfaction and age; therefore the researcher accepts the null hypothesis that there is no relationship between job satisfaction and age. The current research findings are contrary to those of Rhodes (1983), Lee et al. (1985), Mottaz (1987) and Weaver (1978, 1980) who noted a linear relationship between age and satisfaction. However, the current findings support the previous aviation industry research findings of Reudavey (2001).

Job Satisfaction and Education Level

The second research question sought to identify a relationship between the level of job satisfaction and the employee's education level. The respondent's highest level of education completed was entered as the independent variable with job satisfaction as the dependent variable (see Table 3). The significance value (p-value) was .059, which is significant at the .10 level between the job satisfaction and the highest level of education, with a negative correlation of .136.

Table 3: JOB SATISFACTION AND EDUCATION LEVEL

Correlations

			MEANSAT	Highest level of education completed
Spearman's rho	MEANSAT	Correlation Coefficient	1.000	-.136
		Sig. (2-tailed)	.	.059
		N	197	194
	Highest level of education completed	Correlation Coefficient	-.136	1.000
		Sig. (2-tailed)	.059	.
		N	194	197

As the above results indicate a negative relationship at the .10 level, the researcher rejects the null hypothesis that there is no relationship between education level and job satisfaction. Therefore, the conclusion is that job satisfaction and education are related in a negative manner in this occupation. This is consistent with the conclusions of Campbell et al. (1976) and Gruneberg (1980). These results do not support those of Oldham et al. (1986) or Arnold et al. (1982) whose research suggests that job satisfaction and education are positively related. Nor do the current research findings support the research findings of Reudavey (2001) whose research indicated no relationship existed between job satisfaction and education level in the aviation industry.

Job Satisfaction and Length of Service

In order to determine if any relationship exists between job satisfaction and the employee's length of service, and to allow for the possibilities of non-linear relationships, the non-parametric Spearman's correlation test was used (see Table 4). The Spearman's correlation between the job satisfaction and the length of service identified a significance value (p-value) of .229, with a correlation coefficient of .123.

Table 4: JOB SATISFACTION AND LENGTH OF SERVICE

Correlations

			MEANSAT	Length of time employed by aviation company
Spearman's rho	MEANSAT	Correlation Coefficient	1.000	.123
		Sig. (2-tailed)	.	.229
		N	197	97
	Length of time employed by aviation company	Correlation Coefficient	.123	1.000
		Sig. (2-tailed)	.229	.
		N	97	100

The evidence above tends to favour the acceptance of the null hypothesis; therefore, the researcher accepts the third null hypothesis that there is no relationship between job satisfaction and the length of service. The above research supports the findings of O'Rielly and Roberts (1975) and Bedeian, Farris and Kacmar (1992). Conversely, these results do not support the findings of Reudavey (2001) whose research identified a weak negative relationship between job satisfaction and length of service.

Job Satisfaction and Job Security

The fourth and final research question investigates whether there is any relationship between the level of job satisfaction and the employee's perceived level of job security. The question pertaining to job security asked respondents to indicate their level of satisfaction or dissatisfaction about 'the way my job provides for steady employment'. The Spearman's correlation (see Table 5) between the job satisfaction and the length of service identified a significance value (p-value) of .000 with a correlation coefficient of .510.

Table 5: JOB SATISFACTION AND JOB SECURITY

Correlations

			MEANSAT	The way my job provides for steady employment
Spearman's rho	MEANSAT	Correlation Coefficient	1.000	.510**
		Sig. (2-tailed)	.	.000
		N	197	197
	The way my job provides for steady employment	Correlation Coefficient	.510**	1.000
		Sig. (2-tailed)	.000	.
		N	197	199

**. Correlation is significant at the .01 level (2-tailed).

The evidence of the above tests clearly favours the rejection of the fourth null hypothesis that there is no relationship between job satisfaction and job security The researcher concludes that there is a relationship between job satisfaction and job security; a finding which supports the research of Reudavey (2001), Oldham et al. (1986) and Arnold et al. (1982) which reported that job security is positively correlated with job satisfaction.

Conclusion

Support from the literature strongly suggest that job satisfaction is an important contributing factor to an organisation's success. Understanding factors that contribute to an employee's job satisfaction is imperative for managers and their organisations. Numerous researchers have documented relationships between age, education, length of service, job security and job satisfaction.

The current research involved an exploration of a number of variables (age, education, length of service and job security) and the level of job satisfaction of South East Asian aviation employees. Overall, the results indicated positive relationships between job satisfaction and both education level and job security: whereas those of age and length of service were not statistically significant within this research.

On the whole, looking at the current research results in relation to education level and job satisfaction, the results do support the work of Campbell et al. (1976) and Gruneberg (1980). However the current results do not support those of Oldham et al. (1986) or Arnold et al. (1982) whose research indicated a positive relationship between the two variables. The current results also do not support those of Reudavey (2001) whose previous research indicated no relationship between job satisfaction and education in the Australian aviation industry. Within the current research a statistical relationship was identified between job satisfaction and job security. This result supports the work of Reudavey (2001), Oldham et al. (1986) and Arnold et al. (1982) whose research identified a positive relationship between the two variables.

Overall, no relationship was found to exist between job satisfaction and age in the current research. This find does not support the work of Rhodes (1983), Lee et al. (1985) Mottaz (1987) and Weaver (1978, 1980) whose research indicated a linear relationship. However, the current results do support the previous research carried out by Reudavey (2001). No relationship was found between job satisfaction and length of service. The current results support the work of O'Reily et al. (1975) and Bedeian et al. (1992). However, the current results do not support the results of Reudavey (2001) whose previous research indicated a weak negative relationship between job satisfaction and length of service.

It would appear, that from the literature review and previous research, there does not seem to be a consistent explanation as to which variables reliably affect employees' job satisfaction. Therefore, it would appear to the researchers that each industry might have a different weighting of variables that affect job satisfaction of employees. In that case, it would be necessary to undertake research in each industry to determine which variables affect job satisfaction of employees in that industry. In the light of globalisation such research also may need to be cognizant of cultural variables.

References

[1] Ang, K. B. Goh, C. T. Koh, H. C. 1993, "The impact of age on the job satisfaction of accountants", *Personnel Review*, vol. 22, no. 1, pp. 31-39.

[2] Arnold, H. and Feldman, D. 1982, "A multivariate analysis of the determinants of job turnover", *Journal of Applied Psychology*, vol. 67, no. 3, pp. 350-360.

[3] Bedeian, A. G. Farris, G. R. and Kacmar, K. M. 1992, "Age, tenure, and job satisfaction: A tale of two perspectives", *Journal of Vocational Behavior*, vol. 40, no. 1, pp. 33-48.

[4] Blackburn, J. W. and Bruce, W. M. 1989, "Rethinking concepts of job satisfaction: The case of Nebraska municipal clerks", *Review of Public Personnel Administration*, vol. 10, no. 1, pp. 11-28.

[5] Borg, I. and Elizur, D. 1992, "Job insecurity: Correlates, moderators and measurement", *International Journal of Manpower*, vol. 13, no. 2, pp. 13-26.

[6] Brockner, J. DeWitt, R. Grover, S. and Reed, T. 1990, " When it is especially important to explain why: Factors affecting the relationship between managers' explanations of a layoff and survivors' reactions to the layoff", *Journal of Experimental Social Psychology*, vol. 26, no. 4, pp. 389-407.

[7] Campbell, A. Converse, P. and Rodgers, W. 1976, *The Quality of American Life*, Russell Sage, New York.

[8] Carr, K. K. and Kazanowski, M. K. 1994, "Factors affecting job satisfaction of nurses who work in long-term care", *Journal of Advanced Nursing*, vol. 19, pp. 878-883.

[9] Cook, J. D. Hepworth, S. J. Wall, T. D. and Warr, P. B. 1981, *The experience of work: A compendium and review of 249 measures and their use*. Academic Press, Inc., New York.

[10] Daley, D. 1986, "Humanistic management and organizational success: The effect of job and work environment on organizational effectiveness, public responsiveness, and job satisfaction", *Public Personnel Management*, vol. 15, no. 2, pp. 31-142.

[11] Davy, J. Kinicki, A. Kilroy, J. and Scheck, C. 1988, "After the merger; Dealing with people's uncertainty", *Training and Development Journal*, vol. 42, no. 11, pp. 56-61.

[12] DeSantis, V. S. and Durst, S. L. 1996, "Comparing job satisfaction among public- and private-sector employees", *American Review of Public Administration*, vol. 26, no. 3, pp. 327-344.

[13] Doering, M. Rhodes, S. R. and Schuster, M. 1983, *The Aging Worker*, Sage, Beverly Hills.

[14] Emmert, M. A. and Taher, W. A. 1992, "Public sector professionals: The effect of public sector jobs on motivation, job satisfaction and work involvement", *American Review of Public Administration*, vol. 22, no. 1, pp. 37-48.

[15] Glenn, N. D. and Weaver, C. N. 1982, "Enjoyment of work by full-time workers in the United States, 1955 and 1980". *Public Opinion Quarterly*, vol. 46, no.4, pp. 459-470.

[16] Greenhalgh, L. and Rosenblatt, Z. 1984, "Job insecurity: Toward conceptual clarity", *Academy of Management Review*, vol. 9, no. 3, pp. 438-448.

[17] Gruneberg, M. 1980, “The happy worker: An analysis of educational and occupational differences in determinants of job satisfaction”, *American Journal of Sociology*, vol. 86, no. 2, pp. 247- 271.

[18] Herzberg, F. Mausner, B. Peterson, O. and Capwell, D. P. 1957, *Job attitudes: Review of the research and opinion,* Psychological Service of Pittsburgh, Pittsburgh, PA.

[19] Herzberg, F. Mausner, B. and Snyderman, B. 1959, *The motivation to work*, Wiley, New York.

[20] Herzberg, F. 1968, *Work and the Nature of Man,* Crosby, London.

[21] Kacmar, K. M. and Ferris, G. R. 1989, “Theoretical and Methodological Considerations in the Age-Job Satisfaction Relationship”, *Journal of Applied Psychology,* vol. 74, no. 2, pp. 201-207.

[22] Kalleberg, A. 1977, “Work values and job rewards: A theory of job satisfaction”, *American Sociological Review*, vol. 42, no. 1, pp. 124-143.

[23] Kalleberg, A. L. and Lascocco, K. A. 1983, “Aging, Values and Rewards: Explaining Age Differences in Job Satisfaction”, *American Sociological Review*, vol. 48, no. 1, pp. 78-90.

[24] Khaleque, A. and Chowdhury, N. 1983, “Perceived importance of job facet and over all job satisfaction of top and bottom level industrial managers”, Paper presented at the proceedings of the third Asian Regional Conference of the International Association for Cross-Cultural Psychology, Bang, Malaysia.

[25] King, M. Murray, M. and Atkinson, T. 1982, “Background, personality, job characteristics and satisfaction with work in a national sample”, *Human Relations* vol. 35, no. 2, pp. 119-133.

[26] Kulik, C. T. and Oldham, G. R. 1988, “Measurement of Job Characteristics: Comparison of the Original and the Revised Job Diagnostic Survey”, *Journal of Applied Psychology,* vol. 73, no. 3, pp. 462-466.

[27] Kuntz, K. A. Borja, M. E. and Loftus, M. K. 1990, “The effect of education on foodservice manager job satisfaction”, *Journal of the American Dietetic Association*, vol. 90, no. 10, pp1398-11402.

[28] Lam, T. Zhang, H. and Baum, T. 2001, “An investigation of employees' job satisfaction: the case of hotels in Hong Kong”, *Tourism Management*, vol. 22, no. 2, pp. 157-165.

[29] Lee, R. and Wilbur, E. 1985, “Age, education, job tenure, salary, job characteristics, and job satisfaction: A multivariate analysis”, *Human Relations*, vol. 38, no. 8, pp. 781-791.

[30] Lowther, M. A. Gill, S. J. and Coppard, L. C. 1985, “Age and the determinants of job satisfaction”, *The Gerontologist*, vol. 25, no. 5, pp. 520-525.

[31] Martin, J. and Hanson, S. 1985, “Sex, family wage-earning status, and satisfaction with work”, *Work and Occupations*, vol. 12, no.1, pp. 91-109.

[32] Moorman, R. H. 1993, “The influence of cognitive and affective based job satisfaction measures on the relationship between satisfaction and organizational citizenship behavior”, *Human Relations*, vol. 46, no. 6, pp. 759-775.

[33] Mottaz, C. 1987, “Age and Work Satisfaction”, *Work and Occupations*, vol. 14, no 3, pp. 387-409.

[34] Oldham, G. Julik, C. Ambrose, M. Stepina, L. and Brand, J. 1986, “Relations between job facet comparisons and employee relations”, *Organizational Behavior and Human Decision Processes*, vol. 38, no 1, pp. 28-47.

[35] O'Reilly, C. A. and Roberts, K. H. 1975, “Individual differences in personality, position in the organization and job satisfaction”, *Organizational Behavior and Human Performance*, vol. 14, no. 1, pp. 144-150.

[36] Quinn, R. and Mandilovitch, M. 1975, *Education and Job Satisfaction: A Questionable Payoff*. Survey Research Center, University of Michigan.

[37] Reudavey, P. G. 2001, *An Examination of Job Satisfaction and Employee Motivation of Ground Crew Staff within Ansett Australia*, Working Paper Series, School of Management, Curtin University of Technology.

[38] Rhodes, S. R. 1983, “Age-Related Differences in Work Attitudes and Behaviors: A Review and Conceptual Analysis”, *Psychological Bulletin*, vol. 93, no. 2, pp. 328-367.

[39] Seymour, E. and Buscherhof, J. R. 1991, “Sources and consequences of satisfaction and dissatisfaction in nursing: findings from a national sample”, *International Journal of Nursing Studies*, vol. 28, no. 2, pp. 109-124.

[40] Shaffer, G. S. 1987, “Patterns of work and nonwork satisfaction”, *Journal of Applied Psychology*, vol. 72, no. 1, pp. 115-123.

[41] Snyder, R. A. and Dietrich, F. H. 1992, “Age/job satisfaction: Assessment of the shape of the relationship from a systems perspective”, *Personnel Review*, vol. 21, no. 1, pp. 39-45.

[42] Warr, P. Cook, J. and Wall, T. 1979, “Scales for measurement of some work attitudes and aspects of psychological well-being”, *Journal of Occupational Psychology*, vol. 52, no. 2, pp. 129-148.

[43] Weaver, C. N. 1978, “Black-White Correlates of Job Satisfaction”, *Journal of Applied Psychology*, vol. 63, no. 2, pp. 255-258.

[44] Weaver, C. N. 1980, “Job Satisfaction in the United States in the 1970s”, *Journal of Applied Psychology*, vol. 65, no. 3, pp. 364-367.

[45] Wright, J. and Hamilton, R. 1979, “Education and job attitude among blue-collar workers”, *Sociology of Work and Occupations*, vol. 6, no. 1, pp. 59- 83

Integrating Twelve Dimensions of Negotiating Behavior and Hofstede's Work-Related Values: A Six-Country Comparison

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Abstract

We relate Hofstede's cultural values dimensions to negotiating behavior in six countries using a 12 dimension framework. To test relationships between the cultural values and negotiating dimensions we undertook a systematic review of prior work on negotiating behaviors Japan and five of its major trading partners: the USA, Germany, China, Mexico and Brazil. We classified each country's behavior on twelve negotiation dimensions according to a high, medium, low scheme. Next, we ranked each of the six countries according to their index values on Hofstede's five dimensions of cultural variability: power distance, individualism, masculinity, uncertainty avoidance, and long-term orientation. Out of 12 hypothesized relationships, we found strong support for four of the relationships and moderate support for six others using a nonparametric measure of correlation. By linking cultural variations in twelve dimensions of negotiating behaviors to Hofstede's framework, we provide managers with a synthesizing frame that enables more effective negotiation.

Introduction

Forty years of cross-cultural research on negotiating behaviors has created an embarrassment of riches. As data accumulate, the search for comprehensive synthesis seems not only appealing as a means of facilitating understanding but also a necessary element of true knowledge creation.

In the following analysis, we relate Hofstede's dimensions of cultural variability to cross-cultural negotiating behavior in six countries. We propose that a careful application of Hofstede's framework to the large body of work on cross-cultural negotiating behavior is a first step in simplifying and clarifying our level of understanding.

Cultural variation has long been recognized as a key background factor in models of international negotiation [25]. Interestingly, a review of the country-specific negotiation literature revealed scant effort to relate dimensions of cultural variability to the large body of work that exists regarding negotiating behavior.

To test the approach, the authors undertook a systematic review of prior work on the negotiating behavior of six countries – Japan and five of its major trading partners USA, Germany, China, Mexico and Brazil. We began by reviewing the literature for negotiating styles in each of the six countries, thereby developing a comprehensive understanding of the "typical" negotiating behavior in each country. We classified each country's behavior on twelve negotiation dimensions according to a high, medium, low scheme. Next, we ranked each of the six countries according to their index values on Hofstede's five dimensions of cultural variability: power distance, individualism, masculinity, uncertainty avoidance, and long-term orientation. We propose a set of relationships between Hofstede's dimensions and each country's negotiating behaviors, which are supported by the existing body of research. We then test these relationships via nonparametric measures of correlation. We found that negotiating behaviors cluster around one or more of the Hofstede dimensions.

In 1985 Weiss and Stripp [31] proposed a framework for analyzing cross-cultural negotiations. In 1998, they proposed a refinement of the original framework [30]. The framework consisted of 12 dimensions, grouped into five categories: two dimensions were categorized as relating to a general model or concept of negotiation; three dimensions referred to aspects of negotiator roles; negotiator dispositions relating to negotiation interactions encompassed three more; three other dimensions related to aspects of the negotiation process; finally, one dimension related to negotiation outcomes. Although the original framework was proposed more than fifteen years ago, to date no empirical investigations of its validity have been published. Perhaps one of the reasons that the framework has not been empirically validated is that a number of the dimensions incorporated concepts that were not mutually exclusive or that could not be traced along a bipolar continuum.

By contrast, work replicating the validity of Hofstede's working related cultural values is extensive, numbering more than 1500 published studies. Surprisingly, few of these studies have attempted to organize knowledge of cultural differences in negotiating behaviors.

In the following sections, we present a refinement of the Weiss and Stripp framework. Each dimension has been recast to fit a bipolar continuum. Additionally, in consultation with Weiss, we sought to ground the dimensions more firmly in the negotiation and communications literature while remaining faithful to the aims and content of the original framework.

Basic Concept of Negotiation: Distributive vs. Integrative

This dimension refers to how each party views the negotiating process.

Distributive Perspective

Negotiators from countries that fit this profile believe that there will be one winner and one loser [21]. Negotiators take a hard-line approach, seeking to meet only their own goals or interests, in order to maximize the benefit for their side [20]. The goal is to induce the other party to change their attitudes and positions, which may be accomplished either by using promises or threats or by remaining polite and neutral [4,11]. The atmosphere may be contentious or frustrating and a competitive outlook dominates, as negotiators focus on the need for the other party to concede [8].

Integrative Perspective

Negotiators from countries that fit this profile believe that mutually beneficial solutions can be generated. Consequently, integrative negotiators take a problem-solving approach, where the focus is on exchanging information in order to identify the underlying issues and interests of both sides and to generate outcomes that benefit both parties. Through the process of exchanging information, both parties react to each other's arguments and adjust their initial stances on the issues [24]. Negotiators reach agreement not by compromise (giving in) but by employing creative problem-solving approaches to develop solutions that expand the size of the pie available to everyone.

The negotiating behaviors described above correspond to behaviors observed along Hofstede's Masculinity/Femininity value dimension. According to Hofstede, members of masculine cultures are driven to win and are more likely to resolve conflicts through competition. Masculine business practices emphasize survival of the fittest. Business people from masculine cultures are aggressive, competitive, assertive, and decisive. Compromise and cooperation are not goals because a compromise entails giving up part of one's desires, which translates into a loss relative to what could have been won [15]. On the other hand, members of feminine cultures are more likely to resolve conflicts through problem solving. Feminine business practices can be cooperative. Business people from feminine cultures are cooperative, accustomed to seeking consensus, and intuitive rather than decisive [15]. Consequently, we propose that

H_{1a}: Countries with high scores on Hofstede's masculinity index will adopt a basic concept of negotiations that is distributive.

H_{1b}: Countries with low scores on Hofstede's masculinity index will adopt a basic concept of negotiations that is integrative.

Most Significant Type of Issue: Task vs. Relationship-Based

This dimension refers to the types of issues negotiators spend more time discussing.

Task

Negotiators from countries where task issues are more important spend most of their time discussing specific operational details of the project, as opposed to broad objectives. They tend to negotiate a contract in an item-by-item way [29]. Negotiators feel that it is important to come away with a clear understanding regarding the control, use, and division of resources (e.g. profits, management, ownership).

Relationship

Negotiators from countries where relationship issues are more important spend most of their time engaging in activities that build trust and friendship between the members of each team and discussing broad objectives (e.g. the intent of the parties to work together and mutual long-term interests). A good relationship must be established before task issues can be discussed. As the social relationship develops, task issues will be blended in and eventually resolved [29].

According to Hofstede [15], separating the people from the issues, which, as noted above, is common among negotiators with a task frame view, assumes an individualist value set. In collectivist cultures, where relationships prevail over tasks, it is impossible to separate the people from the issues at hand. Hofstede [15] also states that, in collectivist cultures, "*the personal relationship prevails over the task*…and should be established first," whereas in individualist cultures, "*the task…[is] supposed to prevail over any personal relationships*."

H_{2a}: Cultures high in Individualism will place greater emphasis on task issues during negotiations.

H_{2b}: Cultures low in Individualism will place greater emphasis on relationship issues during negotiations.

Selection of Negotiators: Abilities vs. Status

This dimension refers to the criteria each party uses to select members of the negotiating team.

Abilities

Managers from achievement-based cultures consider job-specific skills or substantive expertise, which they believe is relevant to a particular negotiation, when selecting members of the negotiating team. Examples of relevant skills or expertise include education, technical or scientific knowledge, legal training, vocational achievement, negotiating experience, or language fluency. Consequently, negotiating teams from achievement-based cultures may consist largely of technical advisers and people that have demonstrated proficiency and are knowledgeable about the project at hand [28].

Status

Managers from status-based cultures consider who the candidates are and whom the candidates know, when selecting members of a negotiating team. Examples of relevant characteristics include family background, influential connections, seniority, age, or gender [28]. Consequently, negotiating teams from status-based cultures may consist largely of senior, high-ranking officials, who wield considerable influence in their organizations, and who may also command great respect in the community at large [19,28].

Hofstede [15] proposes that Power Distance affects the importance of the status of the negotiators. According to Hofstede, low Power Distance cultures tend to minimize the importance of inherited privilege and status. Roles in the organizational hierarchy can change; a person who is someone's subordinate today may become his boss tomorrow. People at all levels in the organizational hierarchy earn respect on the basis of how effectively they perform their assigned tasks and how adequate their knowledge is. Age is neither respected nor feared. On the other hand, in high Power Distance cultures, inequality among people is expected and desired. Superiors in the organizational hierarchy are viewed as being superior people. Respect is based on seniority and high status in the organizational hierarchy. Older people are held in high regard.

Consequently, we propose that

- **H_{3a}:** Cultures demonstrating high power distance will emphasize status over ability in the selection of negotiators.
- **H_{3b}:** Cultures demonstrating low power distance will emphasize ability over status in the selection of negotiators.

Influence of Individual Aspirations: Collectivist vs. Individualist

This dimension refers to the emphasis negotiators place on the achievement of individual goals and the need for individual recognition.

Individualist

Individualist negotiators are emotionally independent from the organization to which they belong. Negotiators may strive to achieve outcomes that are in their own best interests. They may also keep the organization's interests and goals in mind but will do so because they expect personal reward and recognition for their decisions [28].

Collectivist

Collectivist negotiators have a strong sense of identity with and loyalty to their organization. Consequently, they will strive to achieve outcomes that are in the organization's best interest and will do so with no expectation of personal recognition or gain. The negotiating team will assume joint responsibility and/or receive joint recognition for actions taken or decisions made [20].

The negotiating behaviors described above correspond to behaviors observed along Hofstede's Individualism/Collectivism value dimension. According to Hofstede [15], employees in individualist cultures are expected to act rationally according to their own interests. Consequently, work tasks are organized in such a way that the employee's self-interest and the employer's interests coincide. On the other hand, employees in collectivist cultures are expected to act in accordance with the interests of the organization, which may or may not coincide with employees' individual interests.

- **H_{4a}:** Negotiators from individualist cultures will be strongly influenced by individual aspirations.
- **H_{4b}:** Negotiators from collectivist cultures will be strongly influenced by collectivist aspirations.

Internal Decision-Making Process: Independent vs. Consensus

This dimension refers to the system that negotiators use to reach decisions within their teams.

Independent

Leaders or other influential individuals on the negotiating team may make decisions independently without concern for the viewpoints of others on the team.

Consensus

Decision-making power is delegated to the entire team. The team leader must obtain support from team members and listen to their advice.

According to Hofstede [15], cultures with high Uncertainty Avoidance scores tend to demonstrate a preference for consultative decision processes and group decision-making. On the other hand, cultures with low Uncertainty Avoidance scores tend to demonstrate a preference for independent decision processes and individual decision-making. Consequently, we propose that

H_{5a}: Cultures high in Uncertainty Avoidance will adopt internal decision-making processes that require consensus.

H_{5b}: Cultures low in Uncertainty Avoidance will adopt independent internal decision-making processes.

Orientation Toward Time: Monochronic vs. Polychronic

This dimension refers to the value each party places on the use of time. Hall [14] identified two culturally derived concepts of time as being important to international business: monochronic or polychronic.

Monochronic

Negotiators from monochronic cultures believe that time is money. They set agendas for meetings and adhere to preset schedules. They schedule how long they will stay in another country for a series of meetings, which creates psychological pressure of having to arrive at a decision by a certain date [14]. They believe that outstanding or contentious issues in a negotiation should be resolved effectively within an allotted time frame. Negotiators from monochronic cultures also tend not to mix business with pleasure; they separate task-oriented time from socio-emotional time.

Polychronic

Negotiators from polychronic cultures believe that time is never wasted. They feel that taking the time to get to know their counterparts and building a relationship is more important than adhering to a preset schedule. The actual clock time spent discussing and resolving issues is of minor importance. They tend to integrate task-oriented activity with socio-emotional activity.

According to Hall [13], whereas people in monochronic cultures adhere religiously to plans, "matters in polychronic culture seem in a constant state of flux. Nothing is solid or firm…even important plans may be changed right up to the minute of execution. These monochronic and polychronic behaviors seem to correspond to behaviors observed along Hofstede's Uncertainty Avoidance value dimension. Hofstede [15] notes that cultures high in Uncertainty Avoidance seek clarity and structure, whereas low Uncertainty Avoidance cultures are comfortable with ambiguity and chaos. Consequently, we propose that

H_{6a}: Cultures high in Uncertainty Avoidance will demonstrate a preference for monochronic time.

H_{6b}: Cultures low in Uncertainty Avoidance will demonstrate a preference for polychronic time.

Risk-Taking Propensity: Risk Averse vs. Risk Tolerant

This dimension refers to negotiators' willingness to take risks.

Risk Averse

Risk-averse negotiators will take steps to avoid the risk of failing to come to an agreement [3]. Consequently, they may be more likely to make concessions in order to avoid the risk of failing to come to an agreement [9]. Alternatively, they may accept lower rewards for a higher probability of success [22].

Risk Tolerant

Risk-tolerant negotiators adopt a perspective that there is a level of acceptable risk that should be taken in a negotiation. They are interested in reducing risk, rather than avoiding it altogether. Risk-tolerant negotiators show greater willingness to run the risk of failing to come to an agreement by making fewer concessions or by demanding more [3]. Consequently, they may be less likely to make concessions in order to avoid the risk of failing to come to an agreement [9]. Alternatively, they may likely to choose a strategy that offers higher rewards but has a lower probability of success [22].

Kahn and Sarin [18] propose that the same psychological factors that lead to risk aversion also lead to uncertainty avoidance. Furthermore, they suggest that ambiguity accentuates the effects of risk aversion. Hofstede also suggests a relationship between risk aversion and uncertainty avoidance. Cultures with tendencies toward lower Uncertainty Avoidance accept not only familiar but also unfamiliar risks, whereas cultures with high Uncertainty Avoidance scores tend to limit the risks they take to those that are known [15]. Consequently, we propose that

H_{7a}: Negotiators from high Uncertainty Avoidance countries will employ risk-averse negotiating behaviors.

H_{7b}: Negotiators from low Uncertainty Avoidance countries will employ risk-tolerant negotiating behaviors.

Basis of Trust: External to the Parties vs. Internal to the Relationship

Trust is one party's belief that the other party will take action to honor agreements that have been reached [32]. In all cultures, trust provides the foundation upon which both parties to a negotiation can work together; however, negotiators from some cultures trust that the other party will fulfill its obligations because there is a signed contract and the sanction of law to back it up, while negotiators from other cultures trust that the other party will fulfill its obligations because of the relationship that exists between them.

External to the Parties

Negotiators trust the other party because a contract has been negotiated and agreed to, which can be litigated and enforced [7]. The legal system and governmental agencies are viewed as providing an adequate, reliable, and effective underpinning for commercial transactions. A partner will honor the terms of the contract because the legal system will impose sanctions otherwise. The written word is binding; a deal is a deal [28]. In this context, a trustworthy partner is simply one who complies with the law.

Internal to the Relationship

Negotiators trust the other party because they have invested in a relationship that has been built up over time and they believe that the other party is committed to it. The relationship between the parties is what matters; the contract is simply a symbol of the bond between the parties who drafted it [29]. Consequently, less emphasis is placed on detailed, written contracts. Negotiators expect that the other party will consider unique and changing circumstances over the life of the relationship. A trustworthy partner is one who strives to maintain the relationship, possibly by modifying an existing contract to reflect new developments [28].

In cultures where the legal system and governmental agencies are viewed as providing an adequate, reliable, and effective underpinning for commercial transactions, trust in the legal system enables parties who don't know each other well to do business with each other [7]. Consequently, trust in the legal system reinforces behavior that is consistent with behavior in low Uncertainty Avoiding cultures – a greater willingness to take unknown risks and to enter into unknown ventures with parties that are not well known [15]. On the other hand, in cultures where institutionalized law is inadequate for underpinning transactions with any sense of reliability, lack of trust in legal systems and government institutions, pushes organizations to deal with parties whom they know well [33]. The preference for dealing with only those whom one knows and limiting risks to those that are known is consistent with behavior in high Uncertainty Avoiding cultures [15]. This leads us to propose that

H_{8a}: Negotiators from high Uncertainty Avoidance countries will base trust in relationships.

H_{8b}: Negotiators from low Uncertainty Avoidance countries will base trust in systems external to the relationship.

Concern with Protocol: Formal vs. Informal

This dimension has to do with the importance that members of a culture place on the existence of and adherence to rules for acceptable self-presentation and social behavior [31].

Formal

Negotiators from countries where there is a high concern for protocol will adhere to strict and detailed rules that govern personal and professional conduct, negotiating procedures, as well as the hospitality extended to negotiators from the other side. Rules governing acceptable behavior might include dress codes, use of titles, and seating arrangements [31]. Negotiators on the team believe that there are few appropriate ways to respond to a particular situation and there is strong agreement on the team about what constitutes correct action. Team members must behave exactly according to the norms of the culture and suffer severe criticism for even slight deviations from norms [26].

Informal

Negotiators from countries where there is a relatively low concern for protocol adhere to a much smaller, more loosely defined set of rules. Compulsive attention to observing the rules isn't necessary and those who deviate from norms are not necessarily criticized. Team members not only believe that there are multiple ways to respond appropriately to a particular situation but also may even have conflicting ideas about what is appropriate [26].

Hofstede and Usunier [16] propose that negotiators from uncertainty-avoiding cultures prefer highly-structured, ritualistic procedures during negotiations. People in high uncertainty avoiding cultures seek structure and formalization, in an attempt to make interactions and events transpire in a clearly interpretable and predictable manner. On the other hand, people in low uncertainty avoiding cultures are tolerant of ambiguity in structures and procedures [15].

H_{9a}: High Uncertainty Avoidance cultures will demonstrate a high concern for formal protocol during negotiations**H_{9b}:** Low Uncertainty Avoidance cultures will demonstrate a low concern for formal protocol during negotiations

Style of Communication: High-Context vs. Low Context

This dimension refers to the degree to which people rely on nonverbal cues to convey and to interpret intentions and information in dialogue [30]. During a conversation, what is actually said carries only a part of the meaning of a message. Nonverbal cues, such as facial expressions, gestures, and movements, provide additional meaning. Nonverbal cues provide context for communication in all cultures; however, some cultures are more reliant on and attuned to these contextual cues than are others [2].

High Context

Negotiators from high context cultures are more sensitive to and reliant on non-verbal cues. They will tend to use language that is indirect, ambiguous, and understated [28]. High context negotiators expect their partners to pick up on and to understand unarticulated intentions and feelings, subtle gestures, and other nonverbal or environmental cues [2]. Negotiators from high-context cultures will take it personally when the other party offers direct criticism of their company, its products, their work, or the proposal they have put on the table. High context negotiators will not conclude agreements with business partners whom they do not like [27].

Low Context

Negotiators from low context cultures are less likely to notice and understand non-verbal cues. The communicator is direct and to the point, using language that is precise, open, and frank [28]. Low context negotiators are literal and often fail to perceive nonverbal cues [2]. While low context negotiators may prefer to do business with people whom they like, it is possible for them to conclude agreements with people whom they do not like personally.

According to Gudykunst and Ting-Toomey [12], high context communication is used primarily in collectivist cultures, whereas low context communication is used predominantly in individualist cultures. Hofstede [15] concurs and also notes that things, which are self-evident in collectivist cultures, must be communicated explicitly in individualist cultures.

H_{10a}: Negotiators from individualist cultures will employ a low context style of communication.

H_{10b}: Negotiators from collectivist cultures will employ a high context style of communication.

Nature of Persuasion: Factual-Inductive vs. Affective

This dimension refers to the type of evidence negotiators use to develop persuasive arguments.

Factual-Inductive

Factual-inductive negotiators base their arguments on empirical facts and use linear logic (if-then statements) to persuade the other party [17]. Proof used to support persuasive arguments includes such things as scientific evidence, professional standards, expert opinion, costs, market value, and other hard data [5]. Factual-inductive negotiators believe the strongest case is made by presenting their best arguments first.

Affective

Affective negotiators may base their arguments on abstract theory, ideals, references to status and relationships, and / or appeals to sympathy [1,10]. Evidence used to support persuasive arguments includes such things as moral standards, equal treatment, tradition, and reciprocity [5]. Affective negotiators develop their arguments indirectly. They may start with peripheral arguments and present their best arguments last, after the other party has reacted [27].

According to Hofstede [15], cultures with low Uncertainty Avoidance scores tend to favor inductive reasoning – the development of general principals from empirical facts. On the other hand, cultures with high Uncertainty Avoidance scores tend to favor deductive reasoning – drawing conclusions about specific situations given a set of general principles. Consequently, we propose that

H_{11a}: Negotiators from countries with high Uncertainty Avoidance scores will rely on the affective form of persuasion.

H_{11b}: Negotiators from countries with low Uncertainty Avoidance scores will rely on the factual-inductive form of persuasion.

Form of Agreement: Explicit Contract vs. Implicit Agreement

This dimension refers to the preferred form of agreement between the parties: either formal written contracts or informal verbal agreements.

Explicit Contract

Negotiators favor and expect written, legally binding contracts [31]. A written contract records the agreement and definitively specifies what each party has agreed to do [28]. Consequently, negotiators believe that written agreements provide the stability that allows their organization to make investments and minimize the risk of business loss [6].

Implicit Agreement

Negotiators favor broad or vague language in a contract because they feel that definitive contract terms are too rigid to allow a good working relationship to evolve. Particularly with new relationships, negotiators may feel that it is impossible to anticipate and document every conceivable contingency. They may also believe that contracts inhibit the parties from exploring unexpected or unusual opportunities for improvement and success. Negotiators view the contract as a rough guideline, not because they want to evade responsibility but because the relationship, not the contract, is primary [28]. In some cases, an oral contract may suffice.

According to Hofstede [15], uncertainty-avoiding cultures tend to shun ambiguous situations and prefer structures that enable them to clearly predict and interpret events. Written agreements provide a clearly specified framework for the relationship; hence, they serve as an uncertainty reduction mechanism. Consequently, we propose that

H_{12a}: Cultures high in Uncertainty Avoidance will seek forms of agreement that are explicit.

H_{12b}: Cultures low in Uncertainty Avoidance will seek forms of agreement that are implicit.

Methodology

Negotiation Dimensions

To test the hypotheses, the authors undertook a systematic review of prior work on the negotiating behavior of six countries – Japan and five of its major trading partners USA, Germany, China, Mexico and Brazil. We began by reviewing the literature for negotiating styles in each of the six countries, in the process developing a comprehensive understanding of the "typical" negotiating behavior in each country. We independently classified each country's behavior on twelve negotiation dimensions according to a high, medium, low scheme. Although interrater reliability was high, we conducted a modified Delphi technique to resolve the few discrepancies in ratings that did occur.

Cultural Values Dimensions

Because we were working with only six countries and used a restricted range in the ratings, we adopted a similar approach with regard to the cultural values dimensions scores. We began by obtaining the six countries' index values on Hofstede's five dimensions of cultural variability: power distance, individualism, masculinity, uncertainty avoidance, and long-term orientation[15]. Using these index scores, we collapsed the range by rank ordering the countries on each value in accordance with their scores, with 1 being highest and 6 being lowest.

Analysis of the data consisted of a nonparametric rank order correlation. In which the cultural value rank was paired with the negotiation dimension score. Given the very small sample size, it was determined that a hypothesis would only be declared strongly supportive if the rank order correlation was 1, i.e., the rank ordering of cultural values matched perfectly the rank ordering of the negotiation dimension. In instances where only 1 of the pairings did not fit the hypothesized relationship and the ranking was off by only one position, these hypotheses were deemed to be moderately supported. Given that five of the six countries demonstrated the hypothesized relationship, this seemed a reasonable accommodation.

Finally, although an "a" and "b" hypothesis were reported for each dimension, this was done primarily for purposes of clarity in explicating the relationship between cultural value and negotiation dimension. In the analysis, only the "a" hypothesis was formally tested. As the "b" hypothesis presents the inverse of the "a" hypothesis, readers may infer that where "a" was proven, "b" also was proven.

Analysis

The analysis found support for ten of the twelve hypothesized relations. Four of the hypotheses found strong support. These were the hypotheses relating internal decision-making processes, orientation toward time, style of communication and the nature of persuasion. Six other hypotheses were moderately supported. These six hypotheses were most significant type of issue, influence of individual aspirations, risk-taking propensity, basis of trust, concern with protocol and form of agreement. Hypothesis 1, which focused on basic conceptions of negotiation, and Hypothesis 3, selection of negotiators, found no support.

Overall, these findings suggest strong support for the validity of the Weiss and Stripp framework as a means of identifying meaningful cultural variation across twelve dimensions of negotiation. Moreover, the findings also demonstrate the utility of Hofstede's cultural values in identifying a given culture's position on the various negotiation dimensions.

There are positive implications for negotiation researchers and practitioners alike. The framework provides managers with a useful tool to guide them in identifying what aspects of a cross-cultural negotiation are likely to vary. Because the framework is straightforward and can be aligned with cultural values, managers should be able to draw upon the extensive body of research replicating Hofstede's work to inform their understanding of negotiations. For negotiation researchers, the framework provides a similar benefit. Rather than approaching the study of negotiation in a given country as though it is distinct and unique, researchers can employ the framework to organize data in ways that will allow for comparison.

A study such as this which employs such a small sample size has obvious limitations. Three seem worthy of comment. As we noted at the outset, the body of literature detailing distinctive aspects of negotiation in specific countries is vast, but uneven in its quality and comparability. This presents a particular problem for scholars interested in drawing comparisons. Across the six counties included in this study there was significant variation in volume – extensive literature on Japan and China, significantly less on Brazil). Equally important, there was no common metric available for making comparisons. The intention of this paper was, in part, to test a framework that would allow for systematic comparison. One of the challenges in doing that was the absence of any agreed upon standards. Paradoxically, though lack of common metric is a limitation of this study, one of the contributions of this study is the initial development of some criteria upon which a metric can be established.

A second limitation of this study grows out of the first. Though interrater reliability within this study was not a substantive issue, the variability in quantity and quality of information on negotiation across the six countries does raise an issue of whether or not a different set of raters might have evaluated the countries differently with regard to the 12 dimensions. Given an approach that focused on reviewing the extant literature for negotiation in each country, raters were beset with having to compare and contrast differing vocabularies to describe what often appeared to be similar conceptions or behaviors. To address this issue, our research team is currently developing a questionnaire survey to be used with teams of expert panels in each country. The surveys will flesh out specific aspects of each of the 12 dimensions, thereby enabling a more fine-grained comparison within dimensions. Additionally, further work in this area would benefit from the collaborative efforts of multinational research teams that incorporate one or more experts on negotiation from each of the countries in the study.

A final limitation to this study was the small size of the sample. Even nonparametric statistical analysis is strained when sample sizes drop down to a single digit. As with Hofstede and the many researchers who have replicated his work, statistical analysis is made more credibly with a larger sample [15]. Out current research project includes Japan and its 25 largest trading partners in the sample. Though this number is still small by normal statistical standards, it represent a significant undertaking and should enhance the credibility of findings. An addition way to offset the issue of small sample size is to increase the number of respondents within each country. As noted above, our current research project addresses this issue by developing teams of expert panels.

Conclusion

This study is a first step toward approaching a vast body of information on negotiating behaviors, which lacked a clear structure, and giving it some coherence, thereby making it more accessible to managers. By linking cultural variations in twelve dimensions of negotiating behaviors to Hofstede's framework, we provide a synthesizing frame that enables more effective analysis of negotiation for scholar and more effective negotiation for practitioners. Moreover, linking the Hofstede dimensions to specific aspects of negotiating behaviors allows us to contextualize the application of cultural values dimensions, thereby avoiding the problem of sophisticated stereotyping [23]. Finally, our findings are presented in a form that facilitates comparison of negotiating behaviors between countries, enabling managers to relate negotiating behaviors of "new" countries to other countries with which they might be familiar.

References

[1] Adair, Wendi L. & Brett, Jeanne M. (2002). Culture and negotiation processes. In Michele J. Gelfand and Jeanne M. Brett, (Eds.), *Culture and Negotiation: Integrative Approaches to Theory and Research*. Palo Alto: Stanford University Press.

[2] Andersen, Peter. (2000). Cues of culture: The basis of intercultural differences in nonverbal communication. In Larry A. Samovar & Richard E. Porter, (Eds.), *Intercultural Communication: A Reader*. (pp. 258-269). Belmont, CA: Wadsworth Publishing.

[3] Bazerman, Max H. & Neale, Margaret A. (1992). *Negotiating Rationally*. New York: The Free Press.

[4] DeMente, Boye. (1987). *How to Do Business With the Japanese.* Lincolnwood, IL: NTC Business Books.

[5] Fisher, Roger & Ury, William. (1991). *Getting to Yes: Negotiating Agreement without Giving In,* New York: Penguin.

[6] Frankel, Robert, Whipple, Judith Schmitz & Frayer, David J. (1996). Formal versus informal contracts: achieving alliance success. *International Journal of Physical Distribution & Logistics Management, 26(3),* 47-63.

[7] Fukuyama, Francis. (1995). *Trust: The Social Virtues and the Creation of Prosperity*. New York: The Free Press.

[8] Gelfand, Michele, Nishii, Lisa H., Holcombe, Karen M., Dyer, Naomi, Ohbuchi, Ken-Ichi, & Fukuno, Mitsuteru. (2001). Cultural influences on cognitive representations of conflict: Interpretations of conflict episodes in the United States and Japan. *Journal of Applied Psychology, 86(6)*, 1059-1074.

[9] Ghosh, Dipankar. (1994). Tolerance for ambiguity, risk preference, and negotiator effectiveness. *Decision Sciences, 25(2)*, 263-280.

[10] Glenn, E.S., Witmeyer, D., & Stevenson, K.A. (1977). Cultural styles of persuasion. *International Journal of Intercultural Relations, 1(3)*, 52-66.

[11] Graham, John L. & Mintu-Wimsat, Alma. (1997). Culture's influence on business negotiations in four countries. *Group Decision and Negotiation, 6*, 483-502.

[12] Gudykunst, William B. & Ting-Toomey, Stella. (1988). *Culture and Interpersonal Communication*. Newbury Park, CA: Sage.

[13] Hall, Edward T. (1983). *The Dance of Life: The Other Dimension of Time*. New York: Anchor Books Doubleday.

[14] Hall, Edward T. & Hall, Mildred Reed. (1990). *Understanding Cultural Differences: Germans, French, and Americans*. Yarmouth, ME: Intercultural Press, Inc.

[15] Hofstede, Geert. 2001. *Culture's Consequences: Comparing Values, Behaviors, Institutions, and Organizations Across Nations. Second Edition.* Thousand Oaks: Sage Publications.

[16] Hofstede, Geert & Usunier, Jean-Claude. (1996). Hofstede's dimensions of culture and their influence on international business negotiations. In P. Ghauri & J.C. Usunier, (Eds.), *International Business Negotiations*. Oxford: Pergamon.

[17] Johnstone, Barbara. (1989). Linguistic strategies and cultural styles for persuasive discourse. In Stella Ting-Toomey & Felipe Korzenny, (Eds.), *Language, Communication, and Culture: Current Directions*. Newbury Park, CA: Sage Publications.

[18] Kahn, B.E. & Sarin, R. K. (1988). Modeling ambiguity in decisions under uncertainty. *Journal of Consumer Research*, *15(2)*, 265-271.

[19] Kras, Eva S. (1989). *Management in Two Cultures: Bridging the Gap Between U.S. and Mexican Managers*. Yarmouth, ME: Intercultural Press.

[20] Li, Ji & Labig, Chalmer E. Jr. (1996). Creative relationship-focused negotiations in international business. *Creativity and Innovation Management*, *5(2)*, 99-106.

[21] Mintu-Wimsatt, Alma & Gassenheimer, Julie B. (2000). The moderating effects of cultural context in buyer-seller negotiation. *The Journal of Personal Selling and Sales Management*, *20(1)*. 1-9.

[22] Moran, Robert T. & Stripp, William G. (1991). *Dynamics of Successful International Business Negotiations*. Houston: Gulf Publishing Company.

[23] Osland, Joyce S. & Bird, Allan. (2000). Beyond sophisticated stereotyping: Cultural sensemaking in context. *Academy of Management Executive, 14(1)*. 65-79.

[24] Putnam, Linda L. & Holmer, Majia. (1992). Framing, reframing, and issue development. In Linda L. Putnam & Michael E. Roloff, (Eds.), *Communication and Negotiation* (pp.128-155). Newbury Park: Sage Publications.

[25] Sawyer, Jack & Guetzkow, Harold. (1965). Bargaining behavior in international relations. In Herbert C. Kelman, (Ed.), *International Relations: A Social-Psychological Analysis*. New York: Holt, Rinehart, & Winston.

[26] Triandis, Harry C. (1995). *Individualism and Collectivism.* Boulder, CO: Westview Press.

[27] Triandis, Harry C. (1994). *Culture and Social Behavior*. New York: McGraw-Hill, Inc.

[28] Trompenaars, Fons. (1993). *Riding the Waves of Culture: Understanding Diversity in Global Business.* Burr Ridge, IL: Irwin Professional Publishing.

[29] Victor, David. (1992). *International Business Communication.* New York: Harper Collins Publishers.

[30] Weiss, Stephen E. & Stripp, William. (1998). Negotiating with foreign business persons: An introduction for Americans with propositions on six cultures. In Susanne Niemeier, Charles P. Campbell, & Rene Dirven, (Eds.), *The Cultural Context in Business Communication* (pp.51-118). Amsterdam: John Benjamins Publishing Company.

[31] Weiss, Stephen E. & Stripp, William. (1985). Negotiating with foreign business persons: An introduction for Americans with propositions on six cultures. #85-6, New York University: Graduate School of Business Administration.

[32] Wilson, David T. & Moller, K.E. Kristan. (1991). Buyer-seller relationships: Alternative conceptualizations. In Stanley J. Paliwoda, (Ed.), *New Perspectives on International Marketing* (pp.87-107). New York: Routledge.

[33] Yu, Tony Fu-Lai. (2001). The Chinese family business as a strategic system: An evolutionary perspective. *International Journal of Entrepreneurial Behaviour & Research, 7(1)*. 22-40.

International Compensation: Methodology to Study MNC Practice in Multiple Countries

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Abstract

Multi-country operation challenges company's human resource management and managing compensation. The theory suggests two opposite approaches to managing compensation – local and global approach. The first one lets the local managers decide on policies tied to locally specific culture. The second approach, global, sets common compensation practice across countries in order to achieve close alignment between corporate strategy and compensation of its employees.

This paper suggests methodology how to measure the extent to which multinational corporations adopt one or the other approach. It also suggests testing the difference between *intended* compensation policies and *actual* compensation practices. Furthermore, it asks how different components of compensation will be affected by influence of the local labor market.

The methodology suggested in this paper could be used as a base for further research on international compensation and bring interesting insight on how multinational corporations set and execute their compensation strategy in multiple markets.

Multinational companies play an ever-increasing role in the world and especially in the emerging markets. They are often praised for bringing much needed foreign direct investment into a country but sometimes criticized for not being locally sensitive enough. Unfortunately there is very limited research available that would look at this area from the compensation management perspective.

The goal of this paper is to propose an assessment methodology regarding whether compensation practices adopted by a subsidiary of a multinational company are tailored to local environment or are being pursued in a global approach. The paper seeks to provide methodology to measure to what extent multinational companies (MNCs) adopt common compensation approach to all markets they enter and to what extent do they adapt to local variations. Research based on this methodology could be a valuable insight into international compensation practice for managers with multi-country responsibility. Deeper understanding of compensation practices of multinational companies should thus provide better assessment of their impact on local countries in which they operate. Such information would useful both for academicians and practitioners setting and valuing international compensation strategy.

The text of this paper is divided into two parts. The first one sets compensation into the notion of globalization and introduces an issue of local versus global approach to managing compensation. The second part of the paper suggests a methodology analyzing the MNCs' practices in multiple countries.

For the purpose of this paper we use the following definition of a multinational company: MNC is a company with operations in multiple countries; with its business managed as a separate entity by local employees, and with corporate headquarters providing strategy and resources.

Globalization and Local versus Global Approach to Managing Compensation

In most countries of the world we can see an increasing presence of MNCs, companies often operating in several continents simultaneously. Triggered by a recent wave of free trade agreements, the number and size of such companies strongly increases.

A company's presence in multiple countries challenges the management style normally used in a single country market by increasing its complexity. MNCs benefit from the economy of scale but are challenged by an increasing decision whether to centralize their management processes or not. Centralization could imply cost savings effectiveness, but can be questioned by home country cultural specificity.

Managing Compensation: Global versus Local

Managing compensation plays an important role in the business success of an MNC. It usually forms a significant part of the overall costs and creates one of the most tangible links between employees and the organization.

Literature on international compensation suggests two extreme approaches on how MNCs respond to their multi-country presence [1]. In one extreme, a firm lets its managers to decide on the compensation issues locally in their home countries with a limited or no influence from the company's head quarters. In the second extreme, the firm takes advantage of already created internal processes and through guidelines and policies imposes these onto the countries of its subsidiaries. While the first, local approach, could leverage the culture-specific environment, the second, global approach, adopts practices that ensure best fit with the overall company strategy. The second approach is also often referred to as a strategic approach [2]. It is hard to expect that companies would adopt either of the two extremes in their pure form. This leads us to a question: To what extent do MNCs adopt a unique corporate policy and to what extent do they alter their policy from country to country? Thus our first hypothesis of the paper is:

Hypothesis 1: Multinational Companies adopt the same Policies and Practices in the various markets they are operating in.

Power of Local Markets

A foreign subsidiary does not operate in a closed environment but needs to interact with various stakeholders, e.g. to attract employees from the local labor pool. This suggests that any policy developed outside the host country would have to be validated by the local labor market practice, which would consequently have an influence on the decision making process of the MNC. This is what we refer to as the *power of local markets*.

Compensation Components. On the compensation level, observations suggest that various parts of the pay would be affected to different extent by *the power of local markets* - pressure of the local environment. For example, salary increases granted to manual workers covered by an industry union agreement would be determined by the local labor market rules rather than a decision decided on by headquarters. On the other hand, eligibility for the stock option program for middle management employees would more likely be determined by the company's corporate policy rather than by the forces of a single local market. This leads us to the second hypothesis that the national differences in the compensation policies of the MNCs will vary with the studied compensation component. In other words, we expect to see a different degree of cross-country practice variation for different parts of compensation (for an illustration, please see Figure 1).

Hypothesis 2: The comparability of the policies and practices across the countries will vary with the studied components of compensation.

Policies versus Practices. In the vast majority of companies, there exists internal guidelines that describe what compensation package is to be delivered to employees in the organization. These policies are used as a guide in compensation decision-making. In reality, however, these designed policies often differ from what is actually delivered to the employees. This is often due to power of the local markets as described earlier in the text. Thus while a company might have set common policies for numerous countries, the actual practices might deviate from these significantly.

Hypothesis 3: The actual compensation practices will show higher variations across countries than the formularized compensation policies.

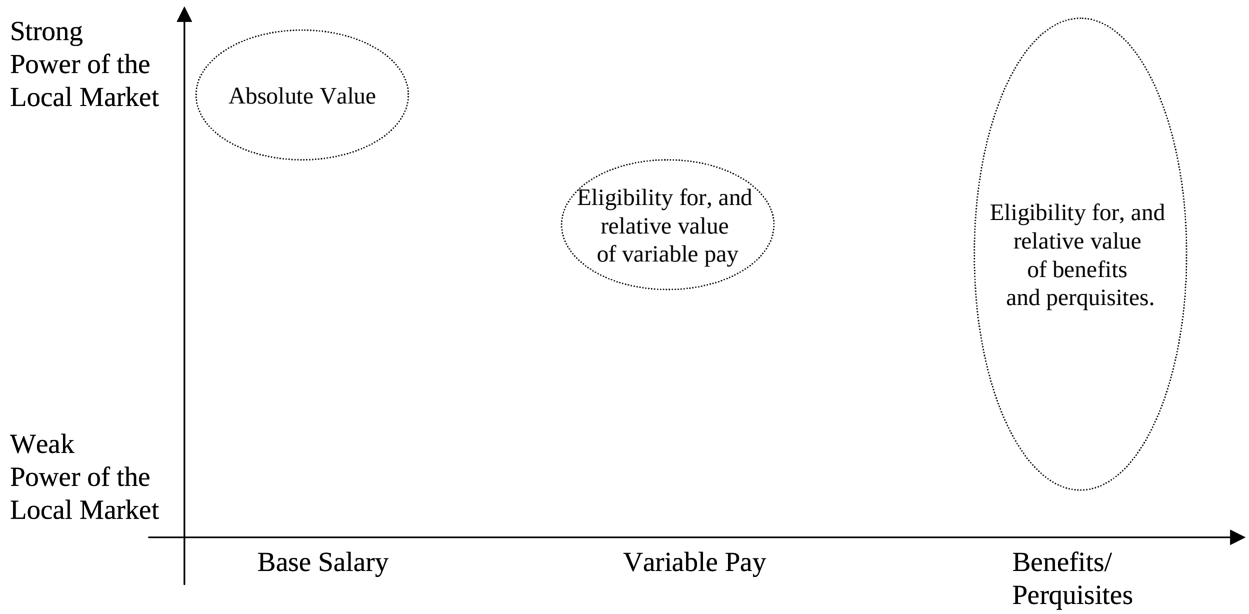

Fig 1: ILLUSTRATION ON THE INFLUENCE OF LOCAL MARKET ON COMPENSATION COMPONENTS

Variation in International Compensation: Assessment Methodology

To be able to assess the local differences in application of policies we will suggest a methodology to test the main three hypotheses. We would further narrow down the focus of the methodology to a content rather than context element of compensation and their main components of the compensation package. Following this, we will suggest general grouping of the data and outline statistical analysis. Then we will suggest what type of data needs to be collected. At the end, we will suggest what data collection method is it be used with desired sample characteristics.

Area of Study: Content versus Context

The hypotheses could be tested from a perspective of context and content. First perspective, context, signifies how is the compensation delivered to the employees (e.g. communicating the link between performance appraisal and the level of bonuses). The second perspective is to look at what is delivered to the employee (e.g. base salary or benefits). According to motivational theories, both content (e.g. Maslow and Herzberg) and context (e.g. Equity theory) play an important role in motivating and retaining high performance of the employees [3]. When comparing these two possible areas of research, we consider analysis of the context [4] to be more subjective and open to the interpretation than an analysis of the content that is usually expressed in dollar value figures. For the purpose of this paper we will be looking at the content rather than context side of the compensation management as this is seen to be more concrete and to a certain level it offers higher confidence in its objective measurement.

Content of Compensation

While one could consider intangible rewards (e.g. positive verbal feedback) as part of the total compensation, for the purpose of this study under the term of compensation we will understand "all forms of financial returns and tangible services and benefits employees receive as part of an employment relationship"[5]. The compensation will include 1. Guaranteed base salary, 2. Variable pay, 3. Benefits and 4. Perquisites. *Guaranteed base salary* is a salary for which the incumbent is eligible as a matter of holding the job. As a *variable pay* we define any payments in addition to guaranteed base salary for which an employee might be eligible. In reality, variable pay would be often linked to performance and would include bonuses, sales bonus, sales incentives, long-term incentives (such as stock option plans) and other forms of variable pay (e.g. gain sharing). *Company benefits* include any benefits provided by a company over the legally required benefits. The suggested benefits include medical, disability, and death benefits. Under the term *perquisites* we would normally include employee advantages such as club memberships, company cars or mobile phones.

Grouping the data

Depending on the countries in which this methodology is to be applied one can expect that different variables could affect the overall results. In general, we expect that the following groups might prove to be relevant:

- Employee level (Manual Workers, Professionals, Middle Management, Top Management)
- Type of the employees (Sales versus Non-sales)
- Nationality of parent company
- Ownership structure (e.g. Joint Venture, Subsidiary, Representation Office)
- Region (e.g. Western versus Eastern Europe)

It is recommended that the sample is further controlled by the following variables describing the studied operations: sales volume, number of employees, type of operation (e.g. sales and distribution or a research centre), and industry.

Statistical Analysis

There are two ways how to look at the practice of multinationals. The first one is to analyze to what extent the *practice of a single company* varies by country. The second way is to look at the variation of the *market practice* of the selected group of multinationals. Our analysis looks at the markets by country and analyses their practice against other markets.

The main goal of the analysis will be to assess if the mean practices vary from country to country. This type of analysis will be used to test all three hypotheses. As the main statistical analysis we propose to conduct an analysis of variance. Furthermore to ensure comparable sample distribution we suggest conducting double check using standard non-parametric tests. Depending on the results of these two tests, the researcher might consider further analysis.

If both ANOVA and Non-parametric test confirms there is no significant difference in the practice, we could consider the practice in the surveyed countries being identical. Proving the hypothesis, such a result would suggest that the multinational companies do not adopt their compensation practice by country. Where the result of the ANOVA and the Non-parametric test are not in agreement, additional assessments of the distributions underlying the data populations will be conducted to determine the final analysis method.

Data and Data Collection Method

Data. To test the three hypotheses two types of data are needed to be collected: 1. Information on compensation policies and practices, and information describing the operation. Table 1 enlists the main compensation elements by item suggesting the collection format.

The list of compensation components from Table 1 has been compiled based on our experience from the compensation practice observed in MNCs in the region of Europe, Middle East and Africa. We have selected those parts of compensation that have normally highest relative value when expressed as a percentage of total compensation. For countries where such compensation structure does not apply, we suggest researchers to add those compensation elements that are considered important in the studied markets.

Table 1: SUGGESTED DATA COLLECTION – COMPENSATION POLICIES AND PRACTICES

Item	Policies (format)	Practices (format)
Annual Base Salary (ABS)	Salary Grade Midpoint (Dollar value)	Actual salary (Dollar value)
Variable Bonus – eligibility	Eligible (Y/N)	Eligible (Y/N)
Variable Bonus – value	Target %	Actual %
Long Term Incentives – eligibility	Eligible (Y/N)	Eligible (Y/N)
Long Term Incentives – value	Target %	Actual %
Benefits (medical, disability, death) - eligibility	Covered (Y/N)	Covered (Y/N)
Benefits (medical, disability, death) - value	Target value (Dollar value)	Actual value delivered (Dollar value)
Perquisites - eligible	Eligible (Y/N)	Eligible (Y/N)
Perquisites - value	Target value (Dollar value)	Actual value delivered (Dollar value)

Data Collection Method. The methodology has been narrowed down to a study of the main components of direct compensation. Such information is usually stored in two forms, written policies (such as a sales incentive program) and in the actual figures (e.g. the commission earned last year by a local sales manager). To facilitate collection of such information, we suggest using a structured questionnaire with closed questions, targeted at providing numerical answers. For the limited scope of this paper we are unable to provide a sample questionnaire. However, one should use a list of the items listed in Tables 1 and 2 as a base for the questionnaire development.

Table 2: SUGGESTED DATA COLLECTION FOR COMPANY CHARACTERISTICS

Item	Format
Parent company nationality	Multiple choice
Sales volume	Dollar value
Number of employees	Number
Industry	Multiple choice
Ownership structure (e.g. joint venture, subsidiary, representation office)	Multiple choice
Category of employees (e.g. sales and non-sales positions)	Multiple choice
Type of employees (e.g. manual worker, professional, middle management, top management, general management)	Multiple choice

Participants

The data should be sourced from multinational companies that have presence in the vast majority of the studied countries simultaneously. We recommend that every multinational covered in the study is present in at least 70-80 % of the studied countries. The number of companies per country should not fall below a level that makes the sample significant. We recommend that at least 30 companies participate per country.

Discussion

This paper suggests methodology that should help researchers in analysis of the MNC policies and practices in multi-country environment. While the text recognizes that there are two perspectives looking at managing compensation – content and context, it intentionally narrows down its focus on the content side. From the organizational perspective it has its limitations in looking only at *what* is the current situation (policies and practices) and not *why* this is so. Thus it is serving its main purpose to look at what difference in compensation do MNC apply across countries rather than to be used as a compensation analytical tool for an organization.

Research study using this methodology could bring valuable information to a missing area of international compensation. Expanding the potential research to cover a span of several years could provide a valuable insight on the MNC behavior in the dynamic times of globalization.

Conclusion

This paper looks at the implication of increasing globalization on compensation practice in a company. It discusses why compensation is an important aspect of globalization and why more attention should be paid to it. The paper suggests areas of comparison between global and local approach to managing compensation and further explores one of them – analysis of the existing policies and practices. It provides rational and step-by-step methodology for further research on analyzing the variations in the practices the multinational companies adopt across the countries. Research adopting this methodology could bring significant contribution to the area of international compensation. While this paper as such brings more contribution to academic discussion, research based on this would benefit both academicians and practitioners.

References

[1] Bloom, M.C., Milkovich, G.T. (1999). A SHRM Perspective on International Compensation and Rewards. Research in Personnel and Human Resource Management. JAI Press.

[2] Bloom, M.C., Milkovich, G.T., Mitra, A. (2000). Toward a Model of International Compensation and Rewards: Learning from How Mangers Respond to Variations in Local Host Context. CAHRS – Working Paper Series: 00-14.

[3] Luptakova, S., Vargic, B. (2001). Communication in Slovak Organizations in Relation to Power Distance Dimension of Slovak National Culture. The 6th International Conference on Global Business & Economic Development, Bratislava, Volume II, ISBN: 0-9660656-6-2.

[4] Milkovich, G. T., Newman, J. (1996). Compensation. Boston, USA: Irwin/McGraw-Hill.

[5] Weidlich, R. (2001). Market Pressures for Tournament Type Organization in Emerging Central Europe: Evidence, Implications and Sustainability. The 6th International Conference on Global Business & Economic Development. Bratislava. Volume II. ISBN: 0-9660656-6-2. p. 16

End Notes

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[1] Bloom, M.C., Milkovich, G.T., Mitra, A. (1999). A SHRM perspective on International Compensation and Rewards. Research in Personnel and Human Resource Management, JAI Press.
[2] Bloom, M.C., Milkovich, G.T., Mitra, A. (1999). A SHRM perspective on International Compensation and Rewards. Research in Personnel and Human Resource Management, JAI Press.
[3] Milkovich, G. T., Newman, J. (1996). Compensation. Boston, USA: Irwin/McGraw-Hill. p.5.
[4] Milkovich, G. T., Newman, J. (1996). Compensation. Boston, USA: Irwin/McGraw-Hill.
[5] Luptakova, S., Vargic, B. (2001). Communication in Slovak Organizations in Relation to Power Distance Dimension of Slovak National Culture. The 6th International Conference on Global Business & Economic Development, Bratislava, Volume II, ISBN: 0-9660656-6-2.

Management Philosophy For Long-term Oriented Global Projects

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Abstract

The pressures to generate short-term financial profits for the stock market make it difficult for global managers to pursue long-term goals. Hence, it is necessary for long-term oriented global managers to arm themselves with an overarching philosophy to uphold their visions, goals, and projects. The first objective of this study is to present a philosophical framework for the global managers to explain and justify what they pursue in the long run. The second objective of this study is to develop an operational model for the global managers to accomplish their long-term goals in the shortest possible time.

Methodologically, this study refers to what they call the '*new science*' claiming that nature is the embodiment of an indwelling reason, doing nothing in vain, being even economical employing the fewest means to achieve its ends (Adler, 1977). Hence, this research draws on many of the concepts and definitions developed both from natural and social sciences, and uses them to analyze historical cases in global management.

This research demonstrates that long-term oriented global projects can only be accomplished at a cost of short-term sacrifices, a component of which can be the short-term financial profits. Finally, this study concludes that in order to pursue a long-term oriented global project, the organization should be in possession of financial ability to forgo the short-term profits, and the organizational culture to wait for the long-term returns to realize.

Introduction

Marvin Minsky, one of the founders of the field of artificial intelligence (AI), said that AI is the science of making machines do things that would require intelligence if done by humans (Stillings, 1987). In other words, AI designers draw on human intelligence (HI) when developing computer-based systems that will exhibit the characteristics of human intelligence. Our question is: what human beings can draw their intelligence from? Many scientists and philosophers have maintained that human beings can draw their intelligence from nature, since nature is the embodiment of an indwelling reason, doing nothing in vain, being even frugal or economical employing the fewest means to achieve its ends (Adler, 1977. P.1170). The Dutch scientist, W. Snell proved that when light passes from one medium (e.g. air) to another (e.g., water), the refraction of the light takes place in such a way as to minimize the time the light takes to reach its destination (Hewitt, 1993. P.498). Ilya Prigogine won the Nobel Prize in chemistry for his work demonstrating the capacity of certain chemical systems to regenerate to higher levels of self-organization in response to environmental demands. From these new discoveries and developments has emerged what they call the '*new science,*' asking today's scholars and managers to pay attention to, and learn from the nature for managerial wisdom.

How the Eagle Minimizes the Time

Let's examine the way an eagle minimizes the time it takes to snatch a prey. When an eagle spots a prey from the sky, the eagle, instead of dashing directly towards the prey, makes a vertical dive at first as depicted in Figure 1.

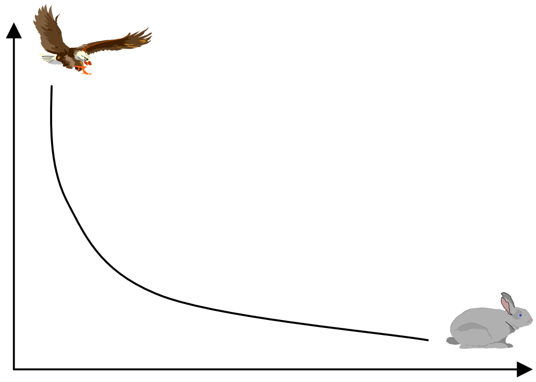

Fig 1: AN EAGLE HUNTING A PREY

As the eagle nears the ground, it changes its course smoothly into horizontal direction to snatch up the prey. Because the gravity works vertically, the eagle can increase speed most effectively by making a vertical dive, and turn the speed into kinetic energy. The kinetic energy then is released to accelerate the eagle on the horizontal portion of the path. In this way, according to some zoologists, the eagle's speed can approach 200 miles per hour (Grambo, 1999, P.16), enabling the eagle to catch the prey in the shortest possible time. Physicists call the path of this fastest descent the *Brachistochrone* curve (Encyclopedia Britannica, "*Brachistochrone*" on CD-ROM 1998). It is what mathematicians call the *cycloid curve* on which a body subjected only to the force of gravity will slide down between two points in the least possible time. Geometrically, the *Brachistochrone* is a 'roundabout' path inasmuch as it is not the shortest distance between the two points. But it becomes the shortest path in terms of time due to the *acceleration* created on it.
Nature's intelligence (NA), as shown above, intimates powerful philosophies and analogies leading to a new way of thinking for today's managers trying to realize their long-term oriented goals in the shortest possible time.

Management Philosophy on Roundabout Methods

Let us turn to what economists call the “roundabout” production. No one will have trouble to see that if men had to work with their bare hands on barren soil, productivity would be very low indeed. Land and labor are often called 'primary factors of production', for the reason that neither land nor labor is regarded as a result of the economic process, but instead exists primarily by virtue of physical and biological (rather than economic) processes. Capital, which is the word often used to refer to capital goods in general, is a different kind of production factor. A capital good differs from the primary factors in that it is an input which is itself the output of the economy. As a matter of fact, over a long time advanced economies have amassed a vast stock of equipment, plant and housing, inventories, and drained land (Samuelson, 1998). The production processes using these intermediate capital goods (i.e., indirect methods) is called 'roundabout processes'.

In the science of chemistry a substance that, when added to a reacting system, facilitates the reaction without itself being consumed, is called a catalyst. For example, enzymes in most animal stomachs are naturally occurring catalysts that help digestive juices do their work more efficiently (Brady, 1993). Scientists have found many catalytic substances from nature and used them in the processes to make gasoline, plastics, fertilizers, and many other products that have become our everyday necessities. For example, in the process to produce solid shortening out of vegetable oil, engineers add nickel powder to the heated vegetable oil, and hydrogen gas is bubbled through to hydrogenate the oil. In this process the nickel powder functions as a catalyst and eventually is screened out at the end of the process for reuse. Without the addition of the catalyst, hydrogenation of the vegetable oil will take too long to be practically feasible.

A Model to Think in Time

Clearly the whole Industrial Revolution and the factory systems were created by the conviction and philosophy that we could get higher productivity (or efficiency) by using the roundabout methods. But, as has become apparent from the foregone analysis, a ‘roundabout’ process turns out to be productive when we insert certain catalytic means in the process. In this study we will call the catalytic means *accelerators*, and develop a model for managers to create and utilize them. Since the roundabout approach is a process through which managers seek the long-term optimum, it should involve taking a long-term view and thinking the future of the organization in time-streams. Thinking in time-streams is based on the belief that seeds sown today will produce the crop in the future. Now, let us examine the required steps of thinking in time-streams.

The First Step of Thinking in Time-Streams

The first step to think in time-streams is visualizing the desired future of the organization in terms of some factors that can strengthen the competitiveness of the organization. In this study we will examine the cases of successful companies that visualized their desired future in terms of products, technologies, and trust relationships with customers.

Products

In the late1920s, when textile fibers could only be obtained from natural materials, the Du Pont Company visualized their desired future in terms of synthetic textile fibers. Natural textile fibers were expensive and in short supply since only Nature could produce them by a chemical process, the creation of “giant” molecules. The Du Pont Company, thus, determined in 1928 to launch fundamental research in chemistry. This was a venture into a field that had bee left almost wholly to the universities and other institutions of higher learning. Dr. W. H. Carothers, in charge of the research team, began to explore a bold possibility to rival Nature, synthesizing the “giant” molecules. In 1938, almost eleven years after the beginning of the fundamental research, the Du Pont Company publicly announced the development of a “group of new synthetic polymers.” This new group of synthetic materials was given the generic name ‘nylon.’ During the next twelve months about 64 million pairs of nylon hose were bought by American women, and newspapers hailed the discovery as “one of the most important in the century of chemistry. (Dutton. 1942. PP.354-359).

Technologies

In the late 1970s, Chairman C. H. Shin of Nongshim Corporation, a Korean manufacturer of ramen (instant fried noodles), visualized the desired future of his company in terms of a new technology that could innovate the quality of his products. Until the late 1970s the consumption of ramen had grown steadily in Korea because of its economic prices. However, as the national income of Korea steadily rose, the consumption of ramen, being regarded as inferior to rice, began to stagnate. In view of this tendency, Chairman Shin determined to adopt a new process technology to improve the tastes of dehydrated soup of ramen. The traditional method of producing the powdered soup was boiling the raw materials (such as beef or vegetables) in order to extract the nutritional essence from them, and then dehydrating the soup by blowing air in a hot chamber. This method resulted in a large loss of nutrition and taste from the reproduced soup. Nongshim succeeded in finding a new process technology that uses enzymes to extract the nutritional essence and vacuum chamber to dehydrate the soup. Nongshim built a new plant equipped with the machinery that embodied the new technology. With their new products through this innovation, Nongshim has become one of the largest market-share holders of ramen worldwide. (Source: interviews with Nongshim managers)

Trust Relationship

In the late 1970s, the former Chairman W. C. Kim of Daewoo Corporation (bankrupt in 1999) visualized the desired future of his company in terms of an emerging market. In the late 1970s, Daewoo had about 15,000 construction workers stationed in Libya. In order to feed this number of employees, Daewoo needed beef, a favored staple for the Koreans. However, Daewoo could not buy beef in Libya since it is a Muslim country. Thus, Daewoo had to import beef from overseas. On this occasion, Chairman Kim came up with a bright idea; he decided to import the beef from an East-European country with which Korea could not get in touch because of the ideological confrontation. However, Chairman Kim wanted to build up “goodwill relationship” with the country to open business when the “cold war” would thaw. Through a Libyan importer he imported the beef for more than 6 years from Hungary. As he expected, when the cold war began to thaw in 1985 and thanks to the ‘good feeling’ Hungary felt toward Daewoo, Chairman Kim could immediately start business with Hungary, and at his request, Hungary became the first East-European country that established diplomatic ties with South Korea.

The Second Step – Creating an Accelerator

Once managers can visualize the desired future of their organization in terms of either products, or technologies, or trustful relationship, the next step is to define an accelerator appropriate to facilitate the realization of the desired future. The following case of Sony will well exemplify the step.

The Case of Sony:

The late Chairman of Sony Corporation, Akio Morita had visualized the desired future of the company in terms of a global brand for their products. In 1956 Morita was on a trip to develop overseas market for transistor radios Sony had just developed. When he visited a purchasing officer of the Bulova Company in New York, he said, “We will take one hundred thousand units, but we have to put the Bulova name on the products.”(Morita, 1986). Morita stopped the negotiation, and gave a thought to the issue of the brand. Morita eventually made up his mind not to accept any orders that would not use Sony’s brand name. A global brand name can be viewed as a means to embody the trust relationship between a company and its global customers. Morita must have visualized the future of Sony as a worldwide supplier of electronic products, and as a means (or an accelerator) to realize this vision he determined to establish Sony’s global brand.

Analysis and Sub-conclusions

The Du Pont Company, having defined its desired future in terms of fundamentally new products, created a fundamental research laboratory. In other words, the Du Pont launched fundamental research as a means (or an accelerator) to realize the desired goal. Nongshim, having visualized its desired future in terms of a new technology, adopted new facilities and equipments that embodied the technology as their accelerator. And Daewoo that visualized its desired future in terms of ‘goodwill’ with an East-European country, chose the importation of beef from there as a means to achieve its goal.

The Third Step – Preparing for Short-term Sacrifices

“*No gain without pain*” is a well-known maxim. Unfortunately, this maxim holds true in our model, too. A long-term goal can be achieved only at a cost of short-term sacrifice. Let us examine the following historical case first.

The Case of King Huangong:

During the Chunqiu period in Chinese history, the ultimate aim of the political rulers was gaining military power by winning the wars. In 681 BC, the king Huangong of Qi Kingdom in China won a war against its neighboring kingdom Lu. A ceremony was prepared for Huangong to take over Sui region, the most fertile part of the Lu country, as spoils of the war. King Huangong was sitting on a high platform, and the king of Lu was about to give his pledge to surrender the Sui Region to Qi. Suddenly, General Caomo of Lu jumped onto the platform and put a knife to King Huangong’s neck, and shouted, “Qi is a big country, while Lu is small. Lu is so small that if Lu loses the land of Sui, Lu can’t sustain its people. Please promise not to take Sui.” To save his life King Huangong could not but concede to Caomo’s demand, and General Caomo came down the platform as if nothing had happened. Now, King Huangong, feeling ashamed and unfair, considered arresting General Caomo and declaring that his promise made under the threat was no longer valid. At this moment, one of Huangong’s chief aids, named Guanzhong, advised the king; “If your Majesty keeps the promise made under the threat, your Majesty will earn “trust” from all other kings surrounding you.” And he continued, “If your Majesty earns trust of the world, the value of the trust would be far more beneficial than the land of Sui.” Taking this advice, King Huangong decided to keep his promise.

In less than two years, Kingdom Chu, located in the southern part of Yang-tze River grew stronger and began expanding its territories to the north. Thus, kings in the northern lands met at Zhen to make alliance. This was the “679 BC Zhen Alliance.” There, the kings of northern lands had to elect their leader. They appointed him the leader of the alliance because he was a man of credibility as he demonstrated by keeping his promise that he could have easily broken. As a result, King Huangong became one of the most powerful rulers during the Chunqiu period of Chinese history.

Analysis and Sub-conclusions

In this historical example, trust was purposefully created as a means (or an accelerator) and helped King Huangong’s vision be realized easier and faster than without it. However, King Huangong had to give up the Su Region as the short-term sacrifice for his long-term gain. In the case of Daewoo, the company had to forego the purchase of beef from cheaper sources such as the U.S. or Latin America. In the case of Sony, the company had to abandon the (bigger) short-term sales in order to stick to their own global brand.

Conclusion

Many global businesses are meant to last long and sustainable, and hence, it takes time for their long-term results to realize as profits. However, the pressures to generate short-term profits for the current stock market make it difficult for the global managers to plan and pursue their long-term goals. Hence, it is necessary for the managers to arm themselves with an overarching philosophy to uphold their global visions, goals, and projects. This study has developed a philosophical framework for the global managers to explain and justify what they are doing in the long run. This study has also presented a thinking-in-time model to realize the long-term goals in the shortest possible time.

This research has shown that long-term goals can only be achieved at a cost of short-term sacrifice: in order for the long-term optimum to be realized, the short-term financial profits should be sacrificed. Thus, the organization pursuing a long-term global goal should be in possession of financial ability to forgo the short-term profits. Another condition a long-term oriented global business to succeed is the willingness of the people to wait for the long-term returns to realize. This willingness belongs to what they call the organizational culture. Geert Hofstede interpreted the Confucian values of thrift, savings, patience, and self-discipline as the long-term orientation that puts the interests of tomorrow ahead of those of today (Hofstede, 1992). Institutional systems such as a company's financing methods or performance evaluation systems are also important factors affecting the viability of the long-term oriented global managers. If the performance evaluation system favors only short-term financial performance, the global managers may not be able to pursue long-term goals. This will be especially true when the managers’ tenure is relatively short. To sum, the road to the success of a long-term oriented global business is covered with many obstacles, and without overcoming these obstacles, sustainable and long-term oriented global businesses will be hard to survive.

References

[1] Adler, M. J., & Van Doren, C. 1977. *The Great Treasury of Western Thought.* London: R. R. Bowker Company. P.1170

[2] Brady, J. E., & Holum J. R. 1993. *Chemistry, The Study of Matter and Its Change.* New York: John Wiley & Sons. P. 625

[3] Davies, P. 1988. *The Cosmic Blue Print.* New York: Simon & Schuster. p. 2.

[4] Grambo, R. L., 1999. *Eagles.* Minn: Voyageur Press. P.19.

[5] Goldstein, H. 1980. *Classical Mechanics (* 2nd ed.) Mass: Addison Wesley. PP.42-43

[6] Hewitt, P. G. *Conceptual Physics.* 1993. New York: Harper Collins. P. 59.

[7] Hofstede, G. 1991. *Cultures and Organizations.* London: McGraw-Hill. PP.159-166

[8] Morita, A. 1986. *Made in Japan.* New York: Signet. P. 92-93

[9] Samuelson, P. A., & Nordhaus, W. D. 1998. *Economics* (16th international ed.). New York: McGrawhill. P.256-257

[10] Wheatley, M. J. 1992. *Leadership and the New Science.* San Francisco: Berrett-Koehler Publishers. PP.1-11

Managerial Work Related Priorities in a Changing Asian Business Arena: An Empirical Assessment in Seven Asian Nations

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Abstract

The emergence of a liberalised competitive global marketplace has been associated with a heightened pragmatic interest in understanding managerial values. Indeed, knowledge about managerial work value systems has crucial implications for better cross national business encounters. The empirical study reported in this paper examined work related values of 1773 managers from seven Asian nations. It was found there was both a commonality as well as substantial differences of managerial value priorities across the study countries. These findings are discussed in terms of meaning and importance of managerial behaviours for conducting international business.

Introduction

The increasing internationalisation of business has heightened the pursuit of understanding managerial values. This attention, to enhance knowledge about differences and similarities in managerial values is driven by pragmatic interest in facilitating better global business encounters (Nicholson & Stepina, 1998; Ralston, Gustafson, Cheung & Terpstra, 1993; Westwood & Posner, 1997). Indeed, during the late 1990s there was an intensity of cross-cultural management research as evidenced by studies in China (Ralston et al, 1999a); Hong Kong, Malaysia and Singapore (Pearson & Entrekin, 2001); India (Gopalan & Rivera, 1997); Mongolia (Chatterjee & Pearson, 1996); Russia (Elenkov, 1997); and Vietnam (Ralston, Thang & Napier, 1999) in endeavours to better understand how to address the cultural challenges of international business.

A general interest in managerial values is underlayed by a long lineage in the Western social sciences literature (Allport, Vernon & Lindzey, 1951; Kluckhohn & Strodtbeck, 1961; Rokeach, 1973). This literature has provided a strong underpinning for conceptual frameworks and empirical evidence to foster advancement of perspectives that values are related to cognitive competencies and behaviours (England & Lee, 1974; Ronen, 1986). As the personal values of individuals are shaped differentially by the wider cultural milieu, in which they socialise, expectedly, values would differ between countries. And as this would be true of managers working in different culturally distinct nations. Consequently, there has been considerable interest in managerial work related values which are believed to impact decision making, and ultimately, organisational vitality (Deal & Kennedy, 1982; England, 1978; Revlin & Meglino, 1987). This fundamental knowledge has been further enriched in the global market place, which recently, has been undergoing significant change. Elizur and colleagues (Elizur et al., 1991) contend there have been extensive changes in work values, across populations, such as “a decline of traditional work values and an increasing concern with the quality of life” (p.21). This paper endeavours to contribute to an understanding of contemporary managerial values in seven Asian nations by an exploration with a sample of 1773 indigenous managers.

The seven countries were chosen by convenience, but more importantly for their diverse economic liberalisation and global business ideologies. For instance, China (the third largest word consumer), which was recently admitted to the World Trade Organisation, is currently undergoing extensive social and economic reform. India, also a large and complex nation, has in 1991 installed free market reforms and economic liberalisation programs. The influence of Japanese business practices on international markets remains salient, albeit currently, the nation is facing formidable pressures for restructuring business practices as companies vie for greater global market share. Singapore has on many occasions been ranked number one in terms of world economic competitiveness, and this republic provides an economic model for reformalisation of organisational architectures and business practices in the aftermath of the mid 1997 Asian financial meltdown. In 1997 Malaysia and neighbouring Thailand were the first nations to experience the collapse of their financial markets, and today these countries are restructuring their economies and rebuilding investor confidence. Mongolia is a land locked country, which has rich underpinnings as a traditional nomadic society, is undertaking social and economic reform from a centrally planned management ideology to a market oriented culture. Data were obtained from indigenous managers in these seven countries by the authors who have been involved with the administration of educational programs in these societies. The purpose of the research is to explore the extent of variation in managerial work goals which serve as a recognised acceptable proxy to managerial values.

Assessing Managerial Values Cross-Culturally

There have been two major approaches for evaluating managerial work values in the international arena. The first approach has been to employ recognised validated Western or Eastern value scales. For instance, Nicholson and Stepina (1998) employed Hofstede's (1980) four constructs (individualism/collectivism, masculinity/femininity, uncertainty avoidance, power distance) in an international study with nearly 4000 managers in China, Venezuela and the U.S. Also, Elenkov (1997) compared U.S. and Russian managers' responses to Hofstede's four measures, but also employed the two Western scales of machiavellianism (adapted from Chrsitie, 1968), and a short dogmatism scale (based on Schulze, 1962). In another study Ralston and colleagues (Ralston et al., 1993) compared a sample of managers from the U.S., Hong Kong and the Peoples' Republic of China by their responses to four Western scales; 1) Machiavellianism, 2) Dogmatism, 3) Locus of control (Rotter, 1966), and 4) Intolerance of ambiguity; as well as the Eastern measure of the Chinese Value Survey (*Chinese Culture Connection*, 1987). Westwood and Posner (1997) examined managerial values with a sample of 2218 respondents from Australia, Hong Kong and the U.S. with a modified version of England's (1967) personal values questionnaire. In a comparative study with 444 indigenous managers, who were working in Hong Kong, Malaysia and Singapore, Pearson and Entrekin (2001) assessed the respondent's values with a shortened version of the Chinese value survey. It is evident from this short selection of a plethora of cross-cultural assessments, managerial values have been evaluated with a diversity of standard instruments, both Western and Eastern, which have been employed within Western and Eastern contexts. Although these endeavours have meaningfully contributed to a vast literature it is difficult for comparative judgements to be formulated.

The second main cross-cultural approach for evaluating managerial values is achieved by ranking a set of 11 work goals. Underpinning for this method was provided by eminent social scientists (Carruthers, 1968; Elizur, 1984; Pennings, 1970) who argued the values espoused by managers could be determined by establishing the ordered degree of importance of relevant work goals. In the wake of installation of macro-economic reforms in many countries a procedure for ranking work goals has contemporal benefits in contrast to instruments, that were developed decades ago, for estimating values. Moreover, managerial work is a universal activity, yet it has values that "encompass a variety of notions ranging from business ethics to work preferences" (Dose, 1997; p.219). By employing a narrow delineated set of well understood concepts (salary, promotion, job variety) as well as acceptable techniques of translation (and back translation) is likely to ensure less loss of liberal meaning in questionnaire items. Finally, the work goal domain has been established in the management literature with the seminal Meaning of Working Study (MOW, 1987).

Arguably, the Meaning of Working Study was a notable international endeavour that explored managerial work goals. This research was conducted across what was considered to be the leading industrial nations of the era. A group of scholars, led by George England investigated the comparative meaning of work with 8192 respondents in the seven countries of Belgium, West Germany, Israel, Japan, Netherlands, Great Britain and the U.S.A. This work enabled the researchers to identify five domains that capture an individual's values and beliefs about working. Three of these domains 1) work centrality, 2) societal norms about working, and 3) valued work goals have attracted the greatest focus with the last domain the most popular line of enquiry. It is likely this popularity is associated with the relative ease of measurement. In practice the respondent is provided with a set of short statements (e.g., good job security, good pay, interesting work) and is required to rank them in order of importance in the work life of the manager.

Despite the importance of the Meaning of Working study (MOW), seldom has it been replicated. On the one hand, the study was designed principally to make international comparisons and in terms of revealing work related preferences impacted international human resource management practices (McGaughey, Iverson & DeCieri, 1997). On the other hand the investigative model, which the MOW research team conceptualised as three hierarchical levels to describe the formation, existence and impact of work meanings, is relatively complex, and hence exceedingly expensive to examine across nations. Consequently, except for a recent partial replication by Lundberg and Peterson (1994), most researchers (Chatterjee & Pearson, 1996; Corney & Richards, 2001; Pearson & Chatterjee, 1999) have examined managerial work goals with procedures concisely reported by Harpaz (1990).

Method

Respondents

Data were obtained from 1773 indigenous managers in seven Asian countries. There were 416 managers from China, 421 Indian managers, 195 Japanese managers, 210 Singaporean managers, 143 Malaysian managers, 156 managers from Thailand and 232 Mongolian managers. Each of these managers completed a questionnaire and this paper reports demographic attributes and the perceived importance of 11 work goals of the respondents.

The respondents were employed in a variety of organisations. For instance, the study managers reported they worked in financial institutions, education establishments, science and technology companies, engineering firms, mining ventures, transportation companies as well as the health industry. Some of these organisations were involved in manufacturing, but a greater number were in the service industry. Overall, these industry types were active in the public and private sectors, some were government departments while others were local government instrumentalities. In addition, the employing institutions ranged from small family firms to large multinational corporations. As the profile of the organisations varied across the study countries it was considered less that meaningful to partition the responses across these organisational attributes.

Procedure

The study design had three key planks. Administration of a questionnaire to obtain demographic information as well as the ranked importance of 11 work goals was the first plank of the design. A second feature of the study design was the deliberate intention to address the challenge of obtaining data in Asian countries by employing the phenomena of the guanxi (pronounced gwan – see). The guanxi is a reciprocal obligation to respond to requests for assistance. In practice the authors administered questionnaires to managers who were attending post graduate education programs. Later, these managers administered the questionnaires to other work colleagues with whom a guanxi existed. The third study design plank was to employ focus groups in each country to enrich understanding and enhance interpretation of the findings of study data obtained from administration of the questionnaire.

Despite there being only one version of the questionnaire it was administered in four separate languages. The Chinese questionnaire was in Mandarin. The Japanese questionnaire used Japanese characters, while the questionnaire that was administered in Thailand was prepared in the Thai language. In the other countries an English version was employed. Nevertheless, as English is an emerging popular language in Mongolia, bilingual assistants were provided to aid respondents if required. For the three non-English versions translation and back translation was effected by separate groups of bilingual academics and practitioners. However, it is to be acknowledged in Thailand, which is recognised as a developing nation, certain words in the questionnaire (e.g., supervisor) are yet to be commonly used and some adjustment was required. Also, in China and Japan, which are extant societies with exceptionally rich languages, it was not always possible to obtain a perfect correspondence with Western nomenclature. In spite of these challenges the commitment of Chinese, Japanese and Thailand colleagues enabled the development of acceptable questionnaires.

Measurement

The relative importance of each of the 11 work goals was assessed by determining the item mean scores from the rankings provided by the managers. In practice the respondents assigned responses to each item in accordance with their perceived importance in the workplace. The most important item was ranked 1, the second most important item was ranked 2 and so on with the least important item ranked 11. This procedure was employed in the seminal MOW study (*MOW*, 1987), and subsequently, in several later investigations (Chatterjee & Pearson, 2000; Corney & Richards, 2001; Harpaz, 1990; Lundberg & Peterson, 1994; Pearson & Chatterjee, 1999). The instrument for measuring managerial work goals is presented as Appendix 1.

In this study the 11 work goals were treated as independent variables. Despite earlier attempts to establish composite sub scales with factor analysis different combinations have been reported (Harpaz, 1986; Lundberg & Peterson, 1994; *MOW*, 1987). When the data provided by the 1773 managers of this study were factor analysed a further set of combined items were obtained. Arguably, managers of these various samples are characterised by different ethnicity and religious backgrounds in a diversity of social contexts. Consequently, composite indices were not employed in this study.

Results

Quantative

Table 1 reveals interesting demographics of the study managerial cadres. For instance, nearly 30 percent of the managers were female, a feature which underscores the emerging role of women in these Asian countries. Notable gender differences in the Indian, Japanese and Thailand data were arguably, because the Indian sample was unique in being mostly of highly educated, aged, executives, while in Japanese society women have often been discriminated against, strategically. The Thailand sample was probably gender distorted as the questionnaire administrator, who was a supervisor, employed guanxi to obtain responses. Except for the Indian sample the study respondents were reasonably distributed across the assessed managerial levels. A relatively higher proportion of younger, university educated Chinese respondents might reflect a feeling of being confident and comfortable to articulate their views on a questionnaire, which, consequently, might explain sample attributes of the Chinese managers. The importance of formal education was most pronounced, and this attribute adds to the profile of the study managers.

Table 1: DEMOGRAPHICS

	China	India	Japan	Singapore	Malaysia	Thailand	Mongolia
Respondents	416	421	195	210	143	156	232
Gender:							
Female	43.0	6.9	5.6	33.8	32.9	71.8	40.1
Male	57.0	93.1	94.4	66.2	67.1	28.2	59.9
Managerial Level:							
Executive	18.8	70.1	26.2	25.7	37.1	14.7	26.7
Middle	44.7	25.4	34.8	38.6	35.6	26.3	46.6
Supervisory	36.5	4.5	39.0	35.7	27.3	59.0	26.7
Age (years)**:**							
20-29	52.5	5.0	7.7	39.0	21.0	44.2	22.8
30-39	32.2	16.9	32.3	38.1	45.5	27.6	42.8
40-49	10.3	34.0	27.7	18.6	25.8	22.4	22.8
Above 49	5.0	44.1	32.3	4.3	7.7	5.8	11.6
Education Level:							
Senior High School	13.7	6.2	30.3	19.0	30.1	6.4	43.1
Trade or Vocational	18.8	38.2	6.6	21.4	14.7	12.2	12.1
University	67.5	55.6	63.1	59.6	55.2	81.4	44.8

Table 2 presents the means and their ranks (as superscripts) for each assessed managerial work goal. Also shown in Table 2 are contrasts of these means, between countries, and the outputs are reported as ANOVA omnibus results and Scheffé comparison of means P values. These data reveal the extent of convergence of work goal priorities. For instance, the rank scores and the non-significant difference in the mean scores contrast test result shown there was substantial agreement (by the respondents) for the importance of the work goal of *a lot of opportunity to learn new things.* Also, there was strong agreement, at lower levels of importance, for the work goals of *interesting work*, *a good match between the job requirements and incumbent competencies*, and *a lot of autonomy*. Furthermore, there was general consensus, by the study managers, that the two comfort work goals of *convenient work hours*, and *good physical work contradictions* were of relatively, the least importance in their work settings. It is also demonstrated in Table 2 the rankings of the other five work goals varied considerably among the seven countries.

Table 2: WORK GOAL MEANS AND RELATIVE IMPORTANCE

Work Goal Group #	China 1	India 2	Japan 3	Singapore 4	Malaysia 5	Thailand 6	Mongolia 7	ANOVA F P<	Means Comparisons Scheffé
Opportunity to learn	3.87^{1}	3.81^{1}	4.30^{1}	3.96^{1}	4.75^{2}	4.37^{1}	3.97^{1}	3.09 .06	n.s.
Promotion	4.45^{2}	5.62^{6}	5.88^{6}	4.87^{3}	4.08^{1}	6.61^{8}	5.28^{5}	20.57 .01	1<2*** 3*** 5<2*** 7* 6>1*** 2* 4*** 5*** 7**
Interesting	4.75^{3}	4.09^{2}	4.67^{3}	4.67^{2}	5.94^{5}	4.90^{2}	4.61^{2}	7.62 .05	5>1* 2*** 3* 4* 7**
Salary	5.15^{4}	7.60^{9}	7.03^{8}	5.49^{5}	5.31^{4}	7.08^{9}	6.84^{7}	30.35 .00	1<2*** 3*** 6*** 7*** 2>5*** 4<2*** 3*** 6** 7** 5<3** 6*** 7**
Good match	5.53^{5}	4.75^{4}	4.43^{2}	5.40^{4}	4.83^{3}	5.29^{4}	5.16^{3}	5.12 .05	1>3**
Autonomy	6.26^{6}	6.00^{7}	6.30^{7}	5.52^{6}	6.70^{9}	6.08^{6}	6.91^{8}	4.43 .05	4< 7**
Inter personal	6.38^{7}	5.24^{5}	5.41^{5}	5.78^{7}	6.38^{7}	5.13^{3}	5.22^{4}	10.07 .01	1>2*** 3* 6* 7*** 5>2* 6* 7*
Security	6.54^{8}	7.16^{8}	7.39^{9}	6.90^{9}	6.46^{8}	5.56^{5}	7.30^{10}	8.87 .01	6<2*** 3*** 4** 7***
Variety	7.31^{9}	4.33^{3}	5.05^{4}	6.31^{8}	6.34^{6}	6.46^{7}	6.56^{6}	50.37 .00	1>2*** 3*** 4** 2<4*** 5*** 6*** 7*** 3<4** 5** 6*** 7***
Convenience	8.01^{10}	8.69^{11}	8.10^{10}	8.66^{10}	7.92^{11}	7.12^{10}	7.13^{9}	12.51 .01	6<2*** 4*** 7< 1* 2*** 4***
Conditions	8.80^{11}	8.69^{10}	8.43^{11}	9.02^{11}	7.78^{10}	7.42^{11}	7.38^{11}	15.89 .01	1>5* 6*** 7*** 2>6*** 7*** 3>7* 4>5** 6*** 7***

Earlier, Lundberg and Peterson (1994) reported significant differences between work goals as country effects. These researchers arrived at this conclusion in a partial replication of the MOW study, with a small sample of Japanese and U.S. local government managers, where the researchers found significant differences between work goals were partitioned across city, region and country. In Table 2 it is demonstrated the greatest intensity for variations in the perceived importance of work goals (across the examined countries) is shown as means comparison test results. Arguably, these significant differences are country effects. To better understand these divergences managerial focus groups were established in these countries, and the members were invited (by the researchers) to provide commentary for the reported importance of the work goals.

Focus Groups

Comments from the focus groups enhanced understanding of the results of Table 2. For instance, members of the focus groups universally endorsed the importance of the work goal of the *opportunity to learn new things*. A number of members expressed the sentiment the rapid changes occurring in today's international business arena required managers to continually upgrade their skills and knowledge in order to be prepared for tomorrow's jobs. Focus group members provided explanations for the extent of recorded differences in the importance of the work goal of *promotion*. The Malaysian focus groups, for example, claimed promotion was exceedingly important (during the questionnaire administration 1998/99) in the aftermath of the 1997 Asian financial meltdown. In a climate of devalued currency higher financial benefits were prized and they were available by promotion. The Chinese focus groups (comprised of members from several Chinese provinces) explained the importance of promotion was vested in access to the other work goals. For instance, Chinese executive job positions are more likely to be linked with interesting work, higher salary, a good match of personal skills, greater job autonomy, higher job security as well as improved task variety. *Interesting work* was a work goal that was relatively important to most managers, and the focus group members believed this was because learning was associated with challenging and interesting work.

In spite of *salary* being a central component of HRM systems this work goal was at best only reported to be of intermediate importance. For the sample of Chinese managers salary was ranked fourth and the focus groups explained this is likely to be a consequence of low salaries, particularly in government jobs, in China. The Malaysian focus groups reiterated salary was important in a context of substantial devaluation of the Ringett. Salary, which although ranked fifth most important by the Singaporean sample, was an artifact of gender influences. Indeed, male managers ranked salary seventh while female managers ranked salary as their third most important work goal. The Singaporean focus group members explained as a consequence of the development of Singapore affluence costs of entry levels for social facilities, such as education, health, housing and transport, have risen alarmingly. Accordingly, women managers, who have to balance vocational, recreational and family commitments are more likely, than male managers, to place a higher importance on salary.

Commentary from the focus group enhanced understanding of the respondents' intensity of importance of the remaining work goals of Table 2. For instance, the national focus groups expressed a viewpoint the consensus for a relatively high level of importance for the work goal of *a good match between the job requirements and incumbent competencies* was a reflection of managers valuing an opportunity to have tasks that challenged their educational standing and skills. These same focus groups proposed the relatively high agreement, but at a lower level of importance, for the work goal of *autonomy* was to be expected, because in Asian societies people are mindful of their status in an ordered set of hierarchical relations. The significant differences in degrees of importance for the work goals of *good personal social inter-relationships* and *job security* were explained as country effects. Focus groups of the representative countries claimed in many Asian societies networking is an ubiquitous element of successful business, but because it is commonly employed the worth or importance of inter-relationships is seldom acknowledged. However, in Mongolia, which has a rich heritage of tribal nomadic tradition; and in Thailand, an Asian developing nation that is also yet to be strongly influenced by Western value systems, traditional nuances of relationships and/or security are important attributes of work settings. The work goal of *job variety* was preferred most highly by the Indian and Japanese managers. Argument was advanced the Indian sample, being mostly of senior executives, would prefer extensive challenge and hence a plethora of different, rather than repetitive tasks. The (Japanese) focus groups contended job variety is of high importance to Japanese workers who hold an ethos of a good organisation – fit, and consequently, want to be involved in variety of organisational activities. Finally, the two comfort work goals (*convenient work hours*, and *work conditions*) were frequently perceived to be the least important of the assessed 11 work goals. An argument was put Mongolian managers held a slightly higher preference for convenient work hours, as at the time of the survey salaries were extremely low and an extensive amount of 'moonlightning' (a second job) was occurring. Hence, managers valued the opportunity to work hours of choice which gave flexibility of attendance. Overall, the information provided by the focus groups enriched the quantative results.

Conclusion

In the light of remarkable economic transformation of Asia in the recent decades, the role and goals of the new generation of Asian managers show a remarkable reorientation. This paper attempts to provide an empirical insight into the commonly shared refocussing of managerial work goals in seven Asian countries. This reorientation adds a methodological platform in understanding the various adjustments needed for corporate managers in responding to the imperatives of globalisation and their commitment to their roles. The findings of this study suggest there are hidden dimensions of workgoals that converge across countries. One of these dimensions is the strong correlation of learning. The overwhelming managerial perception was the key work goal needs to shift to learning. This observation is a unique feature of this study. Embedded within the deep cultural roots of Asian values, this work goal has a special resonance for Asia.

There are several observations that can be made to summarise this study. Firstly, the globalisation process need not reflect a fairly sterile one-way traffic from the West to the East. The Western models of managerial thinking and practices may work as 'guides' to help interpret their own indigenous experiences within the framework of their culture and context. Secondly, the mastering of unpredictability in the post 9/11 world of managers, certainly needs a mindset shift away from the traditional economic and security to learning and challenge orientation. Thirdly, Asian managers have a relative luxury of deploying a 'catch-up' managerial approach not only in managing large entities, but also in small and entrepreneurial organisations. The balancing of innovation and 'importation' of ideas and technologies with the building of facilitative infrastructure will be the main challenge in Asia. Lastly, the emphasis on learning orientation signals a refinement of the human resource capability in Asia. Indeed, this finding emphasises the emergence of a new generation of managers in Asia who are willing to be flexible and whose primary focus is learning.

References

[1] Allport, G. W., Vernon, P. E. & Lindzey, G. 1951. *Study of Values*. Boston: Houghton Mifflin.

[2] Chatterjee, S. R. & Pearson, C. A. L. 1996. Job Related Attitudes of Managers in Managers in Mongolia: An Empirical Study. *International Journal of Management.* 13(4): 434-440.

[3] Christie, R. 1968. Machiavellianism Scale. In J. P. Robinson & P. R. Shaver (Eds.), *Measures of Social Psychological Attitudes*. Ann Arbor: Institute for Social Research, University of Michigan.

[4] Corney, W. J. & Richards, C. H. 2001. Work goal differences: Post communist versus capitalist economies. *International Journal of Management*, 18: 294-300.

[5] Deal, E. & Kennedy, A. A. 1982. *Corporate Culture*. Reading, M.A.: Addison Wesley.

[6] Dose, J. J. 1997. Work values: An integrative framework and illustrative application to organizational socialization. *Journal of Occupational and Organizational Psychology*, 70: 219 – 240.

[7] Elizur, D., Borg, I., Hunt, R. & Beck, I. M. 1991. The structure of work values: A cross cultural comparison. *Journal of Organizational Behaviour,* 12: 21 - 38.

[8] Elenkov, D. S. 1997. Differences and similarities in managerial values between U.S. and Russian managers. *International Studies of Management and Organization*, 27: 85-106.

[9] England, G. W. 1975. *The Manager and His Values*. Cambridge, MA. : Ballinger Publishing Co.

[10] England, G. W. & Lee, R. 1974. The relationship between managerial values and managerial success in the United States, Japan, India and Australia. *Journal of Applied Psychology*, 59(4): 411 – 419.

[11] Gopalan, S. & Rivera, J. B. 1997. Gaining a perspective on Indian value orientations: Implications for expatriate managers. *The International Journal of Organizational Analysis*, 5: 156-179.

[12] Harpaz, I. 1990. The importance of work goals: An international perspective. *Journal of International Business Studies*, 21: 75-93.

[13] Hofstede, G. 1980. *Cultures' Consequences: International Differences in Work Related Values.* Beverly Hills: Sage.

[14] Kluckholm, C. & Strodtbeck, F. L. 1961. *Variation in Value Orientations.* Evanston, IL.: Row, Peterson.

[15] Lundberg, C. D. & Peterson, M. F. 1994. The meaning of working in U.S. and Japanese local governments at three hierarchal levels. *Human Relations*, 47: 1459-1487.

[16] McGaughey, S. L., Iverson, R. D. & De Cieri, H. 1997. A multi-method analysis of work-related preferences in three nations: implications for inter- and extra - national human resource management. *The International Journal of Human Resource Management,* 8: 1-17.

[17] MOW International Research Team. 1987. *The Meaning of Working.* London: Academic Press.

[18] Nicholson, J. D. & Stepina, L. P. 1998. Cultural values: A cross-national study. *Cross Cultural Management*, 5: 34-49.

[19] Organ, D. W. & Greene, C. N. 1974. Role ambiguity, locus of control, and work satisfaction. *Journal of Applied Psychology*, 59: 101-102.

[20] Pearson, C. A. L. & Chatterjee, S. R. 1999. Work goals in a society under economic reform: A study with Indian managers. *International Journal of Management*, 16: 139-146.

[21] Pearson, C. A. L. & Entrekin, L. 2001. Cross-cultural value sets of Asian managers: The comparative cases of Hong Kong, Malaysia and Singapore. *Asia Pacific Journal of Human Resources*, 39: 79-92.

[22] Ralston, D. A., Egri, C. P., Stewart, S., Terpstra, R. H. & Kaicheng, Y. 1999a. Doing business in the 21st century with the new generation of Chinese managers: A study of generational shifts in work values in China. *Journal of International Business Studies*, 30: 415-428.

[23] Ralston, D. A., Gustafson, D. J., Cheung, F. M. & Terpstra, R. H. 1993. Differences in managerial values: A study of U.S., Hong Kong and PRC managers. *Journal of International Business Studies*, 10: 249-275.

[24] Revlin, E. C. & Meglino, B. M. 1987. Effects of values on perception and decision making: A study of alternative work values measures. *Journal of Applied Psychology*, 72: 666-673.

[25] Rokeach, M. R. 1973. *The Nature of Human Values*. New York: Free Press.

[26] Ronen, S. 1986. *Comparative and Multinational Management.* New York: John Wiley & Sons.

[27] Rotler, J. B. 1996. Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs*, No. 609.

[28] Schulze, R. H. K. 1962. A shortened version of the Rokeach dogmatism SCALE. *Journal of Psychological Studies*, 13: 92 – 97.

[29] The Chinese Culture Connection. 1987. Chinese values and the search for culture-free dimensions of culture. *Journal of Cross Cultural Psychology*, 18: 143-164.

[30] Westwood, R. J. & Posner, B. Z. 1997. Managerial values across cultures: Australia, Hong Kong and the United States. *Asia Pacific Journal of Management*, 14: 31-66.

Appendix 1

Respondents are required to rank in order (1 = first to 11 = least) the importance of each work goal for their work life.

A. A lot of opportunity to learn new things.
B. Good interpersonal relations (supervisors, co-workers).
C. Good opportunity for promotion.
D. Convenient work hours
E. A lot of variety
F. Interesting work
G. Good job security
H. A good match between your job requirements and your abilities and experience.
I. Good pay/salary.
J. Good physical working conditions (such as light, temperature, cleanliness, low noise level).
K. A lot of autonomy (you decide how to do your work).

Source: Harpaz, 1990; *MOW,* 1987.

New Managerial Competencies in the New Organizational Environment

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Abstract

The growth of globalization as well as of diverse organizational environment, the development of technologies, faster flow of information, constantly changing environment of the organizations, new demands of customers resulting in product innovations and quality improvement, demand not only changes in organizational structures but also changes of individuals – their personality, abilities, or skills. These also demand a change in understanding of a role and position of managers within the organizations.

The organizations of a new type require managers to demonstrate new characteristics, abilities, and skills. This means that new competencies mainly in the arena of leadership require new way of thinking, new attitude towards self-development, work, as well as towards other people. Flexibility, collaboration, trustworthiness of managers and constant development of his or her personality are becoming a part of managers' work, part of the demands put on the managers. Inability of managers to develop their own personality, inability or unwillingness to develop knowledge equals the inability to succeed and inability to survive.

To specify requirements on behavior and skills or abilities of effective managers, we should focus on a particular level of management, on specific cultural, political and socio-economic conditions in which the particular managers work. We should also take into account the characteristics of their subordinates, or the nature of their tasks.

The requirements put on line managers represent a specific condition of success of managers in Slovak companies. The line managers should most of all keep direct contact with their subordinates, they should set aside time for direct interaction with the employees. The line managers should demand participation in decision-making, goal setting, they should require their subordinates to take responsibility and thus motivate them, and they should modify their attitude to people and also to themselves.

Also at present, the organizations demand tailored programs, based on the needs of individual managers, the problems they encounter during their work. Development programs designed on this basis have stronger motivation, they are not detached from practical experience and the managers realize their link to practice.

The growth of globalization as well as of diverse organizational environment, the development of technologies, faster flow of information, constantly changing environment of the organizations, new demands of customers resulting in product innovations and quality improvement, demand not only changes in organizational structures but also changes of individuals – their personality, abilities, or skills. These also demand a change in understanding of a role and position of managers within the organizations.

The success of organizations will depend on the success of their managers; the success of managers will depend on the success of the people around them and on the ability of the managers to utilize their potential. Traditional hierarchical models of organizations have required predominantly technical, strongly specific knowledge and skills of managers at different levels of management. The managerial roles have been vertically differentiated, their goal being formulation of strategies, giving orders, and controlling resources.

The organizations of a new type require managers to demonstrate new characteristics, abilities, and skills. This means that new competencies mainly in the arena of leadership require new way of thinking, new attitude towards self-development, work, as well as towards other people. Flexibility, collaboration, trustworthiness of managers and constant development of his or her personality are becoming a part of managers' work, part of the demands put on the managers. Inability of managers to develop their own personality, inability or unwillingness to develop knowledge equals the inability to succeed and inability to survive.

Management development, as a continuous process, gains more and more importance and `becomes competitive advantage. More and more organizations include management development in their developmental plans.

In present organizations, which succeed among the competition abroad as well as in Slovakia, the attention is on such skill and abilities of managers that lead towards positive interpersonal interaction.

The organizations of the 21st century require an effective manager to be willing to delegate responsibility, enrich the authority of his or her subordinates, support a decentralized communicational flow, also to be resistant and tolerant towards stress, tolerant towards uncertainty, objective to himself or herself and to the others, able to forecast, clearly and convincingly express himself and herself in both written and verbal form, able to stimulate his/her subordinates towards excellent results. Effectively managed management development programs can help to attain all the efforts and competencies mentioned above.

To specify requirements on behavior and skills or abilities of an effective manager, we should focus on a particular level of management, on specific cultural, political and socio-economic conditions in which the particular manager works. We should also take into account the characteristics of their subordinates, or the nature of their tasks.

The requirements put on line managers represent a specific condition of success of managers in Slovak companies. The line managers should most of all keep direct contact with their subordinates, they should set aside time for direct interaction with the employees. The line managers should demand participation in decision-making, goal setting, they should require their subordinates to take responsibility and thus motivate them, and they should modify their attitude to people and also to themselves.

Communication skills become indispensable in the area of interpersonal interactions. These skills include active listening, effective interpersonal communication, effective negotiation, accepting and providing information, conflict resolution, language skills, effective presentation style, or effective way of providing feedback.

The skill in formulating questions is another required skill that comes up, however in the past there was not much attention paid to it. When solving problems in the past, the questions were almost exclusively focused on who was responsible for a particular problem and there was no interest in why the problem occurred. Contemporary philosophy within organizations stresses the questions that seek the stems and antecedents of problems.

However, to answer such questions in a meaningful way, they should be asked in an appropriate manner and in an appropriate situation. If a person has a skill in asking questions, he or she can also time the asking and use a proper tone of voice. The question should not be manipulative, express anger or a tendency to criticize.

Empathy and intercultural sensitivity are other competencies that should be possessed not only by human resource managers, but also by all managers who want to be effective. The raise of globalization and diversified workplace only enhances this requirement.

To develop desired competencies, it is important to identify their level within particular managers.

J. Kochanski (1997, p. 46) defines several ways of identification of managerial competencies:

- analysis of the best employee – the author states that the benefit of this approach is to disclose the secrets of the best employee;
- analysis of exemplified employees;
- analysis of experts;
- creation of external models.

While identifying such competencies that need more attention, need to be developed, it is possible to draw upon the methods mentioned by S. Parry (1998, p. 61):

- 360° feedback – this is evaluating and providing feedback from co-workers, supervisors, team members, or customers;
- evaluation laboratories (assessment centers) – the individual is evaluated based on role play, demonstration of behavior that he or she presents;

– interactive multimedia – the individual is evaluated based on his or her reactions on a situation that is presented to him or her through e.g. video.

The need of development of the competencies mentioned above is also confirmed by research works abroad and also in Slovakia (Sulikova 2000, Luptakova - Vargic 2001) where there were 400 questionnaires distributed to managers at different levels of management within 20 companies mostly operating in manufacturing (industry).

The top management positions formed 17.73 % of the researched sample. All of these respondents are university graduates.

From the analysis we can see that managers at this level participate in development program focused mainly on:

managerial knowledge – 76 %
interpersonal relations – 52 %
communication skills – 44 %
work with computer – 44 %

Based on the results of the research, we can also conclude that the managers in their development programs prefer participative style of training – using case studies (60 %), computer based learning (60 %).

In the sample, there were 67 % participants from the middle management position. The managers were participating in development programs focused on:

managerial knowledge – 61 %
work with computer – 53 %
communication skills – 37 %

We can conclude that active participation among the respondent at this level of management has not become popular, yet. There were only a small percentage of respondents who would choose it as an alternative of developing their knowledge and skills. They indicate the following preference – role playing (4 %), case studies (6 %), and simulations (8 %).

In the sample, there were 15% participants from the line management positions. The focus of development programs at this level of management was on the areas of:

work with computer – 71 %
managerial knowledge – 43 %

The preferred methods of development programs, similarly to the middle managers, are lectures – 76 %, which shows a preference for passive acceptance of information. As it is evident that active approach is a more effective way of learning a skill, the solution can be in a gradual implementation of such an approach into training and development programs.

It is evident thus that the managers are aware of the need to develop their personality not only in a specific, professional area, but also in an area of competencies linked to the interpersonal interaction. The need for employee development within the organizations has therefore be a priority for all companies that want to be successful. It is also necessary to enable and support the need for self development through development programs that, however, need to be prepared in and effective manner so that they meet the goals of organizations as well as the personal goals of the participants themselves.

There are specific problems for the organizations operating in the Slovak environment that are related to the development programs and that managers have to solve. These problems are related to overcoming traditional way of thinking and acting that reflect directive style of management, centralized decision-making, one way communication flow without feedback, limited knowledge, detachment of theory from practical experience that were so typical for organizations during the past decades. The need for management development was also approached in a directive way. The development programs were attended by selected managers regardless the needs of an organization.

Language barrier that is also related to the past, is nowadays a barrier in gaining new knowledge and experience. In many Slovak organizations, we can see reluctance towards development programs also among managers. Many managers are avoiding such programs and they consider their own personal experience to be the only appropriate way of personal development. To overcome such resistance, it is necessary to choose such ways of work that connect theory and practical experience.

Another source of resistance of managers is past experience, environment in which development programs take place, lack of support, inability to apply acquired knowledge, and often personality of the lecturer. Therefore, when designing development programs, the organization should take into consideration the personality of a manager – his/her characteristics, level of knowledge, attitude to learning, his/her needs, requirements, interests, as well as the conditions under which the program takes place, right selection of a teaching method reflecting the needs of participants, needs of a program, and personality of a lecturer.

On the other hand, it is important for the organizations to set criteria of development programs not only from the standpoint of the employees but also from the long-term needs of an organization. Therefore, it is important that the development programs stem from the strategic needs of the organizations. Organizations should thus identify the key employees and to those then offer education designed for skills specific for the organization (e.g.: organizational culture) than for technical skills development (Luptakova 1999).

At present, the organizations demand tailored programs, based on the needs of individual managers, the problems they encounter during their work. Development programs designed on this basis have stronger motivation, they are not detached from practical experience and the managers realize their link to practice. Development programs will be useful in case they are not general, but specifically aimed on the goals of the organizations. Their content should reflect not only development of professional skills but also a change in behavior. They should become development-educational programs with an international focus.

For a development program to be effective, it is necessary not only to set the goal of a program and prepare it effectively, but it is necessary to analyze the competencies of individual managers in great detail. When defining a level of competencies of individual managers, it is necessary to stem from the present situation and compare it with a desired state. We should not forget that the changes that we want to achieve through development programs have to be reachable by these programs.

When analyzing managerial competencies we can rely on:

- study at the organizational level – need for change can be related to the effectiveness of an organization, maintaining the level of employees, organizational culture – values, philosophy, or trust. The techniques of needs analysis can have a form of a benchmark – comparison with another organization within the same industry, diagnosis of an organization through an in-depth study of the organization, research, etc.;
- job analysis, tasks analysis, analysis of knowledge, skills, qualifications needed for fulfilling the goals;
- analysis of persons – this analysis can be done on the level of an individual (his/her abilities, knowledge, skills in interaction with others, overcoming crisis situations, etc.) as well as on the group level where there are intragroup or intergroup problems, negotiation style, conflict resolution, leadership, assigning roles, etc.

The overcome the reluctance to evaluation of skills and abilities of individuals and groups, it is necessary to announce the purpose of such activity, reject that the evaluation is done for the purpose of compensation. Such situation thus opens space for self-evaluation.

References

[1] Kochanski, J.: Competency Based Management, Training & Development, October 1997.

[2] Luptáková, S.: Issues of employee development and fairness while creating competetive advantage through people. In: Súčasné trendy v manažmente. Zborník z medzinárodnej konferedncie, UK Bratislava, 14 – 15. októbra 1999.

[3] Luptáková, S. – Vargic, B.: Communication in Slovak Organizations in Relation to Power Distance Dimension of Slovak National Culture, VI. medzinárodná konfernecia: Global Business & Economic Development, November 7-10, 2001, FM UK Bratislava

[4] Parry, S.: Just what is a competency? Training, Vol.35, No.6, p. 58 – 64, June 1998.

[5] Sulíková, R: Rozvoj manažérskych zručností jako predpoklad zvyšovania efektívnosti manažérskej práce, FM UK Bratislava, 2000.

Performance Appraisal as a Part of Managerial Work in Slovak Organizations

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Abstract

The article seeks to find whether the concept of performance management has been introduced in the Slovak companies over the past decade. The findings of the article are based on a research examining a sample of 52 companies operating within the Slovak Republic. Total number of 718 questionnaires was sent with final count of returned questionnaires amounting 512 from 35 organizations. The enterprises involved in the research cumulatively employ 11765 people. There were 432 respondents from Slovak companies and 79 from those with capital investments from abroad. The aim of the research was to define the role of performance management, its tools and links to other HR activities within the surveyed companies. It examines the differences between Slovak companies and foreign owned companies in the way performance management is understood and executed. Moreover, it studies performance management related differences stemming from a position of the particular manager within the organizational structure.

Performance management forms an inseparable part of efficient human resource management system within a given organization. It represents a crucial tool to enhance employee motivation, to influence job satisfaction, and to stimulate top quality work performance. Moreover, it serves as an instrument to link other human resource management (HR) activities, such as compensation, training and development, as well as career management making it a backbone for management practices within an organization.

In 1989, there was a significant change of the political system in Slovakia that was followed by a transition from centrally planned to market economy. This transition caused a shift in the nature of business environment that has moved from a relatively stable and predictable towards a more competitive and frequently changing system. Such a shift has called for more flexibility of managers and workers, for market orientation in designing HR activities, and for redefining a role of human resource management as a strategic partner within the managerial activities in the companies. Within the redefined HR system, quality of work and performance are the key success indicators, so it is inevitable for companies to create environment that supports achievement of high quality work. The change of external system has thus altered the demands put on managers and expanded their roles; it is no longer sufficient for managers to be technocrats, narrowly yet professionally focusing on accomplishing their tasks.

It has been mainly foreign multinational companies entering the Slovak market and introducing different managerial practices that influenced the gradual change of the business environment. Slovak companies, in order to stay competitive, have had to introduce different style of management and change the attitudes and skills of their managers. The new required managerial skills include participative decision-making, active listening, providing feedback, counseling, and coaching, and conflict resolving, just to mention a few [1]. Such skills are vital for executing the human resource activities that form a new set of skills and duties of managers. In the center of these lays performance management.

As the concept of performance appraisal is a fairly new phenomenon in the Slovak business environment, the article seeks to find whether and in what form the concept of performance management has been introduced in the Slovak companies over the past decade. In addition, it examines how the managers understand this concept and whether they comprehend it as a tool to motivate their subordinates. The findings of the article are based on a research that examines a sample of 52 companies that operate within the territory of the Slovak Republic. There were a total number of 718 questionnaires sent with final count of returned filled out questionnaires amounting 512 from 35 organizations. The enterprises actively involved in the research cumulatively employ 11765 people. There were 432 respondents from Slovak companies and 79 from those with capital investments from abroad (in one case the respondent did not state, whether he/she worked for Slovak or foreign company). We have considered this sample sufficient to generalize the main trends in a particular HR practice within the business environment of Slovakia.

Aim of the Research

The presented paper is aimed to portray performance appraisal as it is understood among the managers in the Slovak Republic. Many changes have been introduced over the past decade leading towards market orientation. The employment mode has shifted from egalitarian towards a tournament – there has been growth in usage of pay-for-performance compensation models where seniority matters less than ability to perform along with decline of average age of managers, and more mobility between jobs [2]. Such changes, often initially inspired by the entry of foreign companies, inevitably call for adaptation from the employees. With increased competition, there has been an increase in need to differentiate employees, to recognize above average performers, and to provide useful and meaningful guidance for the staff in order to perform well, improve and feel motivated. This is a completely new concept in the managerial role, which defined in this way, was non-existent prior to the socio-economic changes of the society in the late 80's of the last century.

Thus, the aim of the research is to define the nature and role of performance management, what tools are used and whether and how it is linked to other human resource management activities within the surveyed companies. It examines whether there are any differences between Slovak companies and foreign owned companies in the way performance management is understood and executed. As the foreign owned companies usually import their systems of managing people, our first hypothesis (H1) was that in companies with foreign capital ownership, we would see more positive understanding of the need to assess performance on a regular basis. Moreover, the paper examines whether there are any differences stemming from a position of a particular manager within the organizational structure and whether tenure of the managers plays any role in their attitudes towards performance appraisal. Hence, our next hypothesis (H2) was that the attitudes towards performance appraisal would be more positive with more senior management positions; followed by the last hypothesis (H3) that people with low tenure would be more positively responding towards performance appraisal and feedback than people with more years of work experience with the company.

Survey Data

To analyze whether providing and accepting feedback in an official form of performance appraisal is done and in what form, we sent 718 questionnaires. They were sent to 52 companies and we have collected 512 filled-out questionnaires amounting from 35 organizations. This represents a 71.31 % return rate on individual participants and 67.3% on the companies. The enterprises actively involved in the research cumulatively employ 11,765 people. We consider this sample more than sufficient for analysis.

To achieve a balanced view, we have addressed companies from all regions of Slovakia, companies of different sizes, and both Slovak and foreign in terms of capital investment [3]. We have addressed managers at all levels of management. We have not addressed employees who are not in managerial positions and do not supervise any subordinates. Moreover, as the questionnaire was in Slovak language, foreigners working in the Slovak Republic were not included in the sample.

We created a questionnaire that is comprised of three parts. The first section regards the demographics of the respondents, asking their gender, position in the company (top, middle, low level management), type of ownership of the company (Slovak or with foreign capital investments); the number of employees in the company as well as the number of direct subordinates. We have also asked the respondents to identify their age by choosing one of the following categories: less than 30 years of age, 31-45, and 45 and more. Additionally, we asked the respondents to indicate their tenure with the organization. We have included four categories: working with the company for up to one year, two to five years, six to twelve years, or more than thirteen years. The category of more than thirteen years contains employees who had worked for their companies from the times before the sociopolitical changes in the country in 1989. As these are the people who do not change companies frequently, here we expected to see the most conservative attitudes in relation to performance appraisal. Moreover, some of the respondents who have identified the tenure have also indicated that they work for a foreign company; this can occur in cases when the company has changed the ownership structure over the past decade and the employee still work there.

As the focus of the article is to find out whether performance appraisal is used in the companies and how it is linked with other human resource activities, most of the analysis is only done in detail and ownership of the company is compared. However, there are some questions in the questionnaire that test the attitudes of the managers towards providing feedback. In such questions, we have looked whether ownership of the company (H1), position in the institutional hierarchy (H2), or the length of employment with the company (H3) would differentiate the responses.

Demographics

The demographic characteristics of the respondent group were as follows. There were 115 (22.55%) top managers, 205 (40.2%) middle managers, and 190 (37.25%) line managers. The group consisted of 390 (76.32%) male respondents and 121 (23.86%) female. Out of the sample, 64 (12.52%) were younger than 30, 190 (37.18%) were from the group 31 – 45 years of age, and 257 (50.3%) people were older than 45. There were 432 respondents from Slovak companies and 79 from those with capital investments from abroad. There were 511 respondents who identified their tenure, out of which 33 (6.46%) have worked less than one year for a company, 101 (19.77%) who have worked 2-5 years with the company, 123 (24.07%) who have worked 6-12 years with the company, and 254 (49.71%) who have worked longer than 13 years with the company.

Questionnaire quantitative statements

The second part of the questionnaire consisted of 30 statements evaluated on a 1-5 Lickert scale, where "1" indicated the least acceptance of the statement and "5" indicated that the respondent fully agrees with the statement. There are various statements from different areas that evaluate the attitudes of managers towards their work, their managerial style, and communication style. For the purpose of this paper we have analyzed only questions related to performance appraisal, its form and frequency and regularity, its link with other human resource activities, and attitudes of respondents towards assessing performance of their subordinates. The statements numbered 20, 22,and 25 ask for the system of management in the organizations, and thus they do not vary across positions, age, gender, or tenure. Statements numbered 19 and 28 are evaluative and thus the responses may vary on individual level (Figure 1).

20. Performance appraisal evaluation is reflected in compensation	1 2 3 4 5
22. In our organization, the subordinates evaluate performance of their supervisors	1 2 3 4 5
25. Needs for further training and development are analyzed during assessment of work performance	1 2 3 4 5
19. I regularly assess performance of my subordinates	1 2 3 4 5
28. I consider performance assessment to be a motivating factor	1 2 3 4 5

Fig 1: QUESTIONNAIRE QUANTITATIVE STATEMENTS

Questionnaire qualitative statements

The third part of the questionnaire consisted of questions where the respondents were asked to evaluate statements qualitatively, indicating all the responses that are relevant or those that are the closest to what they think about the statement. There was also space available for personal responses/comments. For the purpose of this paper, only those questions were analyzed that were relevant to the topic. In these questions, we have not received any individual open-ended responses, so there was no need for additional grouping and coding.

Of these, questions number 33, 34, and 36 ask about a system of performance appraisal within the organization and question 37 ask about the individual opinion on the performance appraisal in the following manner (Figure 2).

33. How frequently is performance assessed in your organization?	❑ Regularly every year on the day the employees started to work for our organization ❑ Regularly every year, all employees in the same period ❑ Always when a project is finished ❑ Irregularly, rather incidentally ❑ Performance is not evaluated ❑ Other
34. In what form is performance evaluated in your organization?	❑ Employees write their own self-evaluations ❑ Evaluation interview ❑ Superior evaluates subordinates without their knowledge ❑ Superior ranks subordinates in order of their performance ❑ Employee is evaluated by several parties (e.g.: superior, colleagues, subordinates, customers)
36. Information from performance appraisal is used for	❑ Compensation ❑ Analysis of training needs ❑ Career development and career growth ❑ Setting of further goals ❑ Are not used for any of the above ❑ Other ____________________
37. In your opinion, when evaluating performance, the manager should	❑ Evaluate only set goals ❑ Be interested in personal problems of the subordinates ❑ Evaluate in factual and impersonal way ❑ Be interested in the relations among subordinates ❑ Provide both positive and negative feedback

Fig 2: QUALITATIVE QUESTIONNAIRE QUESTIONS

Performance Appraisal in Slovak Companies

It can be summarized that performance appraisal is a common tool used by companies and managers in Slovakia. Performance is assessed on a regular basis; information it provides is used as a base for further career advancements, training and development, and it is reflected in compensation. However, it is not common to see subordinates assessing their supervisors.

Performance of the employees is assessed on a regular basis in 66% of the cases, with 32.41% indicating that they always assess performance regularly and 33.59% indicating almost always. When checking for the questions in the third part of the questionnaire, we can say that organizations assess performance upon finishing a particular project in 130 (25.39%) of responses, and once a year at the same time for all employees in 111 (21.67%) of cases. Some companies use a combination of several approaches, but these do not make for more than 1.2%. In 96 (18.75%) cases, performance is assessed on an irregular basis. However, there were also 14 unchecked responses in this section. Out of the sample, 58.78% of respondents said that they both regularly evaluate performance and consider performance assessment to motivate people. An interesting issue arises here, when we can see most managers believing assessing performance motivates (82.03% indicated "always" and "almost always" categories), yet not all of them do evaluate performance.

The most frequent sole technique of performance assessment is when the supervisor assesses his/her subordinates without them knowing they are being assessed. This happens in 139 (27.14%) cases, followed by an interview that is done in 119 cases (23.24%). Ranking as a form of performance assessment is done in 93 cases (18.16%). These numbers suggest prevalence of one-way, top-bottom communication form, where the superior is basically in charge of the evaluation. However, in 72 cases (14.06%) the companies use a multi-party evaluation, where the performance is assessed by more constituents except for a direct superior, such as colleagues, customers, or subordinates. As we have not specified the exact group of possible evaluators, we are unable to say who precisely constitutes the wider group of evaluators. We can only exclude the subordinates as a major group to ask feedback from, as 65.36% of respondents said that it their companies subordinates "never" and in 22.7% "almost never" assess the work of their superiors.

There is a tendency to link performance assessment with other activities, such as analyzing training and development needs, identifying talent within the organization and career opportunities, compensating employees, and setting further goals. Thus we can see performance management systems being established. The highest two rankings make 63.99% (29.35 for "almost always" and 34,64 for "always") of responses indicating that results of performance appraisal are reflected in financial compensation. When analyzing question #36., the most frequent usage of information gained from performance assessment was solely for compensation purposes (196 cases, 38.28%). However, compensation is also seen in combination with other activities such as analyzing training needs (25 cases, 4.88%), career development (15 cases, 2.92%), and goal setting (34 cases, 6.64%). It also appears in a combination of the three activities mentioned above, which cumulatively make up to 13.28% of the responses. On the other hand, linking performance assessment with goal setting seems to be slightly controversial. While 153 managers (29.88%) say that in their companies they use performance assessment to define further goals, only 11 of them think they should be using performance assessment for goal setting.

Comparison of Performance Appraisal in Slovak and Foreign Companies within Slovakia

H1: Companies with foreign capital ownership will show a more positive understanding of the need to assess performance on a regular basis.

In the analyzed sample, there were 432 respondents from Slovak companies and 79 from companies with capital investments from abroad. We have received responses from all managerial positions that were represented in rather balanced ratios. Out of all managers working for Slovak companies, 21.3% were in top, 39.58% in middle, and 38.66% in line positions within the organizational hierarchy. Of the managers working for foreign companies, 29.11% were in top, 43.03% in middle, and 27.84% in the line managerial position.

When compared for gender, there is a slightly higher number of women working in foreign companies than in Slovak (31.65% and 21.99% respectively), which might be caused by the fact that higher number of Slovak companies involved in the study operate in heavy industries.

Foreign companies employ younger people in managerial positions than Slovak companies. Out of all respondents who work for Slovak companies, 6.25% are younger than 30 years of age, 36.81% are aged 31 to 45, and 56.48% are older than 45 years. On contrary, in foreign companies, there are 46.84% of managers younger than 30, 37.97% in the age group of 31 – 45, and only 15.19% of managers older than 45.

When comparing the timing, frequency and techniques of performance assessment used by Slovak or foreign companies, we can identify certain gaps between these two groups of companies (Table 1). In Slovak companies, 31.48% of respondents indicated that they assess performance upon finishing a particular project and

23.15% once a year at a period that is common for everybody. Moreover, 22.92% of respondents said they assess performance on an irregular basis and further 4.17% indicated they do not assess performance at all. On the other hand, 31.65% managers from foreign companies assess performance upon finishing a project, 48.10% do that once a year at the same time. However, only 11.39% assess performance on an irregular basis and only 1.27% do not assess at all.

Since some of the techniques can be used simultaneously to give a better picture of performance, in the question to identify a form of performance assessment, the respondents could check more than one answer, based on what it valid for their companies. The most frequently used form of performance assessment in Slovak companies is when a manager assesses the subordinates without them knowing they are being assessed (32.87%), followed by ranking (24.31%), interview (20.37%), and multi-party appraisal (18.06%). Self-evaluation is almost not used in Slovak companies (2.31%). In foreign companies, the interviews outnumber all other techniques – they are used in 69.62% cases. This gives space for clarification impressions and better understanding of the subordinates than evaluation without subordinates' knowledge. Also, interview provides better environment for linking assessment of performance with other human resource management activities, thus creating performance management. In foreign companies, self-appraisals are also more frequently used (7.59%) and multi-party assessment is comparable to Slovak companies (Table 1).

Table 1: COMPARISON OF FREQUENCY AND FORM OF PERFORMANCE APPRAISAL BETWEEN SLOVAK AND FOREIGN COMPANIES

Question	Response Possibilities	Slovak	Foreign
33. How frequently is performance assessed in your organization?	a) Regularly every year on the day the employees started to work for our organization	7 (1.69%)	0
	b) Regularly every year, all employees in the same period	100 (23.15%)	38 (48.10%)
	c) Always when a project is finished	136 (31.48%)	25 (31.65%)
	d) Irregularly, rather incidentally	99 (22.92%)	9 (11.39%)
	e) Performance is not evaluated	18 (4.17%)	1 (1.27%)
34. In what form is performance evaluated in your organization?	a) Employees write their own self-evaluations	10 (2.31%)	6 (7.59%)
	b) Evaluation interview	88 (20.37%)	55 (69.62%)
	c) Superior evaluates subordinates without their knowledge	142 (32.87%)	8 (10.13%)
	d) Superior ranks subordinates in order of their performance	105 (24.31%)	9 (11.39%)
	e) Employee is evaluated by several parties	78 (18.06%)	12 (15.19%)

When comparing previous statements about frequency and form of performance assessment, we could look at the answers as if they were solo answers, because multiple answers do not make more than 1.5% of the all responses. When looking at the link of performance appraisal with other areas of management such as development, training, compensation, or goal setting, the percentage of multiple answers is considerably higher. This is especially true of foreign companies, where there were almost no solo answers. In this case, as Table 2 suggests, we can talk about performance management, because the information from performance assessment is used for decisions about compensation, analysis of training needs, identification of career paths and personal growth of employees, as well as for setting further goals. It is also interesting to see that almost all foreign companies apply the information from performance appraisal in some way, while Slovak companies slightly lag behind with 8.56% of them not utilizing information from performance appraisal at all. In the Slovak companies, performance is mostly assessed by manager without employees' involvement and applied mostly to decisions about financial or non-financial forms of compensation. Although it is positive to see that performance is assessed by majority of Slovak companies, they still need to elaborate their approach to achieve an effective performance management system.

Performance appraisal is in its nature a rather unpopular managerial activity because it requires managers to evaluate their subordinates and then communicate them the results. Whether performance is assessed during an interview, where there is a dialogue between a manager and a subordinate, or manager evaluates subordinate independently and then tells him/her the results, there are certain behaviors connected with this activity.

Performance appraisal provides environment for both manager and subordinate to learn, explain and clarify each other's expectations and attitudes. What is important for a manager to learn during performance appraisal reflects his or her style of management, their inclining towards achieving goals and/or understanding their subordinates. In our questionnaire we asked managers to indicate their preferred approach to the quality of the message and interest in the relationships among the employees and in the personal life of the employees. Here, multiple answers were also possible, and we have seen them more among managers from foreign companies than from Slovak ones. Only approximately 10% of managers from both groups think that they should evaluate only achieved goals. Although both groups of managers agree that the evaluation should be factual and not biased (70.37% from Slovak companies; 63.29% from foreign), managers in foreign companies put more stress on the fact that they should provide both positive and negative feedback (77.22% compared to 32.64% of Slovak managers). They also show more interest in personal problems of the employees (15.19% compared to 9.72%) and in the relations among the employees (30.38% compared to 15.28%). This, again, is enabled by the form of performance assessment: interview, as a dialogue, can give rise to issues of interpersonal relations of the subordinates and thus more complex understanding of their work-related attitudes.

Table 2: COMPARISON OF USAGE OF PERFORMANCE APPRAISAL INFORMATION BETWEEN SLOVAK AND FOREIGN COMPANIES

Question	Response Possibilities	Slovak	Foreign
36. Information from performance appraisal is used for	a) Compensation	281 (65.05%)	58 (73.42%)
	b) Analysis of training needs	70 (16.20%)	41 (51.90%)
	c) Career development and career growth	40 (9.26%)	37 (46.84%)
	d) Setting of further goals	117 (27.08%)	35 (44.30%)
	e) Are not used for any of the above	37 (8.56%)	1 (1.27%)

Attitudes towards performance appraisal

For this part of the study, we have looked only in those questions that reflect attitudes of managers and thus can very by position within the hierarchy or length of time spent working for a particular company. While the previous part of the paper focused on the general information of form, frequency, and usage of performance appraisal by companies, this part studies whether attitudes towards assessment of performance differ depending on managerial position or tenure. Our hypothesis (H2) is that the attitudes towards performance appraisal will be more positive with more senior management positions. We also expect that the managers who are not familiar with the company feel more interested in evaluating performance and linking it to other activities. Thus the hypothesis (H3) is that managers with low tenure would be more positively responding towards performance appraisal and feedback.

When looking at the tenure of the respondents, there is a difference in the pattern of distribution of respondents in managerial positions. While in the Slovak companies, the tendency is ascending, with the largest group at any level being formed by managers with the longest tenure; in the foreign companies the tendency is descending from the largest group of managers in the category from two to five years of employment with the company. Moreover, managers younger that 30 years of age are almost non-existent in Slovak companies, thus the strongest group of managers in the Slovak companies is formed by respondents with tenure of more than 13 years and older than 45 years of age (38.42%). In foreign companies, the largest number of managerial positions (45.56%)

is held by the people who have been employed by the company from two to five years, out of those more than a half (52.77%) are younger than 30 years of age. This might be partially caused by the fact that the entry of foreign companies into Slovak business environment started to be significant only at the beginning of the 1990's. From the perspective of tenure, the largest proportion of female managers occurs in among those whose tenure is less than one year with a company (forming 39.39% of the tenure population). Then the share of female managers declines, forming 34.65% among those who are with the company for 2-5 years, 20.33% for 6 – 12 years, and only 18.90% of females out of the population of managers who have been with their companies for longer than 13 years.

H2: The attitudes towards performance appraisal will more positive with more senior management positions

The managers at all positions indicate that they regularly assess performance of their subordinates, and this does not significantly differ in Slovak or foreign companies, and it does not significantly change by the position of a manager or their tenure. However, when asked whether they believe performance assessment is motivating, the percentage of responses slightly declines with position in Slovak companies – among top managers 83.7% indicated "almost always" and "always" (35.9% and 47.8% respectively), 82.5% of middle managers, and 76% of line managers. In foreign companies, the tendency is opposite, yet not significantly and all the responses for the "almost always" and "always" are over 90% – 91.3% of top managers, 94.1% of middle, and 95.5% of line managers.

When asking about the quality of performance appraisal, it is interesting to see that both managers of Slovak and foreign companies differ according to the position in their attitude and need to provide both positive and negative feedback to their subordinates (see Table 3). While the numbers are doubled for managers in foreign companies, the tendency is still descending from top managers to line managers, where only a quarter of managers in Slovak companies have the need to provide both positive and negative feedback. Similar trend can be seen when managers are asked whether they should be interested in personal problems of their subordinates – the higher the manager is within the hierarchy the higher is the notion to understand their subordinates more complexly. The values are still significantly higher for managers in foreign companies. In this question, respondents could check as many answers as were applicable for them. The occurrence of multiple answers was higher for managers of foreign companies, where the most complex situation was for top managers and then it went proportionally down to middle and line managers. The most multiple answers of managers in Slovak companies was also in top management positions, however the difference was not significant.

Table 3: COMPARISON OF QUALITY OF PERFORMANCE APPRAISAL INFORMATION AMONG MANAGERIAL POSITIONS

Question	Response possibilities	**Top** Slovak *Foreign*	**Middle** Slovak *Foreign*	**Line** Slovak *Foreign*
37. In your opinion, when evaluating performance, the manager should	a) Evaluate only set goals	**8 (6.96%)** 6 (6.52%) *2 (8.10%)*	**26 (12.68%)** 22 (12.87%) *4 (11.76%)*	**16 (8.42%)** 14 (8.38%) *2 (9.09%)*
	b) Be interested in personal problems of the subordinates	**15 (13.04%)** 9 (9.78%) *6 (26.09%)*	**25 (12.20%)** 19 (11.11%) *6 (17.65%)*	**14 (7.37%)** 14 (8.38%) *0*
	c) Evaluate in factual and impersonal way	**75 (65.22%)** the same for both	**133 (64.88%)** 114 (66.67%) *19 (55.88%)*	**145 (76.32%)** 128 (76.65%) *16 (72.73%)*
	d) Be interested in the relations among subordinates	**21 (18.25%)** 11 (11.96%) *15 (43.48%)*	**39 (19.02%)** 31 (18.13%) *8 (23.53%)*	**30 (15.79%)** 24 (14.37%) *6 (27.27%)*

	e) Provide both positive and negative feedback	**63 (54.78%)** 44 (47.83%) *19 (82.61%)*	**83 (40.49%)** 55 (32.16%) *28 (82.35%)*	**56 (29.47%)** 42 (25.15%) *14 (63.64%)*

H3: managers with low tenure would be more positively responding towards performance appraisal and feedback

When looking whether tenure influences managers' attitude towards motivation strength of performance appraisal, we can see a descending tendency in the percentages of responses both in Slovak and foreign companies. The highest rankings are in the category of the least tenured managers, with 100% of responses for "almost always" and "always" among managers in foreign companies and 92.3% of responses of their counterparts from Slovak companies. Managers who work for their companies form two to five years have the same opinion in 91.7% of cases in foreign companies and 83.1% case in Slovak companies. The category of managers with 6 – 12 years of tenure has the same answers in 87.5% and 78.3% for Slovak and foreign companies respectively. There is on average a 10% difference in answers when foreign and Slovak companies are compared (Table 4).

Table 4: COMPARISON OF ATTITUDES TOWARDS PERFORMANCE APPRAISAL ACCORDING TO THE TENURE OF INDIVIDUAL MANAGERS

Question	**Response possibilities**	**Tenure**			
		Less than 1 year **33 respondents** Number of responses (%)	**2 – 5 years** **101 respondents** Number of responses (%)	**6 – 12 years** **123 respondents** Number of responses (%)	**More than 13 years** **254 respondents** Number of responses (%)
37. In your opinion, when evaluating performance, the manager should	a) Evaluate only set goals	3 (9,09%)	13 (12,87%)	3 (2,44%)	21 (8,27%)
	b) Be interested in personal problems of the subordinates	3 (9,09%)	9 (8,91%)	16 (13,01%)	26 (10,24%)
	c) Evaluate in factual and impersonal way	21(63,64%)	64 (63,37%)	82 (66,67%)	187 (73,62%)
	d) Be interested in the relations among subordinates	7 (21,21%)	18 (17,82%)	26 (21,14%)	39 (15,35%)
	e) Provide both positive and negative feedback	17 (51,52%)	61 (60,40%)	39 (31,71%)	85 (33,46%)
	TOTAL	*154,55%*	*163,37%*	*134,96%*	*140,94%*

* one respondent did not state his responses in this part

Discussion and Limitations of the Study

The study findings confirm that performance appraisal is a commonly used practice among companies operating within the territory of the Slovak republic, which was not present a decade ago. Under new external conditions, companies embody new practices in order to compete successfully. As predicted in hypothesis 1 (H1), there is a difference in usage of performance assessment between Slovak companies and companies with foreign capital investment, with the later being more advanced. Even though other studies suggest that influence of market is becoming more significant when companies decide about their policies, the direct influence of foreign companies on the local ones cannot be proven by this study, as we do not have historical data available. Thus, our hypothesis 2 and 3 were not completely proved, however it could be a subject of further study. Also, since there is a lead of foreign companies in performance appraisal execution, inspiring the local companies, it would be interesting to see what role the entry of foreign companies plays in other countries.

Conclusion

Performance management is used to ensure that employees' activities and outcomes are congruent with the organization's objectives resulting in the firm's successful implementation of strategy. This fact makes the performance management a central factor to gaining competitive advantage. As a system, performance management has three parts: defying performance, measuring performance and feeding back performance information. With performance as success indicator, the need to assess performance and benefit from the gained information has become a vital part of managerial job and a common practice in the Slovak business environment. Managers understand it as a tool to motivate their subordinates and incorporate it into activities they regularly perform. Performance is assessed on regular basis and the gained information is then used for decisions about compensation, training and development, and for setting further goals. Still, there is a gap between managerial practices of companies that have foreign capital investment and those that are Slovak.

References

[1] Noe, R.A., Hollenbeck, J.R, Gerhart, B.and Wright, P.M. (1994). Human Resource Management: Gaining Competitive Advantage. Austen Press. Irwin. ISBN: 0-256-11349-1.

End Notes

[1] Sulíková,R. (2001). Intercultural communication, The 6th International Conference on Global Business & Economic Development. Bratislava. Volume II. ISBN: 0-9660656-6-2. p. 311-316

[2] Weidlich, R. (2001). Market Pressures for Tournament Type Organization in Emerging Central Europe: Evidence, Implications and Sustainability. The 6th International Conference on Global Business & Economic Development. Bratislava. Volume II. ISBN: 0-9660656-6-2. p. 16

[3] Companies with foreign capital investment are often in this text referred to as “foreign” for simplicity of terminology.

Synergy of National and Corporate Culture: Comparative Study Amongst International Hotels Operating in Indonesia

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Abstract

A study was undertaken among 165 employees at Hotels chain International and National (USA, Hong Kong, Indonesia) for the purpose of determining (1) effect of dimensions of National and Corporate cultures as defined by Hofstede, have a greater synergy to improve the performance of hotel managers and (2) whether we found that the presumed negative effect from culture distance on performance originate more from differences in organizational culture than from differences in National culture. The finding also shows that to a large extent there was a positive relationship between National and Corporate Culture. Therefore it was possible to conclude that as hypothesized by Hofstede and others, the cultural differences influence the way International management should be conducted

Introduction

Culture can affect the way companies do business, and sometimes this is a blessing in disguise. Culture is that complex system that includes knowledge, belief, art, law, morals, customs and any capabilities and habits acquired by a man as a member of society (Alder 1991), culture is some things that are shared by members of same social group. Culture is a way of life of a group of people that is handed down from one generation to the next (Barnouw, 1963:4) or suggested by Hofstede (1980a: 25)

"The collective programming of the mind which distinguishes the members of one human group from another … the interactive aggregate of common characteristics that influence a human group's response to the environment"

As can be seen from the above definitions, culture is a social mechanism that shapes and guides people's thoughts, values and beliefs and ultimately controls their behavior.

Schein's (1984:3-16) defines that Organization culture is the pattern of basic assumption that given group has invented, discovered, or developed in learning to cope with its problems of external adaptation and internal integration. This has worked well enough to be considered valid, and therefore, to be taught to new members as the correct way to perceive, think and fell in relation to those problems. Schein definition embodies Atkinsons's in (Huliselan, 1999) explanation, of organizational culture as reflecting the underlying assumptions about the way work is performed, what is acceptable and not acceptable and what behavior and actions are encouraged and what Mc. Lean and Marhshall (1993:37-41) defines as the collection of traditions, values, policies, beliefs and attitudes that constitute pervasive context for everything we do and think in an organization Organizations operate with an increasingly volatile environment and to perform effectively they must be responsive to change. Fundamental changes in business strategy and consequent organizational restructuring have been identified as among key triggers. Hofstede's earlier research showed that people from the same country have a tendency to have similar basic values. However, in the workplace, cultural differences are accounted for more by work practices than by national culture.

Organization culture also provides valuable metaphor, which makes it possible to capture the deeper characteristics and underlying qualities of employees as a whole. As such it can be used as a tool to help management in establishing objectives and what it wants to accomplish from the training and development program, recruitment systems socialization procedures Alvesson and Berg in Huliselan (1999), which may include shared value programmers, performance management and the like. They claim that culture is used as means of attaining collectivity feeling which makes employees less egoistic and instrumental and more willing to work for the best of the company. Organizational culture is also seen by some as either the means of the target for changes that have major commitment, control, productivity or even bottom line consequences. Strong culture is also often said to help business performance because they create an unusual level of motivation in employees. Sometimes the assertion is made that shared values and behaviors make people feel good about working for a firm, that feeling of commitment or loyalty then is said to make people strive harder. Sometimes certain practices believed to be common among firms with strong cultures are said to make-work intrinsically rewarding. Occasionally strong cultures are also said to help performance because they provide needed structure and controls without having to rely on a stifling formal bureaucracy, which can dampen motivation and innovation.

The problem addressed in this study is:

The synergy between national and corporate culture in International Hotels can improve the performance of Hotel?

Frame Work

The diagram shows Organization and managers in a company, managed by a different Nation but has a synergy of national and corporate culture, which uses the multiethnic worker to achieve the performance. The synergy in the organization and managers culture from different operations Hotel the result are some characteristics are similarity and others are differences, the differences of characteristics among the operations can make the strong and unique of culture to improved the performance. According to Alvesson. et al (1992:136) Claim made in support of the cultural perspective is that an idiosyncratic and strong corporate culture will give an organization a competitive advantage over other organization within the same industry. To assume that social or organizational innovation is the key to corporate competitive strength also seems to be shared by many practitioners. In fact, today there seems to be a commonly shared assumption that there is direct and positive relation between a strong organizational culture and corporate performance in terms of profit, productivity and creativity. More precisely, this assumption has been formulated in the strong culture hypothesis. (Denison 1984) which states that in order to “boost performance”; a culture needs to be both strong and distinctive. A part from “strong culture companies” (Ouchi/Price 1978). Concepts such as “high commitment cultures” (Sherwood 1988), “Excellent companies” (Peter/Watermen 1982), “positive culture companies” (Wilkin 1984), “High performing systems” (Vaill 1982) and “distinctive cultures” (Saffold 1988) are used to delineate this assumed culture-performance relationship.

Burger and Bass (1979) assumed Synergy involve a new way of thinking which helps to free one from outdated patterns and can break the shell of permitted ignorance. Fuller (1981) claim that synergy is the behavior of whole systems that cannot be predicted by the behavior of any parts taken separately, in order to really understand what is going on, we have to abandon starting with parts, and we must work interest from whole to particular. While Moran and Harris (1981) emphasize that the very differences in the world’s people can lead to mutual growth and accomplishment that is more than the single contribution of each party to the intercultural transaction, they suggest that we can. They also argued that Culture synergy builds upon similarities and fuses differences resulting in more effective human activities and systems. The very diversity of people can be utilized to enhance problem solving by combined action. International management has unique opportunities to foster synergy on global basis. On the other hand Adler (1980:173), claim that manager in Synergistic organization use diversity as a key resources in solving problems involves situation description, Cultural Interpretation, and cultural creativity.

From the literature described above it is the very assumption of a strong and coherent culture being a prerequisite “excellence” or high performance” that has caused so many hotels corporation to initiate “culture development" program or attempt "culture revolution" or Cultural turn-around". The result is Organization and manager must be competent and commitment.

National Culture

National cultures vary from each other in many respects and on many dimensions. For the last 50 years. Various sociologists, anthropologists and social psychologists have advanced their list of the major dimensions of national cultural variation.
Dutch researcher Geerts Hofstede (1980a) who analyzed the wok values of 116.000 sales service IBM employees in 50 countries, identified the following four basic dimensions of national culture that underlie organizational behavior.

Power distance

Power distance defines the extent to which societies accept inequality in power and consider it as normal. This dimension does not deal with the mere existence of power distance, which is universal, but the magnitude that is tolerated.

Individualism/collectivism

Individualism is tendency of people to look after themselves and their immediate family only. Hofstede measured this cultural difference on a bipolar continuum with individualism on one end of the continuum and collectivism on the other. **Collectivism** is the tendency of people to belong to groups or collectives and to look after each other in exchange for loyalty degree to which cultures encourage individual concerns as opposed to collectivist concerns. In individualist cultures everybody is responsible for him self/herself.

Masculinity

Hofstede as a situation in which the dominant values in society are success, money and things defines masculinity. Hofstede measured this dimension on a continuum ranging from masculinity to femininity. Contrary to some stereotypes and connotations. **Femininity** is the term used by Hofstede to described a situation in which the dominant values in society are carrying for others and the quality of life.

Uncertainty Avoidance

Uncertainty Avoidance is the extent to which people feel threatened by ambiguous situations and have created beliefs and institutions that try to avoid these. Countries populated with people that do not like uncertainty tend to have a high need for security and strong belief in experts and their knowledge. Culture with low uncertainty avoidance have people who are more willing to accept that risks are associated with the unknown, but that life must go on in spite of this. Countries with **high uncertainty avoidance** culture have a great deal of structuring of organizational activities, more written rules, less risk-taking by managers, lower labor turnover, and less ambitious employees. Low uncertainty avoidance societies have organization setting with less structuring of activities, fewer written rules, more risk-taking by managers, higher labor turnover, and more ambitious employees. The organization encourages the personnel to use their own initiative and to assume responsibility for their actions.

Six key Dimensions of organizational culture

Refers to Hofstede (1991) research:

Process-Oriented Vs Results-oriented

Process oriented cultures are most concerned with the way things are done, organizational cultures, participants tend to be low risks-takers and do things by the book. Result-oriented cultures are most concerned with outcomes of decisions, organization cultures, the participants put in maximum effort in getting things done and they are prepared to take risks.

Employee-Oriented Vs Job-oriented

Dimension contrasts a concern for people (employee oriented) with a concern for getting the job done (job oriented). Hofstede et al (1990), relate this dimension to the managerial grid developed by Blake and Mouton (1964). The position (9.1) on the grid represents the task management style in which a manager is an exacting taskmaster who expects schedules to be met and people to do what they are told. On the other hand, the position (1.9) on the grid represents the employee management style, in which manager do not push people for production and overlook their mistakes because members are considered to be doing the best they can. People try to avoid direct disagreements or criticisms of one another , and production problems are glossed over (Pugh and Hickson, 1989) **Parochial Vs Professional**. Parochial cultures are characterized by employees who derive their identify largely from the organization for which they work, members of parochial organizational culture feel that the organization's norms control their behavior at home as well as on the job. They believe that when hiring new employees, the organization takes into account the person's social and family background as well as the individual's job competence. These employees also tend to have a personal short-run time focus, assuming that the organization will address the long-run focus. Professional cultures are characterized by employees who derive their identify largely from the type of work they perform. Members of professional organizational cultures consider their personal life to be their own business and do not allow organizational norms to dictate off-the-job behavior. The employees believe that the organization hires people on the basis job competence and that such factors as social and family background are of no relevance in this selection decision. Employees in this professional culture also tend to have a long run time focus.

Closed system vs. Open system

Closed system cultures are characterized by a willingness to quickly accept new members of the work unit. Closed system culture also have high formalization and are often characterized by material-intensive processes Open system cultures are characterized by a willingness to quickly accept new members of the work unit. Open system organization cultures, on the other hand, are very short time to newcomers and outsiders. New employees often in a very short time become full-fledged members of the group. These units are also more likely to have a large percentage of female employees. Including managers.

Tight Control vs. Loose control

Tight control cultures are characterized by formal policies and rules and close control of both time and money. Tight control organization cultures tend to be engaged in simple, repetitive, or clerical work. There is likely to be a large percentage of female managers and employees, and the work is often process-oriented (as opposed to results-oriented). Manager in these unit also spend a relatively large part of their time reading and writing reports and memos from inside the organization. A tight control culture is also likely to be found in units where there have recently been employee layoffs. These cultures are also characterized by the high absenteeism, evidently one way of escaping from the pressures of a tight control system. Loose control cultures are characterized by informality and a lack of bureaucratic procedures.

Normative vs. Pragmatic

Normative cultures are ones in which major attention is given to following rules and procedures to the letter. Normative organizational cultures are more interested in how things get done than in the results themselves. Pragmatic cultures are ones in which practicality and results are given primary attention even if it means violating rules or procedures. Pragmatic organizational cultures put outcomes at the top of their priority list, and if this means giving a customer a special discount or service in order to get the sale, this will be done. Units operating in pragmatic cultures see ethics as only a flexible guideline to action and are willing to bend the rules if the desired ends can be achieve.

Managerial Implication

According to Hofstede the consequences for management practices resulting from cultural differences are numerous and significant. In individualism cultures the most effective and appropriate reward system is based on individual merit pay, the emphasis is on individual initiative and achievement, leadership is ideal, autonomy and individual security are sought, group members value individual decisions and everybody has a right to private life opinion.

On the other hand, in collectivist cultures the reward system is based on group performance, membership-as opposed to leadership-is the goal, expertise order and duty are provided by the organization, group member's values group decisions and private life is invaded by the organization.

In high power distance cultures effective managers are task-oriented benevolent, autocrats, both subordinates and superiors consider each other as different kinds of people, superiors are inaccessible, managers as power holders are entitled to privileges and try to look as powerful as possible, the underdog and weakling is to blame, and most subordinates are dependent on their superiors. In contrast, in low power distance cultures effective managers are people oriented and participative style leaders, both subordinates and superiors considers each other to be people like me, superiors are accessible, superiors and subordinates have equal rights, managers try to look less powerful than they are, when something goes wrong the system-rather than the underdog-is to blame, and all members of the organization are independent.

In masculine cultures women are expected to play certain roles such as staying home and talking care of the children or be employed in thee caring professions, managerial sexism is widespread and manifested by existence of an unspoken "glass-ceiling" money, power, brilliance, individual competition and "macho" types are universally adored, performance is what counts, and one "lives to work". On the other hand in feminist cultures little differentiation is made between men and women on the same job, power and brilliance is not sympathetically regarded, small and slow types of individuals are admired, quality of life is more important than performance, and one "works to live". In high uncertainty avoidance cultures, organizations have clearly formulated rules and procedures. The manager is expected to issue clear instructions. And subordinates initiatives are tightly controlled. Both subordinates and superiors experience high level of stress, time is money and hard work is a virtue. Employees place a high premium on job

Security, career patterning and retiring benefits. Deviant persons and ideas are thought to be dangerous and intolerance is the norm.

In contrast, both superiors and subordinates in low uncertainty avoidance cultures prefer to have as few rules as possible and are prepared to break rules if necessary. More acceptance of dissent is entailed and deviation is not considered threatening. Ease and lower stress are experienced and time is considered to be free. Lifetime employment is not sought after and people are more willing to take risks (Hofstede, 1980b; Mead, 1994: pp. 64-76; Phatak, 1997:pp.156-1457).

Cultures of Corporate

Like nations corporate have cultures. Though, for the most part, these cultures have neither been extensively documented nor properly classified, the few case studies and short descriptions that were conducted enable us to draw the conclusion that they exit (Pizam, 1993). At this stage the question must be posed as to what extent are corporate culture independent of national cultures and an therefore be implemented worldwide; or are they subjugated to national culture and must be congruent with them? In other word, can we say that the culture of the hotel Industry is universal, or would it have to vary from country to country if it were to be effective?

Researchers such as Child (1981), Child and Tayeb (1983) Cole (1973), Levitt (1983), Hickson (1976), claim that organizational characteristics are similar, if not identical, cross-nations and for the most part are free from cultural dominance. These researchers who are identified with the "Convergence". Okechuku and Wai Man 1991 argue " Individuals, irrespective of culture are forced to adopt industrial attitudes such as nationalism, secularism, and mechanical time concerns in order to comply with the imperative of industrialization.

If ask the above question, such researchers would depend more on other contingency. Such as size, technological development, geographical diversification and market segment than on national culture. Hotels operating in different cultures will differ in many of their managerial practices such as leadership styles, communication patterns, motivation techniques etc.

The Cultures of USA, Hong Kong and Indonesia

USA, according to Hofstede, rank high on Masculine and small power distance, weak uncertainty avoidance and high Individualism (hofstede, 1991). United State culture has generally perceived the human as separate from nature, and entitled to exploit it. Such activities as mining, damming rivers for hydro-electric power, analyzing and planning to control weather patterns, genetic engineering, all show a need for dominance.

Hong Kong Chinese, according to Hofstede, rank high on masculinity and power distance and low on Individualism and uncertainty avoidance (Hostede, 1991). Chinese culture is first and foremost pragmatic. The prevalent type of bureaucracy in Hong Kong is the personnel bureaucracy which resembles on oriental family) Hofstede 1980a).

Chinese culture places a priority on family loyalty and needs. The organizational culture of Chinese family companies closely reflects Chinese cultural values and the traditional teachings of Confucius [which teaches lessons for the here and now rather than for an after life]" (Mead, 1994:309)

Chinese Organization are built around strong leader who controls by direct supervision, and authority is associated with this individual rather than with the organization or his/her rank. (Mead, 1994: 105), Indonesia, according to Hofstede, ranks large power distance, weak uncertainty avoidance and low individualism, and feminine. Indonesian organization frustrated, by what he/she perceives as inefficiency, when Indonesia co workers refuse to ask an outsider, or insider outside the chain of command, for help. And when he/she does make such an advance, they are drawn to censor his/her apparent lack of loyalty and respect. The Indonesian values it as a means of signaling that has authority over whom. Indonesian places most values on social harmony and assesses the potential employees who will be involved in the different positions. In Indonesia terms a group of people who do not observe the proper social priorities and protect their group interests, place their individual interests at jeopardy and cannot be expected to work together efficiently.

Objectives

The objectives of this study were:

1. To determine whether the national culture of USA, Hong Kong, and Indonesia have a greater effect on the corporate culture of the Hotel Industry.
2. To determine whether the synergy of national and corporate culture can improve the Performance of Hotel?

It was hypothesized that the national cultures of USA, Hong Kong and Indonesia will have a greater effect than the corporate culture of the Hotel Industry and therefore more differences would be found managerial practices of the Hotel managers, than similarities. Furthermore, it was hypothesized that synergy of national and corporate culture will be positively associated with improve the performance, and therefore the results of this study which measured managerial practices and work values.

Methodology

Instrument

Data for the study was collected by means questionnaire. The questionnaire used in this study was designed to measure the prevalence of managerial practices related to Hofstede's four cultural dimensions: power distance, Individualism/collectivism. Masculinity/femininity and uncertainty avoidance. The Questionnaire consisted of 23 items. To analysis work value the questionnaire related to Hofstede's Corporate culture six dimensions: Process-oriented/Result oriented, Job –Oriented/Employee oriented, Parochial/professional, and Closed system/open system, tight control and loose control, normative/pragmatic. The questionnaire consisted 36 items. For most questions the rating scale ranged from 1 to 5.

Sample

The final usable sample consisted of 165 hotel employee in International chain USA, Hong Kong, Indonesia Hotels of these, 65 were USA, 45 Hong Kong and 55 Indonesian are represented that come bustle from 4 and 5 stars Hotel and location in Business area.

Data analysis

To test for significant differences between each of the three nationalities on each of the aforementioned managerial practices, a series of analysis of variance with post-hoc multiple comparison tests was conducted. To test for significant differences between each of the three nationalities on each Hofstede's four's and six's Dimensions, first four and six summated scales were created, and second, four and six analysis of variance with post hoc multiple comparisons test were conducted.

Limitations of the study

Study is limited to hotel Industry only, where there is a lot of multinational, conduct in Jakarta, not to be generalized to other region, data collected within period March 2000 to April 2002, Questionnaire in Indonesia and back to back translation and Employees not in truly educate answer they understand the question.

Table 1: FOUR DIMENSIONS

- **Power distance dimension**

Sub-dimension/variable	USA(A)	HK(H)	Indonesia(I)	
1. Very hierarchical	3,7	3	3,8	I>USA>H
2. Very Authoritarian	2,4	4	4,8	I>H>USA
3. Highly centralized	2,9	4,3	4,5	I>H>USA
4. Has clear and formal rules of action	3	3,5	2,5	H>USA>I
5. Being confrontational and assertive	2,5	3,8	4	I>H>USA

6. Keeping a personal distance from subordinates	2,3	4,5	4,8	I>H>USA

I Strong power distance rather then H and USA

The higher the score the large the power distance

- **Individualism/Collectivism dimensions**

Sub-dimension/variable	USA(A)	HK(H	Indonesia(I)	
1. Influenced by family relationship	3,2	4,5	3,7	H> I>USA
2. Clear policies on employee relation-ship	3,5	3,2	4,1	I>USA>H
3. Inter ethnic harmony	4,5	4,8	3,8	H>USA>I
4. Provide equal opportunity for all	3	2,5	2,3	USA>H>I
5. Consult employee	2,8	2,3	2	USA>H>I
6. Very Flexible	4,2	2,1	2,9	USA>I>H
7. Not freedom in a job to adopt own approach	1,7	3,5	3,3	H>I>USA

USA and Hong Kong is more collectivism then Indonesia

The higher the score the higher Collectivism

- **Masculinity/femininity dimension**

Sub-dimension/variable	USA (A)	HK(H)	Indonesia(I)	
1. Risk taking	3,4	3,7	2,6	H>USA>I
2. Clear objective	4,6	4,2	2,8	USA>H>I
3. Has the well being of its people as A major objective.	4,3	3,8	2,7	USA>H>I
3. Believing that reward should be based on achievement.	4,5	4,5	4	USA=H>I
5. . Encourages diversity of opinions	2,7	3,3	4,8	I>H>USA

USA more masculine then Hong Kong and Indonesia

The higher the Score, the more Masculine

- **Uncertainty avoidance dimension**

Sub-dimension/variable	USA (A)	HK(H)	Indonesia(I)	
1. Enjoying, above all else, to work as a part of a team	4	4,7	4,1	H>I>USA
2. Decision making by majority votes	2	2,7	4,5	I>H>USA
3. Degree of anticipation of problems and advance preparation	2,5	3	3,5	I>H>USA
4. Adherence to company procedures manual	2,8	3,5	3,8	I>H>USA

5. Importance of staff compliance with guidelines For addressed guest.	2,9	4,2	4	H>I>USA

I strong uncertainty avoidance rather then H and USA

> The higher the score, the higher the strong uncertainty avoidance

Table 2: SIX DIMENSIONS

- **Process VS Result dimension**

Sub-Dimension/Variable	USA(A)	HK(H)	Indonesia(I)	
1. Eager for opportunities to learn and Develop	4,7	4,6	4,1	USA=H=I
2. Style of dealing with each other is informal	4,3	2,2	2,5	USA>I>H
3. Depending only on group	1,9	4,0	4,9	I>H>USA
4. Typical employee takes initiative	4,4	5	4,7	H>I=USA
5. Typical employee is fast at work	4	3,8	3,2	USA>H>I
6. Non Profit orientation	2,2	2,2	2,8	I>H=USA
7. Oriented not towards to the market	1,5	1,6	3,4	I>H=USA

USA and Indonesia more in process dimension and Hong Kong more in Result dimension

> The higher score process dimension, the lower the score, Result dimension.

- **Employee VS Job Dimension**

Sub-Dimension/Variable	USA(A)	HK(H)	Indonesia(I)	
1. Believing that if one is motivated enough Anything can be achieved	4,2	3,1	4,1	USA=I>H
2. Believing that own achievement is based Very much on outside forces	3,9	2,1	4,1	I>USA>H
3. Preferring, above all else, to direct other People	3,7	2,4	3,3	USA>I>H
4. Socializing with subordinates outside work	4,5	5	4	H>USA>I
5. Having a completely democratic	4,4	4	3,8	USA>H>I
6. Working through the hierarchy at all time.	4	2,1	4,1	I=USA>H
7 . Motivates employees	2,8	3,3	3,7	I>H>USA
8. Strong trade unions	3,2	3,7	4	I>H>USA

Indonesia and USA emphasize to employee, Hong Kong to Job dimension

> The higher the score Employee dimension, the lower the score job dimension.

- **Parochial VS Professional dimension**

Sub-Dimension/Variable	USA(A)	HK(H)	Indonesia(I)	
1. Preferring work to be unpredictable	4,9	4,5	2,9	USA>H>I
2. Very ambitious to reach the top	4,8	4,4	4	USA>H>I

3.	Setting self difficult goals	4,47	5	4,1	H>USA>I
4.	Much internal competition for promotion	4,6	4,3	2	USA>H>I
5.	High level of management expertise	4,8	4,3	3,8	USA>H>I
6.	Undergoing rapid change	4,5	3,8	3,7	USA>H>I

USA and Hong Kong is professional dimension and Indonesia is Parochial

The higher the score, professional dimension, the lower the score parochial dimension.

- **Open VS Closed dimension**

Sub-Dimension/Variable	USA(A)	HK(H)	Indonesia(I)	
1. New employees not need a time to feel at home	4,2	2,3	2,5	USA>I>H
2. Only specific kind of people fit in the Organization	4,5	4,5	2,3	USA=H>I
3. Communicating openly	5	3,5	4,1	USA>I>H
4. Giving subordinates open access to information.	5	2,5	4,9	USA=I>H

USA and Indonesia more open, and Hong Kong closed dimension

The higher score open dimension, the lower the score closed dimension.

- **Loose VS tight control dimension**

Sub-Dimension/Variable	USA(A)	HK(H)	Indonesia(I)	
1. Basing decisions on likely outcome, on pre-set principles	4,5	3,4	3,1	USA>H>I
2. Regarding the well being of its people As the objective of an organization	4,8	3,2	2,8	USA>H>I
3. Many strict rules	3,2	4,5	3,7	H>I>USA
4. Very ethical	4,4	2,4	2,3	USA>H>I
5. Employees always speak seriously of organization and job	4	2,4	2,2	USA>H>I

USA tight dimension, H and I Loose control

The higher score tight dimension, the lower the score tight dimension

- **Normative VS Pragmatic dimension**

Sub-Dimension/Variable	USA(A)	HK(H)	Indonesia(I)	
1. Preferring the security of steady job	4,7	4,7	4,9	I>H=USA
2. Making sacrifices for the good of the group	4,1	4,7	4,3	H>I>USA

3. Believing that managers must Act completely ethically	4,9	4,5	5	I>USA>H
4. Replacement employee on the right place and the right time	3,8	3,3	2,3	USA>H>I
5. Clear Policies on client or customer relation.	4,4	4,3	3,9	USA>H>I
6. Considering only the results of the organization as being paramount	5	5	5	USA=H=I

the three countries have a same range are normative dimension

The lower score pragmatic dimension, the higher the score normative dimension

Results and discussion

Power Distance

Table 1a. Presents the results of the comparison between the power distance related managerial practices of the USA, Hong Kong, and Indonesia hotel managers. As can be seen from the above, in two out of the six variables there was significant differences among the three nationalities, Indonesia appeared to have the highest Power distance. This finding contradicts with Hofstede original research, finding Hong Kong, which was rated as very high power distance country and significant higher than Indonesia. To summarize, the findings related to the power distance dimension showed the USA managers very hierarchical and Hong Kong hotel manager the most clear and formal rules of action.

Individualism/collectivism

Table 1b. Presents the results of the comparison among the individualism/collectivism related managerial practices of USA, Hong Kong and Indonesia hotel managers. As can be seen from the above, in seven variables there was no significant differences between the managerial practices of the three nationalities groupings, though all three nationalities where in the mid range individualism/collectivism dimension. The three country significantly from each other on their managerial practices. Hong Kong manager were found to be most collectivism of the three while USA were the most individualism, and Indonesia were in between the two. This finding countries from Hofstede original research which found that Hong Kong Indonesia is more collectivist rather then Hong Kong. An analysis of the differences between the three nationalities grouping on the managerial practices related to individualism/collectivism indicated that:

1. Hong Kong manager more influenced by family relationship rather then USA and Indonesia manager.
2. Hong Kong manager more inter ethnic harmony rather then USA and Indonesia manager.
3. Hong Kong manager not freedom in a job to adapt own approach more then USA and Indonesia manager.
4. Hong Kong manager provide equal opportunity for all more then USA and Indonesia manager.
5. Indonesian manager clear policies on employee relationship more then USA and Hong Kong Manager.
6. USA manager consult employee more than Indonesia and Hong Kong Manager.
7. USA manager very flexible then Hong Kong and Indonesian manager.

Masculinity/femininity

Table 1c. Present the result of the comparison between the masculinity/femininity related managerial practices of the Chinese, USA, Hong Kong and Indonesia hotel managers. As can be seen from the above, in five Variable there were significant differences between the managerial practices of the three national groupings. Though all three nationalities were USA more strong Masculinity, and than Hong Kong and Indonesia. Indonesian managers were more less Masculinity than both USA and Hong Kong. Who did not differ from each other.

Once again, thus finding confirm to certain extent Hofstede's original research which found that Hong Kong to be Higher Masculinity than USA and Indonesia.

An analysis of the differences between the three nationalities group on the managerial practices related to masculinity/femininity indicates that:

1. USA Manager more clear objective than Hong Kong and Indonesia manager.
2. USA Manager has the well being of its peoples as major objective rather than Hong Kong and Indonesia.
3. Hong Kong manager more risk taking rather then USA and Indonesia manager
4. Hong Kong manager and USA manager more believing that reward should be based on achievement.
5. Indonesia manager more encourages diversity of opinions.

Uncertainty Avoidance

Table 1.d. Present the results of the comparison between the uncertainty avoidance related managerial practices of USA, Hong Kong and Indonesia. As can be seen from the above, in one out of five variables, extent of reutilization of behavior there was no statistical significant different between the three nationalities in three of reaming five, decision making, anticipation of problem and Adherence company procedure manual. Indonesian manager were involved in managerial practices associated with a high uncertainty avoidance. Reaming 2 variable, Important of staff compliance with guidelines and enjoying above all else to work as a part of team Hong Kong Hotel manager possessed the high uncertainty avoidance. These findings partly contradict, Hofstede's original research that found, the USA, Hong Kong and Indonesia manager possessed weak uncertainty avoidance, but Hong Kong is very weak uncertainty avoidance rather than USA and Indonesia manager. To summarize, the finding related to the uncertainty avoidance dimension showed that:

1. USA, Hong Kong and Indonesia manager had a higher preference for enjoying above all else to work as a part of a team
2. Indonesia manager more strong uncertainty avoidance in decision making by majority votes.
3. Indonesia manager more strong uncertainty avoidance degree of anticipate
4. Indonesia manager more strong uncertainty avoidance adherence to company procedures manual.
5. Hong Kong manager more importance of staff compliance with guidelines for addressing guest.

Process Dimension VS Result Dimension

Table 2a. Present the result of the comparison between Process dimension/Result dimension related manager practices of USA, Hong Kong, and Indonesia hotel manager. As can e seen from above, in seventh variable there were significant differences between the managerial practices of the three nationality groupings. USA and Indonesia more in process dimension and Hong Kong tendency to Result dimension. An analysis of the different between the three nationality grouping on the managerial practices related to Process/Result dimension that:

1. USA, Hong Kong and Indonesia manager were more interest to eager for opportunities to learn and develop,
2. USA and Hong Kong manager oriented toward the market, profit oriented, depending on self and typical employee initiative
3. Hong Kong manager tendency to style of dealing with other formal.
4. Indonesia manager were more interest to depending on Group, and not oriented toward to the market.

Employee dimension VS Job Dimension

Table 2b. Present the result of the comparison between the Employee dimension/Job dimension related managerial practices of the USA, Hong Kong and Indonesia hotel managers.

As can be seen from the above, in 8 variables there were significant differences between the managerial practices of the three nationalities groupings. Indonesia and USA manager more interest to employee dimension and Hong Kong manager more interest to the Job Dimension.
An analysis of the differences between the three nationality groupings on the managerial practices related to Employee/job dimension that:

1. Indonesia Hotel managers were more believing that own achievement is based on very much on outside forces, working through hierarchy at all time, motives employee and strong labor union.
2. USA manager were more interest that if one is motivated enough anything can be achieved, preferring above all else, to direct other people and having completely democratic.
3. Hong Kong manager more interest to Socializing with subordinates outside work.

Parochial Dimension VS Professional Dimension

Table 2.c. Present the result of the comparison between the Parochial dimension/Professional dimension related to managerial practices of USA, Hong Kong and Indonesia hotel managers.
As can be seen from above, in six Variables there was significant differences between the managerial practices of the three nationality groupings. USA and Hong Kong more to Professional dimension, and Indonesian Hotel manager more to parochial. To summarized the finding related to Parochial/Professional dimension showed that:

1. USA manager preferring work to be unpredictable, very ambitious to reach the top, much internal competition for promotion, high level of management expertise and undergoing rapid change.
2. Hong Kong manager more interest to setting self difficult goal.

Open dimension VS Closed Dimension

Table 2.d. Presented the results of the comparison between the Open dimension/Closed dimension related to managerial practices of the USA, Hong Kong, Indonesia hotel managers.

As can be seen from above fourth variable there were significant differences between the managerial practices of the three Nationality groupings. USA and Indonesia managers more open and Hong Kong manager more Closed dimension.

To summarized the findings related to the Open/Closed dimension showed that:

1. USA very higher open in remaining four variable, New employees not need a time to feel at home, Only specific kind of people fit in the Organization, Communicating openly and Giving subordinates open access to information.
2. Indonesia manager more open rather than Hong Kong manager in two variable Communicating openly and giving subordinates open access to information.

Loose dimension VS Tight Dimension

Table 2.e. Presents the result of the comparison between the Loose dimension VS Tight dimension related managerial practices of USA, Hong Kong and Indonesia managers. As can be seen from above, in five variable three was significant differences between the managerial practices of the three nationality groupings. USA manager Tight of control dimension and Hong Kong and Indonesia manager is Loose control dimension. An analysis of the different between the three nationality groupings on the managerial practices related to Loose/Tight Control dimension indicates that:

1. USA manager were more basing decision on likely outcome, on pre test principle regarding the well being of its people as the objective of an organization, very ethical, employee always speak seriously of organization and job.
2. Hong Kong manager were more many stick rules
3. Hong Kong and Indonesia manager Loose control for employees always speak seriously of organization and job, no on pre test principle, people not a objective of Organization and no ethical.

Normative dimension VS Pragmatic dimension

Table 2.f. Present the result of the comparison between the normative /Pragmatic dimension related managerial practices of USA, Hong Kong and Indonesia hotel managers. As can be seen from the above, in one out of six variable there was no significant differences between the three nationalities, USA, Hong Kong and Indonesia are Normative dimension while in the remaining three variable USA is more normative this finding that USA manager more normative in Believing that manager must act completely ethically, replacement employee on the right place and the right time and clear policies on client or customer relation. Hong Kong manager more interest to making sacrifices for the good of the group, considering only the result of the organization as being paramount. While Indonesia more interest to preferring the security of steady job.

Conclusion

First, based on the results of the study it is possible to conclude that nationality culture and corporate culture has a greater effect on managerial behavior. In this study there were significantly more differences than similarities between the managerial practices of Hotel managers from USA and Hong Kong, however between USA and Indonesia and Hong Kong and Indonesia more similarities, this is because the Hotel managed by USA and Hong Kong operated in Indonesia and 80% employees are Indonesian. Second, Out of a total 23 national cultures only 24% showed the similariies across Hong Kong and Indonesia Hotel, 15 % showed the similarities between Hong Kong and USA hotels and 20% showed the similarities across USA and Indonesia Hotels. Therefore that nationality cultures have a strong effect on managerial practices. On the other hands, study and 36 Corporate culture study. 70% showed no significantly differences a cross USA and Indonesia Hotel, 33% showed the similarities across USA and Hong Kong Hotel and 30% showed the similarities across Hong Kong and Indonesia. Third, From the data above the result is USA and Indonesia Hotel has a highly synergy of national culture and corporate culture compare then between USA and Hong Kong Hotel and Indonesia and Hong Kong Hotel. This is because USA very fast to adaptation the host country culture.

References

[1] Chen, Chao.C, Xiao-Ping Chen & James R Meindl. 1998, How Can Corporation Be Fostered? The Cultural Effects of Individualism-Collectivism. Academy Of Management Review, 23 (2): 285-304

[2] Deery Margareth and Jago Leo K (2001), Hotel Management Style: a Study of Employeeperceptions and Preferences, International Journal of Hospitality Management 20:325-338

[3] Hofstede,G. (1991) Culture and Organizations: Software of the mind, Mc Graw Hill,London.

[4] Huliselan, J.J. " Can Organization Culture Be Easily Be Manage?" (1999), Journal Program Magister Manajemen Universitas Sahid Vol. II, No.3- Nov. Jakarta Indonesia.

[5] Huliselan, J.J " Managing Ethical Conflicts A cross Cultures. Vol II, No.4- Maret 2002, Journal Program Magister Manajemen University Sahid Jakarta Indonesia

[6] Laurent, A "the Cultural Diversity of Western Conception of Management", InternationalStudies of Management and Organisation Vol.13 No. 1-2 (spring summer 1983) pp.75-96.

[7] Luthans Fred ' Organisational Behavior 7 Th edition, (1995) Mc Graw Hill series in Management New York USA.

[8] Martin Joanne, Culture in Organisation, Sage Publication Inc. London 1985

[9] Mead. Richard (1994), International Management: Cross Cultural Dimensions, Blackwell Business, Oxford United Kingdom.

[10] Mc Lean, A and Marshall J :Intervening in Culture, Working paper, university of Bath, 1993 Management, Personnel Management 20 (11) 37-41

[11] Phatak, A.V (1997) International Management: Concepts and Cases: South-Western Colege Publishing, Cincinnati,OH.

[12] Pizam Abraham, Pine Ray, Mok Connie and Shin Jae Young (1997) "Nationality VS Industry Cultures: which has a greater effect on managerial behavior?" International Journal Hospitality Vol.16. No.2 page 127-145

[13] Pothukuchi Vijay, Damapour Fariborz, Choi Jaepil, Chen Chao.C, and Park Seung Ho (2002), National and Organizational Culture Differences and International Joint Venture Performance, Journal of International Business Studies Vol. 33 No2. 2nd Quarter

[14] Salk, Jane E & Mary Y Brannen, (2000). National Culture, Network, and Individual Influence in Multinational Team. Academy of management Journal 43:191-202

[15] ----------- (1992) International Management Joint venture Teams. MIT Sloan School of management

[16] Schein Edgar. H (1999), The Corporate Culture, Jossey-Bass Publishers. San Francisco.

[17] Trompenaars F and Turner Charles. H (1998), Riding the waves of culture, 2nd edition. Mc Graw Hill New York.

The Effects of Human Resource Management Practices on Firm Performance: The Case for Minimalism

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Abstract

A recent development in the study of the effects of human resource management (HRM) practices on firm performance is the theory of the high-performance work system. The basis of the theory lies in the notion that superior firm performance is contingent upon the adoption of certain HRM practices, and the degree of 'fit' between those practices and business strategy. This paper reports the findings of a study exploring HRM practices in the Australian engineering design service sector. The study sample was a strategic group of firms, selected for their large size, market prominence, and long-term survival. The study found that the application of HRM practices was ad hoc, rather than matched; and, minimal, rather than high-performing. This was the case despite all firms demonstrating substantial revenue growth rates over the previous five years, and survival beyond the previous fifty years. These results are discussed in terms of implications for cost-effective HRM systems within contextually specific domains.

Introduction

The theory of the high-performance work system (HPWS) (Nadler & Gerstein,1992) is a relatively recent development that is encompassed within the rubric of Penrose's(1959) resource-based view of firm growth. According to the resource-based view, a firm's human resources are valuable, rare, inimitable, and non-substitutable, and hence, have the potential to lead to firm growth and sustained competitive advantage provided the resources are well managed (Barney,1991; Wernerfelt,1984). A HRM system that is managed in such a strategic manner is said to articulate a HPWS by way of internal-vertical fit between business strategy and HRM practices, and internal-horizontal fit between HRM practices themselves (Baird & Meshoulam,1988; Beer *et al*,1984; Youndt *et al*,1996).

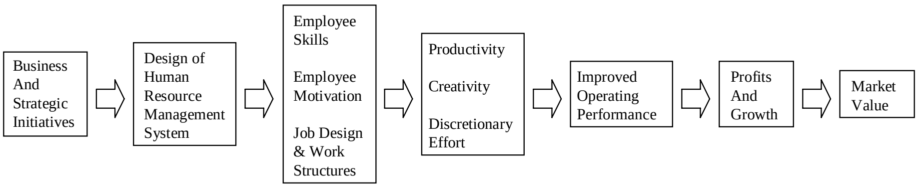
Business Strategy – HRM System Relationship

The link between business strategy and HRM systems has been the focus of considerable attention (Lawler *et al*,1998; Porter,1980; Sanz-Valle *et al*,1999). The "configurational approach" (McMahon *et al*, 1999, p.104) to HRM system design focuses on combinations of HRM practices, specifically designed to match business strategy. The resultant "HR bundle" (MacDuffie,1995, p.197) is a configuration of mutually reinforcing practices, so that the overall effect is more than the sum of the effects of the individual practices. However, prior HPWS studies appear to support the notion that some HRM practices are subject more to a best-practice approach, than a configurational approach. For instance, better recruitment, selection, and socialisation practices lead to the employment and short-term retention of quality employees, irrespective of business strategy (Huselid,1995; Pfeffer,1994).

HRM System-Firm Performance Relationship

Huselid's(1995) study of 968 US companies has been arguably the most influential in support of the link between HRM system quality and firm performance. He found that a one standard-deviation increase in his measure of the quality of HRM systems (about 25percent) increased the market value of a company by US$18,641 per employee, increased profit (+2.2percent), and increased total revenue (+16percent). In addition to Huselid's(1995) research, the results of other HPWS studies have provided substantial empirical evidence in support of a positive relationship between HRM systems and firm performance (Arthur,1994; Kalleberg & Moody,1994; Koch & McGrath,1996; Kravetz,1988; Schuster,1998). Figure 1 illustrates the conventional model of the HRM system-firm performance relationship. The model synthesises the resource-based view of firm growth and HPWS theory, with the empirical evidence of HRM systems in-use.

Fig 1: CONVENTIONAL MODEL OF THE HRM SYTEM-FIRM PERFORMANCE RELATIONSHIP
(SOURCE : BECKER *ET AL*,1997, P.45)



External Influences and Firm Performance

Although the business strategy-HRM system relationship alludes to the influence of the external environment on internal processes, it is client focused and ignores other external influences on HRM system design. These influences include the economic climate (Lahteenmaki *et al*,1998), labour-market conditions (Katz *et al*,1985; Kochan *et al*,1986), barriers to competition (Batt & Keefe,1999; Osterman,1994), and normative imitation for legitimacy purposes (DiMaggio & Powell,1983; Meyer & Rowan,1977). Indeed, scholars generally agree that firm performance is more than a function of the quality of a HRM system. In practice, it is a function of both industry-level effects (i.e., competitive forces) and firm-level effects (i.e., quality of corporate decision-making in reacting to competitive forces, and the quality of a HRM system) (Hansen & Wernerfelt,1989; Weiner & Mahoney,1981).

Objectives of the Study

The methodologies employed in past HPWS studies have generally been of two *genre*. Firstly, primary-data collection by large-scale mail surveys (e.g., Huselid,1995; Koch & McGrath,1996; Kravetz,1988; Schuster,1998). Secondly, secondary-data analysis of corporate statistics (e.g., Kalleberg & Moody,1994). The studies have been substantially dominated by quantitative data collected from single points-of-contact within firms (most often HR executives), and American manufacturing sectors. As such, external influences have generally been omitted from the analysis. The present study proposed that this orthodoxy has created a fertile environment for systematic error in HPWS research, and has supported a façade of generalisability. Consequently, the study sought to test the theory of the HPWS within a contextual domain that was outside the bounds of the conventional methodologies applied to HPWS studies to date.

Methodology

Sample

The study used semi-structured interviews, and a 'meso'-level approach (House *et al*,1995), to collect data from 5 Australian engineering design companies (EDCs), 20 department managers, and 101 professional engineers. Data were collected between May 2000 and May 2001. The selection of EDCs was based on purposive sampling, characterised by local market prominence and large size (i.e., >100 employees in the Western Australian office; Erramilli,1990), and demonstrated long-term company survival (i.e., >50 years; Collins & Porras,2000). For reasons of confidentiality, the 5 EDCs have been designated as CA1-CA5.

Measures

External Environment

The intensity of sector competition was measured as an additive function of a number of competitive forces, including rivalry, market growth, barriers to entry, threat of substitution, bargaining power of clients, and bargaining power of suppliers (Dichtl & Koglmayr,1986; Porter,1980). Each of the competitive forces was classified according to a three-dimensional model, involving complexity (i.e., factors considered for decision-making are few in number and similar (*simple*) or many in number and different (*complex*)); dynamism (i.e., factors remain the same over time or change slowly (*static*) or change rapidly and unpredictably (*dynamic*)); and, munificence (i.e., demand for services and supply of employees is plentiful (*abundant*) or competitive (*scarce*)) (Dess & Beard,1984; Duncan,1979). The external environment was then classified on a continuum from *hypo*-competitive (i.e., simple-static-abundant) to *hyper*-competitive (i.e., complex-dynamic-scarce).

Business Strategy

Porter's(1980) generic business strategies of low-cost and differentiation were used as the measurement parameters. A number of business strategies were rated on a scale from 1 (not important) to 7 (very important).

HRM System

Formal Structure. Shortened versions of the Inkson *et al*(1970) 'formalisation of role-definition' and 'lack of autonomy of organisation' instruments were used to measure formalisation of internal processes and centralisation of decision-making.
Formal processes. Eight formal processes were selected for their significance to Australian EDCs, and over which the corporate leadership maintains discretionary choice. The eight processes were recruitment, selection, socialisation, performance appraisal, compensation, career opportunities, training and development, and formal communication (Huselid,1995; Kravetz,1988; Pfeffer,1994).

Quality of HRM System. HRM practices related to Porter's(1980) two generic business strategies were identified *a priori*. These 'HR bundles' are presented in Figure 2. Following the most common method used in prior HPWS studies, the scores for the two formal structure components, and the eight formal processes, were averaged into scale scores (see, for example, Huselid,1995; MacDuffie,1995; Youndt *et al*,1996). In this way, the scores for the EDCs were a quality measure relative both to each other, and to a HPWS.

Low-cost Strategy

Sector 1 – Low-cost Strategy		**Sector 2 – Combination Strategy**	
Focus	Efficiency	**Focus**	Flexibility/Learning
Formal Structure	High formalisation High centralisation	**Formal Structure**	Low formalisation Low centralisation
Performance Appraisal	Objective Individual objectives	**Performance Appraisal**	Objective/Subjective Linked objectives
Compensation	Individual-based Base salary bonuses =Industry average	**Compensation**	Individual-/Group-based Total rewards >Industry average
Career Opportunities	Lower	**Career Opportunities**	Higher
Training and Development	Lower	**Training and Development**	Higher
Formal Communication	Lower	**Formal Communication**	Higher

Low High
Differentiation Strategy

Fig 2: THE HPWS MODEL

Firm Performance

Total revenue data were collected for the previous five financial years (i.e., 1995-6 to 1999-2000) from either company annual reports or web-sites, or directly from the managing directors.

Results

External Environment

Rivalry. All EDCs reported less competitors than 10 years previous. However, all agreed that the external environment had become more competitive by way of increasing EDC size.

Growth Rates. Figure 3 shows that both global and Australian economic growth were significant and stable over the period 1980-2000. The value of ‘work done’ by the Australian construction industry grew by 427percent, whereas the value of manufactured goods grew by 181percent. The extraordinary rate of growth of the construction industry (and by association, the engineering design service sector) allowed stable high growth rates for Australian EDCs.

Barriers to Entry. All EDCs reported high ratings for a differentiation business strategy based on company reputation (see Table 3). This suggests high entry barriers because of the need to establish reputation by past performance.

Threat of substitution. In the case of engineering design, there is no threat of substitution.

Market Share. Except for CA5, all EDCs reporting financial data out-performed the market and increased their market share between 1995 and 2000 (see Figure 5).

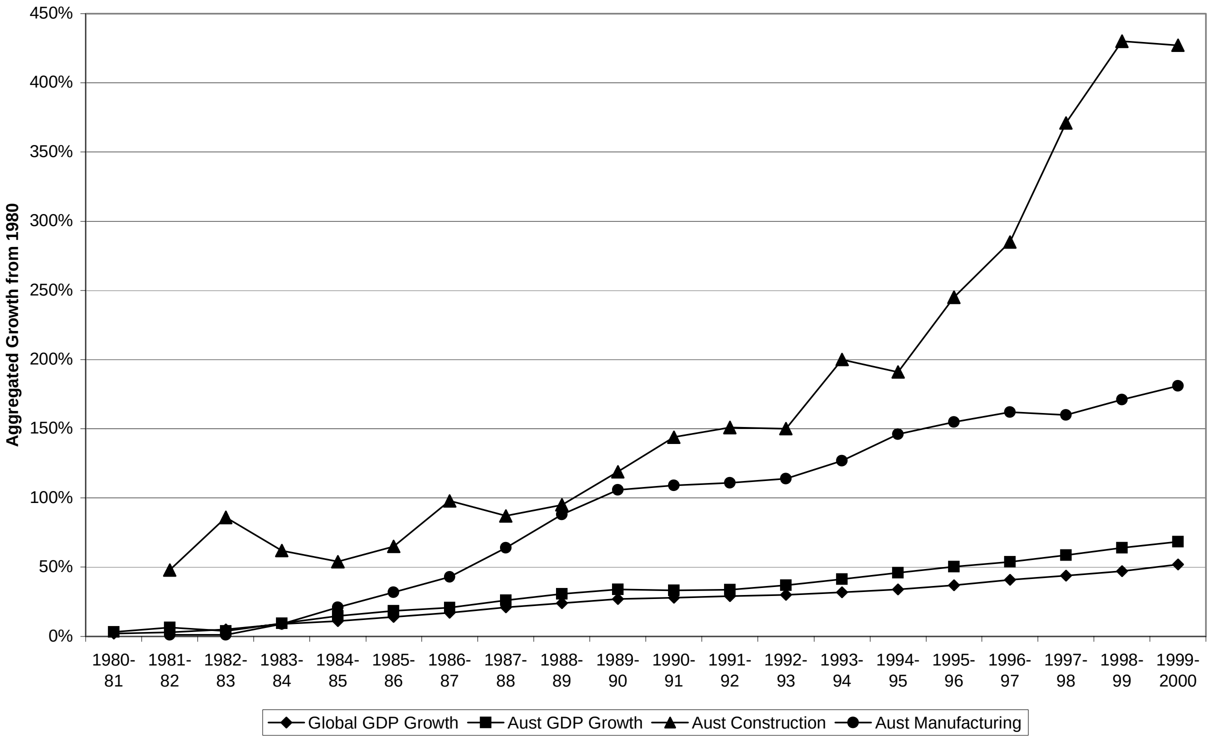


Fig 3: GDP AND INDUSTRY GROWTH RATES : 1980-2000
(Source : Abs,5204.0; Abs,8201.0; Abs,8762.0; Wto,2001)

Bargaining Power of Clients. All EDCs reported multi-divisional corporate structures, indicating greater complexity and greater client power (Bobbitt & Ford,1980). In addition, the high ratings attributed to combination strategies also suggested considerable client power.

Bargaining Power of Suppliers. Since the inputs to an EDC are labour manhours, the bargaining power of suppliers is a function of union influence, and the availability of skilled labour. In the case of professional engineers, union influence can be gauged by the collegiality of the profession. Membership of the professional institute was reported as high (78percent), but perceived benefits from membership were low (68percent no benefits). Additionally, attendance at institute meetings was weak. The majority of engineers never attended (58percent), 23percent made a token gesture, and only 12percent were significantly committed to the institute. The results indicate that union influence is low. In addition, the EDCs reported labour statistics consistent with a high availability of human resources (see Table 1).

Table 1 – AVAILABILITY OF SKILLED LABOUR

	CA1	CA2	CA3	CA4	CA5
No. applicants for advertised position	50+	30	15	6	6
Unsolicited CVs per month	50+	50+	10	5	35
Under(**-**)-/Over(**+**)-supply of engineers	**+**	**+**	**+**	**-**	**+**

Table 2 shows the classification of the external environment as largely *hypo*-competitive, since it was found to be substantially simple and static, and overwhelmingly abundant in munificence. The results suggest that the Australian engineering design service sector is largely oligopolistic, since competition is restricted by high entry barriers.

Table 2 – CLASSIFICATION OF THE EXTERNAL ENVIRONMENT

External Environment	Rating	Complexity		Dynamism		Munificence	
		Simple	Complex	Static	Dynamic	Abundant	Scarce
Rivalry	High		*		*		
Global GDP growth rate	High					*	
National GDP growth rate	High					*	
Industry growth rate	High					*	
Industry growth rate	Stable	*		*			
Barriers to entry	High	*		*			
Threat of substitution	Low	*		*			
Bargaining power of clients	High		*		*		
Market share	Increase	*					
Bargaining power of suppliers	Low	*		*			
Availability of skilled labour	High					*	

Business Strategy

Table 3 shows business strategies involving differentiation were consistently more important than a low-cost strategy. The results indicate that all EDCs used combination strategies.

Table 3 – BUSINESS STRATEGIES

Strategy	Description	CA1	CA2	CA3	CA4	CA5	Ave	Rank
A	Lowest cost	7	4	4	5	3	4.6	5
B	High quality	7	6	7	6	6	6.4	2
C	Company reputation	7	6	7	6	7	6.6	1
D	Most effective design	7	6	7	6	6	6.4	2
E	Post-sale support	5	5	7	5	7	5.8	4

HRM System

Formal Structure. High formal structure was found in all EDCs (see Table 4).

Table 4: FORMAL STRUCTURE SCORES

Item	Description	CA1		CA2		CA3		CA4		CA5	
		Raw Data	Calc Score	Raw Data	Calc Score	Raw Data	Calc Score	Raw Data	Calc Score	Raw Data	Calc Score
1.0	**FORMALISATION (Reverse score)**		**20%**		**40%**		**0%**		**40%**		**20%**
1.1	Handbook given to new engineers (Y=10; N=0)	Yes	10	Yes	10	Yes	10	Yes	10	Yes	10
1.2	Organisational chart given to new engineers (Y=10; N=0)	Yes	10	No	0	Yes	10	Yes	10	Yes	10
1.3	Written job descriptions for engineers (Y=10; N=0)	No	0	No	0	Yes	10	No	0	No	0
1.4	Standard operating procedures for engineers (Y=10; N=0)	Yes	10	Yes	10	Yes	10	No	0	Yes	10
1.5	Accredited to AS/ISO9000 (Y=10; N=0)	Yes	10	Yes	10	Yes	10	Yes	10	Yes	10
2.0	**CENTRALISATION**		**21%**		**18%**		**26%**		**39%**		**41%**
	Level of decision (L1=10; L2=5; L3=2; L4=0)) :										
2.1	Create a new engineers' position	4	0	3	2	3	2	2	5	3	2
2.2	Appointment of engineers	4	0	4	0	3	2	2	5	3	2
2.3	Appointment of department managers	4	0	4	0	4	0	3	2	3	2
2.4	Salary adjustments	4	0	4	0	4	0	3	2	3	2
2.5	To spend unbudgeted money	3	2	4	0	3	2	3	2	2	5
2.6	Selection of suppliers of equipment	2	5	2	5	2	5	2	5	1	10
2.7	Alter the responsibilities of engineers	2	5	3	2	2	5	2	5	2	5
2.8	Approval of design work	2	5	2	5	2	5	2	5	2	5
	FORMAL STRUCTURE		**21%**		**29%**		**13%**		**39%**		**31%**

Formal Processes. Table 5 presents the quality scores for the eight formal processes.
Quality of HRM Systems. Figure 4 shows the quality scores for the HRM practices, as well as the averaged scale score for the two components of formal structure and the eight formal processes.

Firm Performance

Figure 5 shows that positive market growth was translated into positive total revenue growth over the study period (CA3 would not release total revenue figures). The results suggest a significant impact of the economic climate on firm performance. No significant relationship was found between firm performance and the quality of HRM systems.

Item	Description	CA1		CA2		CA3		CA4		CA5	
		Raw Data	Calc Score	Raw Data	Calc Score	Raw Data	Calc Score	Raw Data	Calc Score	Raw Data	Calc Score
1.0	**RECRUITMENT**		**60%**		**52%**		**50%**		**44%**		**56%**
1.1	Recruiting connected to business plan (Y=10; N=0)	No	0	No	0	No	0	No	0	No	0
1.2	Company has graduate recruitment policy (Y=10; N=0)	Yes	10	Yes	10	Yes	10	Yes	10	Yes	10
1.3	Company differentiates staff and contractors (Y=10; N=0)	No	0	No	0	Yes	10	Yes	10	Yes	10
1.4	Ave no. applicants for advertised job (50+=10; 10xno./50)	50	10	30	6	15	3	6	1.2	6	1.2
1.5	Ave no. unsolicited CVs per month (50+=10; 10xno./50)	50	10	50	10	10	2	5	1	35	7
2.0	**SELECTION**		**50%**		**55%**		**13%**		**33%**		**19%**
2.1	Use of structured interviews by dept managers (%Yx10)	0%	0.0	60%	6.0	0%	0.0	0%	0.0	0%	0.0
2.2	Interviewing training for dept managers (%Yx10)	75%	7.5	20%	2.0	0%	0.0	0%	0.0	0%	0.0
2.3	No.of interviewers (2+=10; 1=0)	2	10	2	10	1	0	2	10	1	0
2.4	Dept managers selection includes 'teamwork' (%Yx10)	25%	2.5	40%	4.0	50%	5.0	33%	3.3	75%	7.5
3.0	**SOCIALISATION**		**62%**		**51%**		**58%**		**47%**		**47%**
3.1	Use of formal employee inductions ((no.hrs/8)x10; >8=10))	8	10.0	1	1.25	2	2.5	0	0.0	4	5.0
3.2	New employees inducted (%Yx10)	100%	10.0	80%	8.0	100%	10.0	n/a		91%	9.1
3.3	New employees made to feel welcome (%Yx10)	93%	9.3	80%	8.0	96%	9.6	88%	8.8	100%	10
3.4	A lot of support for new employees (%Yx10)	82%	8.2	80%	8.0	88%	8.8	100%	10.0	86%	8.6
3.5	Company has mentoring program (Y=10; N=0)	Yes	10	No	0	Yes	10	No	0	Yes	10
	Problems with mentoring program (%x-10)	43%	-4.3	n/a		0%	0.0	n/a		100%	-10.0
3.6	Mentor/Protégé match (ment allocated=0; prot choose=10)	Alloc	0	n/a		Alloc	0	n/a		Alloc	0
3.7	Training provided to mentors in 'mentoring' (Y=10; N=0)	No	0	n/a		No	0	n/a		No	0
4.0	**PERFORMANCE APPRAISAL**		**29%**		**23%**		**26%**		**8%**		**18%**
4.1	Use of formal PA system (Y=10; N=0)	Yes	10	Yes	10	Yes	10	No	0	Yes	10
	Engineers unhappy with PA, or unappraised >2yrs (%x-10)	82%	-8.2	79%	-7.9	86%	-8.6	n/a		83%	-8.3
	Engineers happy with NO PA (%x10)	n/a		n/a		n/a		28%	2.8	n/a	
4.2	PA Training for dept managers (%Yx10)	25%	2.5	0%	0.0	25%	2.5	n/a		25%	2.5
4.3	Use of MBO-type PA (Y=10; N=0)	No	0	No	0	Yes	10	n/a		Yes	10
	Individual goals linked to comp goals (N=-7.5)	n/a		n/a		No	-7.5	n/a		No	-7.5
4.4	PA linked to objectively measured performance (Y=10; N=0)	No	0	No	0	No	0	n/a		No	0
4.5	PA linked to rewards (Y=10; N=0)	Yes	10	Yes	10	Yes	10	n/a		No	0
4.6	Use of 360 degree feedback system (Y=10; N=0)	No	0	No	0	No	0	No	0	No	0
4.7	Engineers happy with amount of feedback (%Yx10)	59%	5.9	42%	4.2	20%	2.0	29%	2.9	58%	5.8
5.0	**COMPENSATION**		**49%**		**6%**		**13%**		**23%**		**11%**
5.1	Engineers consider salary 'better' than industry (%x10)	23%	2.3	10%	1	25%	2.5	12%	1.2	4%	0.4
	Engineers consider salary 'average' (%x5)	67%	3.4	59%	3.0	65%	3.3	69%	3.5	29%	1.5
	Engineers consider salary 'worse' than industry (%x-10)	10%	-1.0	31%	-3.1	10%	-1.0	19%	-1.9	67%	-6.7
5.2	Ave bonus last year (>7%=%;<7%=%x0.5;>10%=10)	8.3	8.3	0.0	0.0	0.0	0.0	2.4	1.2	3.0	1.5
5.3	Bonus differential between engineers (%x10/15;>15%=10)	12.5	8.3	0.0	0.0	0.0	0.0	5.8	3.9	7.5	5.0
5.4	Use of 'total rewards' system (Y=10; N=0)	No	0	No	0	No	0	No	0	No	0
5.5	Use of 'combination plan' (Y=10; N=0)	No	0	No	0	No	0	No	0	No	0
5.6	Long-service leave (7yrs=10; 10yrs=5; 15yrs=0)	7	10	15	0	15	0	13	2	15	0
5.7	Company benefits (no. out of 10)	3	3	3	3	4.5	4.5	6.3	6.3	6	6.0
6.0	**CAREER OPPORTUNITIES**		**65%**		**42%**		**13%**		**80%**		**43%**
6.1	Use of succession planning for dept managers (Y=10; N=0)	Yes	10	No	0	No	0	Yes	10	No	0
6.2	Dept manager positions filled internally (%Yx10)	100%	10.0	100%	10.0	50%	5.0	66%	6.6	0%	0.0
6.3	Senior engineers take ownership of budgets (Y=10; N=0)	No	0	No	0	No	0	Yes	10	Yes	10
6.4	Use of ESOP (Y=10; N=0)	Yes	10	Yes	10	No	0	Yes	10	Yes	10
6.5	Proportion of engineers on ESOP (%x10)	25%	2.5	8%	0.8	n/a		33%	3.3	15%	1.5
7.0	**TRAINING AND DEVELOPMENT**		**41%**		**41%**		**29%**		**47%**		**31%**
7.1	Ave no. training days last 12 months ((no./5x10); >5=10)	2.72	5.4	3.06	6.1	1.78	3.6	2.43	4.9	1.82	3.6
7.2	Proportion engineers received training (%x10)	77%	7.7	72%	7.2	53%	5.3	83%	8.3	70%	7.0
7.3	Company good at determining training needs (%Yx10)	28%	2.8	25%	2.5	32%	3.2	50%	5.0	21%	2.1
7.4	Engineers happy with amount of training (%Yx10)	46%	4.6	45%	4.5	23%	2.3	55%	5.5	30%	3.0
7.5	T&D needs analysed (Y=10; N=0)	No	0	No	0	No	0	No	0	No	0
8.0	**FORMAL COMMUNICATION**		**56%**		**50%**		**61%**		**24%**		**44%**
	FORMAL-HORIZONTAL COMMUNICATION										
8a.1	Use of project de-briefing (%Yx10)	25%	2.5	40%	4.0	0%	0.0	0%	0.0	0%	0.0
8a.2	Formal meetings per week (ave hrs/wk x 2; 5+=10)	2.21	4.4	3.41	6.8	3.7	7.4	2.52	5.0	3.3	6.6
8a.3	Department meetings held (%wklyx10)	0%	0.0	20%	2.0	50%	5.0	0%	0.0	25%	2.5
	Department meetings held (%mthlyx5)	50%	2.5	40%	2.0	0%	0.0	33%	1.7	25%	1.3
	Department meetings held (%<mthlyx2)	0%	0.0	20%	0.4	0%	0.0	0%	0.0	25%	0.5
	Department meetings held (%neverx0)	50%	0.0	20%	0.0	50%	0.0	67%	0.0	25%	0.0
	FORMAL-VERTICAL COMMUNICATION										
8b.1	Use of company newsletter/intranet (Y=10; N=0)	Yes	10	Yes	10	Yes	10	Yes	10	Yes	10
8b.2	Use of employee suggestion scheme (Y=10; N=0)	Yes	10	No	0	Yes	10	No	0	Yes	10
8b.3	Exit interviews conducted (Y=10; N=0)	Yes	10	Yes	10	Yes	10	No	0	No	0
8b.4	Attitude surveys conducted (Y=10; N=0)	No	0	No	0	No	0	No	0	No	0
	FORMAL PROCESSES		**51%**		**40%**		**33%**		**38%**		**34%**

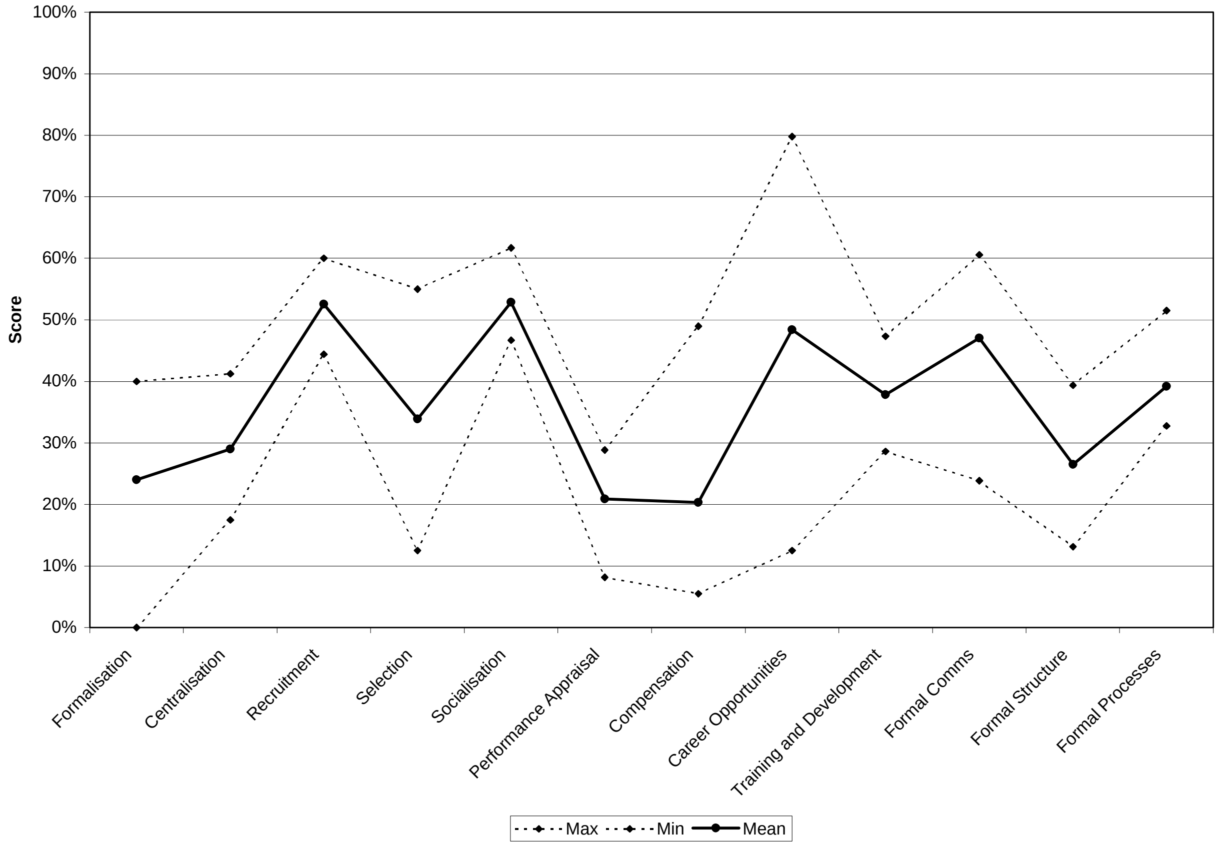
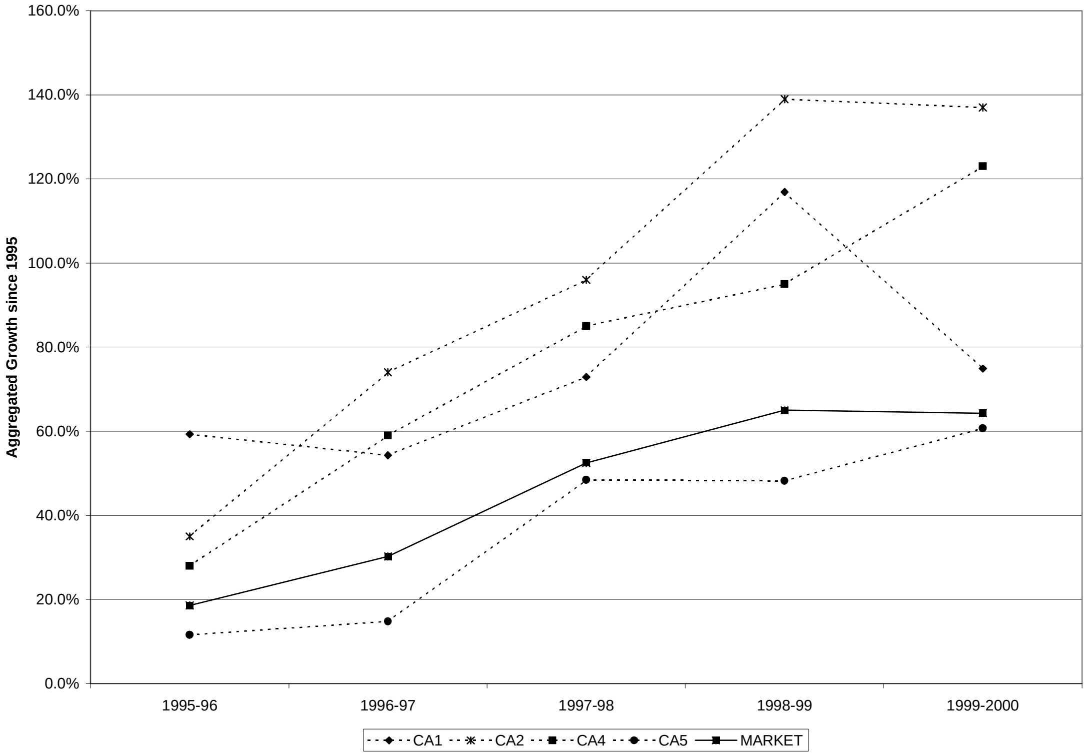


Fig 4: SUMMARY OF SCORES FOR HRM PRACTICES



a. Figures shown are total revenue for Australian operations only.

Fig 5: FIRM TOTAL REVENUE GROWTH VS. MARKET : 1995-2000[A]

Discussion

The study found the external environment of the Australian engineering design service sector to be *hypo*-competitive and oligopolistic. As other authors have observed (see, for example, Batt & Keefe,1999; Osterman,1994), increasing competitive pressures force firms to look within for greater internal efficiency and reduced costs. In the case of Australian EDCs, the *hypo*-competitive environment has resulted in these competitive pressures being absent. Consequently, HRM systems were found to be minimal, with little evidence of fit to business strategies. Firm growth and long-term survival were found to have eventuated despite minimal, non-strategic HRM systems. For Australian EDCs, the economic climate, and the quality of strategic decision-making at the corporate level, overwhelmed HRM system quality in contributory significance to firm performance.

The results of the study further suggest that unmodified American HRM practices permeate Australian EDCs. Such unmodified practices include employee induction, succession planning, mentoring, performance appraisal, management-by-objectives, profit-share schemes, and intra-nets. The unreflected copying of American HRM practices reduced their implementation to a parody of organisational theory. Implementation was aimed at normative legitimacy, and was, in practice, oblivious to the potential for latent dysfunctions created within the organisations. Bereft of context and perspective, engineering managers have mistaken the instruments of management for management itself. This finding invalidates the assumption that the application of a HRM practice at the organisation-level naturally results in positive outcomes at the individual-level. Consequently, the finding has implications for the conventional HPWS research methodology based on large-scale mail surveys and single points-of-contact within firms.

Conclusion

Resource-based thinking has emerged as the inviolable doctrine of HRM scholars, as well as the politically-correct edict of management practitioners. The present study challenges this doctrinarianism by positing the resource-based view of firm growth as spurious and context-bound, rather than a generalisable truism. In a *hypo*-competitive external context, human resources *per se* are usurped, and overwhelmed in contributory significance to firm performance by the economic climate and strategic decision-making at the corporate level. In this case, the concept of the HPWS is an anomaly. The present study has demonstrated that contextual specificity can disconnect business strategy from HRM systems, and HRM systems from firm performance.

The findings of this study show that abundance of work and human resources re-defines the economic-rationalist HRM system as one that is minimal, rather than high-performing. Provided the quality of the HRM system resides within certain limits of stakeholder demands (i.e., upper limit set by economic rationalism and shareholder demands; lower limit set by legal obligations and employee demands), the attention of corporate leaders is most effectively directed towards strategic decision-making. Validation of the conventional model of the HRM system-firm performance relationship (see Figure 1) will only occur in an external environment approaching *hyper*-competition. This notion may be conceptualised as a 'HRM equilibrium point', which will vary between nations and industrial sectors, because it is determined by the relativity of external environments (see Figure 6). The most cost-effective HRM system will be the point at which equilibrium is achieved between external influences and internal processes.

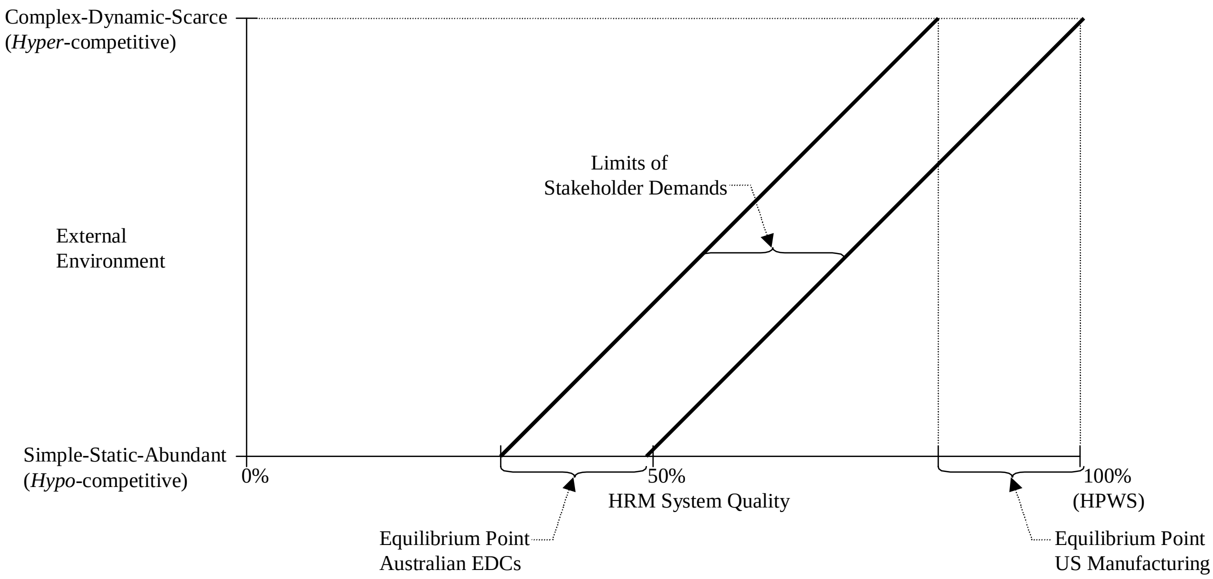


Fig 6: HRM EQUILIBRIUM POINT

References

[1] ABS,5204.0 *Australian System of National Accounts*, Australian Bureau of Statistics : Canberra

[2] ABS,8201.0 *Manufacturing Industry*, Australian Bureau of Statistics : Canberra

[3] ABS,8762.0 *Engineering Construction Activity*, Australian Bureau of Statistics : Canberra

[4] Arthur, J.B.(1994) 'Effects of Human Resource Systems on Manufacturing Performance and Turnover', *Academy of Management Journal*, vol.37, no.3, pp.670-687

[5] Baird, L. & Meshoulam, I.(1988) 'Managing Two Fits of Strategic Human Resource Management', *Academy of Management Review*, vol.13, no.1, pp.116-128

[6] Barney, J.(1991) 'Firm Resources and Sustained Competitive Advantage', *Journal of Management*, vol.17, no.1, pp.99-120

[7] Batt, R. & Keefe, J.(1999) 'Human Resource and Employment Practices in Telecommunications Services, 1980-1998', in *Employment Practices and Business Strategy*, Cappelli, pp.(ed.), Oxford University Press : New York

[8] Becker, B.E., Huselid, M.A., Pickus, P.S. & Spratt, M.F.(1997) 'HR as a Source of Shareholder Value : Research and Recommendations', *Human Resource Management*, vol.36, no.1, pp.39-48

[9] Beer, M., Spector, B., Lawrence, P.R., Miller, D.Q. & Walton, R.E.(1984) *Managing Human Assets*, Free Press : New York

[10] Bobbitt, H.R. & Ford, J.(1980) 'Decision Maker Choice as a Determinant of Organizational Structure', *Academy of Management Review*, vol.5, no.1, pp.13-23

[11] Collins, J.C. & Porras, J.I.(2000) *Built to Last : Successful Habits of Visionary Companies*, 3rd ed., Random House : London

[12] Dess, G.G. & Beard, D.W.(1984) 'Dimensions of Organizational Task Environments', *Administrative Science Quarterly*, vol.29, no.1, pp.52-73

[13] Dichtl, E. & Koglmayr, H.G.(1986) 'Country Risk Ratings', *Management International Review*, vol.26, no.4, pp.4-11

[14] DiMaggio, P.J. & Powell, W.W.(1983) 'The Iron Cage Revisited : Institutional Isomorphism and Collective rationality in Organizational Fields', *American Sociological Review*, vol.48, no.2, pp.147-160

[15] Duncan, R.(1979) 'What is The Right Organization Structure?', *Organizational Dynamics*, vol.7, no.1, pp.35-47

[16] Erramilli, M.K.(1990) 'Entry Mode Choice in Service Industries', *International Marketing Review* [Electronic], vol.7, no.5, pp.50-62, Available : http://global.umi.com, [1999, Nov.6]

[17] Hansen, G.S. & Wernerfelt, B.(1989) 'Determinants of Firm Performance : The Relative Importance of Economic and Organizational Factors', *Strategic Management Journal*, vol.10, no.5, pp.399-411

[18] House, R.J., Rousseau, D.M. & Thomas-Hunt, M.(1995) 'The Meso Paradigm : A Framework for the Integration of Micro and Macro Organizational Behavior', *Research in Organizational Behavior*, vol.17

[19] Huselid, M.A.(1995) 'The Impact of Human Resource Management Practices on Turnover, Productivity, and Corporate Financial Performance', *Academy of Management Journal*, vol.38, no.3, pp.635-672

[20] Inkson, J.H.K., Pugh, D.S. & Hickson, D.J.(1970) 'Organizational Context and Structure : An Abbreviated Replication', *Administrative Science Quarterly*, vol.15, no.3, pp.318-329

[21] Kalleberg, A.L. & Moody, J.W.(1994) 'Human Resource Management and Organizational Performance', *American Behavioral Scientist*, vol.37, no.7, pp.948-962

[22] Katz, H.C., Kochan, T.A. & Weber, M.R.(1985) 'Assessing the Effects of Industrial Relations Systems and Efforts to Improve the Quality of Working Life on Organizational Effectiveness', *Academy of Management Journal*, vol.28, no.3, pp.509-526

[23] Koch, M.J. & McGrath, R.G.(1996) 'Improving Labour Productivity : Human Resource Management Policies do Matter', *Strategic Management Journal*, vol.17, no.5, pp.335-354

[24] Kochan, T.A., Katz, H.C. & McKersie, R.B.(1986) *The Transformation of American Industrial Relations*, Basic Books : New York

[25] Kravetz, D.J.(1988) *The Human Resource Revolution*, Jossey-Bass : San Francisco

[26] Lahteenmaki, S., Storey, J. & Vanhala, S.(1998) 'HRM and Company Performance : The Use of Measurement and the Influence of Economic Cycles', *Human Resource Management*, vol.8, no.2, pp.51-65

[27] Lawler, E.E., Mohrman, S.A. & Ledford, G.E.(1998) *Strategies for High Performance Organizations – The CEO Report*, Jossey-Bass : San Francisco

[28] MacDuffie, J.P.(1995) 'Human Resource Bundles and Manufacturing Performance', *Industrial & Labor Relations Review*, vol.48, no.2, pp.197-222

[29] McMahon, G.C., Virick, M. & Wright, P.M.(1999) 'Alternative Theoretical Perspectives for Strategic Human Resource Management Revisited : Progress, Problems, and Prospects', *Research in Personnel and Human Resource Management*, vol.17

[30] Meyer, J.W. & Rowan, B.(1977) 'Institutionalized Organizations : Formal Structure as Myth and Ceremony', *American Journal of Sociology*, vol.83, no.2, pp.340-363

[31] Nadler, D.A. & Gerstein, M.S.(1992) 'Designing High Performance Work Systems : Organizing People, Work, Technology, and Information', in *Organizational Architecture : Designs for Changing Organizations*, Nadler, D.A., Gerstein, M.S., Shaw, R.B. & Assoc.(eds.), Jossey-Bass : San Francisco

[32] Osterman, P.(1994) 'How Common is Workplace Transformation and Who Adopts It?', *Industrial and Labor Relations Review*, vol.47, no.2, pp.173-188

[33] Pfeffer, J.(1994) *Competitive Advantage Through People*, Harvard Business School : Massachusetts

[34] Porter, M.E.(1980) *Competitive Strategy : Techniques for Analyzing Industries and Competitors*, Free Press : New York

[35] Sanz-Valle, R., Sabater-Sanchez, R. & Aragon-Sanchez, A.(1999) 'Human Resource Management and Business Strategy Links : An Empirical Study', *International Journal of Human Resource Management*, vol.10, no.4, pp.655-671

[36] Schuster, F.E.(1998) *Employee-Centered Management*, Quorum : Connecticut

[37] Weiner, N. & Mahoney, T.A.(1981) 'A Model of Corporate Performance as a Function of Environmental, Organizational and Leadership Influences', *Academy of Management Journal*, vol.24, no.3, pp.453-470

[38] Wernerfelt, B.(1984) 'A Resource-Based View of the Firm', *Strategic Management Journal*, vol.5, no.2, pp.171-180

[39] WTO(2001) '*International Trade Statistics*', [Online] World Trade Organization : Geneva, Available : http://www.wto.org, [2001, Dec.15]

[40] Youndt, M.A., Snell, S.A., Dean, J.W. & Lepak, D.P.(1996) 'Human Resource Management, Manufacturing Strategy, and Firm Performance', *Academy of Management Journal*, vol.39, no.4, pp.836-866

The Myth of Cultural Differences

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Abstract

Cultural diversity has often been recognized as a factor that influences business, particularly located in different countries. There have been several attempts by organizational behavior scientists in determining its influence in specific situations. Perhaps the comprehensive study is that of a Dutch researcher, Geert Hofstede who categorized the cultural differences based on 5 parameters. These are few instances of specificity that help analyse the differences of behavior of companies that have people from these regions. But, what often happens is that any difference in behavior from an expected one is liberally classified as being to culture without adequate evidence. This paper presents such a case where a severe problem in a software company was attributed to a particular culture and the management was looking at a solution based on this premise. The use of the thinking process tool suggested by the theory constraints helped us to expose this myth of culture being the culprit and help work towards a more authentic solution

Introduction

With the globalisation of business activities, it has become imperative for the players to recognize and take into account cultural differences that exist between business partners of different regions – not to forget that catering to the cultural ethos of the clientele is very important for the very survival of the business. In fact, in the late seventy's, many of the business schools in the U.S. introduced curricula in international business that included cross-cultural issues between the west and the Arab world since that region had become a major field of their business thrust.

That market demands are different, and buying habits too are alien in different regions of the globe, is obvious and all companies that do business globally seem to be quite adept at their marketing strategies in addressing this issue. What is also important, however, is to recognize and address the matter of what cultural differences exist between the regions of the business partners and, therefore, how to take cognizance of the differences in behavior among the staff of a company, belonging to separate geographical regions.

Specific to this situation, is the Information Technology industry in India. There are two kinds of companies here: those of local origin who have become global players because of the absence of a home market and those, non Indian companies, who have been global players before and have set up units in India to capitalize on some of the comparative advantages that India has in the IT field.

The first kind seems to have adapted itself to the foreign cultures and even imported quite a bit of it. The impact of this can be observed dramatically in places like Bangalore with its western style cafeterias, bowling alleys, resorts and sartorial tastes. All this is however is in the physical world and no great culture barrier exists within the organization as all of them work with the same mindsets.

In the second case, that is, where western IT companies have set up units here, while the physical or external differences have been ironed out like in the first case, there is an accepted level of difference in the behavior of the Indian units, and those outside, resulting in some communication problems and some dissonances. While quite often the organizations do manage by accepting this difference as a given constraint, it can happen that the parent organization (and employees from there) can get frustrated with what they feel as an obstacle to efficient performance from the Indian counterpart. It is assumed, for instance that the western culture is to be more individualistic, aggressive and very professional, while the Indian units are driven by a feudal culture that accepts instructions without questioning, irrespective of their appropriateness, never being realistic and often misleading. Similarly, the Indian counterpart also operates on some premises based on its perception of the culture prevalent in the Parent Company.

This paper presents a case of such a software center in India, set up by a European company that was experiencing painful relationship with its parent company. The interaction between the parent and the subsidiary units were all based on the premise that the differences between the two regions' culture was at the core of the problems. The solution that was aimed at was to bridge this difference. However, a team of consultants, with two members from Europe and two from India broke the myth of this cultural difference as the root cause of the problem. It turned out that the cause of the problem was elsewhere and had nothing to do with cultural differences – in fact; there were no cultural differences.

There are two kinds of culture we come across – one, ethnic culture, differences arising primarily because of traditions and philosophy governing the behavior of peoples of different countries; and, two, organizational culture, something everyone talks about but cannot define. This is governs the way things are actually done in an organization. A strong culture is expected to result in higher productivity, better image and overall health of an organization.

In this particular case, the message we kept getting from the higher ups was that the Indian unit of the company did not conform to the culture of the parent company (something no one was able to specify when questioned) and tended to behave differently. At the same time the problems faced by the parent company with the Indian unit was attributed to the Indian culture. Thus, even here, the different forms of culture were mixed up in the perceptions.

This paper presents the story as it was and shows the method employed by the consultants, which resulted in the revelation. Through this, it intends to draw the conclusion that quite often, cultural differences are accepted as an excuse for not trying to find more amicable way s of working.

The Case - Jacobson India Ltd.

Messrs. Jacobson is a multinational software development company, 100 years old, located in Northern Europe. It deals with systems software related to communications and enjoys a fairly large share in the global market, operating in 140 countries. It had a total billing of USD 26 billion by beginning of 2000.

Initially, in India, it had only selling and servicing interests and had a marketing office located in New Delhi.

The company claims to offer the broadest portfolio of products and services in the field of networking and telecom services, with 50 R&D centers around the world. It employs over 100,000 workers across the globe.

At the moment the company is working on products in the following areas:

- Mobile networks: 2G, 3G
- IP/ATM backbone systems
- Transition and migration solutions
- Applications

In 1997, Jacobson set up its first R&D center in India, at Pune, which has abundant talent available, especially, in the area of systems and communication technology. This is referred to as JIL and has about 150 employees on the rolls. The management consisted of some non Indians, particularly from the parent company.

JIL was largely engaged in the development of various network management systems. These were based on requirements specified by the parent company or one of the larger subsidiaries outside India. In that sense, the growth of the company also dependent on the number of projects it could get from the parent or sister companies. The parent company or other units of the company that provided jobs to JIL in the form of projects were referred to as sponsors. In a sense, the market for JIL consisted of sponsors.

The tasks were organised under 3 functional categories, namely, Line, Project and Technical. Administration was the supportive function that included accounts and human resources management.

Line management consisted of business development, appraisals, resources management and competence development. Technical management consisted essentially of technological projects related to telecommunications namely, operating support system (OSS) development and research; and, know how required for a particular product under development. Project managers were responsible for planning and execution of projects. They collected resources from line managers. They were not concerned with technology. The teams were thus organised around products.

In short, the projects followed a matrix form of structure with line mangers equivalent to the vertical functional managers and projects forming the horizontal, cross-functional teams.

By early 2002, there was a sense of discomfort among the engineers that they were not getting appropriate encouragement from the parent company. At the same time, there were some complaints from senior managers from both Europe and India that the JIL engineers failed to act as members of the Jacobson family as such and tended to maintain a rather narrow, Indian outlook. They accepted the requirements without questioning them, even though there were inadequacies in them oftentimes. In other words, they failed to take adequate initiative and performed their role in the organization in a very passive manner.

In a sense, the attitude of not questioning what the parent company asked them to do in a very reactive manner was being attributed to the so-called Indian culture of feudalism. The Jacobson group managers, however, felt that this was not good for the entire company and that the Indian engineers must learn to change their attitudes. They should behave like their western counterparts.

Survey

The company management carried out an in-house survey to assess what areas of improvements that the organization should focus on. This was normal practice in Jacobson and certain responses were accepted as an indicator of the well being of the company, in terms of the motivation of the people.

This time, the survey results indicated a satisfaction level that was below par.

In summary, this “dialog” with the employees indicated the following:

- Large amount of frustration
- Big difference between managers and non-mangers in motivation and human communication interfaces.
- Employees felt that they could take on more tasks than they were allowed to or were encouraged to.

The last point mentioned shows a contrast in perceptions. The management, especially from the parent/sponsors felt that the JIL workers were not keen on taking up more tasks while the JIL employees felt that they were discouraged from doing so. Right away one could notice a flaw in perceptions.

Introducing Change

Mr. Malcolm Penney, a senior project manager for many years in a North American unit came in as the managing director of JIL and the first thing that he took note of was the survey outcome. He discussed this matter with some senior managers of the company and decided to introduce appropriate changes.

The other units of Jacobson are operated on teams based on features and not products as in JIL. So, there was also a felt need that the teams here should also conform to the company practice. Feature teams would require stronger commitments and an ability to take ownership as teams.

A steering committee was formed consisting of three senior managers who would initiate and manage the change process.

TMG is a group of professional management consultants from Northern Europe who has worked for Jacobsons corporate as well as several other units on many occasions. In a sense, they have been retainer consultants to the Jacobson family of companies. It was natural, therefore, that they were now asked to come over and help JIL in the conceived change process.

It was also felt that since the problem seems to have to do with cultural differences, a European consultant might be again driven by a cultural bias; the same would happen if one were to engage Indian consultants. It was therefore felt that an Indian team could also be asked to participate in the process. This was how we got involved in the project.

Thus a “pre-study’ was launched within a month, to be conducted by a team consisting of the two members each from Europe and India.

The Pre-study

The study lasted for a week and consisted of understanding the psyche of the organization by conducting a one on one interview with several managers and staff members of JIL.
Gists of some of the interviews are shown in exhibits 1, 2 and 3.

This phase of consulting was referred to as pre-study because, at this stage, the main objective was to identify the nature of the problem that JIL faced so that appropriate HR interventions could be recommended as a consequence.

The first fact that emerged out of these discussions, right at the beginning, was that both Jacobsons and JIL wanted JIL to grow and both of them wanted JIL to be freer with ideas and participate in the larger process of selection of projects.

This was in total contrast with the perception where each one had been operating on the premise that while one wanted the JIL to grow it was the other that was preventing it either through treatments or attitudes.

As it turned out, the cultural difference, used as a reason, was only a myth. It turned out that the Indian engineers felt that they were not to question the requirements given by the sponsors because that was how the market had defined them; and that it would be futile to suggest changes even if they were appropriate.

The sponsors felt, on the other hand, that the JIL staff were governed by an Indian culture of being non-innovative and therefore were not keen on growing up to be a part of the larger community.

The truth was that there was a significant absence of communication between the two JIL and the rest of the Jacobson community.

It also turned out that the major problem that existed was that of mistrust. There was a strong undercurrent of mistrust on both sides and this was causing great harm.

The sponsors were reluctant to give more and larger projects to JIL because they were not sure that JIL was capable of high quality products. This was in direct contrast with what the Indian engineers said about the strengths of JIL – lower costs and very high technical capability. They also believed that they could actually demonstrate their capability if they were given the opportunity to visit the parent company and sell their services by demonstrated competence. But, they found that adequate funds were not sanctioned for such purposes. Recognition for work done hardly existed.

Many of the engineers had worked earlier in major telecomm software companies Motorola, Texas Instruments and Lucent. They had come over to JIL with the hope that the organization had potential for growth and therefore an opportunity of growth for them. They were highly disappointed with what actually happened when they joined here. They could also compare JIL with their earlier organisations and said that those organisations made them feel to be part of the larger global community while here, they were made to feel isolated, as only an outsourcing unit.[Incidentally, it turned out that JIL was originally set up to satisfy a statutory obligation to the government of India and that might have some historic bearing on the earlier attitude towards JIL] .

The engineers of the parent company felt, on the other hand, that the engineers here did not have or support a process view of product development and had a very narrow outlook and that was just of coding or designing. Infact, there were hardly any testers compared to developers which was indicative of this attitude.

One of the oldest engineers, regarded for high technical competence, but regarded by the European bosses as a rabble-rouser, was particularly angry and outspoken in the interview. The reason was that he was particularly lured into JIL from another large Multinational with promises that JIL would grow to 400 engineers within the year; but that never happened.

On the other hand, there were some younger engineers, who felt that they were getting what they wanted – they wanted experience in the technology and they were getting it. New initiatives were being taken in some teams in the form of rigorous testing and setting up of standard processes, which they felt were good.

JIL was sent a special congratulatory message from headquarters on a particular project that was delivered on time and met high standards of quality. This was the consequence of steps taken in some projects to establish processes and quality assurance. These were mainly based on individual initiatives of the managers.

History

There was a lot of history behind all this. It was a history essentially of mistrust. Among the corridor talks was that the managing director - usually a north European from the Parent Company – was posted for a very short duration. He would pay attention only to issues that were often inconsequential to the growth of JIL, like attending to office premises, air-conditioning facilities and so on. A new boss that came would repeat almost what his predecessor did.

Another corridor grudge seems to be that European managers were often sent to JIL at senior positions with disproportionately higher wages and perks which was unfair. What was worse was that these managers became incommunicado after 5pm every day and on weekends – the engineers working with them could not consult them if they had to work beyond 5pm -which was always true – and often during the weekends.

Below is a summary of what the consultants found about JIL from historical perspective:

1. An unclear Initial Objective?
   Was JIL expected to be a full, worthy Jacobson Design Site or a Low cost SW-body shop?
2. People recruited with expectations of becoming a”450” company
3. Became Responsible for a Product without formal handing over
4. Sudden growth of staff without the usual investments in infrastructure
5. No visible strategy
6. Frequent changes in Leadership
7. Gradual growth in process capability

As regards leadership, the consultants had this to say:

- Lack of continuity of Leadership on senior level
- No clear visible direction regarding marketing and positioning of the Design Site (JIL)
- Leadership seems focused on making operations run smoothly
- The perception is that top leadership does not reflect the standard Jacobson 24 hour commitment
- Unclear about Jacobson values

And, about objectives:

- Unclear overall strategy
  - Unclear strategy for how to capitalize on cost level
  - Unclear strategy for how to capitalize on SW competence
- Unclear Customer Structure
  - Who is regarded as sponsor
  - The role of the Technical Board
- Relative position against other Design Centres

The consultants also found that, historically, there was little focus on processes. There was no explicit product development process, absence of project management planning process. A not very deep induction programme for new recruits and a weak competence and role mapping/appraisal indicated lack of HR process.
However, there had been an increase in Process focus in the last year. Specifically, the following processes had been set in place:

- Project Assignment Review and Negotiation process
- ”Light” Product Development Process (introduced for new projects)

- Team life cycle process
- Management Team process
- Unit Manager Process
- Communication Process

Also, there had been a very minor investment in quality assurance thus far. This was being set right with recruitment of some testers and introducing some quality process.

Consultants' assessment

The consultants concluded that some of the desperation of the JIL engineers was justified – that JIL is not likely to survive unless it gets more projects and grows. They also believed that a sense of mistrust existed between Jacobsons and JIL, largely driven by historical events. This could be the cause of several ills of the organization.

They further felt that one could only wish that the parent company would start actively offering more projects to JIL or become particularly interested in nurturing the Indian wing. This can happen only if the sponsors found specific value in doing so. What is it that they can get here which cannot be got from other design centers at a perceptibly greater reliability?

It seemed obvious to them that JIL has been caught in a vicious circle. Unless they prove themselves, Jacobson and other sponsors are unlikely to offer them major projects; neither are they likely to make more investments in JIL. Unless investments were made, JIL would not be able acquire resources and competence to build u p its capability. This would further augment the feeling of mistrust.

If any, it was up to JIL to take major initiatives in the form of ownership.

Thus, they affirmed that problem arose neither because of ethnic nor of organizational cultural differences. The reasons were of two folds- one, lack of capability in thinking in terms processes and, two, the existence of mistrust.

What is important is that the consultants could confidently arrive at this conclusion by applying the Theory of Constraints and the corresponding thinking process tools to analyze the situation and could also identify the solutions area with clarity.

Figures 1 and 2 shows the cause effect relationships that emerged out of this exercise in the two problem cases.

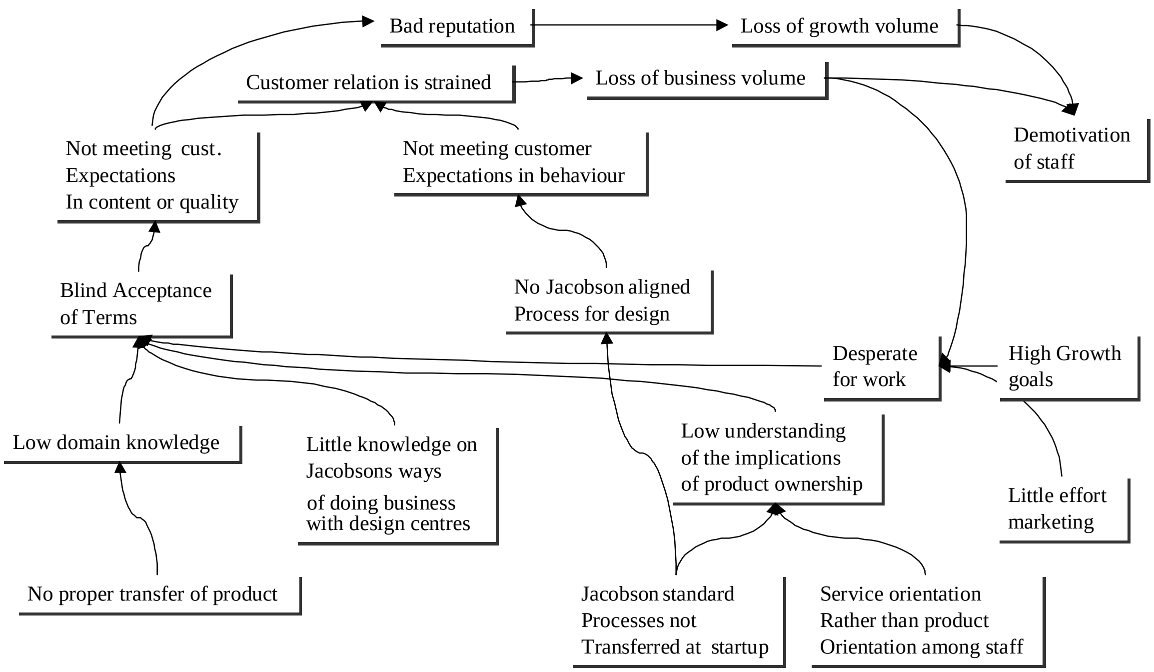

Fig. 1: GROWTH IN SIZE AND CAPABILITY.

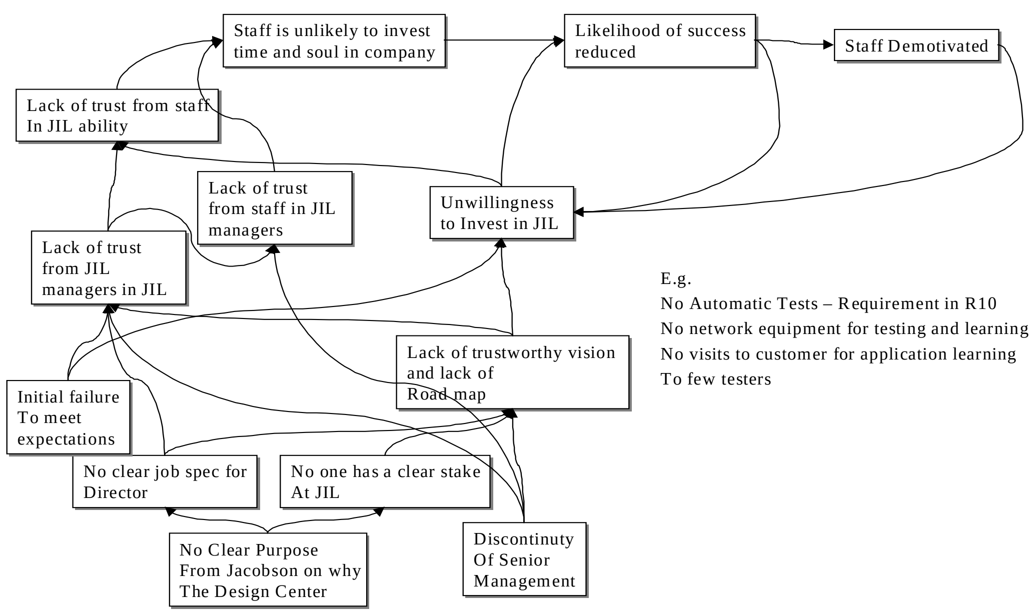

Fig. 2: TRUST ANALYSIS

Solution

It is clear from fig. 1 that there is a loop at the top part, which is what prevents growth. The solution lies in breaking this loop through managerial interventions. The possible intervention was already made clear from the fact that one of the projects where specific interest was show in using processes and employment of testers received high recognition. It means that systems and procedures relating to formal software processes and increasing capacity of quality methods can result in breaking the vicious loop.

Fig. 2, again, shows how the company management and staff have got themselves entangled into a loop of mistrust. From this diagram, it also gives us a clue of how we can break this loop by blanking out the lower left half of the diagram that has only to do with history. Thus, once history is laid to rest, one can start owning and managing processes from within the Indian unit. The contention is that this will raise the project competency level of this group by focusing its attention on it and; once this happens, there is a larger probability that the parent company and sponsors will start taking notice. By sheer virtue of this competence it will be able to attract more business.

This will be seen to be imperative on the part of the local managers because that will be their only means of survival.

References

[1] Scheinkopf, Lisa J., "Thinking for a Change", St. Lucie Press/APICS Series on Constraints Management, 1999.

[2] Moorhead, Gregory and Griffin Ricky, W., "Organizational Behavior" 5th edition, A.I.T.B.S publishers & Distributors, New Delhi.

Annexure

SELECTED INTERVIEW OUTCOMES

Mr. Rajiv Lal, Senior manager and member of steering committee

The new recruits always look for new applications. Their expectations from the organization are very high.
They do not understand the difference between services and products. The engineers should understand that a product is much more than a few lines of code.
We have not managed to educate these people what all this is about – not been able to make them feel proud of being Jacobson global.
The engineers expect to be appreciated for every thing that they do. They lack trust. They feel that whatever we do has already been done. They have no sense of belonging – they just want to move.
We have not been able to communicate about what and how of the big picture. They have a very narrow view of things.
They lack initiative. Always wait for instructions. They think it is only the responsibility of the managers to fix problems.
Actually, it is a great place to learn.
Any change management should take into consideration the cultural differences between Indians and the Europeans.
The line managers themselves need to change their attitudes. The HR should take them through a programme of creating awareness about team working. This alone may bring about a change for the better.

Patel –engineer

Role changes every day. Not sure of how the propose organisational structure is going to help matters.
Relation with parent company not good. Apparently Jacobson does not have confidence in JIL unlike other companies with their Indian operations.
Should be more interactions between Jacobson Europe and JIL. There is less information about how Jacobson works.

Leonard: Line Manager, Technical (Been with Jacobson for 14 years)

There is not much of a cultural difference across countries in the company.
What is the role for JIL?
Starting operations here in 1997 was obviously to look for economical resources. There are a lot of good people here – Jacobson should realise and use these good people. Should expand 3 to 4 times to get the most of the investment in JIL.
There is no clear strategy at the Jacobson board level about what to do here. It cannot be made into a profit centre on its own. There is however a desire to develop and expand the Indian operations to attract more business within OSS.
There is a mandate for this division to take up larger OSS projects with competence. They should say that the Indian operations is a good place to pass on assignments to.
Measurement is essentially that of customer satisfaction of the stakeholders – metrics like delivery and performance.
Expectation of employees**:** stable organization and growth. It is now perceived to be a non-growth company. At the moment, we are moving towards becoming clear about roles and responsibilities.

We have very good, ambitious and dedicated people. The question is, how can we make them to be more creative and to take their own initiatives. How can we commit ourselves to exceed customer expectations?

Prabhakar –line manager, systems development

Been here for 5 years. Expectation on joining Jacobson was that since this was a start up company, and I had skills obtained in the MNC I worked in previously; I could hone my ability in developing products.
Expectation on product development is satisfactory. But growth was disappointing. No adequate recognition from Jacobson head quarters. Older people like myself are only looked upon as troublemakers.
There is no formal marketing process. Two products that are current were sold by the effort of individuals who went to Jacobson in Europe.

The strengths are cost, availability of skills and previous experience in products. H.Q. treats us disparagingly. We accept requirements blindly.

Chandran – line manager. Responsible for 29 engineers and 3 products. The oldest member of JIL.

Originally, there was a suggestion to build competence-based groups; but then, the decision taken was to product-based teams.

Idea was to work for 5 years in one company and to experience growth. Promised growth never materialised. We failed to recruit even when more business came in 2000. We were so eager to get work that we picked up jobs but failed to recruit enough competence people Jacobson had no visibility as a software developers.

At the time of joining, the atmosphere was very positive. Ability to work on new technologies and exposure to telecom.

JIL was established because the government insisted on setting up an R&D centre here. Another reason is that Jacobson saw a big market and found it easier and economical to recruit people here.

We've been only reactive to demands of stakeholders. Never went out and told anybody what we can do and what we want to do

Our strengths are costs, competence in information technology and ability to change quickly.

The biggest obstacle to progress is that the senior managers from Europe keep coming and going every two years.

Trends and Transitions in Japanese and Korean Management Approaches

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Abstract

This paper focuses on the influence of culture, religion and relationships in Korea and Japan as well as their impact on respective management systems. Because of their common cultural heritage, the practice of Confucian ethics is of crucial importance in both countries. Confucian ethics essentially encapsulate a set of rules that govern daily life. Further, collectivism is deeply rooted in the culture of both countries and building and cultivating relationships through the social constructs of *wa* (Japan) or *inwha* (Korea) is important to management practices in both systems. Despite the pressures to reform caused by economic stagnation in Japan since the early 1990s, and the disruption to the South Korean economy caused by the Asian Financial Crisis of 1997, cultural values are still central to both management systems.

Introduction

Cultural characteristics derived from deep-rooted traditions have shaped the management systems of Asian multinational companies in terms of the leadership styles, decision-making procedures, organisational structures and human resource management practices. In the North East Asian context, the Japanese as well as the Koreans live under the influence of the Confucian heritage in which hard, honest work is an important social norm. They believe that it is an important way to guarantee career success in their respective management systems. The practice of Confucian ethics has a most profound effect as it goes beyond a religion *per se* – it encapsulates a set of rules that govern daily life. As multinational companies in Asia are strongly influenced by Japan and Korea, and their management systems exhibit unique Asian management practices, this paper will focus on the management practices of these two countries.

Impacts Of Culture On Asian Management Practices

Even though all management practices aim to attain high performance through effectiveness, management systems differ singnicantly. One reason is that nations have maintained their unique cultural heritages, and cultural differences have formed an important basis for management systems in each country. In fact, Chang (1988) concluded that any management system could be expressed as a function of cultural identity. Some unique cultural heritage characteristics comprise language, religion, territorial location, social and political system, cuisine, clothing and shelter (Chang, 1988).

Japanese Culture

The core values of Japanese culture are *amae* (dependence), *on* (obligation passively incurred), *giri* (a bond or moral obligation and debt that must be repaid because of one's status or membership of a particular group), *ninjo* (human feelings including all the natural human impulses and inclinations) (Sethi, Namiki and Swanson, 1984).

All of the above core values can be seen expressed in Japanese corporate life, often in terms of the relationship between managers and staff, or between colleagues. For example, the word amae originally comes from the word "amaru" which means to depend and presume on another's life; to seek and bask in another's indulgence (Sethi et al, 1984). It is a state of mind that describes a desire to be passively loved and to be protected. This relationship is similar as in a mother-child relationship where the mother (multinational company) is obliged to take care of her children's lives (Japanese employees). In order to be protected and loved by their mother, the children (Japanese employees) have to obey and follow the command of their mother. This cultural characteristic has resulted in a close interdependent relationship between Japanese employees and their organisations.

Japanese Social Characteristics

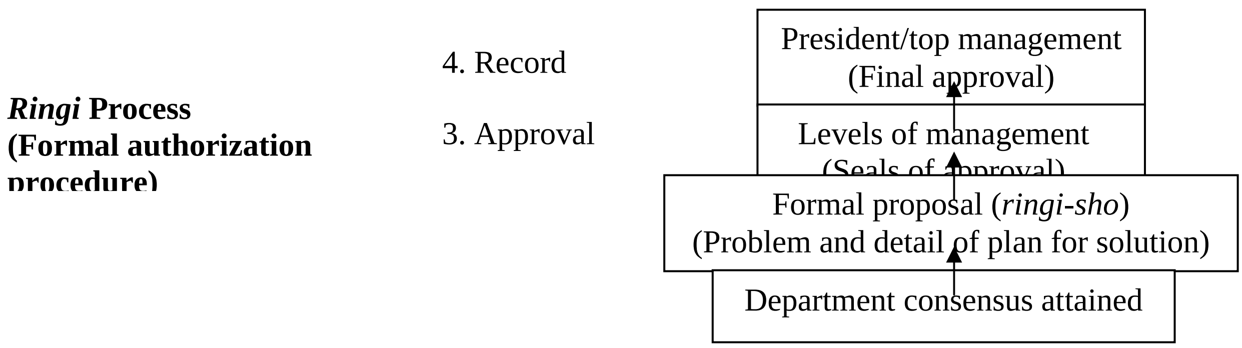
An important Japanese social characteristic is called *ie*, which literally means “household” or “family” (Sethi et al, 1984). In Japan, the word has a broader context, such as in the workplace or in terms of social orientation. Nakane (1972) explained that *ie* is a social group constructed on the basis of an established frame of reference and often this can be interpreted as the organisation or workplace. For a Japanese, commonly a frame such as a company is the most important of all other personal attributes such as kinship, cast or descent group. The *ie* is the source of the commitment and loyalty to the frame-based group of Japanese society - a company is conceived as an *ie*, where the employees are the household members and the employer is its head.

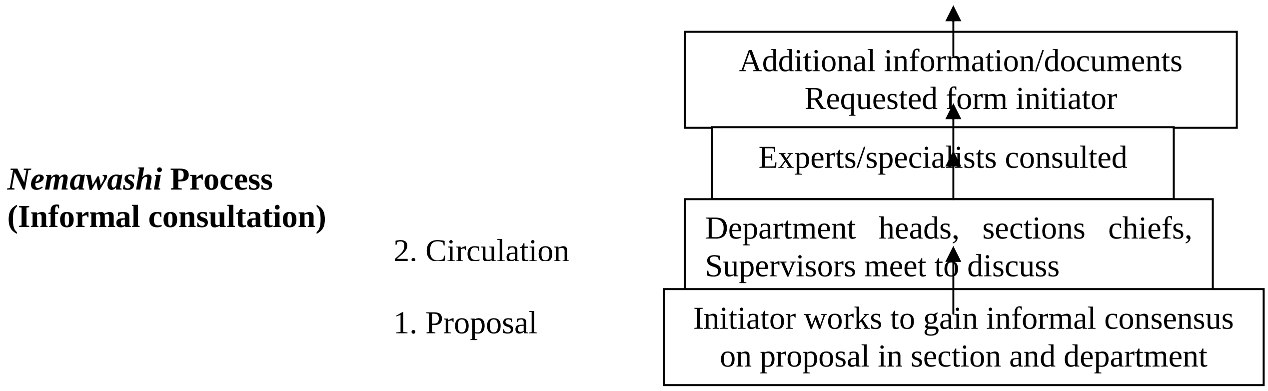
In this vein, Volery & Mensik (1997) also noted that most of the larger Japanese firms are connected with affiliated companies within the *keiretsu* (or economic group or conglomerate) system, whereby companies maintain long-standing business ties with each other that are sometimes, but not always, cemented by mutual ownership of each other’s shares. *Keiretsus* are the successors of the pre World War 2 *zaibatsus* which were dismantled by the Allied Forces following the defeat of Japan, and although the new industrial structure virtually eliminated family control through holding companies and other devices, it certainly did allow Japanese companies to conglomerate and to exhibit the benefits of capitalistic collectivism. In fact this system was so successful in the decades from the 1960s to the 1980s, that Japanese industrial and management systems became virtual international benchmarks in best practice. The decline in Japan's economic performance which began in the early 1990s has tarnished this reputation, but the keiretsu remain a very important element in the Japanese industrial and commercial landscape, still dominating Japan's external economy.

Decision Making

Decision-making in Japanese organisations is based on the culture of collectivism and shared responsibility. This underlies the Japanese *ringi* system, which is based on consensual decision-making (Parker, 1994). The Japanese tend to believe the *wa* or harmony, fundamentally important to Japanese culture and social interaction, can be best maintained in consensus decision-making where everyone has to agree and be happy with the final decisions being made (Chen, 1995). An associated concept, *nemawashi,* literally refers to dealing with the roots of trees (Chang, 1988), where gardening or the transplanting of trees requires much skill and meticulous effort. In addition, Chen (1995) explained that *nemawashi* in a big organisation refers to preliminary and informal ideas generation in relation to a proposed course of action or project. The employers in Japanese organisations realise that ideas from the bottom level of the organisation are an important source for the company. Therefore, *nemawashi* implies the activities that take place below ground level in which contacted persons remain anonymous and feel free to talk about their ideas.

The *ringi* process usually comprises four steps: proposal, circulation, approval and, record. A *ringisho,* which is a proposal that originates in one section, is forwarded to all relevant sections on the same level, section heads, managers, directors and eventually the president of the company (Chen, 1995). Upon receiving the *ringisho*, each person involved in the process will make comments on a sheet attached to the back of the proposal. The decision will be made by the top management based on comments of all people involved in the process (Chen, 1995). The purpose of this round-about way of making decisions is to eliminate dissension, as many are given a chance to change their decision before it is actually made. The process of decision-making procedures in the Japanese multinational companies is outlined below:





Source: Deresky (1994:178)
Figure 1.

There are many advantages to the Japanese form of decision-making. It has some elements of democracy in the sense that employees at lower levels can initiate proposals or work out plans, which will be transferred upward to the higher levels of management (Chen, 1995). Since many people are involved in the process and various meetings are held, there is a greater participation of decision making in the company. Any decisions adopted on the basis of such extensive discussions will be more likely to meet general acceptance and implementation will become easier and more efficient.

However, there are also a number of disadvantages associated with the process of the *ringi* system. Often, too many people and sections get involved, even though a *ringisho* may concern one section only. Furthermore, too many meetings are held and it takes a very long time for participants to follow all the proper motions. According to a report of the Japan Management Association, managers spend around 40% of their time in conferences and meetings (Chen, 1995). These may significantly hamper organisational effectiveness, as business often demands timely decision making.

Although the *ringi* system is time consuming prior to the implementation stage, the final decision can be rapidly implemented because of the widespread awareness of and support for the proposal already gained throughout the organisation. This process is the opposite of the top down decision made by many Western multinational companies, where decisions are made quite rapidly and without consultation, but which then take some time to implement because unforseen practical or support problems often arise through a lack of understanding of essential processes, or even grassroots opposition to change (Deresky, 1994).

Leadership

Japanese leadership is highly participative (Deresky, 1994). This participative style is based largely on the Japanese companies' *ringi* method of decision-making and their intolerance for deviation from decision based on consensus. Such participation and shared responsibility is evidenced in cohesive work group and quality circles. Quality circles, according to Deresky (1994), are groups of workers who meet regularly to solve problems and improve quality. An understanding of the importance of the relationships in these work groups and of the manager's role in the group is central in order to understand Japanese leadership style. Moreover, in this participative context, managers often look to subordinates for advice, and managers are expected to be transformational which is to raise the aspirations of subordinates and to secure their respect and faith.

The use of 'quality circles' has created number of advantages for many Japanese organisations. Kumuzawa (1996) has claimed that quality circles, which have been used by many Japanese multinational companies such as Toyota, Mitsubishi Motors Corporation, Toshiba and Komatsu have improved the technical skills of the employees and reduced defect rates. At Toyota, according to Kotler, Ang, Leong and Tan (1996), workers are organised in teams that take full responsibility for some production activity, as opposed to each worker specialising in some repetitive task. The team members are able to handle various tasks. They have job security and are paid according to their seniority, not by what job they are currently doing (Hiroyuki, 1997).

They strive continuously to improve the product and the process. Guided by high standards, workers will stop production of their component at any time an error occurs, instead of hiding the error and letting it get embedded in the final product, only to be later corrected at greater expense. The workers use the error as an occasion to unearth the error's fundamental cause so that it would not happen again (Kumazawa, 1996). Weinshall (1993) noted that the Japanese have a sense of unlimited commitment to their responsibilities and, accordingly, the proverbial "passing the buck", namely transferring or pushing responsibility to someone else, is unusual in mainstream Japanese industrial organisations.

In addition, group participation involves suppliers, which can enhance core competencies (Eleanor, 1996). Companies carefully select their suppliers and plan to involve them in long-term commercial relationships. The close relationship with suppliers has created core competencies for companies as through timely information received from all suppliers, production speeds can be increased, and companies are able to detect production defects faster (Lincoln, Ahmadjian & Mason, 1998). As suppliers are an important asset to the company, Japanese managers tend to maintain a cooperative, long-term relationships with them. This has been exemplified by major companies such as Toyota and Mitsubishi Motors Corporation, which have maintained a long-term relationship with their suppliers for a number of decades (Kim & Hoskisson, 1996).

Further, retailers or dealers participate in development of products based on their experience in hearing what customers want. Companies use this information as an additional source to improve the technology or other important features in creating a new product (Fruin, 1997).

In the course of the rapid business expansion, the Japanese companies have actively sought to promote their manufacturing advantages. One revolutionary manufacturing process, known as the Just-in-Time system (JIT) (Wheatley, 1998), was widely adopted by the Japanese companies in the 1960s and 1970s (Chen, 1995). Some major motor vehicle manufacturing companies (the best know example is Toyota) are able to maintain production schedules with less than a day's worth of parts on hand by maintaining close ties with suppliers, financially and geographically (Wheatley, 1998). Additionally, the system has delivered significant cost advantages - Sethi et al (1984) stated that the Japanese motorcar companies are estimated to hold an average cost advantage of as much as US$2,200 per unit vis-a-vis their American and European rivals, which is attributed to production improvements through efficient assembly lines, automation and low inventory levels (JIT).

Human Resource Management

Growing global interdependence and the logic of customer, industry and alliances are bringing considerable degree of convergence to Japanese managerial work goals. In a recent study, it was suggested that there is an evident erosion of the distinctive features of the classical Japanese management such as internal labour market, deep socialisation, and lifetime employment etc. Learning has emerged as the dominating work goals of the managers (Okachi, Pearson, and Chatterjee, 2001). Nevertheless, it is interesting to examine the fundamentals of the Japanese HRM system which has emerged in the post WWII period, conscious of the fact that global pressures are bringing changes to the system, but also acknowledging that large Japanese corporations in particular are reluctant to completely abandon established and previously successful practices.

Life-time Employment (shushinkoyo)

The life-time employment system has been based on several key components. First, most employees in this system are directly recruited from school rather than from an open job market (Chen, 1995). Second, they are expected to stay with the company for a career lon period and can in turn expect long term job security (Hundley, Jacobson and Park, 1996). The decision of recruitment is more focused on the general characteristics and abilities of potential employees than on a particular technical skill.

The concept of life-time employment has far-reaching consequences for Japanese management. When recruiting a new employee, the company has had to be extremely cautious because a mistake in recruitment can be very expensive and difficult to correct. Therefore, a complicated screening process is involved, ranging from academic examinations of the candidate, investigations of the family background and individual history, to detailed personal interviews (Chen, 1995). On the other hand, the potential employee also has to exercise a fair amount of care in determining which company he should apply to for employment. The applicant has not been simply looking for a job but rather a lifelong commitment (Chen, 1995).

The process of recruitment really has really been a process of exchanging commitment (Warner, 1994). The candidate has taken significant risks in betting his future on a particular company. In general terms, even today, if a Japanese leaves mid-career or is fired from a large company, he will have a hard time in being hired by another large company. That is, by recruiting someone, a corporation assumes the obligation of a family to take care of him for his entire career. This means that the company must be prepared to make sacrifices for its employees. Even when a company is experiencing a business downturn, it is still obliged to carry the burden of protecting the job security of its employees. As employees have grown with their organisations, they have become increasingly entrenched within the corporate family.

There are alternative views, however. Hirakubo (1999) strongly contends that the Japanese lifetime employment practice has little or nothing to do with the traditional *oyabun-kobun* (parent-child) relationship between a firm and its workers. Owing to the enormous job insecurities faced by Japanese workers in the late 1940s and 1950s it was not until the bloody Mitsui Miike coal strike in 1960 that the 'lifetime employment' became a prominent feature of the Japanese management. Furthermore, the term "lifetime" is also misleading as it refers to the male employees, due to compulsory retirement between 55 and 60. Actually, the majority retire in their late 50s (Hirakubo, 1999).

And Modic (1987) argues that employee loyalty is one of the illusions that colour the appearance of Japanese-style management. Historically, Japanese are not loyal people and the image of Japanese as willing to sacrifice themselves for the good of the company is further blurred. In 1998, only about one in five male employees working in large firms or government enjoyed lifetime employment, and the absence of job-hopping is also far from reality - according to a Japanese Labour Ministry Survey, 19 percent of high school graduates and 8 percent of college graduates quit their first job within a year (Romani, 1998).

Seniority Promotion (Nenko Joretsu)

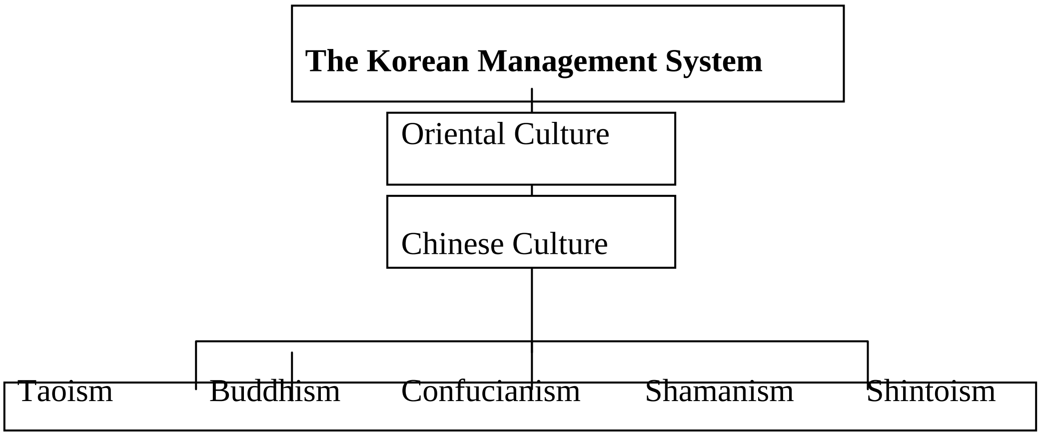
The term used in relation to work compensation and promotion based on seniority is *nenko* or the merit in the number of years an employee has provided his services (Warner, 1994). Since most employees are recruited directly from school, age and length of service parallel each other and seniority becomes an appropriate standard for reward. The seniority promotion was another major motivation for employees to stay long in one company (Hiroyuki, 1997). Under the seniority-based wage system, the remuneration of a worker is determined primarily on the basis of the number of years he has spent with the company, subject to age and level of education at the time of entry (Vagelis, 1995).

The seniority based wage system has been the dominant practice in Japan up until the 1970s. Although the difference between the incomes of younger and older workers is greater in larger companies, the prevalence of wage differentials according to age and length of service was found in all enterprises, regardless of size (Sethi et al, 1984). The system was supported by the idea that within the *ie* (group or community) framework, a supervisor must be more than a technically superior worker (Warner, 1994). He must be able to maintain order in the group and look after its well-being. Thus the older manager acts as the symbol of group strength and continuity (Sethi et al, 1984). He also acts as the opinion leader and consolidates the community, acts as the elder statesman and assists group members in all aspects of their lives, including non-job related activities such as arranging marriages, and even settling family disputes (Sethi et al, 1984).

Korean Management Practicies

Korean Culture

The basic conceptual framework of the Korean management system is also closely related to Korean culture. The relationship can be seen from the diagram below:



Adapted from: Chang & Chang (1994:10)

Fig 2.

Korea and the other countries adjacent to China have been under the influence of Chinese culture for up to two thousand years. Chinese culture, therefore, has dominated Korean society and their everyday lives through political, legal and social systems in addition to literature, religion and ethics (Tan & Derek, 1998).

According to Matsunaga (1969), although Buddhism and Confucianism have been generally accepted as religions in Korea and have become an integral part of the lives of the Koreans, there are major difference between them. Buddhism is understood and practised as pure religion and it recognises heaven, hell and transmigration. It also teaches that anyone can enjoy the life in heaven if he or she has a virtuous and honest life in this world. Confucianism, according to Won (1992) is understood more meaningfully as a moral philosophy than as a religion. It is involved more in the contemporary world, rather than emphasizing the afterlife. Having a meaningful, moral and virtuous life in this world is an end in itself, it does not serve as a precondition to the life after death. In addition, in Confucian culture, the roles of males and females are differentiated. Under Confucian ethical codes, the father leads the family as an economic provider while the wife manages the household and nurtures children (Chung, Lee & Jung, 1997). Confucianism, therefore, is not seriously concerned with the supernatural as an unknown world. Ikeda (in Toynbee and Ikeda, 1976) further noted that Confucianism is a completely rational political and life philosophy and, accordingly, its religious psychology is part of the rational tradition that assisted the Chinese in accepting the teachings of Marxism-Leninism.

Another religious belief that has shaped Korean culture is Shamanism. It teaches that people must fulfil an additional obligation of filial piety to their ancestors (Kendall, 1985). Shamanism has been integrated into the lives of the Koreans through ancestor worship. Furthermore, Shamanism recognises the existence of various gods everywhere who possess the power to bless people who in turn seek the god's blessings by their devoted prayers for their family members. Chang and Chang, (1994) further noted that the Koreans are one of the most family-oriented peoples in the world. Maintaining family tradition and enhancing family prestige are the most important obligations to each family member.

In South Korea, one of four of the population is Christian. However, Korean Christians have to reconcile their Korean cultural heritage with Christian doctrines. Nevertheless, Christianity has had a significant impact on Korean modernisation (Song, 1990), witnessed by western-style schools and hospitals, and democratic political processes, and to some extent, Western style business practices.

And through (Chinese) Taoism, Koreans conceived the universe as a great hierarchical whole composed of parts, spaces and times that correspond to one another. Additionally, believers in Taoism emphasize a distaste for worldly affairs and a yearning for life in harmony with nature (Won, 1992).

Furthermore, the concept of paternalism is also important within the Korean management system. Koreans see the father as the central figure in the family (Chung et al, 1997). The father is expected to lead the family with authority and to demand and earn respect. He should be the role model for his wife and children by leading them with authority on one hand and affection on the other. Similarly, in an organisational context, the owner is expected to take the role of father in leading his company and its employees with authority while at the same time fulfilling the employees' needs (Chung et al, 1997). In return, employees should respect the owner's authority to lead them. The same kind of relationship exists between superiors and subordinates. In this manner, Confucianism reinforces the hierarchical, authoritarian and paternalistic corporate culture in Korea (Chung et al, 1997).

Another cultural value which is also important to know is 'blood-based succession'. In Korean culture, the eldest son occupies a particularly important place in the family. His relationship to his siblings is akin to the father to the family (Chung et al, 1997). In fact, the eldest son is expected to inherit family assets and succeed his father in taking over responsibility for the family. This inheritance system is also applied to managerial succession. Koreans generally believe that the ownership of a business should be kept in the family (Kenna & Sondra, 1995).

The ownership of many Korean large businesses (*chaebols*) has been passed onto the founder's children as in the case of the Samsung chaebol group. When Lee Bying Chull, who was the founder of Samsung group, died, the business was passed onto his son Lee Kun Hee (Paisley, 1993). He has taken over the company, and performs all important tasks and continues in the top management function, previously done by his father.

Another traditional value in Korean culture is the *yon-go* relation, meaning "relation-based behaviour" (Chung et al, 1997). This relation-based behaviour is promoted to foster trust and closeness that people have for others. A sense of closeness and trust always prioritises one's immediate family members and relatives, followed by people with common educational backgrounds and regional origins (usually birthplace) (Chung et al, 1997). In the Korean tradition, having attended the same school or having been born and raised in the region promotes a sense of belongingness and trust. In addition, while this sense of belongingness promoted harmony within the close-knit group, it fosters a sense of exclusion toward others. In work organisations such inclusion fosters a closely-knit relation-oriented group culture (Chung et al, 1997).

Corporate Culture: Shared Values

The corporate culture of Korea companies is often referred to as *sahoon*, which can be usefully translated as "company credos" (Chung et al, 1997). Basically, a *sahoon* could be called a company motto or slogan. It could be also be called management ideology, or core value and beliefs, and it generally consists of a few words or short phrases, which succinctly express the company's important values and beliefs (Janelli & Roger, 1993). In Korean firms, the *sahoon* is often written with beautifully crafted calligraphy, nicely framed and hung on the walls of executive offices, conference rooms, training centres and, major work areas. It also appears on the first page of company brochures, operating manuals, training texts, diaries, directories and other important company publications (Chung et al, 1997). Below are some illustrations of shared values and *sahoon* in major Korean *Chaebols*:

Table 1.

***Chaebol* Group**	**Shared Values or Official *Sahoon***
Samsung	Respect for individual, pursuit of technology and empowerment
Hyundai	Diligence, thriftiness, trust and affection
LG	Value creation for customers, respect for individual and empowerment
Daewoo	Creativity, challenge and sacrifice
Sunkyong	Humanism, rationalism and realism
Ssangyong	Trust, credibility and innovativeness

Adapted from: Chung et al (1997:148)

Organisational Structure

Formal Structure

The organisational structure of many Korean companies is characterized by a high degree of centralisation and formalisation. Authority is concentrated in senior levels of managerial hierarchies, with major decisions, especially financial decisions, requiring a formal procedure of approval from top levels of management which involves receiving many 'chops' (personal stamps of approval). As an example, in Samsung, it required 21 stamps for a financial decision to be approved from bottom to the top executives, and the process took several months (Paisley, 1993). The hierarchical structure has typcially started with the chairman, followed by the president, vice president (*busajang*), senior managing director (*junmu*), managing director (*sangmu*), department manager (*bujang*), section manager (*kwajang*), and continued down to the foreman and blue collar workers (Chen, 1995).

Korean companies usually have a tall hierarchical structure of organisation (Gray and Marschall, 1998). In addition, many Korean companies attach great importance to functional specialisation, allowing the planning and finance departments to exercise significant functional control under the leadership of the chief executive. Many Korean multinational companies (*chaebols*) have a planning and coordination office under the group of chairmen, who are responsible for allocating major internal resources within the group (Shin, 1998). Therefore, many Korean companies have a dual organisational structure, placing a vertical concentration of decision-making power at the senior levels of management, and a horizontal concentration of functional control at staff department level (Chen, 1995).

Informal Structure

The concentration of authority has resulted partly from the fact that ownership and management are not separated in most Korean companies. The owner family actively participates in the management of most Korean companies as family or clan members together dominate the management power (Lee & Yoo, 1987). Many Koreans value blood-based relationships so highly that they have an extended clan, which provides broad-based security for the family members (Chen, 1995). Business founders are expected not only to take care of their own immediate family members but also of other relatives.

There is a fundamental difference in the concept of ‘family members’ between the Japanese and Koreans (Lee & Yoo, 1987). The Japanese concept consists of two meanings: one is the concept of family strictly based on blood relationships and, the other is the concept of *ie* (household and clan). Contrastingly, the Korean concept of family is strictly based on a blood relationship.

Professional executives and managers also form an important power group in Korean companies. In some Korean companies, career managers, who have been promoted during their extended service in the company, can also exert powerful influences on the company management through the creation of personal networks within the company and foster them over the years (Chung et al, 1997). Common geographical and school ties also play a strong role in the formation of management power groups. It is a common practice for owners to bring his school and hometown friends into management (Chen, 1995). In some Korean companies, top management positions are predominantly filled by those who are from the same geographical area, such as Seoul, Honam or Yeongnam (Chen, 1995).

Leadership

A common characteristic of the Korean management style is authoritarian but paternalistic leadership (Chang & Chang, 1994). It is reinforced by a clear hierarchical order and vertical communication (Jonathan, 1985), and such managerial behaviour is acceptable in a hierarchy-based Confucian culture (Koo & Nahm, 1997). It is further enhanced by the centralised managerial structure found in Korean firms and by the generally obedient and passive attitude of Korean subordinates.

However, the authoritarian style of the Korean manager is rarely despotic. Corporate leadership in Korean companies is heavily influenced by a key value of Korean behaviour, *iuhwa*, which is defined as harmony (Chen, 1995). Korean managers cherish good interpersonal relationships with their subordinates and try to keep the needs and feelings of the subordinates in mind. Managers maintain various interactions with subordinates on an informal basis as an important way to achieve harmony-oriented leadership, which is based on mutual trust and benevolent authoritarianism (Chen, 1995).

Korean employees are highly motivated and are well known for enduring long workdays. The motivation of Korean employees is influenced by traditional values as well as realistic needs (Kearny, 1991). The key Confucian values of diligence and harmony have contributed to a relatively high work ethics. The instinct for survival has also been an important driving force among the Koreans, who have been haunted by instability and poverty throughout most of their recent history (Chen, 1995). Therefore, a strong work ethics and harmonious human relationships with managers and colleagues have become the most important motivators for Korean employees (Chen, 1995).

Human Resource Management

Recruitment Practices

Traditionally, Korean business firms depended heavily on *yon-go* based recruiting processes (relation-based recruiting) Chung et al, 1997). The primary source of recruitment were the owner's family members, school alumni and friends from the employer's birthplace (Kim, 1989). However, as Korean businesses expended, they were unable to meet increasing manpower needs through *yon-g*o sources alone. In order to meet the increasing demands for manpower, Korean firms had to open and systematize their recruitment processes. Job openings are now widely advertised in newspapers and applications are sought through active recruitment efforts (Chung et al, 1997). In addition, according to a study by the Korean Employer Federation (KEF), the 50 largest Korean *chaebols* utilise a variety of recruitment methods such as newspapers, magazines, company newsletters, TV commercials and campus visits (Chung et al, 1997).

Korean firms consider the recruitment of college graduates to be the most important personnel function and accordingly pay it close attention (Kim, 1992). This function is often performed centrally through a Human Resource Team in the Office of Planning and Coordination for an entire business group (Chung et al, 1997). Recruitment of college graduates takes place twice a year, in the spring and fall. As the demand for high quality manpower increases, so does the competition among large *chaebol* groups to recruit the graduates from elite universities such as Seoul National, Yonsei, Korea, Sogang and Hanyang Universities (Chen, 1995). In the fall of 1996, the top 20 largest chaebols recruited about 13,000 college graduates, Samsung, Hyundai and Daewoo recruited more than 2,000 and, LG 1,100 respectively (Chung et al, 1997). The typical selection process in Korean firms begins with a review of bio-data presented in the application form. For new college recruits, age, schools, academic majors and grades attained are the main items of evaluation (Soon, 1995). The age limit, which is normally 29 years old, is strictly enforced in most Korean firms because too much age difference among newly hired could be source of conflict and could disrupt group harmony (Chung et al, 1997).

The impact of traditional Confucianism is also seen clearly in discriminatory hiring with strong preference for male graduates in most Korean firms. Many Korean firms accept only male applicants among college recruitment; female applicants are usually screened out at the bio-data review phase (Chung et al, 1997). As a comparison, in 1994, the 50 largest *chaebols* hired only 2,000 female college graduates who are only 8% of the total number of employees hired (Chung et al, 1997).

Employee Training

One of the human resource management functions that Korean business firms have emphasized is employee training and development. The emphasis on training and development is consistent with Korean culture, which has placed a high value on education (Koo et al, 1997). Within traditional Confucianism, educational achievements have been the most important criterion of success and social status (Won, 1992). Moreover, within a society that reveres education, it is natural to see business firms emphasize employee training and management development. Great efforts made by Korean firms to promote training and development are evidenced by the fact that many the Korean *chaebol* groups have their own management training institutes with boarding facilities capable of accommodating hundreds of trainees (Chung et al, 1997). It is not uncommon to see as much as five percent or more of the employee's work time spent on formal training each year (Chung et al, 1997). Moreover, many employees are enrolled in evening MBA programs or foreign language programs on their own. Often these employees receive financial support from their companies.

Korean businesses have been steadily expanding training and development activities as they become aware of the increasing importance of human resources in an age of limited global competition. In 1995, many Korean firms increased their training and development expenditures, as outlined in the table below:

Table 2.

Chaebols	**Training and Development Expenditure (unit: $1 million)**
Samsung	**260**
Hyundai	**195**
Daewoo	**130**
LG	**130**
Sunkyung	58
POSCO	45
Hanhwa	40
Ssabgyong	32
Hanjin	30

Source: Chung et al (1997:172)

Employee training and development programs in most Korean *Chaebols* are well organised and systematically designed, covering all functional areas such as production, marketing, accounting/finance, human resources, labour relations, strategic management and international management (Chung et al, 1997).

In addition, globalisation of the Korean businesses has increased the importance of the international dimension of managerial work. In recent years, topics related to internationalisation, global strategies, multinational collaboration and, international competitive advantages have been scheduled in almost all management development programs (Chung et al, 1997). Foreign language capability is becoming an important qualification for Korean chaebol managers and, it is now almost a necessary requirement for career success in most of the big Korean firms. Furthermore, many business firms are sending their executives for overseas training and study tours. Many large Korean *chaebols* have designed one to three week overseas training programs in cooperation with foreign graduate schools of management (Chung et al, 1997). North America, Europe, Japan, China and Southeast Asia are common overseas training sites for most Korean firms. As an illustration, in 1990, Samsung Group initiated a five-year program to develop 2,000 international area experts (Chung et al, 1997). Trainees were selected from young employees with three years of work experience in the company, and these employees were sent to foreign countries for up to one year to learn the local language and culture (Chung et al, 1997).

Conclusion

The distinctive Japanese culture characteristics of *amae* (dependence), *on* (duty), *giri* (social obligation) and, *ninjo* (human feeling) have influenced the Japanese management systems. The system which became so successful in the post Second World War era developed unique characteristics such as consensus decision-making, life-time employment, strong loyalty to employers and the organisation, and paternalistic leadership. Within such a system, once a graduate was employed by a company, he was guaranteed life-time employment until he retires. In addition, the seniority system was applied in relation to promotion and compensation, although this system has given way to performance based management systems since the mid 1970s. Team spirit or group consciousness has been more important than individual ability or achievement.

Volery & Mensik (1997) noted that, today, *Nihonteki Keiei* or, the Japanese-style management, has become a popular model in the West. However, after the 'bursting of the Japanese bubble' in 1989, and the debacle of the Asian Financial Crisis in 1997 and, the contours of the world economy have become changed. Recent events in the USA and elsewhere have profoundly changed global perspectives. The world economy has stagnated, the rate of unemployment has increased in many developed countries. Further, in Japan, the birth-rate has dropped sharply and the Japanese population is ageing as in Western industrialised countries. Given the established and specialised nature of Japanese human resources management practices, within this context of economic uncertaintly and decline, Hirakubo (1999) asks whether Japanese workers are prepared for job losses whether the practice of lifetime employment be abandoned?

The Korean management system is also culturally bounded. It strives to enhance the organisation performance within the broad context of Chinese culture and philosophy. The Korean management system shares characteristics with the Japanese management system such as decision-making by consensus (with some qualifications), life-time employment (with some qualifications), individualism in group settings, loyalty and paternalistic leadership (with qualification). In the Korean management system, group harmony or consciousness is strongly emphasized and group harmony is one of the most popular mottos for many organisations. Given this managerial context, similar doubts must be raised about the capacity of traditional, chaebol style Korean management to continue unchanged within an uncertain global economic and political conditions.

All management systems have similar goals, importantly enhancing efficiency and effectiveness. The specific methods by which these goals are sought, however are often different. The unique differences or characteristics often have their origins in national cultural values, and the special characteristics and development of the Japanese and Korean management systems exemplify this relationship between culture and management. It should be noted, however, that the established Japanese and Korean management systems also share a vulnerability to modern global economic and political conditions.

References

[1] Chang, C.S. (1988) "Chaebol: The South Korean Conglomerates", *Business Horizons,* Vol.31, No.2,(March-April):51-57.

[2] Chang, C.S. & Chang, N.J. (1994) *The Korean Management System: Cultural, Political, Economic Foundations,* Quorum Books, U.S.A.

[3] Chen, M. (1995) *Asian Management Systems*, International Thomson Business Press, New York.

[4] Chung, K.H., Lee, H.C. & Jung, K.H. (1997) *Korean Management: Global Strategy and Cultural Transformation,* Walter de Gruyter, Berlin/New York.

[5] Deresky, H. (1994) *International Management: Managing Across Borders and Cultures,* Harper Collins College Publishers, U.S.A.

[6] Eleanor, W.D. (1996) "The Japanese Business System: Key Features and Prospects for Change", *Journal of Asian Business,* Vol.12, No.1:21-50.

[7] Fruin, W.M. (1997) *Knowledge Works,* Oxford University Press, New York.

[8] Gray, K.R. & Marshall, K.P. (1998) "Kenyan and Korean Management Orientations on Hofstede's Cultural Values", *Multinational Business Review,* Vol.6, No.2:79-88.

[9] Hirakubo, N. (1999) "The End of Lifetime Employment in Japan", *Business Horizons,* Vol.42, No.6, (Nov-Dec): 41-46.

[10] Hiroyuki, T. (1997) "Success as the Source of Failure? Competition and Cooperation in the Japanese Economy", *Sloan Management Review,* Vol.38, No.2:83-93.

[11] Hundley, G., Jacobson, C.K. & Park, S.H. (1996) "Effects of Profitability and Liquidity on R & D Intensity: Japanese and U.S. Companies Compared", *Academy of Management Journal,* Vol. 39, No.6:1659-1674.

[12] Janelli, .Y. & Roger, L. (1993) *Making Capitalism: The Social and Cultural Construction of a South Korean Conglomerate,* Stanford University Press, California.

[13] Jonathan, J. (1985) "In Search of Theory K", *International Management,* Vol.40, No.9:107-109.

[14] Kearney, R.P. (1991) "Managing Mr. Kim", *Across The Board,* Vol.28, No.4:40-46.

[15] Kendall, L. (1985) *Shamans, Housewives and, Other Restless Spirits: Women in Korean Ritual Life,* University of Hawaii Press, Honolulu.

[16] Kenna, P. & Sondra, L., *Business Korea: A Practical Guide to Understand South Korean Business Culture,* Passport Books, Lincolnwood.

[17] Kim, H. & Hoskisson, R.E. (1996) "Japanese Governance Systems: A Critical Review", *Advances In International Comparative Management,* Vol.11:165-189.

[18] Kim, K.C. & Kim, S. (1989) "Kinship Group and Patrimonial Executives in a Developing Nation: A Case Study of Korea", *Journal of Developing Areas,* Vol.24, No.1:27-46.

[19] Kim, P.S. (1992) "Who Serves the People? Educational Backgrounds of South Korean and Japanese Bureaucrats", *American Review of Public Administration,* Vol.22, No.4:307-326.

[20] Koo, J.H. & Nahm, A.C. (1997) *An Introduction to Korean Culture,* Hollym, New Jersey.

[21] *Korea Rebuilds: From Crisis to Opportunity.* (1999) Department of Foreign Affairs and Trade, Canberra, ACT.

[22] Kotler, P., Ang, S.H., Leong, S.M. & Tan, C.T. (1996*) Marketing Management: Asian Perspective,* Simon & Schuster (Asia) Pte Ltd, Singapore.

[23] Kumuzawa, M. (1996*) Portraits of the Japanese Workplace,* Westview Press, U.S.A.

[24] Lee, S.M. & Yoo, S. (1987) "Management Style and Practice of Korean Chaebols", *California Management Review,* Vol.29, No.4: 95-110.

[25] Lincoln, J.R., Ahmadjian, C.L. & Mason, E. (1998) "Organisational Learning and Purchase-Supply Relations in Japan: Hitachi, Matsushita and, Toyota Compared", *California Management Review,* Vol.40, No.3:241-264.

[26] Matsunaga, O.A. (1969*) The Buddhist Philosophy of Assimilation: The Historical Development of the Honji-Suijaku,* Sophia University, Tokyo.

[27] Modic, S.J. ((1987) "Myths About Japanese Management", *Industry Week,* October 5:49-53.

[28] Morikawa, H. (1992) *Zaibatsu: The Rise and Fall of Family Enterprise Groups in Japan,* University of Tokyo Press, Tokyo.

[29] Nakane, C. (1972) *Japanese Society,* University of California Press, California.

[30] Okachi. K., Pearson, C.A.L., and Chatterjee, S.R. (2001) Japanese managerial work goals: An empirical assessment, *The Asia Pacific Journal of Economics & Business.*

[31] Paisley, E. (1993) "Management: Innovate, Not Imitate", *Far Eastern Economic Review",* Vol.156, No.19:64-70.

[32] Parker, P. (1994) "East or West: Which will prevail", *Management Today.*

[33] Romani, P. (1998) "The Westernization of Japanese Human Relations Practices", *Supervision,* March:11-13.

[34] Sethi, P., Namiki, N. & Swanson, C.L. (1984) *The False Promise of the Japanese Miracle,* Pitman Publishing Inc., London.

[35] Shin, Y.K. (1998) "The Traits and Leadership Styles of CEOs in Korean Companies", *International Studies of Management and Organization,* Vol.28.No.4:40-48.

[36] Song, B.N. (1990*) The Rise of the Korean Economy,* Oxford University Press, New York.

[37] Soon, H.W. (1995) "Educational Background and Corporate Culture: A Case Study of a South Korean Business Conglomerate", *Journal of Asian Business,* Vol.11, No.4.

[38] Tan, C.H. & Derek, T. (1998) *Human Resource Management: For South East Asia and Hong Kong,* Prentice Hall, Singapore.

[39] Toynbee, A.J. & Ikeda, D. (1976) *Choose Life,* Oxford University Press, London.

[40] Vagelis, D. (1995) "Simply a Question of Cultural Barriers? The Search for New Perspectives in the Transfer of Japanese Management Practices", *Journal of Management Studies,* Vol.32, No.6:731-746.

[41] Volery, T. & Mensik, S. (1997) "The Influence of Religion, Culture and Relationships of Ethnic Chinese, Japanese and Korean Entrepreneurship", in Conference Proceedings of the Eighth Annual ENDEC World Conference on Entrepreneurship, Loyola Management University, Los Angeles, California, pp.203-211.

[42] Warner, M. (1994) "Japanese Culture, Western Management: Taylorism and Human Resources in Japan", *Organization Studies,* Vol.15, No.4:509-53

[43] Weinshall, T.D. (1993) *Societal Culture and Management,* Walter de Gruyter, Berlin/New York.

[44] Wheatley, M. (1998) "Asian Lessons in the Art of Manufacturing", *Management Today,* April: 72-74

[45] Won, Y.B. (1992*) A History of Korean Buddhist Culture and Some Essays The Buddhist Pure Land and The Christian Kingdom,* Jip Moon Dang Publishing Co., Seoul.

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International Trade & Marketing

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A Comparative Study of Asia Strategy: Wal-Mart versus Carrefour

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Abstract

Wal-Mart, the number one retailer in the world, persistently maintain three fundamental beliefs—respect everyone, total-solution service, and in search of highest quality—to shape their unique corporate culture. They insist lowest price every day, carry out total solution services, effectively control the cost of global logistics, fully leverage information technology to become e-company, powerfully motivate employees to work and share knowledge and adopt a play-safe strategy in internationalization. As for the number two player—Carrefour, they provide customers with one-stop shopping, lowest price, fresh products, self-served shopping in a hypermarket with free parking lots. In contrast to Wal-Mart's internationalization strategy, Carrefour expands to foreign markets faster and more flexible than their counterpart.

This study investigates the configuration in Asia, marketing service, product procurement, logistics management, digitalization and human resource management of Wal-Mart and Carrefour. The authors then propose strategic implications for global retailers to increase their management effectiveness and efficiency.

Introduction

Wal-Mart founded by Sam Walton adopted circumventing strategy by starting her operations in small towns and then expanding to bigger cities. She maintains lowest price everyday and promises customer satisfaction together with high quality suppliers' cooperation and prompt delivery to grow continuously at marked rates. Public offering begun in 1970, Wal-Mart then extended operation around the States and further expanded across borders. She has branches in Canada, Mexico, Brazil, Argentina, Porto-Rico, UK, Germany, South Korea and Mainland China. Currently, she employs more than 1.3 million staff. In 2001, her sales reached more than 217 billions and won the title of biggest enterprise in the globe.

On the other hand, Carrefour initiated the idea of "hyper-market" in 1959 that stressed mass-sales, low delivery cost and discount everyday to achieve high rotation. Other key success factors include one-stop shopping, low selling price, freshness, self- service and free parking. She started public offering in 1970, acquired 45 shops in Europe in 1991, and merger with Promodes in 1999. At last, she had 9,225 stores and more than 340 thousand employees. The sales reached 78 billions and made her as the largest retailer in Europe and the 2nd largest in the world.

As for their operations in Asia, Wal-Mart had established her footholds in Thailand, South Korea, and China. By contrast, Carrefour had extended her services to Taiwan, Malaysia, China, Hong-Kong, South Korea, Singapore, and Indonesia. Compared with westerns, Asia customers tend to buy impulsively rather than as planned and concern more price than package. This study focuses on the comparisons of Asia strategies of Wal-Mart and Carrefour to serve as management references to other retailers.

Configuration in Asia

Accompanied by the increase of purchasing power in Asia since 1980, both traditional supermarkets and department stores were not be able to meet the requirements of one-stop shopping and shopping as leisure. Consequently, huge mass retailers emerged by providing customers with buying large quantity at low cost and one-stop shopping. Makro from the Netherlands first entered Taiwan and quickly captured more than 30% market share in 1989. Then Carrefour established a joint venture with Presidential Enterprise Corporation in Taiwan followed Makro's path by providing free parking, fresh and full range products at low price to customers.

Carrefour started her operation in big cities and knew the purchasing power there. Owing to the restriction of setting-up of mass retailers in France, Carrefour was forced to go overseas and built her first store in Spain. Then she moved to other parts of Europe, America, and Asia that accumulated herself with plenty internationalization experiences. Those experiences enable Carrefour to win over Wal-Mart to hold leading position in emerging markets. Carrefour entered Taiwan in 1989 and had 27 stores nationwide in 2001. She went to Malaysia in 1994 and had 6 stores there in 2001. Followed by Mainland China in 1995, Carrefour had built 27 stores there in 2001. Up to 2001, Carrefour had 15 and 22 stores in Thailand and South Korea (both served in 1996), respectively. Then she penetrated in Singapore in 1997, Indonesia in 1998 and Japan in 2001 where Carrefour had 1, 8 and 3 stores respectively in 2001.

By contrast, Wal-Mart internationalized slower than Carrefour. The former began overseas operations to Canada, Mexico, Europe and Asia in the middle of 1990. In addition to her breakthrough in Thailand and South Korea, Wal-Mart also targeted China as the most promising market and started operating her first store in Hsang-chuin city in 1996 by supplying full range offerings and friendly service to win customers' trust. At present, Wal-Mart has invested more than 1 billion dollars and employed more than ten thousand employees. She also takes China as one of her critical procurement center and more than 90% of their products sourced there to serve customers' needs in the whole world.

Wal-Mart chose Shang-chuin city as their door into China because the later locate close to Hong-Kong that is the door to outside world and the city government provided her with preferential tax treatment. Consistent with her circumventing strategy, Wal-Mart was able to develop her territories by first entering South regions to accumulate operating experiences and cultivate talents and then further expand to other bigger cities in China. As for Carrefour, she had 27 stores and employed 16 thousand residents there in 2001. In the near future, Carrefour plans to build 10 stores per year and move to western parts of China. In a summary, Carrefour established stores in 15 cities first and then integrated them to gain economies of scale and scope.

Marketing and Service Strategies

Wal-Mart built differentiated business departments to serve different market segments. They included supermarket (1,294 stores in 2001), one-stop shopping store with entertainment facilities, so-called Sam's Club member warehouse, (528 stores), discount store targeted family (2,348) and small scale stores selling foods and related stuff (19). Wal-Mart has discounted stores in Canada and Mexico. As for Asia operations, she mainly uses supermarkets supplemented by warehouses.

The major factor of Wal-Mart's success is built on "lowest price everyday" practice that significantly reduces searching cost. Further, her high quality at low price offerings has won herself the reputation of high value-added company and loyalty of customers. Therefore, Wal-Mart could reduce expenses on advertisements and promotions and also increase turnovers of products.

Wal-Mart always believes that customers always come first. Even in Asia, all employees follow three management philosophies—respect everyone, serve customer, and search for perfection—to entirely implement her humane service. They fully carry out the practices of 8 teeth smile, ten-foot rule, and sundown rule; provide 95% products as a minimum for 95% of time. All these practices have become the benchmark of the retailing industry.

Carrefour adopts two-stage philosophy both in France and Asia to achieve stable growth. At the 1st stage, to enable branch stores to smoothly operate as fast as possible and to maintain high turnover. Meanwhile, to decentralize authority of set-up branches to link with community development that finally leads the increases of local tax, employment and further prosperities of communities. Carrefour decides to set up a new store after the investigations of location, store space and neighboring purchasing power. For example, she built a whole-selling or green store in industrial region and a general retailing or blue store in residential ones in Taiwan. By adopting this strategy, Carrefour could capture both big and small accounts in one shot and then grow much faster than her rivals like Makro.

At the 2nd stage, Carrefour focuses on customers, personnel training and market channels. She gradually enhances service quality, product innovation and emphasizes personnel cultivation. She further adopts strategic alliances to develop private label products to supply more offerings so as to meet the needs of one-stop shopping. At the same time, utilizing the system of commerce automation to centralize the purchasing matters of all stores, Carrefour could coordinate orderings, stock management and data processing for better control and decision-making.

In a summary, the key success factors for Carrefour are: one-stop shopping, extremely low prices, full range of choices, self-service, free parking. To Carrefour, price does not equal to competitive advantage but an essential means to survival. To maintain lowest price reputation, Carrefour keeps reminding customers to refund if they buy more expensive in order to comfort their purchases.

To meet the nature of impulse purchase of customers in Asia, Carrefour chooses mass-selling, low delivery cost and promotion to attract and retain their buying. On the other hand, Carrefour also follows flexible pricing to reflect the differences of local markets. Because weekly purchase has become part of daily life for customers in Asia, Carrefour provides wider shopping space and parking lot to make customers' buying more convenient. In addition, she delegates each stores, as profit centers, to decide what to purchase, pricing and promotion strategies and constantly stresses discount everyday that is very different from that of Wal-Mart's.

Sourcing Strategy

Wal-Mart is less experienced than Carrefour in foreign market expansion. The former adopts both the practices of localization and centralization. Headquarters integrates resources around the globe and distribution system and also invents the technique of cross docking to achieve the objective of every day low costs.

Localizing their sourcing in Asia enable Wal-Mart to meet needs of local customers and reduce lead-time and delivery cost. Wal-Mart also builds international procurement headquarters that provides sourcing information of local retailers and centralizes sourcing practices and then directly distributes goods to each distribution center.

Carrfour always emphasizes the competitiveness of sourcing and the turnovers of commodities. They exploit the potentiality of economies of scale and accommodate local differences of customer preferences. For local sourcing, fresh fish meat for example, is to achieve the objective of quick response (Lhermie, 2001). Although Carrefour also starts to centralize sourcing operation, suppliers still use to deal with local stores directly.

Carrefour has their products sourced locally more than 95% in China since their entry in 1995. They build global procurement centers, coordinated by Shanghai and Hong-Kong, in big cities that are directly responsible for headquarters in France. China has become the biggest procurement center in Asia that procures more than 1.5 billion dollars currently.

Physical Distribution and Digitalization Strategies

Wal-Mart has spent more than half billion dollars in information technology facilities to connect their worldwide stores with headquarters. Meanwhile, they request suppliers to adopt electronic data interchange system. With this system in place, Wal-Mart can transfer information swiftly and has saved three fourth stock-holding costs. Further, headquarters can finish stock-taking of each item for more than 4,000 stores in the globe within an hour. At present, each store sends information to his suppliers via internet and have products replenished in on-average two days versus five days of their rivals (Huey & Walton, 1992).

Comparing with Carrefour, Wal-Mart has a complete storage management system. Their transportation and logistics system, especially cross docking, are well known. This method enables Wal-Mart to replenish goods twice a week (once bi-weekly to their rivals) and reduce storage space and delivery time. As a result, Wal-Mart can reduce stock-carrying costs and transportation and therefore increase profitability by 2.5% compared with their competitors (Stern & Stalk, 1998).

Wal-Mart cooperates with NCR to construct quick response/efficient consumer response system (QR/ECR) to strengthen the supply and replenishment of each store (Margolies, 1995). At the beginning, Wal-Mart has 7,000 gigabytes data that have been increased to 10 terabytes at present that make their commercial data bask as the largest one in the world. This QR/ECR system effectively facilitates the information exchanges among suppliers, Wal-Mart and their stores that substantially increase operational efficiency, customers' satisfaction and profitability. Wal-Mart also has 6-channel satellites to do teleconferences and videoconferences to communicate with their stores and demonstrate their new products.

Wal-Mart also cooperates with IBM to set a brand new on-line shopping site named Walmart.com. This site provides full range products from low to high price items. As for physical distribution, Wal-Mart allies with local retailers for customers to take what they have purchased at the website.

In contrast, Carrefour, Sears and Oracle jointly built "global net exchange" supply-chain e-commerce system in 2000. Globally, more than 50 thousand suppliers conclude transactions electronically amounted to 80 billion dollars annually. Carrefour's website in France had markedly started to provide foods, banking, touring, and win services at the end of 2000. Further, they will invest one billion Euros in develop their internet businesses in three years.

Human Resource Management Strategy

To treat customers friendlily, reduce cost, and educate employees are consistently practiced in Wal-Mart both in the States and Asia. To treat new comers in the company fairly, make them perceive responsibility and participation and share information, the following enlightenment and inspiration measures are undertaken. 1.Education and training: Through learning by doing with superiors in the first 16 weeks, new staff can accumulate experiences and skills. They can also take courses supplied in the Wal-Mart Institute and have job rotation opportunity to enrich their expertise. 2.Regularly announce performance: Each store has to announce his profit, purchasing, sales and percentage of discount regularly to make all employees informed. 3. Profit sharing: Employees who has worked in Wal-Mart for more than one year and worked over than 1,000 hours are eligible to this profit-sharing scheme. 4.Stock option: Allow employees to buy Wal-Mart stock at 15% off the market price. 5. Benefit-sharing from reduced depletion: If depletion of stocks could be controlled within the limit of target, each employee will be awarded maximum 200 dollars. 6. Motivate and challenge his/or her partners for better ideas everyday. 7.Cultivate employees with ambitions to become a leader of stores within a store. 8.Assist employees to conquer operational difficulties in pursuing their goals. 9.Social responsibility: Wal-Mart sponsored "United Way" activities, assisted children hospital to make "Children Miracle" TV program. They spent 190 million dollars in these social welfare activities in 2001.

In contrast to Makro's localization strategy, Carrefour stresses more on the hand-down of corporate heritage. In the early stage of foreign market entry, Frenchmen take the positions of top-level management constantly to infuse management philosophy of "serve customers" and "action orientation" into each store overseas. When walk into any stores of Carrefour, you will see many staff walk around to replenish stocks all the time. The manager in charge of a store also wanders around the store once it is open.

As for their social responsibilities, Carrefour promotes physical education activities such as Marathon run and environmental protections. They actively work with local governments or other non-profit organizations to reduce pollutions from packaging globally. Carrefour and Chinese Packaging Corporation initiated "green packaging joint actions" in 2002. Carrefofur further requested all their stores in the world to make less use of plastics in packages and won the reputation of the model in retailing industry.

Comparison of Strategies

From the comparisons of strategies in Asia of Wal-Mart and Carrefour, this study summarizes the common and different part of their strategies. They all adopt the same strategies in the following practices. Firstly, both stress the culture of humane and provide employees with best career planning, education, training and incentives. Secondly, supply products at lowest price but highest value-added every day to reduce the searching cost and build trust and loyalty of customers. Thirdly, localizing sourcing to reduce transportation expense and exploit economies of scale. Fourthly, emphasize the creation of friendly atmosphere at every store where employees wander around to replenish goods and see if any assistance required.

On the other hand, differences in Asia strategy are reflected in the following facets. First of all, Carrefour internationalized earlier than Wal-Mart, the former established as many stores in big cities as possible but the latter adopted "circumvent cities from countries" strategy to steadily cultivate talents and accumulate experiences. Secondly, Wal-Mart emphasizes "lowest price every day" to win the best corporate image but Carrefour focus on "discount every day" to attract customers to buy impulsively. Thirdly, basing on the concept of "every day low costs" (EDLC), Wal-Mart implement cross-docking technique simultaneously to increase operational efficiency and control cost in global logistics. Carrefour, on the other hand, can only rely on the flexibility from local procurement of individual stores to exploit the benefits of localization because they do not yet established global logistics system. Finally, Wal-Mart has various stores that include American discount store, supermarket, Sam's Club membership warehouse, and drugstore by the streets based on the characteristics of customers. As for Carrefour, most of their stores are discount ones but they also develop a mixed strategy nowadays. Take Taiwan as an example, they chose industrial and commercial parks to develop their own shopping centers or integrate existing spaces of stores ready for rent just like departments.

Implications to World Retailing Industry

Further expand Asia market

The greatest business opportunities come from Asia, Mainland China in particular, in the 21st century. It also generates great potentiality to the globalization of retailing industry (Yip, 1995). More than 300 global retailers such as Wal-Mart, Carrefour, Metro, Makro and others have invested 2 billion dollars in the whole China. Any new entrants to this emerging market, they have to recognize the unique features of its economic structure from the co-existence of four different industries—agriculture (50% of total employment), industry (23%), service (22%) and knowledge (5%). With the understanding and knowledge of local market, regulation, consumer behavior and social custom, new comers could therefore penetrate China by combining well-renown brand, chain store, professional management team and appropriate localized practices to create maximum benefits.

Greater chain-store system

It is essential for chain-store retailers to have greater space supplied with many various choices to meet the expectation of one-stop shopping for customers. With more stores easily accessible for customers, the exposure of brand could also exploit the externality from the widespread of stores. Basing on advantages built from operating worldwide, new entrants could learn from Wal-Mart and Carrefour to replicate and modify their business model to generate success. Through the sharing management know-`how among all member companies under one common brand, operating cost and uncertainty could be reduced and further strengthen their competitive advantages.

Flexible procurement

Taking warehousing and transportation cost into account, global retailers could follow Wal-Mart’s model to establish global procurement center to leverage the economies of scale. Meanwhile, to meet various local needs, it becomes important to customize product offerings by increasing local procurement. Furthermore, basing on the law of 20/80, retailers have to analyze profit margin and turnover of products and then focus on higher ones. Also try to increase the proportion of own-branded manufacturing products to achieve higher profit.

Information Technology Utilization

The widespread adoption of information technology within and across companies could increase operation efficiency and strengthen flexibility. Linking vertically from suppliers to retailers by electronic data interchange (EDI) grounded on internet architecture, both of them could share the information of supplies, sales and stock. Facilitating by the adoption of systems of supply chain management, enterprise resource planning, and customer relationship management, cooperation among allies could be further deepened and tightened (Johnson & Wood,1996□Keah & Handfield,1998). Besides, retailers could combine sales channels of physical stores and virtual ones to wide their accessibilities to potential customers. The virtual shops could not only increase potential sales, but also accumulate market information for further investigation. Finally, by the widely adoption of information technology could enable retailers transformed as intelligent businesses.

In search of innovation

For retailers to hold opportunities from globalization (Lovelock & Yip, 1996), they could follow operation mode of Wal-Mart and Carrefour to integrate flows of products, materials, information, people and finance. With the integrations of various flows among partners, operating cost could be reduced and efficiency of resource-utilization could be increased at the same time. To gain competitive advantage, companies have to build-up reputations with high brand equity and unique business models (Lewision, 1997). The following tactics could be considered as viable alternatives. In addition to better location and unique building architecture design, retailers could aim to design smooth layout within a store, professional outlet management and provide many choices of product portfolio (Stern, El-Ansary □Coughlan,1996). Moreover, by using flexible marketing activities and friendly service quality (Fitzsimmons & Fitzsimmons, 1998), companies could hopefully increase customer satisfaction and loyalty (Terpstra □Sarathy,1994).

Shape humane culture

That most retailers prefer on-going promotions to attract new customers and retain old ones is totally different from everyday low price and no price promotion practices of Wal-Mart. An open and tolerating culture of Wal-Mart could endure over time because managements treat employees as their partners. They show respect each other and share both profit and knowledge that lead to the creation of a harmony organizational climate. Therefore, companies ought to develop themselves not as a workplace but a learning institution to further the practices of knowledge management. By establishing knowledge management system, knowledge could be repeatedly utilized to generate economies of scale and reserved within a firm easily accessed internally.

Reference

[1] Hasty, R. & J. Reardon(1997), Retail Management, N.Y.: The McGraw-Hill Companies, Inc.

[2] Huey, J. & S. Walton(1992), Made in America, N.Y.Doubleday.

[3] Johnson,J. C. & D. F. Wood(1996),Contemporary Logistics, N.J.: Prentice Hall Upper Saddle Creek.

[4] Keah C. R. K. & R. B. Handfield(1998),"Supply Chain Management : Supplier Performance and firm Performance,"*International Journal of Purchasing and Materials Management*, pp.2-9.

[5] Lewision,D. M. (1997),Retailing, N.J.: Prentice Hall.

[6] Lhermie,C.(2001),Careefour ou 1' invention del1' hypermarche,France:Quercy.

[7] Margolies,J.M.(1995),Best Practiecs in Retailing:The Grocery Industry and ECR, *Chain Store Age*, 71, pp.92-94.

[8] Morita, M. & T. Takanashi(1999), Nyuumon Knowledge Management, Tokyo : Kanki Publishing Inc.

[9] Fitzsimmons, J. A. & M. J. Fitzsimmons (1998), Service ManagementOperations, Strategy, and Information Technology, N.Y.: McGraw-Hill International Editions, 2nd ed.

[10] Lovelock, C. H. & G. S. Yip (1996), "Develop Global Strategies for Service Business," *California Management Review*, 38(2), pp.64-86.

[11] Stern, L. W., A. I. El-Ansary A. T. Coughlan(1996), Marketing Channels, N.J.: Prentice Hall, 5th ed.

[12] Stern, C. W. & G. Stalk Jr.(1998)(eds.), Perspectives on Strategy, M.A.:The Boston Consulting Group.

[13] Terpstra V. R. Sarathy(1994), International Marketing, N.Y.: The Dryden Press, 6th ed.

[14] Yip,G. S.(1995),Total Global StrategyManaging for Worldwide Competitive Advantage, N.J.Prentice Hall.

A Research driven HIV/AIDS Strategy for Tertiary Institutions: The Case of Northern Gauteng

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Abstract

The most devastating aspect of the HIV/AIDS epidemic compared with other epidemics is that it usually affects people in their most productive years, which are between the ages of 15 and 49. Against this background this paper will focus on one of the most daunting challenges facing tertiary education institutions in South Africa – combating the rapidly spreading HIV/AIDS epidemic. In its fight against HIV/AIDS, it is important that planned and sustained strategies are developed based upon a research-driven approach that takes into account tertiary education institutions' output role of the graduate population. This paper reports on two surveys conducted amongst tertiary students in Northern Gauteng in 2000 and 2002. It provides some strategies from a social marketing perspective to implement in an attempt to reduce the spread and impact of the HIV/AIDS virus in South Africa.

Introduction

The epidemiology of HIV/AIDS is not the same all over the world. Although the spread of the epidemic is largely under control in the developed world infection rates continue to rise in countries characterized by poverty, poor health systems, lack of education, and limited resources. Sub-Saharan African Countries – which includes South Africa – comprises 70% of the proportion of the world adult and children population living with HIV/AIDS (AIDS Statistics, 2000).

South Africa has one of the fastest growing HIV epidemics in the world with an estimated total of 4.4 million people infected. By the end of 1997 the overall prevalence of HIV in South Africa had increased to 16 percent to 22.8 percent in 1998, and by the end of 1999 to 25.2 percent. Levels of HIV infection had increased in eight of the nine provinces of South Africa. Noteworthy is that the number of South Africans that died because of AIDS before they reached the age of 50, almost doubled since 1990. According to the president of the Medical Research Council, Professor Malegapuru Makgoba, AIDS is devastating South Africa's most economically productive citizens – those aged between 15 and 49 – with more men aged between 35 and 40 dying than in any other age group in the 1999-2000 period. The death rate has risen despite better access to health care and improvements in the quality of life of most South Africans in the ten years since 1990. Life expectancy is therefore projected to fall from 68.2 years in 1998 to 48 years in 2010. This has devastating implications both for the economy and the social structure of families and for their quality of life (Sunday Times, 23 July 2000: 14).

A study conducted by Grundling, de Jager, Fourie, Ras, and Grundling (2002), clearly indicated that on a community and individual level, pending the development of an effective vaccine or cure for HIV/AIDS, sexual behaviour change is the only means of averting the continuous spread of the disease. This also implies that higher education institutions in South Africa have a social responsibility to contribute to the managing and prevention of the epidemic in a strategic manner.

Research Objectives

The application of marketing principles does not only apply for profit organisations but also for non-profit organisations in order to achieve their objectives (Kotler & Levy, 1969: 10-15). Marketing principles do not only apply to goods and services, but can be applied to businesses, persons, places and ideas. Idea marketing is better known as social marketing because it is concerned with social affairs. Kotler and Andreason (1996: 389) pointed out that the goal of social marketing is not to market a product of service but to influence social behaviour. Bearing in mind that 135 000 people in SA died of HIV/AIDS in 2001, it is evident that **sexual behaviour in this country should be influenced** dramatically in an attempt to reduce the incidences of HIV/AIDS infected patients.

The necessity for social marketing programs in the area of HIV/AIDS awareness campaign become more important when taking in consideration that recent surveys indicate that more than 83 percent of enterprises in South Africa have not undertaken an AIDS-impact assessment and do not have any policies or programs in place to deal with the problem. This paper provides an **overview** of HIV/AIDS in South Africa, the **sexual behaviour** of students at tertiary education institutions in Northern Gauteng, South Africa, and the primary **sources** from which they obtain their **information**. The influence it may have on the future of South Africa is highlighted. The paper concludes by providing some **strategies** to be applied by tertiary education institutions in an attempt to reduce the impact of the HIV/AIDS virus in South Africa after interviewing a sample of students regarding related aspects of the disease.

Problem Investigated

By the year 2003, it is estimated that South Africa, with already 4,2 million people infected with HIV, will be experiencing a negative population growth, shrinking at a rate of between 0.1 and 0.3 percent. The fact that HIV predominantly affects people between the ages of 14 and 35 years means that students at tertiary institutions are directly affected. In a survey conducted among 3000 students in KwaZulu-Natal in May 2000, it was found that 1 in 2 students are HIV positive. An immediate response to this would be to ask the question - what could be done by tertiary education institutions to make students more aware of prevention strategies and care available to those infected with HIV? For this reason a study was conducted in April 2000 on HIV/AIDS awareness in Northern Gauteng and repeated in February 2002.

Research Methodology

In the first survey conducted on HIV/AIDS awareness among tertiary students in 2000 a total of 552 students completed questionnaires; and in the second survey conducted in 2002, 720 students participated. After the questionnaires have been divided by means of the stratified sampling method, a non-probability sample (the convenient sample method) was used to obtain the data from the students. A total of 667 valid questionnaires could be used in the second survey for the purpose of the research representing a response rate of 92.6 percent. This high response rate was made possible because the personal data collection method was used to obtain the information.

As the sample composition differs significantly between the years 2000 and 2002 (Chi-square = 139; Degrees of freedom = 17; Alpha = 001) the study cannot contribute to longitudinal research significance. However, it is possible to compare the two time periods to determine which factors remains factors of concern or influence from a HIV/AIDS management perspective by conducting intra-sample analyses.

Results

The results of the 2002 survey are compared to the 2000 survey. The discussion of the comparisons will be conducted under the following headings: profile of the respondents; sex education; sexual behaviour; awareness; HIV/AIDS testing and preventative behaviour.

Profile of respondents

The sample of students in both the 2000 survey and the 2002 survey were representative of the major **indigenous language** groups (56,7% and 64,5%) in South Africa, with the majority of the first survey being Zulu speaking (19.5 percent) and in the second survey the majority were Sotho speaking (26.3 percent). The **other language** groups, including Afrikaans and English, constitutes respectively 43,3% in 2000 and 35,5% in 2002. The gender distribution was 41,5% male, 58,5% female and 31,2% male, 68,9% female in 2000 and 2002 respectively. In both samples the non-married groups were dominant (92,4% and 98,5%), whilst the age group 18 to 21 years constitutes the majority (59,5% and 58,2%) of respondents. Figure 1 summerises the profile of the respondents:

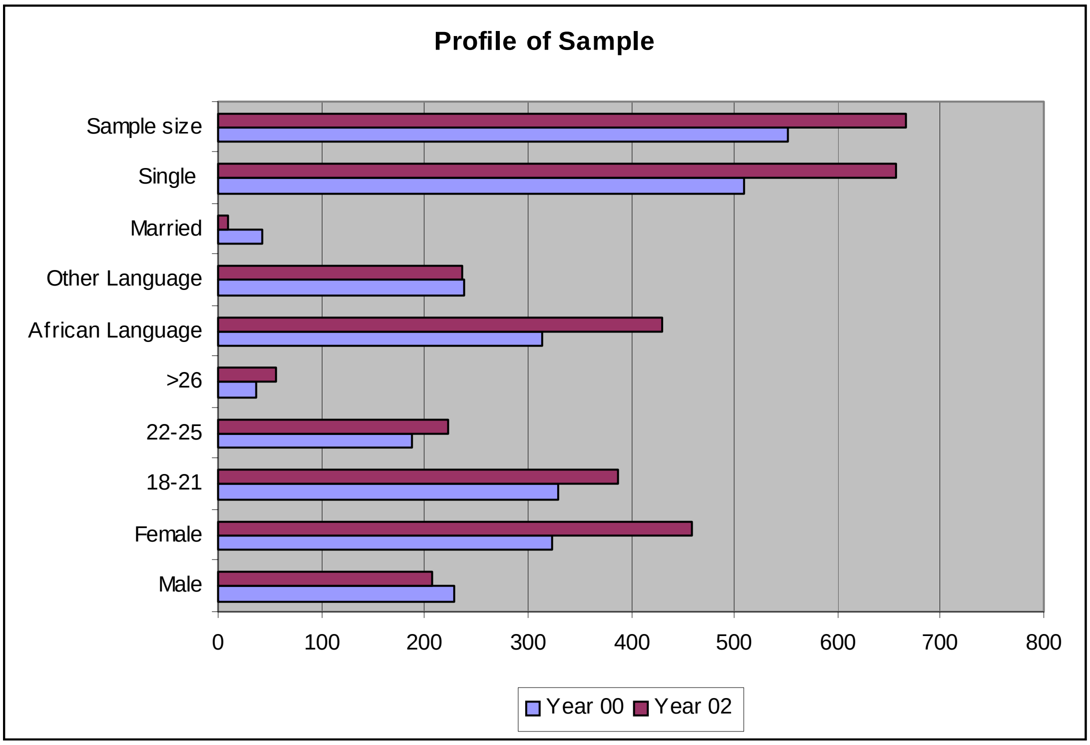

Fig. 1: PROFILE OF SAMPLE

Sexual Education

The majority of the respondents have indicated that they have received formal sexual education at some stage at school. It is however interesting to find only about 45% of students in both surveys indicated that they have received formal sexual education by the time they had finished grade 9. Both surveys indicated that the main sex education effort occur during the last three years at school. It also indicated that sex education awareness is relatively low between grades 1 and 7 as both surveys indicated low awareness of 20% and 22,1% respectively. Although sexual education is a secondary school responsibility it is unacceptable to find that 26.5 percent of respondents did not receive any formal sexual education at school, decreasing from 29.2 percent in the 2000 study. For the 73.5 percent that have received sexual education at school, it is done in a haphazard manner. Table 1 provides information on the provision of sex education at school from those respondents whom indicated that they had received sexual education at school.

Table 1: PROVISION OF SEXUAL EDUCATION AT SCHOOL

Grade	**Year 2000**		**Year 2002**	
	%	**Cum.%**	**%**	**Cum.%**
1-5	1,54%	1.54%	4,1%	4,1%
6	6,92%	8,46%	5,6%	9,7%
7	11,54%	20,0%	12,4%	22,1%
8	12,56%	32,56%	13,6%	35,7%
9	13,33%	45,89%	8.9%	44,6%
10	18,21%	64,1%	16,3%	60,9%
11	12,31%	76,41%	20,7%	81,6%
12	23,59	100,0%	18,4%	100%

For sexual education to be effective it should be conducted at an age that teenagers are receptive enough to deal appropriately with the subject. Considering that according to Sunter (1996) South Africans have their first sexual experience on average at 16.7 years of age, it could be argued that sexual education programmes should be introduced from at least the age of 13 years (Grade 7) to be effective in changing sexual behaviour. It is evident from these surveys that sexual education programmes are being introduced at a younger age to scholars.

Apart form it being an educational task to be performed at school, it is also the responsibility of parents to provide sexual education to their children. In this regard, almost 60 percent of the respondents in both the 2000 and 2002 surveys indicated that they did receive sex education from their parents. Interestingly, is that those who have not received any formal sexual education ended up having more sexual partners (5.7 sexual partners in the 2000 survey and 5.9 partners in the 2002 survey) than those who have had formal sexual education (2.8 sexual partners in 2000 and 2.3 sexual partners in 2002). This goes to prove that formal sexual education does result in teenagers being more responsible in their sexual behaviour.

Disconcertingly, 48.7 percent of the respondents in the 2000 survey and 55 percent in the 2002 survey only received sexual education from their parents or guardians after 16 years of age. The argument can again be made that this is too late. Figure: 2 summarizes the main sources from which the respondents obtain their sexual information:

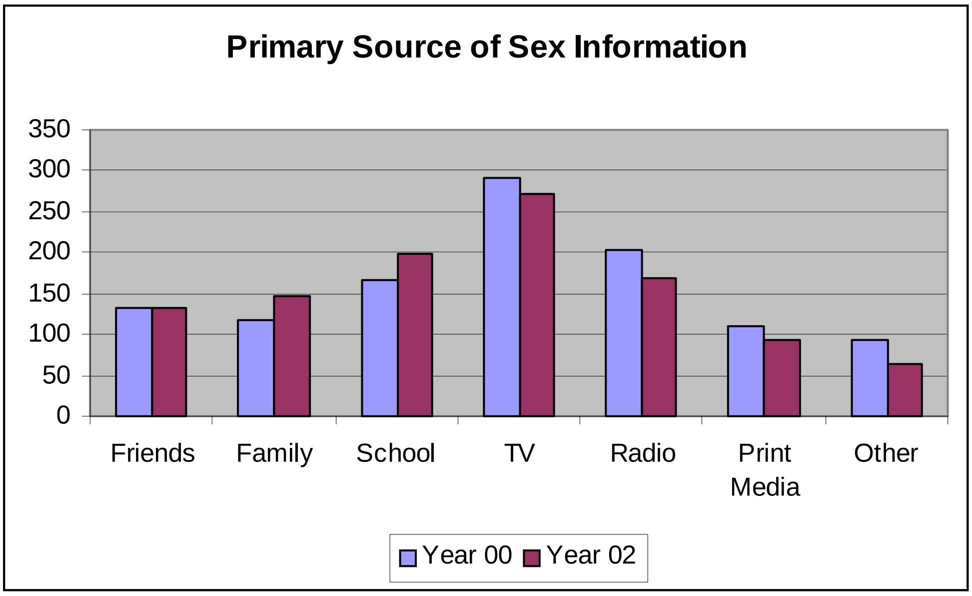

Fig 2: PRIMARY SOURCES OF SEX INFORMATION

Figure 2 clearly indicates the important role that educational institutions play in transferring sexual knowledge to students. If provided in concert with television, radio, and parent education the HIV/AIDS knowledge transfer capacity of tertiary institutions can be greatly enhanced.

Sexual Behaviour

Almost 95 percent of respondents in both surveys are single, with 82.4 percent of the respondents in the 2000 survey sexually active, compared to 78.4 percent in 2002. Most students became sexually active in the age category 15 to 18 years.

Fig 3 provides a profile (numbers; %; cummulative%) of the age distribution when students became sexually active:

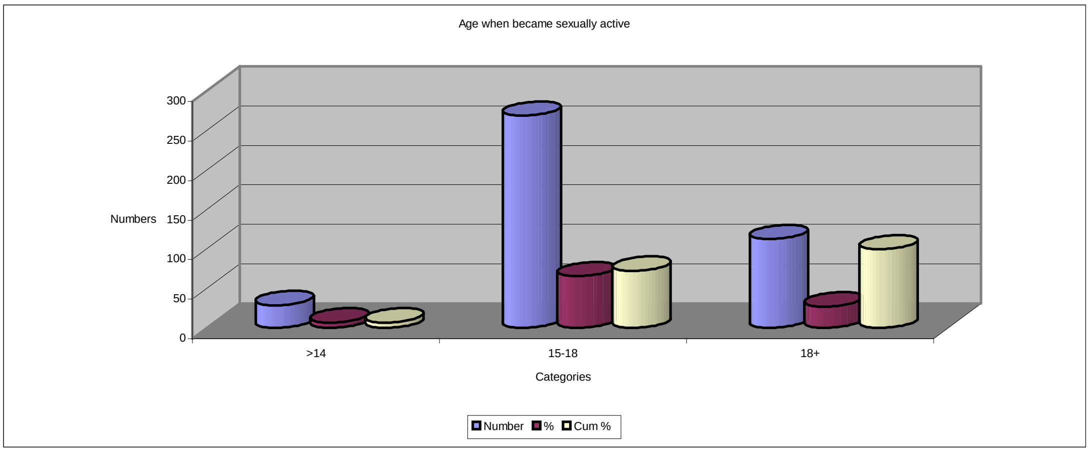

Fig 3: AGE WHEN BECAME SEXUALLY ACTIVE

In both surveys the majority of respondents (63.3 percent and 62.8 percent respectively) indicated that they had between one and three sexual partners since becoming sexually active. It could be argued that the more sexual partners a person has the greater the chance of becoming infected. It becomes a forbidding reality considering that more than 83 percent of the respondents indicated that they do not inquire into the sexual history of a new sexual partner.

Abstinence or monogamy will prevent infection, but the fact is that in modern society teenagers do not abstain or rarely engage in monogamous relationships. South African students need to practice safer sex. If one has more than one sexual partner, always practice safer sex (South African Health Review, 1997: 201). It is however each individual's responsibility to engage in either monogamous relationships or in safe sexual practices. To some it is a question of morals; to others it should be a question of survival.

Awareness

The majority in both surveys (82 percent and 90.7 percent respectively) have indicated that they are aware of **how** AIDS is contracted. The majority of both samples (73.7 percent in 2000 and 80.2 percent in 2002) indicated that they are aware of the fact that AIDS can be contracted other than sexually. However, this does imply that there are respondents (26.3 percent and 19.8 percent respectively) that are not aware how HIV/AIDS could be contrated in other ways than sexually. Disconcertingly, 25.9 percent and 23.1 percent respectively indicated that AIDS can not be contracted by means of an open wound; 41.4 percent and 39.1 percent respectively indicated that AIDS cannot be contracted by donating blood; and 37.6 percent and 30 percent indicated that AIDS cannot be contracted by using drugs. It could be argued that the educational task of informing South Africans about HIV/AIDS and how the disease is contracted, is not done effectively.

HIV/AIDS Testing and Preventative Behaviour

While 74 percent of the respondents in the 2000 survey indicated that they have not been tested for HIV/AIDS, 72 percent in the 2002 survey neither did. Of those who have indicated that they have been tested for HIV/AIDS, 85 percent in the 2000 survey and 84 percent in the 2002 survey indicated that there results were negative. Interestingly, 5 percent and 11 percent respectively indicated that they would prefer not to make the results known, which may give an indication that the rate of infection may be higher than specified. It appears that the respondents who were willing to reveal their HIV positive status has more than doubled from 4 percent in 2000 to 10.6 percent in 2002.

In the 2000 survey, 50.4 percent of the respondents indicated that they always use condoms for protection, increasing to 56.3 percent in 2002. Positively, there is a decrease from 36 percent to 31 percent of respondents who do not exercise safe sex practices

Preventing infection among students with the riskiest behaviour is essential to stopping the epidemic. People who are classified in the riskiest behaviour category are people who have unprotected sex with many partners and people who inject drugs and share unsterilized needles are most likely to become infected and to pass HIV to others (World Bank, 1997c : 285-286).

While prevention strategies such as encouraging condom use play a key role in reducing the number of infections, they are only helpful if they are consistently pursued and target different age groups with accessible messages (Sunday Times, 2 July 2000 : 16).

Strategies to Combat HIV/AIDS

While South Africa struggle to cope with the impact of AIDS, tertiary institutions should ensure the implementation of strong policy, management, prevention, care, and support programs. The approach should be based on a research-driven strategy viewing tertiary institutions as a workplace environment that has a responsibility to provide industry with a healthy graduate population. Assuming this role output implies accepting responsibility towards both industry and the tertiary institution's population – students and staff – by:

* Providing a **Policy framework** driven by top management that allows for a multi-level (Individual, group, and institutional level) approach to infuse a concerted effort by all intra-tertiary institutional stakeholders and that facilitates co-operation with other higher and tertiary institutions.
* Developing management systems at tertiary institutions that will fosters a **receptive environment** able to provide advice, counselling, care, support, and information to affected and also not affected students and staff. The developed management systems should aim at enhancing the quality of life through the intended programmes.
* Ensuring HIV/AIDS **knowledge transfer** utilising the curriculum requirements of Academic departments to ensure that the public in general and students specifically get access to correct information. A journalist academic department can for example analyse articles in terms of the way the pandemic is spreading or in terms of ethical writing such as judgemental writing and the implications thereof or in terms of reporting myths. It may even be possible for academic departments to consider the subject matter from a career role point of view and building the information into a global, regional, or community perspective. It is also recommended that a concerted effort with the national television network, radio, and parents been launched to provide information, but also to provide a caring and supportive environment. This concerted effort is a matter of urgency as research conducted by the researchers in (2002) clearly indicated that a stand-alone AIDS Centre although a necessity) is not really utilized by, nor is able to provide total need satisfaction to students. Tables 2 and 3 provide insight in the utilisation and satisfaction impact of the AIDS Centre:

Table 2: VISITED THE HIV/AIDS CENTRE ON CAMPUS

	Frequency	%
Yes	40	19.9
No	161	80.1

Table 3: NEED SATISFACTION OF HIV/AIDS CENTRE ON CAMPUS

	Fr equency	%
Yes	25	48 .1
No	17	32 .7
Not sure	10	19 .20

- Implementing a **peer educators system** at each tertiary institution. As the HIV/AIDS pandemic is largely still perceived as a rich-poor sickness in South Africa, many people are not willing to utilise the established HIV/AIDS centres on campuses. For this reason a more personalised education system should also been considered.

Prevention of infection among those with the riskiest behaviour is a priority at all stages of the epidemic. Without these programs, the epidemic cannot be stopped. Failure to act will cost millions of lives. Tertiary institutions should therefore:

* **Encourage healthy lifestyles.** Although there is currently no cure, students with HIV should be encouraged to lead healthy lifestyles. Good nutrition, regular exercise and stress reduction, have been shown to be beneficial to the immune system, whereas alcohol, smoking and drugs can be harmful. Transmission of the virus to others can be avoided by not donating blood or organs and not sharing needles, syringes, razor blades or toothbrushes.
* ***Segment student markets.*** Different student markets have to be segmented with strategies fine tuned to the needs and wants of each sub youth population. Closeness to consumers leads to the recognition that traditional demographic approaches are seldom adequate to capture the rich diversity in a target market's needs, wants, perceptions and lifestyles (Kotler and Andreasen, 1996: 397). While many sub target markets may be identified, tertiary institutions should emphasise understanding and intervening in the youth (students) market segment and it sub-segments.

Change perceptions through awareness campaigns

In an attempt to convince students of the desirability of the low risk sexual behaviour being promoted, management should be totally open to the possibility that many students may not agree. According to Kotler and Andreasen (1996: 395) the social marketer realises that the behaviour being promoted is not an objective reality but what the customer thinks it is. Changing the offer to marketers means changing these perceptions. It is sometimes experienced that reluctant antagonistic customers are deadly accurate and changing the offer requires that the marketer make fundamental changes. Sometimes consumer perceptions do not reflect reality. In such cases it is the challenge of the marketers to understand what has led to the misconception and how to alter it. One of the most effective ways of changing customers' perception is by means of awareness campaigns.

Set prevention priorities.

It is a fundamental responsibility of tertiary institutions to ensure that HIV is prevented among those with the riskiest behaviour. Preventing infection among people with the riskiest behaviour is essential to stopping the epidemic. People who are classified in the riskiest behaviour category are people who have unprotected sex with many partners and people who inject drugs and share unsterilized needles are most likely to become infected and to pass HIV to others (World Bank, 1997c : 285-286).

Helping people who engage in the riskiest behaviour to protect themselves and others will prevent the largest number of infections. For example, a prevention program in Nairobi, Kenya, demonstrated this point:

The program treated the sexually transmitted diseases of 500 prostitutes and raised their condom use to 80 percent. It prevented 10 000 infections per year among the sex workers' clients, the clients' wives, and other partners. On the other hand, a similar level of condom use among an equal number of men in that community would have prevented fewer than 100 infections per year.

Broadening the Alliance

It is clear that the formal health system will not be able to cope with the increasing demands of those infected with HIV/AIDS. The answer is not to wait for the system to collapse under pressure. What is required is a re-thinking of tertiary institutions of how best to support and extend community-based care and support for those who are infected and affected. Critical to the process of building a collective response is the need to broaden and strengthen the existing alliance among all sectors and structures. In this regard the National AIDS Advisory Group, provincial and local government structures; the private sector; trade unions and civil society organizations have specific and general roles to play in the fight against HIV/AIDS.

Conclusions

HIV/AIDS has gripped the South African society to such an extent that debates about what causes AIDS or how one gets infected are merely academic. The real work that needs to be done is to prevent the spread of the disease while scientists search for a cure (Sunday Times, 9 July 2000: 1). Tertiary education institutions can play a crucial role to prevent the spread of the disease by recognising that HIV/AIDS is not just a health issue but also a development issue as it not only affects the health status, but also the social, economic and psychological well being of individuals, communities, and industries.

Tertiary education institutions are highly valued national institutions as it provides valuable manpower to the nation. Yet, these institutions, and therefore industry, as large are vulnerable to the impacts of HIV/AIDS on their internal functioning as well as on their role as providers of valuable manpower to industry. Their core operations of management, teaching, research and community outreach should therefore take account of the HIV/AID epidemic.

Lastly, as the educators and trainers of the most skilled people in the economy, only planned and sustained efforts focussing on prevention and changes in behaviour will decrease the HIV/AIDS vulnerability of students while they are studying at these institutions.

Experience elsewhere has shown that the impact can be mitigated by managing a process that can redirect the path of the epidemic and make a difference to the lives of people affected and infected with HIV. The test of the institution's response does not only lie, therefore, in the many disparate activities undertaken, nor in the efficiency of approach, but in the process of engagement with people living with HIV/AIDS and with the broader society.

References

[1] Abdool Karim, Q. 1998 : The HIV Pandemic – New and Emerging Epidemics. Keynote address, XIIth World AIDS Conference, Geneva.

[2] Abdool Karim, Q. 1998 : Changes in HIV seroprevalence in a rural black community in KwaZulu-Natal, South African Medical Journal 82 : 424.

[3] Crookes, R.L., and Heynes, A.P. 1992 : HIV seroprevalence – data derived form blood transfusion services, South African Medical Journal 82 : 484-485.

[4] Grundling, J.P., De Jager, J., Fourie, L. de W., Ras, P., and Grundling, I.D. 2002: Determining high risk sexual behaviour amongst secondary school children in Tshwane. Research Report for Tshwane Metropolitan Council. Technikon Pretoria. Pretoria. South Africa.

[5] Kotler, P. and Andreasen, A.R. 1996 : Strategic Marketing for Nonprofit Organisations, Third Edition, Englewood Cliffs, Prentice Hall.

[6] Kotler, P. and Levy, J. 1996 : Broadening the Concept of Marketing. Journal of Marketing, 33 : 10-15, January.

[7] Luiz, J. and Smart, H. 1995 : The AIDS threat in South Africa, Insight, 25(1) : 31-36.

[8] Pretoria News, 17 July 2000 ; Mandela saves the day at AIDS conference, p.3.

[9] Pretoria News, 17 July 2000 : It's time to turn the tide against AIDS, p.5.

[10] Rapport, 16 Julie 2000 : Entstof – nou is daar hoop, p.11.

[11] Rapport, 9 Julie 2000 : Vigs – SA se grootste vyand, p.4.

[12] Robbins, S. 1999: The scourge of AIDS will affect your business. South African Journal of Marketing and Sales, 5(4)15.

[13] Solomon, M.R. and Stuart, E.W. 1997: Marketing. Real people, real choices. Upper Saddle River, Prentice Hall, Inc.

[14] Sunday Times, 2 July 2000 : SA response to AIDS a tale of woe and denial, p.16.

[15] Sunday Times, 9 July 2000 : Young, gifted and dead, p. 1.

[16] Sunday Times, 9 July 2000 : Mbeki : The Big Debate, p.15.

[17] Sunday Times, 9 July 2000 : AIDS – the facts behind the smokescreen, p.15.

[18] Sunday Times, 9 July 2000 : Mbeki must turn to action, p.22.

[19] Sunday Times, 16 July 2000 : AIDS – the way forward, p.20.

[20] Sunday Times, 23 July 2000: The view behind the HIV curtain, p.14.

[21] Sunter, C. 1996 : The High Road : Where are we now? Cape Town, Tafelberg, Human and Rousseau.

[22] Taylor, V. 1997 : Social Mobilisation – Lessons from the Mass Democratic Movement, SADEP,

University of Cape Town, Bellville.

[23] The National STD/HIV/AIDS Review Report, Department of Health, Government of South Africa, July 1997 : 11-14.

[24] United Nations development Programme, Human Development Report 1998, Oxford University Press.

[25] Washington Times, 12 June 1999, HIV/AIDS the Human Time-Bomb, p.12.

[26] World Bank Report on the global HIV/AIDS epidemic : 1997, Oxford University Press.

An Inquiry into the Factors Impeding Foreign Firms' Exports in the Context of Developing Economies

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Abstract

Focusing upon the characteristics of the marketing environment prevailing in the Arab market, the present article explores the prerequisites for an enhanced performance in export markets. It treats the factors perceived to affect the export performance of the Japanese multinationals in this region yielding thereby in a useful framework for understanding the facets of doing business in the light of the substantial change witnessed by the Arab economies

Introduction

With the growing globalization of business and the subsequent increasing openness of markets, international business researchers have focused upon investigating the factors that determine the firm's success in export markets. A significant volume of research in this field has been devoted to investigate the relationship between export success and export marketing strategy (e.g., Aaby and Slater, 1989; Barker and Kaynak, 1992; Cavusgil and Zou, 1994; Madsen, 1989; Evangelista, 1994), export determinants such as firm structural characteristics, market orientation, market characteristics, managerial attitudes (e.g., Chetty and Hamilton, 1993; Dau, 1992; Madsen, 1989; Slater and Narver, 1993), the effects of perceived export barriers on the export expansion of the firm (e.g., Ford and Leonidou, 1991; Barrett and Wilkinson, 1985; Burton and Schlegelmilch, 1987) and the impact of export market characteristics on export performance (Slater and Narver, 1993; Bodur, 1994). Yet, studies investigating the issues challenging the firms' exports to developing countries have been very scarce compared to the large amount of studies conducted in the context of developed economies such as the US and Europe. Such discrepancy calls for the need to explore the variables associated with foreign firms' involvement in different settings than those of the industrialized countries especially in the light of the substantial change subsequent to the globalization of markets.

Further, it has been argued that the economies in the Arab region are witnessing a substantial transformation from socialist to market economies, and thus, the present article attempting to shed lights on these context specific settings, contributes to the growing body of literature on multinationals' activities in developing/emerging markets through providing a perspective on the impediments prevailing despite the change witnessed by these economies.

Background of the Study

The present research deals with experienced exporters of consumer electronic products in Japan as well as their behavior, and attitudes towards the Arab market. In fact, trade between Japan and the Arab countries reached a significant level during the last decades. The Japanese multinationals have shown a growing interest in the Arab market following the deep economic and social change witnessed by the region along with the high buying power in the Arab oil-economies. However, multinational firms still face several difficulties to expand their operations and apprehend the particularities of the region. There is indeed a lack of understanding of the Arab market ensuing the need to formulate appropriate marketing strategies that would suit the local requirements.

Historically, the most substantial stimulant to the Japanese investment in the Middle East came following the change in Japan's policy during the 60s. In 1973, when the oil-crisis started, Japan found itself vulnerable to oil-producers' policies since it has relayed up to 80% on Arab oil. Since that period, Japan has emerged as the major exporter to the Arab countries despite its relative late entry comparing with Western companies.

Recently, the Arab market witnessed substantial change. The demographic growth was accompanied by an increased urbanization, and an appreciation of the consumer's income as a result of the economic growth in the 70s and the early 80s. The market is substantially changing into a big consumer market characterized by a growing demand for consumer goods along with high spending on luxury and welfare. However, it has been observed in a literature review conducted by Sriram and Manu (1995) that changes in the economic and political environment in many developing countries bring opportunities for multinational corporations; many multinational companies find that they have little experience with marketing and exporting to such countries since they have focused mainly on developed-country markets. This suggests that the link between export marketing strategy and performance is a function of differences in country of destination.

Moreover, several authors (Kaynak 1984, Leonidou 1991) have argued that the Arab market has several particularities that compel companies to apprehend and integrate its characteristics into their marketing programs. It appears indeed, that firms should align between their strategy and the characteristics of the export market, and thereby it would be of interest to determine the key factors to be considered by foreign companies operating in this market. Additionally, to the best of the author's knowledge, given that most of international marketing studies treating the Arab market have been descriptive in nature; limited amount of research had been devoted to the analysis of the effects exerted by the contextual factors prevailing in this particular region on the firms export activities.

The selection of the Arab market as the field work of the present study was justified on several accounts: **first**, it has been observed that this region constitutes a lucrative market for foreign companies characterized considerable purchasing power, a growing demand for both durable and consumer products, and a considerable change embracing most of the marketing environment facets thus generating quite a few forces affecting the multinational firms that strive to protect their achievements in the light of an intensified competition and more sophisticated consumers (Leonidou, 1991); **second**, the Arab region portrays a very idiosyncratic marketing environments differing greatly from those of their major foreign trade suppliers (Kyanak, 1984) allowing thereby to investigate the key factors affecting the firm's performance in a different context than the thoroughly investigated context of the developed economies; and **third**, the Japanese multinationals have succeeded in entering this market and establish strong positions despite the considerable unfamiliarity with the Arab market environment (Lyn, Amine and Cavusgil, 1986).

Methodology

This study is a part of an ongoing research project aiming to investigate the factors affecting the export performance of the foreign firms in the context of developing countries focusing on the case of the Japanese multinationals operating in the Arab region.

Considering the little amount of information related to this specific subject, the research was of a preliminary nature. It was carried out by conducting several interviews with the export managers of the major Japanese consumer electronics companies such as SONY, MATSUSHITA, TOSHIBA, SHARP, HITACHI, SANYO, which constitute the bulk of the Japanese consumer electronics industry. These firms are very large: the average size was 20.000 employees, with operations spread over the 5 continents, and have operations in most of the Arab countries either in the Gulf regions or the Maghreb countries (North African region).

The responding firms' age averaged 70.53 (SD= 26.40) years with an export experience averaging 45.18 years indicating thus that the population being studied in considerably involved in exporting and has accumulated consequently a substantial experience in foreign markets including the Arab market where they started their operations since 30.32 years in average. 37% of them have even established sales subsidiaries to handle regional sales, most of these establishments have occurred in the nineties given the development of a substantial demand and the increasing competitive pressures.

Moreover, 77% of the managers have describe their companies export behavior in the Arab market as proactive and accordingly these firms are strongly committed to develop their exports rather that reacting to the various stimuli they are facing in the Arab market. This was confirmed by 91% of the responding managers who judged their exports to the Arab region as regular rather than sporadic.

The interviews showed that most of the firms are looking to develop further their activities in the Arab market even though it appears that most of them are not substantially satisfied with the realized export performance. This virtual dissatisfaction with export performance could constitute an underlying reason explaining to some extent the emphasized commitment to develop the exports to the Arab market.

Finally, we observed that the most important markets pointed by the respondent were situated in Saudi Arabia and U.A.E, accounting for a significant part of the overall exports. The common traits of these markets are the important buying power (following the High levels of the population's income) and their role as leading markets in the Arab region. Other managers have included Egypt considering the fact that it is the most populous Arab country.

It is worth to mention that the importance of such an exploratory study stems not only from its multicultural aspect, but also from the fact that due to the increasing competition in the Arab market, the Japanese companies are increasing their commitment through further localization of the operations and a strong desire of enhancing their performance in the region.

Procedure

During the interviews held at the various companies' headquarters in Osaka and Tokyo, the respondents were requested to indicate their perceptions with regards to a series of factors likely to affect their firms' performance in the Arab market. The listed items were identified from a comprehensive review of the relevant the literature related to the field of the firm's export behavior (Robertson and Chetty 2000; Bodur, 1994; Evangelista, 1994; Katsikeas *et al.*, 1996), export performance (See the literature review of Zou and Stan 1998, Leonidou *et al.*, 2002), information pertaining to the firm expansion in export market (Wood and Roberstson, 2000) as well as studies treating the aspects of doing business in the Arab market (Kaynak 1984, 1986, Amine and Cavusgil, 1986; Leonidou, 1991; Trimeche 2002) .

The concerned managers were asked to rank the importance of the listed items on a 5-point Likert scale ranging from "not at all important" to "extremely important". These items included broadly:

- Political stability
- Lack of information and marketing research in the Arab market
- Different consumer behavior/habits
- Psychological distance
- Cultural/ religious factors.
- Competitive considerations
- Infrastructure
- Firm's related impediments

Results

Previous studies have acknowledged the importance of the external environment in exporting (Yeoh and Jeong, 1995, Cavusgil and Zou, 1994). In analyzing the pertinent literature in this regard, we observe that the external environment has been conceptualized in terms of hostility, attractiveness and growth, with trade barriers, political stability, cultural differences, psychic and physical distance playing an inhibitory role in export development and success and subsequently sited as the most important factors characterizing the export market hostility (Kaynak and Erol, 1989; Cavusgil, 1984). These factors entail substantial risks for international firms decreasing thereby the "favorableness" of a foreign market business climate (Douglas and Craig, 1995).

Hence, the present environmental analysis would provide a good perspective on the risk and difficulties of operating in the Arab region providing an insightful perspective on the factors affecting the managerial perceptions with regards to market attractiveness.

Overall, despite the differences in the degree of perceived importance, the responding managers have considered most of the listed items as affecting significantly their export performance in the Arab market (Results exposed on Table 1; Overall mean score, 3.63) with a lower importance accorded to physical distance and religion (Mean scores 2.74 and 2.91 respectively).

Table 1: Factors Impeding Exports to the Arab Market [a]

	Mean	Std. Deviation
Political situation	4.37	.81
Legal requirements	4.31	.68
Technical regulations	4.20	.63
Foreign competition	4.00	.97
Competitiveness of the exported products	3.97	.98
Lack of information	3.91	.83
Japanese competition	3.89	1.08
Arab attitudes towards foreign products	3.89	.90
Lack of export marketing research	3.86	.91
Currency fluctuation	3.83	1.12
Ineffective communication with consumers	3.83	.66
Infrastructure	3.74	.98
Communication	3.74	.71
Culture	3.66	.87
Lack of information about distributures	3.66	1.03
Complexity of the required documents	3.54	1.01
Inappropriate promotion	3.48	.83
Lack of personnel qualified	3.47	1.05
Different consumer habits	3.34	1.06
Poor organization of the firm's export department	3.31	.93
Urbanization	3.31	.87
Unfamiliarity with business practices	3.26	.95
Lack of governmental assistance	3.26	1.01
Psychic distance	3.09	1.01
Religion	2.91	1.12
Physical distance (transportation)	2.74	1.09

a. *Perceptions indicated on a 5 points Likert scale ranging from 1: not important to 5: very important.*

Political Stability

The Japanese managers perceived political stability as the most significant encountered problem. Such a perception is particularly relevant when we consider that -with the exception of Tunisia-, for the past thirty years, all countries in the region have suffered either war or internal unrest or a serious border dispute (Beshara, 1999). Moreover, the global media had further exacerbated the image of the region and routinely vilify the countries of the region as having anti-western attitudes, perceiving western products as a threat of their basic cultural traits.

Since the mid eighties, the Arab region is witnessing significant changes embracing the social, cultural and economic aspects (Trimeche, 2002). Nonetheless, the market is still associated with a substantial lack of attractiveness due to the evolving Middle East peace process, the rise of fundamentalism, and the instability of the political regimes pursuing structural reforms aimed to accelerate liberalization economically but not politically. Such a lack luster has been even more aggravated after the events that occurred on September 11th in the US as well as their potential implications for the entire region.

It is noteworthy that the perceived importance of the political stability as a primary factor affecting the export performance of the responding firms is contrasting with the findings of previous studies where it has been found that in evaluating international markets, managers tend to be influenced respectively by market potential, legal consideration and political stability (Robertson and Wood, 2001). Moreover, this finding indicates that despite the relative mature involvement of the responding companies in the Arab market venture (i.e. average export experience in this region is about 30 years); there is an invariable sensitivity towards the observed political instability and its potential effects upon their export performance. The responding managers have emphasized the need for committing more resources to the Arab export venture through localizing their operations and strengthening the relationships with local distributors. Such commitment would eventually decrease the perceived uncertainty – still important despite the acquired experience - allowing subsequently a more efficient monitoring of the market.

Technical and Legal Requirements

The second factor deemed to affect the export performance of the Japanese firms has trait to the legal and technical regulations prevailing in the Arab countries (Mean scores 4.31 and 4.20 respectively). The significance accorded to these items is underlined by several factors including the technological nature of the exported products (i.e., Consumer electronics), as well as the heavy regulations still reigning in most of the Arab countries despite the steady but slow liberalization and tariffs dismantlement.

In this regard, it has been argued that the Arab countries are characterized by high rates of protection, lack of transparency and distortions, with the economies remaining relatively closed. While the average custom rates in the Gulf countries is relatively low- 5% in UAE and Bahrain- the economies of the other Arab countries tend to be much more restrictive, with an average custom tariff as high as 30% in some countries. The weighted average rates in the Southern Mediterranean Rim countries are more than double the international average, and most of the region's non-oil economies have in place significant tariffs and non-tariff trade barriers (El Erian, 1997). Such observation does not put out of sight the considerable trend for greater trade liberalization both in the context of the WTO and through the conclusion of bilateral Association Agreements with the European Union.

This result is in accordance with the findings of Wood and Robertson (2000) where information related to legal considerations such as tariff and non-tariff barriers, laws affecting agents; intellectual property protection and travel requirements were roughly equally considered in importance by a multicultural sample of international managers. It also shows that the reforms being implemented in most of the Arab economies in order to attract foreign firms, have been not sufficient to attract foreign firms and that the liberalization of the markets has not been effectively executed. For instance most of the Arab countries pose several restrictions on foreign firms operations including their relation with local distributors. Even though such partnerships are getting quite easier to establish, their cancellation entails substantial risks for the company; which could be even forced to exit the market.

Another major impediment facing the Japanese companies exporting to the Arab market has trait to the quasi absence of an intra-Arab trade and the multiplicity of technical/legal requirements in the different country markets. Coupled with the diversity of the "heavy" administrative procedures (mean score 3.54) these requirements pose a real constraint to the foreign firms willing to standardize their operations in the region.

Competitive Considerations

As the Arab market is changing from sellers to buyer conditions characterized by a growing competition, the responding managers have attached a significant importance to competitive considerations. While this results is consistent with prior studies suggesting that the major trait of the Japanese consumer electronics companies is their competitive drive (Kotler and Fahey, 1982), a closer look shows that unexpectedly, competing with foreign multinationals in the Arab market was judged to be more important than the Japanese competition (mean score 4.00 and 3.89 respectively). Such a result reflects the depreciation of the Japanese competitive advantage in this product category in favor of the South East Asian multinationals that are pursuing aggressive marketing strategies backed by a strong emphasis upon price advantages and facilitated by the declining disposable incomes of the Arab consumer. On the other hand, currency fluctuation is likely to affect the export performance of the Japanese consumer electronics companies (mean score, 3.83).

This result could be explained by several factors: first, the Japanese competitive advantage is depreciating in the light of the increasing competition in the consumer electronics market and the successful entry of several South Asian companies, second, even though the Japanese products are still enjoying a sustainable demand, the Arab consumer is becoming more price sensitive and is thereby moving towards the Korean products which seem to enjoy a greater acceptability, and third, the study was conducted at the time where the Japanese economy is downgrading considerably and most of the consumer electronics companies came under pressure.

A further confirmation of the importance accorded to competitive considerations in the Arab market is the relatively high score related to the competitiveness of the firm's exported products (mean score 3.97). This result is a perfect illustration of the depreciating competitive advantage of the Japanese consumer electronics firms in the Arab market where the Korean manufacturers pursue aggressive marketing strategies aimed to strengthen the gain in brand awareness realized over the past few years (LG and SAMSUNG have been frequently mentioned as the main "rivals").

Informational Impediments

With respect to the unavailability of information about the Arab market, the responding managers have emphasized the significance of a set impediments related to the lack of information (mean score 3.91) and marketing research hurdles (Mean score 3.86) along with the subsequent difficulty to communicate effectively with the Arab consumer (Mean score 3.83). Thus this set of items is perceived as a major deterrent for implementing efficient marketing strategies in the Arab market given the fact that foreign companies operating in an export market are required to gather, apprehend and monitor information relative to a wide array of aspects in order to achieve higher levels of performance. In order to overcome such difficulties, the Japanese tend to commit more resources to the market (i.e., establishing regional branches has been the recent trend in the industry) – even though such commitment is threatened by the recent crisis witnessed by the Japanese consumer electronics industry – and entertain strong relationships with the well-established local distributors through providing a strong after sale services, technical assistance, and frequent visits.

The informational impediment recalls the crucial role played by local distributors who are better placed to get the products sold in the Arab market enhancing thereby the performance of the firm. In fact, most of the studies treating the Arab market have stressed the importance of local distributors given the considerable lack of market information, the regulatory constraints, and the high levels of market risk. In this regard, it has been stated that selecting a local distributor is a prerequisite of success in the Arab market (Leonidou, 1991) given their market knowledge, their ability to respond effectively to consumer trends, and their personal relations with government officials. The role of local distributors is gaining in importance despite the increasing localization of foreign firm's activities. Moreover, whilst in the past the local representative had a rather passive role in the marketing of goods, nowadays he plays a more active role and is more demanding especially with regards to advertising support, prompt deliveries and better prices (Kaynak, 1986).

Infrastructure

A good infrastructure not only serves as an incentive for market entry but also affects the strategy of the firm in export markets and subsequently its overall performance. Such influence is likely to be greater in the context of

developing economies. This dimension is seen as a hindrance to the realization of the export objectives considering the three main areas stated by Wood and Robertson (2000):
- The extent and nature of the physical distribution prevailing in the market
- The extent and nature of the export market's communications infrastructure, and,
- Geography and climatic conditions that affect the business enterprise

Specifically, high scores associated with infrastructure (Mean score 3.74) and communication in one hand (Mean score 3.74) are considerably underlined by the specificity of the product category being exported as well as although infrastructure in most of the Arab countries is witnessing a significant improvement, it is still comparing unfavorably to other fast-growing developing economies. In addition, this result is in concordance with previous empirical studies that have placed infrastructure as being among the most important factors determining the decision of the firm to commit its resources to the export venture. The influence exerted by infrastructure over the firm's exports is accentuated by the geographic nature of the Arab countries, the state of communication facilities and the difficulties to reach the rural population.

Religion Culture and Psychic Distance

Unexpectedly, psychic distance (mean score 2.74); which is frequently considered as a major factor determining the export expansion of foreign firms, seems to merely affect the exports of the Japanese consumer electronics to the Arab market despite the considerable psychic disparity between the host market and the country of origin. This unanticipated result could be explained by the substantial experience and market knowledge accumulated by the Japanese companies manifested by the average level of experience achieved by the responding firms (the average export involvement in the Arab market attained 31 years).

Such a result is in accordance with the organizational learning theory where the firm's export commitment is underlined by the accumulated knowledge, which in turn affects the managerial perceptions towards the host market and subsequently limits the effect of psychic distance. Likewise this argument could explain to some extend the relative irrelevance attached to religion despite the fact that it has been cited in most of the studies treating the facets of international business in the Middle East as a crucial determinant of foreign companies' success particularly in Islamic markets. In this regard,

Managerial implications

Evidence analyzed in the present paper illustrates to some extend the environmental forces affecting the performance of the firm in less developed countries with a particular emphasis on the Arab market. It revealed that the Japanese firms attach a prime importance to the political instability characterizing the region along with other impediments related to the institutional environment (legal and technical considerations), the substantial lack of information about the market and the state of the prevailing infrastructure. On one hand, the present study provides useful insights to local government managers since it shows – to some extend – the weaknesses observed in the adjustment programs being implemented in order to attract foreign firms given that perceptions of foreign managers are of substantial importance in understanding the difficulties encountered by foreign firms and improving the business environment accordingly. On the other hand, since the Arab countries tend to vary in their ability to provide foreign firms with the listed impediments could constitute a basis for segmenting the Arab market on the basis of the encountered impediments.

The importance of exposing these findings stems from several considerations: First, the managerial perceptions have been recurrently cited as important determinants of the firm's export performance. Therefore, it is of substantial interest to explore the environmental factors perceived to affect the performance of the firm since firms need to grasp the external environment along with the managerial perceptions about these attributes that should be regarded as a significant causal element in the operation strategy-business performance nexus (Bourgeois, 1985; Swamidass and Newell, 1987). Second, although prior studies have not thoroughly investigated the effected of the host market business climate on the performance of the export venture, it has been argued that foreign firms operating in developing countries may be more sensitive to the host market characteristics due to the instabilities and market imperfections observed in such contexts (Athukorala *et al.*, 1995). Finally, in nowadays' turbulent situation prevailing in the Middle East along with the expected outcomes of the after September 11th, it is legitimate to inquire about the managerial perceptions with regards to operating in such a volatile region. Accordingly the study has shown that the political situation prevailing in the Arab market (and especially in the Middle East) is the major factor hampering the stability of exports to the region and tending to affect to a certain degree the registered performance in the market.

Furthermore, the importance of international marketing research in such a volatile market cannot be underestimated considering that the assessment of information determines, in large part, the degree of success (or failure) achieved in the international arena (Andersen and Strandskov, 1998). As it is always advisable to refer to the current problems encountered, the need for monitoring the market is even more incessant given today's rapidly shifting alternatives in terms of risk, stability, and potential returns inherent in the myriad markets around the world (Wood and Robertson, 2000).

Conclusion

Foreign firms willing to operate in the Arab market region should be aware of a number of factors that impact the success of their marketing strategies being pursued and therefore, enhancing their performance is contingent upon how the managers perceive and deal with the environmental impediments. On a more specific note and with regards to the performance of the firm in the export market, the results of empirical studies investigating the effect of the export market characteristics have been inconclusive (see literature reviews conducted by Madsen, 1987; Zou and Stan, 1998).

Yet, most of the studies consider that the firm is likely to overcome the export market barriers (i.e., instability, trade barriers, competitive threats, physical and psychological distances…) by pursuing effective and efficient marketing strategies. This assumes that the managers ought to identify, analyze and comprehend the characteristics of the export market environment in order to maximize the efficiency of the firm's marketing strategy and subsequently enhance its overall performance. In this regard, the international marketer should bear in mind that the business environment in the Arab region is rapidly changing and therefore marketing plans should be dynamic rather than static given that continuous monitoring and constant re-evaluation of the external environment requirements are a basis of success in this region.

References

[1] Aaby, N.E., and S.F. Slater, (1989) " Management influences on export performance: A review of the empirical literature". International Marketing Review (64), pp.7-26.

[2] Amine, L.S., and S.T. Cavusgil, (1986) " Marketing environment in the Middle East and North Africa: The forces behind homogenization". In Cavusgil, S.T., and Axinn, C. (Eds.), Advances in International Marketing,(1), pp. 115-141, Greenwitch, CT: JAI Press.

[3] Andersen, P.H. and Strandskov, J. (1998), " International Market Selection: a Cognitive Mapping Perspective", Journal of Global Marketing, Vol. 11, No. 3, pp. 65-84

[4] Athukorala, P., Jayasuriya, S. and E. Oczkowski, (1995) "Multinational firms and export performance: Some analytical issues and new empirical evidence". Journal of Development Economics (46), pp. 109-122.

[5] Barker, T. and E. Kaynak, (1992) "An Empirical Investigation of the Differences between Initiating and Continuing Exporters". European Journal of Marketing (26) 3, pp. 27-36.

[6] Barrett, N. and I. Wilkinson, (1985)"Export stimulation: a segmentation study of the exporting problems of Australian manufacturing firms". European Journal of Marketing 19 (2), pp. 53-72.

[7] Beshara, M. (1999), " Globalization and the Middle East: growing together or growing apart" The Middle East Institute, Policy Briefs series, Washington, U.S.A.

[8] Bodur, M., (1994) " Foreign market indicators, structural resources and marketing strategies as determinants of export performance". In Cavusgil, S.T. and Axinn, C. (Eds.) Advances in International Marketing, 6, pp. 183-206, Greenwitch, CT: JAI Press.

[9] Bourgeois, L., (1985) "Strategic Goals, perceived uncertainty and economic performance in volatile environments". Academy of Management Journal, 28 (3), pp. 548-573.

[10] Burton, F.N. and B.B. Schlelegmilch, (1987) "Profile Analysis of non-exporters versus exporters grouped by export involvement". Management International Review, 27 (1), pp. 38-49.

[11] Cavusgil, S.T., (1984) "Organizational characteristics associated with export activity". Journal of Management Studies, 21 (1), pp. 3-22.

[12] Cavusgil, S.T., and S. Zou, (1994) " Marketing strategy- Performance relationship: An investigation of the empirical link in export market venture". Journal of marketing, 58 (January), pp. 1-21.

[13] Chetty, S.K. and R.T. Hamilton, (1993) "Firm-level determinants of export performance: A meta-analysis". International Marketing Review 10, pp. 26-34.

[14] Dau, R., (1992) "Marketing orientation and export performance in New Zealand manufacturing industry". Unpublished Ph. D. dissertation, Victoria University of Wellington.

[15] Douglas, S.P. and Craig, C.S. (1995), Global Marketing Strategy, McGraw-Hill Series in Marketing.

[16] El-Erian, M., (1997), " Globalization and Growth Prospects in Arab Countries", *IMF working paper series*, September, WP/97/125.

[17] Evangelista, F.U., (1994) " Export performance and its determinants: Some empirical evidence from Australian manufacturing firms" In Cavusgil, S.T., and Axinn, C. (Eds.) Advances in International Marketing, (6), pp. 207-229, Greenwitch, CT: JAI Press.

[18] Ford, I. And L.C. Leonidou, (1991) "Research developments in international marketing" in Palliwoda, S. (Eds.), New Perspectives on International Marketing, Routledge, London, pp. 3-32.

[19] Katsikeas, C.S., Piercy, N.F., and C. Ioannidis., (1996) " Determinants of export performance in a European context" European Journal of Marketing 30 (6), pp. 6-35.

[20] Kaynak, E., (1984) "Marketing in the Middle East and Northern Africa". Management Decision, 22 (1), pp. 23-29.

[21] Kaynak, E., (1986) International Business in the Middle East, De Gruyter. Berlin. New York.

[22] Kaynak, Erdener and Erol, Cengiz (1989) "he export propensity of Turkish manufacturing and trading house firms", Journal of Marketing Management, 5, 2, Winter, pp. 211-229

[23] Kotler. P. and Fahey, L. (1982), "The World's champion marketers: the Japanese" The Journal of Business Research, Vol.2, (Summer), pp. 3-13.

[24] Leonidou, L.C., (1991) "Marketing in the Gulf states". *Management Decision*, 29 (8), 38-45.Leonidou, C.L., (1995), " The Saudi Distribution System: Structure, Operation, and Behavior", Marketing Intelligence and Planning, Vol.13, No. 11, pp. 27-35.

[25] Leonidou L.C., (1996) "Unveiling the marketing scene in Saudi Arabia: From sellers' to buyers' conditions". Journal of International Marketing and Marketing Research 21 (3), pp. 123-144.

[26] Madsen, T.K., (1989) "Successful export marketing management: some empirical evidence". International Marketing Review, 6 (4), pp. 41-57.

[27] Robertson, K.R. and Wood, V.R. (2000). "Evaluating international markets, the importance of information by industry, by country of destination, and by type of export transaction", International Marketing Review, 17, 1, pp. 34-55.

[28] Slater, S.F. and J.C. Narver (1993) "Product-market strategy and performance: An analysis of the Miles and Snow strategy types". European Journal of Marketing, 27 (10), pp. 33-51.

[29] Swamidass, P. and W. Newell, (1987) "Manufacturing strategy, environmental uncertainty and performance: A path analytic model". Management Science, 33 (4), pp. 509-524.

[30] Sriram, V. and Manu, F.A. (1995), "Country-of-destination and export marketing strategy: a study of US exporters" Journal of Global Marketing, 8 (3-4), pp. 171-190.

[31] Trimeche, M., (2002) "Change in the Arab marketing scene: Implications for Multinationals". Proceedings of the Society for Advancement of Management-2002 International Business Conference. Mc Lean, Virginia.

[32] Yeoh, P. and Jeong, I. (1995), "Contingency relationships between entrepreneurship, export channel structure, and environment: A proposed conceptual model of export performance" European Journal of Marketing, Vol. 6, pp. 95-115.

Antidumping War against China and the Effects of WTO Membership

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Abstract

Despite the positive impact of China's opening to the global market, there are still some concerns that may be detrimental to its economy. Chinese companies claim that they are able to sell at prices below most of its competitors because of lower labor costs and not having to comply with environmental standards. As a result of all this negative publicity, China has decided to fight antidumping charges and, why not, strike with some of its own. Is China a victim of trade discrimination and protectionism? Are Chinese companies and authorities trying to portrait an image of China that does not reflect the true situation of its economy? How will China's accession to the WTO help the country shake off antidumping charges? This article presents useful information that will help you answer these questions and arrive to your own conclusions regarding antidumping procedures against China.

Introduction

Here is a topic that never gets out of style: Antidumping legislation. It is perhaps the most controversial subject involving foreign trade. The United States uses antidumping legislation to address unfair trade practices by importing companies. Advocates of antidumping laws claim that they are essential in the fight against predatory pricing by foreign companies. If left unregulated, this practice would severely harm domestic industries, drive companies out of business, take control of the market, and eventually create monopolies. Those opposing antidumping legislation suggest that it is just another form of protectionism that nurtures inefficient industries and increases cost to U.S. consumers. Critics also say that antidumping laws create impediments to free trade, which results in misallocation of global resources and the disregard of comparative advantages.

The first dumping lawsuit against China came in 1979 when Europeans accused Chinese saccharin manufacturers of dumping. Since them, China has become a common target of dumping charges for most of its major trading partners. More than 422 cases have been brought up against Chinese enterprises involving more than $10 billion worth of products. This represents only a small portion of total exports of China, but the negative effect to some Chinese industry has been devastating. Chinese TV manufacturers know for experience how dumping charges can bring down one of the strongest industries in China. With a 44.6 percent antidumping tax on color TV from China, the European market has completely closed its door to Chinese TV manufacturers.

One of the major reasons for these attacks is the non-market economy status that China has. Contrary to a market economy, in a non-market economy the state has a major influence in production cost and the final price of goods. The government provides some companies with subsidies and tax benefits that put foreign competitors in a disadvantage. Some countries like the United States claim that because of this situation China is able to sell its products at prices well below normal value. This is considered dumping and the World Trade Organization (WTO) condemns it.

On the other hand, Chinese companies claim that they are able to sell at prices below most of its competitors because of lower labor costs and not having to comply with environmental standards. As a result of all this negative publicity, China has decided to fight antidumping charges and, why not, strike with some of its own.

In recent years, China has taken some major steps to ensure its prompt accession to the WTO. Once a member, antidumping procedures against China may have to change. The United States has decided to take away the status of non-market economy of China, but only after fifteen years of its entrance to the WTO. This will allow the U.S. to still use a surrogate country to calculate normal value and determine dumping margins for at least another fifteen years.

Is China a victim of trade discrimination and protectionism? Are Chinese companies and authorities trying to portrait an image of China that does not reflect the true situation of its economy? How will China's accession to the WTO help the country shake off antidumping charges? This article presents useful information that will help you answer these questions and arrive to your own conclusions regarding antidumping procedures against China.

The Chinese Antidumping Arsenal

When talking about China and antidumping regulations is hard to picture Chinese authorities in the offensive end. But China has developed its own antidumping laws to protect domestic industries from dumping. Due to increasing globalization and in effort to join the WTO, China has removed some import quotas and reduced non-tariff and tariff barriers. This has led to an increase in the importation of products that have either lower prices or higher quality, sometimes leaving domestic industries at the mercy of foreign companies.

The State Council promulgated China's Antidumping and Anti-Subsidy Regulations on March 23, 1997. From that date and until March 1 2001, seven investigations had been conducted (Ross, 2000 Issue). As it is the case in the United States, antidumping regulations in China try to curb the effects of imports that substantially hurt, or threat to hurt, established industries, or impede the establishment of comparable domestic industries.

Non-Market Economies

When non-market economies are involved, Chinese antidumping regulations follow a different procedure than the one follow by the United States. According to current antidumping laws in the U.S., when dealing with a non-market economy the price of the subject product in a comparable market economy must be used. This has affected trading with China immensely since the United States considers China a non-market economy. Chinese antidumping regulations do not have this provision. Chinese authorities use the company's price whether in a market economy or not.

The World Gets A Taste Of Chinese Antidumping Laws

China designed its own antidumping regulations in 1997 to protect domestic industries from dumping by foreign companies. The next step, obviously, was to put into practice the new laws. The first antidumping investigation carried out by MOFTEC and SETC came to an end on June 3, 1999.

Antidumping tariffs were raised on newsprint imports from the United States, Canada, and South Korea. MOFTEC and SETC jointly worked on the case since November 1997 after receiving complaints from nine domestic manufactures. Authorities concluded that imports of newsprint from these countries had a tremendous negative impact on the domestic industry. "Newsprint prices dropped 9.1 percent, and the total profits of the nine domestic newsprint firms fell 88 percent, leading to inventory buildup, large-scale layoffs, and rising debts" (Ross).

Officials at MOFTEC sent questionnaires to the foreign companies involved, but only five Canadian companies and one Korean firm responded to the charges on time. Canadian companies are subject to tax rates ranging from 57 to 78 percent. Except for Hansol Paper Co., which pays 9 percent, all South Korean companies must pay a tax of 55 percent. Since the US companies did not respond to the dumping allegations, they are all subject to a tax of 78 percent (Ross).

Other investigations undertaken by the MOFTEC and SETC involve the following countries: Russia for Cold-rolled silicon steel sheet, initiated in March 1999; South Korea for Polyester Film, in April 1999; Japan and South Korea for Stainless steel strip and sheet, in June 1999; and Germany, Japan, and United States for Acrylates, in December 1999 (Ross). China now joins the rest of the world in the war against dumping and, as many other countries, is now subject to same criticism concerning its antidumping procedures.

Non-Market Economy Status of China

In April 1998 the European Council with Council Regulation (EC) No 905/98 gave individual Chinese and Russian companies the opportunity to claim that they operate in market economy conditions on a case-by-case basis. This regime was extended in 2000 and it now applies to other non-market economies such as Ukraine, Vietnam and Kazakhstan (Hong Kong Trade Development Council, Issue 14).

In order to take advantage of this special treatment, companies need to comply with the following requirements:

- Company decisions must be made without significant State influence;
- Accounts must be independently audited in line with international accounting standards;
- Production costs and the financial situation of the company are not affected by distortions carried over from the former State-led economic system, barter trade or compensation of debts;

This regulation does not grant China the status of full market economy. However, provided that Chinese companies satisfy the requirements above, dumping calculations are based on their own domestic price and costs and not those of a third country.

The United States does not make such exclusions. In all dumping cases involving China, the U.S. calculates normal value based on prices in a third country. An article by MOFTEC stated the following: “We hope that the United States will fully acknowledge China’s reality as a socialist market economy after 20 years’ of reform and opening-up. We hope that the US will abandon the outdated concept and practice as soon as possible and render fair treatment to Chinese enterprises and products” (MOFTEC).

Although China has been making some progress in the past two years, the European Commission still believes there is more work to be done before it can be considered a market economy. The fact that the Commission is willing to make exceptions when dealing with Chinese companies shows it commitment to help China make a smooth accession to the WTO. The more steps China takes towards the creation of an economic environment in line with international agreements, the closer it will be to obtaining a full market economy status.

China Fights Antidumping Charges

In recent years, the number of dumping cases against China has skyrocketed. From August 1979 to March 2001, a total of 422 antidumping cases had been filed against China involving more than US$10 billion worth of Chinese exports (The Times of India). The European Union leads the attack, followed closely by the United States. China’s aggressive expansion of exports has made it a target of dumping charges. “From 1981 to 1999, China’s exports increased at the rate of 12.9% on a year-on-year basis, far higher than the world average of less than 6%” (China Web).

In most of these cases, Chinese companies did not bother fighting back because of the high cost of antidumping litigation and their unwillingness to share what they might consider sensitive corporate information. But this trend is slowly changing.

China is now committed to establishing a quick-response mechanism and improving an antidumping early warning system to counter dumping cases before they become lawsuits. MOFTEC has already set up warning systems for dumping charges in major markets such as the United States, the

European Union, Australia, and South Korea. Chinese authorities are concentrating their efforts, not only on warning but also on the prevention of such charges overseas.

According to the vice minister of MOFTEC, Sun Zhenyou, the quick-response system will be composed of government departments, import and export chambers of commerce, local foreign trade authorities and relevant companies (The Times of India).

Chinese enterprises are now more active in responding to important anti-dumping investigations. "While in the past Chinese companies turned a blind eye to such investigations, about 60 to 70 percent of Chinese companies facing anti-dumping allegations now respond," confirmed Mr. Zhenyou (The Times of India).

When Chinese exporters respond to dumping charges their probability of winning tremendously increase. The overall percentage of cases won by China has increased to 35.7 percent. According to Mr. Zhenyou, this percentage represents a major improvement compared to that of a few years ago (The Times of India).

Although the value of the goods involved in antidumping investigations is relatively small compared to China's total exports, the long-term effects to China's economy may be devastating. As China becomes a usual target of dumping charges, foreign investors' excitement about the country may slowly fade away. Investors will start withdrawing their capital, which will inevitably hurt China's economy a great deal.

Therefore, it is not surprising that MOFTEC supports and encourages domestic companies to go to whatever extent needed to defend against dumping allegations. In 1997 twelve Chinese manufacturers traveled to Brussels to counter dumping charges brought by the EU on the exportation of ferro-silico-manganese, an alloy for steel and iron production.

In August 2000, after one year of fighting dumping charges, The Shanghai Baosteel Group Corp. won two major dumping suits brought in the United States and Indonesia. It all started in June 1999 when eight U.S. companies jointly accused Baosteel of dumping cold-rolled steel plate. Later, in September of the same year, the Indonesian Association of Steel Pipe Manufacturers also proposed an antidumping investigation of seamless steel tubes exported by Baosteel (China Online).

Baosteel, convinced that these allegations did not have any grounds, decided to actively contest the charges and to seek the legal judgment of the United States and Indonesia. The company's efforts paid off!

Some Hints for Chinese Defendants of Antidumping Charges

After paying close attention to the Commission and Commerce determination in Chinese cases, William E. Perry in his article "U.S. Antidumping Cases Against China-Lessons Learned" gives Chinese exporters some advises on how to deal with antidumping charges.

1- Do not ignore the charges. Get involved.

According to U.S. antidumping laws, if Chinese exporters do not participate and provide the information required to conduct the investigation, Commerce has not choice but to use the best information available to calculate the margin. In most cases, the only information provided is that of the petitioners, which may or may not reflect real figures.

Since 1994 the Chinese garlic industry has been shut out of the U.S. market. This is the result of a 376 percent dumping margin imposed by Commerce after the Commission reached an affirmative injury determination based entirely on the information provided by U.S. producers because Chinese exporters refused to participate.

2- Do everything possible to win the initial investigation.

In order to obtain an antidumping order, U.S. petitioners must prove two points: high dumping margins with Commerce and injury and threat of material injury with the Commission. If U.S.

petitioners are able to get this far, the only recourse left to Chinese defendants is to fight for a lower dumping margin in antidumping review investigations so that they can export again.

That is why it is very important to try to win the first investigation. There are three ways Chinese companies can do this: if the Commission does not find injury, if Commerce finds low antidumping margins, or by negotiating suspension agreements between the Chinese and U.S. government, that is lowering the quantity imported under quota and above a price floor.

By getting a no-injury determination by the Commission companies are allowed to export their products to the U.S. without any duties. However, they face a different problem: "free riders"(Perry). Any other Chinese company that was not involved in the investigation and did not incurred any legal expenses will be able to export their products too. This will unfairly make the U.S. market more competitive for the company that battled and won the case.

3- Ally with U.S. Importers

The same way Chinese exporters are interested in bringing their products to the U.S., U.S. importers are interested in buying those products. Thus, it makes sense that they both work together to fight dumping charges. U.S. importers can bring political pressure to the Commission and Commerce because U.S. jobs may depend on the entrance of Chinese goods to the country.

Another way domestic importers can help Chinese companies, according to Mr. Perry, is by involving end users. In a case where Chinese exporters were accused of dumping silicon carbide on the U.S., domestic importers persuaded General Motors, one of the biggest users of Chinese silicon carbide, to intervene and testify in favor of the Chinese companies. This was one of the major reasons the Commission reached a negative determination of injury in the case.

Mr. Perry also clarifies that pressure from importers alone will not win the case, "but it has the effect of leveling the playing field." When Chinese companies are not familiar with the situation in the U.S. market, the help from insiders is always needed.

China and the WTO: Gateway to the Future

By 1978, after decades of totalitarian communism, the Chinese economy was almost in ruins. It was then that Chinese leaders engaged the country in a transition that would take it from an inefficient centralized economy to a market oriented one. They viewed WTO membership as the light in the dark tunnel that would take the country out of its misfortune.

In July 1986, China sent a delegation to Geneva with a formal request to join the GATT (General Agreement on Tariffs and Trade), the organization that preceded the WTO (World Trade Organization). China accomplished few major breakthroughs in its attempt to join the WTO until April of 1999 when a deal with the U.S. was almost finalized. The Chinese premier Zhu Rongji traveled to Washington with a package explaining in detail all the steps that its country would take to ensure its accession to the WTO. No other Chinese leader had promoted such major changes before. Unfortunately, the Clinton administration did not take advantage of Zhu's offer and rejected it (Groombridge, p5).

The situation did not get any better after that. In May 1999, NATO forces accidentally bombed the Chinese embassy in Belgrade putting all negations on hold indefinitely. The U.S. government was quick to realize the mistake they had made and tried to get negotiations back on track. U.S. Trade Representative Charlene Barshefsky went personally to Beijing to finalize the deal before the WTO Ministerial Meeting in November 1999.

In March 2000 the Office of the U.S. Trade Representative published the full bilateral agreement signed by the United States and China in November 1999. These are some of the most important concessions made by China in the agreement:

- Agriculture: By January 2004, the overall average tariff on agricultural products will be 17 percent.

- Industry: By 2005 China will have lowered the overall average industrial tariffs from 24.6 percent to 9.4 percent.
- Trading: For the first time and phasing in over a three year period, foreign companies will have trading and distribution rights for most products.
- State-Owned Enterprises (SOEs): The Chinese government has agreed that SOEs will make purchases and sales based entirely on commercial considerations. It has also agreed not to influence commercial decisions except in a WTO-consistent manner (Groombridge, p7).

This bilateral agreement signed with the U.S does not guarantee China's membership to the WTO by itself. China still has to sign similar agreements with other major members (such as the European Union and Japan). However, the Sino-U.S. agreement sets the base where future negations between China and other nations will start.

China's Worries about WTO Membership

Despite the positive impact of China's opening to the global market, there are still some concerns that may be detrimental to its economy. In his article "Economic Implications of China's Accession to the WTO," Thomas M.H. Chan explains what those concerns are.

Without a doubt the number one concern is that reductions on tariffs and duties on imports will make the Chinese market more accessible to foreign companies. This means that domestic producers would face a fiercer competitive environment than the one they are used to, without major interference by the government.

As mention before, China is required by its bilateral agreement with the U.S. to lower its average import tax level from 24.6% to 9.4% for industrial products. However, Mr. Chan claims that the effective import tax rate that China has been receiving since 1990 has actually being dropping to less than 3%. "Only when the Chinese government has begun extensive anti-smuggling campaign to close all the loophole in the import business in the latter half of 1998 that the ratio moves up to 5.46% in the first half of 1999". According to Mr. Chan, the positive effect for China of lower tariffs on imports would be less significant that most people expect.

Not all Chinese industries will be affected the same way by the terms agreed with the U.S. Those industries that enjoy high import barriers and government protection like food-grain, automobiles, iron and steel, pharmaceuticals, and petro-chemical and chemical products may be in danger. These industries in China are already suffering from extensive competition from foreign companies with excess capacity. The liberation of the Chinese market may represent the extinction of these industries. "China might repeat the experiences of many other developing countries in that the domestic industries would either be eliminated in the intense competition or fall into the hands of the invading multinational corporations either through mergers or acquisitions" (Chan).

Mr. Chan suggests that WTO membership for China may not be as necessary as others may think. In 1995, China acquired observer status, which allowed the country to participate in the Uruguay Round negotiations of the GATT and sign all agreements resulting from the meetings. Observer status gives China the flexibility of accepting only those terms that are in its best interest without any obligation to sign those that are not. Mr. Chan also claims that China's heavy weigh in international trade makes it impossible for other nations to ignore its influence, even without formal membership.

The Positive Impact of WTO Membership for China

Despite the immediate negative effects, WTO membership will bring about positive changes for China in the future. The secretary-general of the China National Federation of Textile Industries put it this way: "especially in the long-run…is that the country will be able to enjoy stable multilateral preferential trade policies in a rules-based market" (Groombridge, p7). Once a member, other nations may change their attitude about China. No longer will it be regarded as an outsider they have to watch for, but as a team player willing to abide by the same rules. Of course, the change will not be overnight and China will have to prove through more economic reforms that it is worthy of being part of the WTO system.

Chinese economists estimate that about 10 million jobs will be lost in agriculture, automobile, and machinery. However, they also acknowledge that WTO membership will create 12 million jobs in industries such as textiles, toys, and footwear (Groombridge, p7).

One of the terms agreed by China to facilitate its entry to the WTO was to permit foreign banks to conduct business in the local currency with Chinese clients. This will promote reforms in the financial sector eventually allowing new sources of capital for Chinese enterprises, which are being neglected by the state-banking sector.

Promoters of China's accession to the WTO also suggest that it would bring about positive changes in the way the law is applied. Throughout its history, China has implemented a "rule-by-law system." In this system, the law is used by the state to achieve its leadership's goals. The state is not subject to the law. This system differs significantly from the "rule-of-law system" found in democratic countries where the law applies to everybody, even the elite.

China will more effectively fight discriminatory dumping charges since it would be able to use the dispute settlement mechanism that the WTO provides. And they will need it. The U.S. will still consider China Non-Market economy for 15 years after its entry to the WTO. This means that the U.S. Department of Commerce will still be able to disregard Chinese companies prices and use those of a surrogate country at its convenience. WTO membership will place China at the same field level to defend against dumping charges, and why not, more successfully confront foreign companies suspected of dumping in Chinese market.

Final Thoughts

Many factors may have influenced Chinese companies to wait so long to start fighting dumping charges. In order to conduct a thorough investigation, authorities need detailed information about a company's business operations, information that many Chinese enterprises are reluctant to share. Another issue is the cost of litigation. Some small companies accused of dumping cannot afford to pay experienced lawyers to present their side of the story and those that can are not willing to absorb the cost. The result: more than 422 antidumping cases against China involving more than $10 billion worth of products so far.

But China has finally learned the lesson. It is better to sacrifice a little today, than to lose a whole lot later on. Chinese companies have realized that the cost of the negative image created by increasing dumping cases against them goes beyond the cost of reduced exports and higher duties. It has created a history that prompts other nations to discriminate against the country. It has built a fictitious sense of much needed protection measures against Chinese pricing strategies.

Now, not only are Chinese enterprises cooperating with the authorities of the countries where charges are being filed, but they have also instituted an early warning mechanism that help them take corrective actions before a dumping complaint becomes a lawsuit. The Chinese government has also assembled it own antidumping arsenal to protect domestic industries from dumping by foreign companies.

The state may still have a great influence in some industries in China. However, countries filing dumping charges against China should recognize those companies that fall outside the state umbrella. If these companies are able to prove that their prices reflect free market condition, at least to some extent, they should receive the same treatment other companies get in market economies.

The world cannot afford to ignore China's influence in international trade, nor can China afford to remain isolated from its major trading partners. U.S. computer makers, for instance, are missing out on millions of dollars because China is not part of the International Information Technology Agreement (Stokes). This situation was addressed in the bilateral agreement reached by both countries in November

1999. Once a member of the WTO, China will also participate in the Agreement, eliminating all tariffs on computers, telecommunications equipment, semiconductors, and other high-technology products.

The U.S. trade deficit with China when China first applied to join the GATT was $2.8 billion. Since then, the trade deficit has skyrocketed to $57 billion! (Stokes). More access to the Chinese market may reduce this staggering gap.

China needs to be part of the WTO to provide the legal safeguard that foreign investors need to bring their capital back to China. WTO membership will also help promoters of economic reforms since they would be able to use the organizations' rules as a base to bring about favorable changes. Antidumping cases will be settled in a more crystallized manner because the WTO will provide a field where all players can play by the same rules.

China's intention to be more involved in the international arena has been proven by its 20 years of economic reforms and the concessions made to prompt its entry to the WTO. There will definitely be some negative short-term effects. Some industries will be in danger by wider market access not only in China, but also in the U.S. However, we cannot permit short-term loses cloud the bright future that harmonious trading between the two nations will bring.

Main Issues Concerning China, Dumping, and the WTO

- Over 422 cases have been brought up against Chinese companies involving more than $10 billion worth of products since 1979.
- While in the past Chinese companies paid little attention to antidumping investigations, about 60 to 70 percent of those facing dumping charges now respond.
- Among other reasons, China is able to sell below most of its foreign competitors because of lower wages and non-compliance to environmental pollution standards.
- The State Council promulgated China's Antidumping and Anti-Subsidy Regulations on March 23, 1997. From that date and until March 1 2001, seven investigations had been conducted.
- Antidumping regulations are carry out by two government agencies, the Ministry of Foreign Trade and Economic Cooperation (MOFTEC), in charge of confirming or rejecting dumping accusations and the State Economic and Trade Commission (SETC), in charge of determining injury to the industry.
- While in the United States the Department of Commerce first determines if dumping is occurring before the International Trade Commission assesses injury to the industry, in China these two steps take place at the same time. This makes critics question the fairness of antidumping procedures in China.
- According to current antidumping laws in the U.S., when dealing with a non-market economy the price of the subject product in a comparable market economy must be used. This has affected trading with China immensely since the U.S. still considers China a non-market economy.
- In April 1998 the European Council with Council Regulation (EC) No 905/98 gave individual Chinese and Russian companies the opportunity to claim that they operate in market economy conditions on a case-by-case basis.
- In order to increase their chances of winning antidumping investigations, Chinese companies should not ignore the charges and get involved, do everything possible to win the initial investigation, and ally with U.S. importers to get final users involved.
- In July 1986, China sent a delegation to Geneva with a formal request to join the GATT (General Agreement on Tariffs and Trade), the organization that preceded the WTO (World Trade Organization).
- In March 2000 the Office of the U.S. Trade Representative published the full bilateral agreement signed by the United States and China in November 1999, a major step to prompt China's accession to the WTO.

- WTO membership will mean more accessibility to the Chinese market by foreign companies. Chinese producers will face a fiercer competitive environment than the one they are used to, without major interference by the government.
- Once a WTO member, China will more effectively fight discriminatory dumping charges since it would be able to use the dispute settlement mechanism that the organization provides.
- The U.S. trade deficit with China when China first applied to join the GATT was $2.8 billion. Since then, the trade deficit has skyrocketed to $57 billion. More access to the Chinese market may help the U.S. narrow the gap.

References

CBC. “Dumping Accusations to Increase.” CBC News Across Asia. November 5, 2000 June 5, 2001 http://www.cbcnow.com/files/news/5-11_dumping.htm

Chan, Thomas M.H. “Economic implications of China’s accession to the WTO” Draft translation. November 26, 2000 http://www.future-china.org/csipf/activity/19991106/mt9911_03e.htm

China Biz. “Chinese TV-makers fight EU-dumping charges, admit mistakes.” July 16, 2000. November 26, 2000 http://www.chinabiz.org/articles/leg/000716.htm

China Daily Information. “China Fights Anti-dumping Charges with Pollution.” June 5, 1997. November 26, 2000 http://nautilus.org/trade/monitor/61697.txt

China Daily Information. “China TV Makers Move to Fight EU Dumping Charges.” August 13, 2000. November 26, 2000 http://www.chinadaily.com.cn/cover/storydb/2000/08/13/mn-tv.813.html

China Online 2000. “China’s Baosteel wins two dumping suits brought in U.S., Indonesia.” August 16, 2000. November 27, 2000 http://www.chinaonline.com

China Web. “Fight Against Dumping Charges.” Beijing Homeway Info. Media Ltd. September 7, 2000. November 26, 2000 http://www.chinaweb.com/english/cw_html/economy/policy_analysis/BJ1276.html

Elecmotor.com. “US Cable Dumping Charges Defeated.” China United Electric Imports & Export Corp. 2000. June 5, 2001 http://www.elecmotor.com/en/calling/news.asp?mgid=173

Groombridge, Mark A. “China’s Long March to a Market Economy: The Case for Permanent Normal Trade Relations with the People’s Republic of China.” Cato Institute’s Center for Trade Policy Studies, April 24, 2000.

Guojian, Han. “China Learns How to Deal With Dumping Charges.” June 5, 2001 http://dawning.iist.unu.edu/china/bjreview/98aug/bj98-31_9.html

Hong Kong Trade Development Council. “Commission proposal to maintain the current special anti-dumping regime for China.” Issue 14. July 7, 2000. November 15, 2000 http://www.tdctrade.com/alert/eu0014.htm

MOFTEC Business Site. “How does the Chinese side view the US anti-dumping investigation involving Chinese products? How should this problem be resolved from the Chinese perspective?” June 6, 2001 http://www.moftec.gov.cn/moftec/business/html/questions_answers/5.html

Naguib, Sameh. “China takes the plunge.” Al-Ahram Weekly. 2-8 December 1999. Issue No. 458. December 4, 2000 http://www.ahram.org.eg/weekly/1999/458/wto5.htm

Perry, William E. “U. S. Antidumping Cases Against China-Lessons Learned.” Glass BYTES Update. July 10, 2001 http://wwwglassbytes.com/030701dump.htm

Rediff.com. “China denies dumping products in India” December 1, 2000. June 5, 2001 http://www.rediff.com/money/2000/dec/01china.htm

Ross , Lester and Ning, Susan. “Modern Protectionism: China’s Own Antidumping Regulations.” The China Business Review.” May-June 2000, Vol 27 Issue 3, P30. July 5, 2001 http://www.chinabusinessreview.com/0105/ross.html

Stokes, Bruce. “The China WTO Dilemma.” Council on Foreign Relations. December 4, 2000 http://socrates.berkeley.edu

The Times of India Online. “China to set up mechanism to counter anti-dumping charges.” April 16, 2001. June 5, 2001 http://www.timesofindia.com/160401/16inte1.htm

Can We Rely on Control? Effect of Management Control on Export Performance: Moderating Role of Relationship Intensity and Market Dynamism

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Abstract

Although international channel management theorists assert that management control over foreign distributors can lead to superior export performance outcomes, to data, empirical evidence has been lacking. For the few that examined the direct effect of export management controls on performance, they however reported very mixed findings. Existent studies also failed to consider the fact that different export task have different cost functions and subject to different degree of possible control. Furthermore, there is little knowledge concerning the way in which export control mechanisms interact with environmental uncertainty and channel relationship in the context of foreign markets to affect the performance of export ventures. In order to address these voids in the literature, this empirical study tests directly the export performance consequences of management control over different export tasks and their congruence with environmental and channel context. The current results clearly show that export control over foreign pricing and product activities have a significant direct effect on export performance outcomes. The results also support that although controlling foreign promotion (or distribution) activities is ineffective in promoting export performance in exchanges involving a low level of channel relationship (or market dynamism), when relationship intensity (or environmental uncertainty) is high, close control over foreign promotion (or distribution) activities yield an effective means of governance resulting in enhanced export performance. By recognizing these differences, managers should be sensitive to relationship intensity and market dynamism when designing new formal controls or changing existing ones.

Introduction

Control is one of the key problems of channel management that has long been addressed in descriptive textbooks (Czinkota and Ronkainen, 1995; Terpstra and Sarathy, 1994) and professional journals (Ahmed, 1977; Ahmed and Al-Motawa, 1997). Studies on international channel management (Bello and Gilliand, 1997; Celly and Frazier, 1996; Gencturk and Aulakh, 1995; Sachdev, Bello and Pilling, 1994) put forward different control theories that account for the choice of outcome- versus behavior- based control systems in foreign markets. In spite of considerable efforts that were spent to determine the antecedents of outcome- versus behavior- based control systems in the international channel literature, Jap and Ganesan (2000) noted that the expected performance effect of control systems was seldom examined. Given the ultimate objective of channel management is achieving strategic goals or improving economic performance, the consequences of channel control efforts is a research priority that deserves further examination (Celly and Frazier, 1996).

Although several channel control studies (Ahmed, 1997; Ahmed and Al-Motawa, 1997; Bello and Gilliand, 1997; Genturk and Aulakh, 1995) have examined the performance consequences of control systems, the hypothesized relationships take very different directions. In line with the sales-force management literature, some researchers like Bello and Gilliand (1997) hypothesized that export control mechanisms serve to train up foreign representatives to become professionally competent salesmen, nourish the latter's commitment to pre-established sales goals, ensure efficiencies in selection, planning and implementation of selling and related efforts that make direct contributions to export performance. In contrast, other researchers like Gencturk and Aulakh (1995) followed the contingency perspective to propose that export control mechanisms alone have no consequential impact on export performance. Rather, export control mechanisms must match to the type of uncertainties perceived by the business and this congruence is presumed to be the critical determinant of organizational performance.

Empirical results on the control-performance relationship were mixed. Whereas Ahmed (1977) found a very strong, *positive* effect of channel control on export sales performance, Ahmed and Al-Motawa (1997) found a significant but *negative* effect of channel control on overall dealer performance. While Bello and Gilliand (1997) reported that *output control* has a powerful effect on export channel performance, *process control*, however, has no performance effect. One possible explanation for the discrepant empirical results is that little or no research has examined the contextual factors that moderate the effects of control systems on export performance. It was concluded that although the control-performance relationship is generally supported by empirical evidence, the performance effect of control systems need to be considered in a more contingent fashion (Oliver and Anderson, 1994). A key question therefore is: *How and under what conditions are export control mechanisms useful forms of governance?*

The purpose of current research is to theoretically and empirically examine the moderating influence of relationship intensity and market dynamism on the control-performance linkage. By focusing on contextual variables that may moderate the relationship between channel control and export performance, this study addressed the possible explanation for the inconsistent results in previous studies. In addressing the performance consequences of different control mechanisms, this study proposed that consistency of the control mechanisms with external context is deemed necessarily for superior export performance.

Theoretical Foundation Linking Management Controls to Export Performance

Organizational control researchers (Jaworski, 1988; Ouchi, 1979) defined management controls as management-initiated mechanisms that are designed to regulate organizational activities to ensure their conformance to established expectations. This concept can be applicable to international distribution channels where manufacturers can achieve direct control by monitoring the middlemen's activities (Sachdev et al., 1994). Stinchcombe (1985) contends that monitoring allows trading partners to simulate the control function available from vertical integration.

Out of the many control or regulating mechanisms available to export manufacturers, this study focused on monitoring as a form of direct control. Monitoring involves data gathering and supervisory procedures (Noordewier, John, and Nevin, 1990) and takes the forms of sales reports, forecasts, call reports, and other information on foreign marketing activities (Ward, 1984) that are used to oversee trading partners. According to Gencturk and Aulakh (1995), monitoring as a formal control offers a richer and more multidimensional description of formal controls than aggregate measures of organizational forms (i.e. hierarchy versus markets) and reward packages (i.e. salary versus commission). Headquarter managers' exercise of monitoring over foreign distributors can be assessed by the <u>amount of resources</u> (such as time and effort) they commit in monitoring how specific <u>types of activities</u> (such as product, price, promotion, and distribution tasks) are performed in foreign markets.

From transaction cost perspective, Stigler (1951) found that each (marketing mix) function has a unique cost curve: cost curve for some functions such as demand tasks decreases with increasing volume while others such as supply tasks remain flat or increases as volume rises (Bello and Verhage, 1989). According to Mallen (1973), low-volume exporters can cut transaction costs by spinning off export tasks with falling cost curves to foreign distributors since the latter can combine export volume of several firms to gain cost economies. On the other hand, exporters can self-perform export tasks with flat cost curves without affecting transaction costs (Mallen, 1973). For the purpose of analysis, export marketing mix functions in this study can be broadly divided into two categories:

(1) Export tasks with falling cost curves include <u>promotion activities</u> that stimulate foreign demands and <u>distribution activities</u> that fulfill foreign orders.

(2) Export tasks with flat cost curves include <u>pricing activities</u> that set up price policies and <u>product activities</u> that develop product specifications.

Insights from transaction cost analysis can be integrated with channel control literature to provide an improved appreciation of export control mechanisms' influence on export performance.

Arguments suggesting positive effect of price- and product- monitoring on export performance

Price monitoring over foreign distributor, as a formal control, refers to resources expended in monitoring how pricing activities (including provision of price discounts, dealer allowances, credits, list price specifications, and end-user price specifications) are performed in a foreign country (Gencturk and Aulakh, 1995). Ahmed (1977) observed that price monitoring is at work as many manufacturers actually require their foreign dealers to approximate a suggested retail price. It is proposed in this study that foreign price monitoring enhances export performance. The rationale behind concerns foreign price monitoring as <u>a motivation scheme</u> that drives foreign dealers' resources and attention on selling and servicing exporting manufacturers' products. To motivate channel members, Rosenbloom (1995) expects the manufacturer to assume responsibility for making the distributors more effective through programs of careful pricing. By carefully monitoring the magnitude and predictability of costs involved in promoting products in foreign markets (Williamson and Bello, 1992), manufacturers determines whether fixed discount pricing or variable discount pricing be used for foreign dealers. The magnitude of discount may vary with the costs the distributors experiences in promoting the manufacturer's products (Brasch, 1981). In the light of the sales force management literature (Eisenhardt, 1985; John and Weitz, 1989), price monitoring over foreign distributors tends to approximate a "variable compensation plan" that rewards distributors differentially based on the involved cost assignments. According to Kirpalani and MacIntosh (1980), successful exporters tend to be the ones that arrange alternative price "packages" using tag prices, discounts, and credits with the effect of giving the foreign customers an attractive total deal. It is therefore hypothesized here that

H1: The use of foreign price monitoring increases export performance.

Product monitoring over foreign distributor, as a formal control, refers to resources expended in monitoring how product activities (including provision of product-, process- and package- design specifications, selection of brand names, and development of new products) are performed in a foreign country (Gencturk and Aulakh, 1995). Evidence abounds that product monitoring is at work as almost all manufacturers set sales goals for foreign dealers (Ahmed, 1977). In this study, it is expected that foreign product monitoring improve export performance. The rationale behind concerns foreign product monitoring as <u>a source of manufacturer expertise</u> that specifies desirable behavior on the part of foreign distributor in an effort to improve performance. For manufacturers who has a breadth of expertise based on domestic and other foreign markets, they can make recommendations that are proven effective for its brands elsewhere (Bello and Gilliand, 1997), and specify desirable distributor efforts in areas in which its products are sold (Celly and Fraiser, 1996). In contrast, foreign distributors that carry different product lines and competitive brands are unlikely to have specialized knowledge and expertise concerning the focal brands. In particular, a foreign distributor would call for help and advice of the exporting manufacturer when the product handled is an, expensive, complex and durable product that require superior after-sales services (Ahmed and Al-Motawa, 1997), it is thus hypothesized here that

H2: The use of foreign product monitoring increases export performance.

Arguments suggesting negative effects of promotion- and distribution- monitoring on export performance

Although the sales force motivation literature and the product expertise theory suggest positive effect of price- and product- monitoring on export performance, the transaction cost economics argues that formal controls over *export tasks with falling cost curves* (such as promotion and distribution activities) influence export performance in a negative way.

Promotion monitoring over foreign distributor, as a formal control, refers to resources expended in monitoring how promotion activities (including provision of sales force training, conduct of personal selling, design of advertising, non-advertising and sales promotion materials) are performed in a foreign country (Gencturk and Aulakh, 1995). In the light of the transaction cost economics, promoting products in foreign markets incurs costs and takes the forms of *high capital expenditures* on trade fairs, or *variable operating expenses* on promotional product brochures (Williamson and Bello, 1992). In order to cut promotion costs of export exchanges, many exporting manufacturers spin-off promotional activities to foreign distributor (Mallen, 1973). In a similar vein, *distribution monitoring over foreign distributor*, as a formal control, refers to resources expended in monitoring how distribution activities (including warehousing, inventory management, local transportation, order processing, and specification of territorial coverage) are performed in a foreign country (Gencturk and Aulakh, 1995). From the angle of transaction cost economics, a rationale for adopting low-level channel control is its ability to shifting risks to agents and consequentially enhancing channel efficiency (Gatignon and Anderson, 1988).

However, in practice, some exporting manufacturers opt for improved control over foreign promotion and distribution in spite of increased communication costs (Bello and Verhage, 1989). Bucklin (1973) maintains that where communication costs are excessive as in cases where pricing has become secondary to other methods of selling (such as advertising and personal selling, after-sales services and support), a rationale for control can be established. Although exporters' close monitoring over foreign promotion and distribution activities tends to bring along inefficient results, success for foreign entrant hinges on channel control. Empirically, a negative relationship between channel control and global performance of dealer (Ahmed and Al-Motawa, 1997) was observed, it is therefore hypothesized in this study that
H3: The use of foreign promotion monitoring *decreases* export performance.
H4: The use of foreign distribution monitoring *decreases* export performance.

Moderating Effect of Relationship Intensity and Market Dynamism on Control-Performance Relationship

This study used relationship intensity and market dynamism as contingency variables and developed hypotheses about each variable's role in moderating the effects of export control mechanisms on export performance. Given that exchange partners tend to provide different levels of tangible and intangible inputs to different phases of relationship development, according to Jap and Ganesan (2000), the effectiveness of control mechanisms is likely to be moderated by phases of relationship development namely: exploration, buildup, maturity, and decline. It is proposed that exporting manufacturers whose relationship dealings with foreign distributors are very intense may implement control/monitoring mechanisms in better ways to enhance overall export performance than those exporters that are denied of such relationship dealings. On the other hand, given that export market environments are not the same, factors related to environmental uncertainty surrounding a distribution arrangement will influence control mechanisms (Sachdev et al., 1994). According to Gencturk and Aulakh (1995), the performance effect of control mechanisms is likely to be moderated by the perceived uncertainty of the political and economic environment of a host country. This study expected that exporting manufacturers who perceive great market uncertainty would assume greater control over foreign distributors to enhance overall performance than those exporters that perceived little market uncertainty.

Changes in Relationship Intensity refers to the magnitude of ongoing interactions between venture partners (Li and Ogunmokun, 2001; Lin and Germain, 1999). In the exporting context of manufacturer-overseas distributor relationships, an intense relationship takes the shapes of frequent two-way communication (Anderson and Narus, 1984; Anderson and Weitz, 1987), open information exchanges (Aulakh, Kotabe and Sahay, 1996), close personal relationships (Wilson and Mummalaneni, 1988; Mummalaneni and Wilson, 1988), and formalized responsibilities (Rosson and Ford, 1982). According to the theory of relationship marketing, intense interaction between venture partners is an important predictor of commitment in a relationship that in turn improve venture performance (Morgan and Hunt, 1994; Sarkar, Cavusgil, and Evirgen, 1997).

This study proposed that the influence of export control over foreign marketing activities on export performance is subject to intensity of channel relationship (i.e. intensity of communication, personal involvement and closeness). When an exporter perceives greatly increased communication and information exchanges with the overseas distributor, he is more likely to obtain confidential and critical information from the overseas distributor that enables the exporter to cope with the vulnerability associated with product, pricing, and inventory decisions (Jap and Ganesan, 2000). In other words, intense two-way communication enhances the exporter to closely monitor foreign product and pricing activities (i.e. *export tasks with flat cost curves*) that eventually contributes to good performance. Besides, when an exporter perceives greatly increased involvement on both personal- and firm- levels with the overseas distributor, he is more likely to cope with the uncertainties regarding needs of training and design of sales support. In short, intense involvement enhances the exporter to closely monitor foreign promotion and distribution activities (i.e. *export tasks with falling cost curves*) that eventually contributes to good performance. On the other hand, when an exporter perceives greatly decreased communication with the overseas distributor, possessing little information over changes in product/market demands and price fluctuations, there are greater chances for disagreement between the exporter and distributor over the ways in which products are designed and prices are specified. Besides, when an exporter perceives greatly decreased personal- and firm- level involvement with the overseas distributor, getting little inputs from the distributor in setting goals and deciding means, the overseas distributor may not feel committed to promotion- or distribution – related goals being set, may remain skeptical to the policies, systems and procedures pertaining to the promotion and distribution activities. Hence, it is hypothesized that:

H5: Monitoring controls over foreign pricing, product, promotion, and distribution activities are more likely to increase export performance when intensity of channel relationship is high than when it is low.

Market Dynamism refers to the degree to which external factors remain the same over time or are in a continual process of change (Achrol and Stern, 1988). Market dynamism is the result of factors such as rapidly changing technology, frequent price changes, or variability in product availability and support services. External uncertainty caused by market dynamism makes it more difficult to predict future contingencies (Aldrich, 1979; Child, 1972), correctly plan for unforeseeable situations, correctly assess supplier performance (Alchian and Demsetz, 1972; Anderson and Weitz, 1986), and leads to control problems (Sachdev et al., 1994).

This study proposed that the influence of export control over foreign marketing activities on export performance is subject to level of market dynamism. When an exporter encounters greatly increased external uncertainty in customer demands and competitive reactions, he would find it more difficult to pre-specify desired outcomes (Sachdev, Bello, and Pilling, 1994). Furthermore, in markets with higher dynamism, tasks are frequently ambiguous (Cannon, Achrol, and Gundlach, 2000). Since tasks are ambiguous, neither suppliers' product/service standards nor objective performance assessments are developed, regular intervention and interaction are needed to solve inevitable and unforeseen problems (Lawrence and Lorsch, 1967). Empirically, it is reported that as the level of environmental uncertainty increases, export control activities increase (Sachdev et al., 1994; Gencturk and Aulakh, 1995; Celly and Frazier, 1996). On the other hand, when an exporter faces greatly decreased external uncertainty, and subjects to stable and less ambiguous circumstances, he would more readily visualize potential contingencies and devise appropriate safeguards. Expectations and requirements can be more clearly specified, lessening the need for frequent monitoring and regular intervention. Instead, a governance structure relying on specific details and terms of a formal contract is likely to provide adequate referents and safeguards for high performance (Cannon, Achrol, and Gundlach, 2000). Cannon et al. (2000) found that when external uncertainty is low, elaborate contracts lead to enhanced supplier performance. It is therefore hypothesized that:

H6: Monitoring controls over foreign pricing, product, promotion, and distribution activities are more likely to increase export performance when level of market dynamism is high than when it is low.

Research Methodology

The Sample

The present study defined its population as manufacturing firms that have production facilities set up in China, and that sell its outputs to overseas countries. This study used the Directory of Chinese Export Commodities Fair Exhibitors as its sampling frame as the directory is a formal reference book authorized by the Ministry of Foreign Trade and Economic Cooperation of the People's Republic of China. From this directory, a systematic random sample of 300 firms was drawn from Beijing, Shanghai, and Guangdong. Each firm was contacted by mail to solicit their cooperation in participating in this study. A copy of the survey instrument was provided via personal delivery to each of the 280 exporting firms that indicated their willingness to participate in the study. Out of the 280 exporting firms that agreed to complete the questionnaire, a final total of 111 exporting firms fully completed the questionnaires resulting in a response rate of 39.6 per cent. The response rate is comparable to the rates reported in other studies involving exporting firms (e.g., Axinn, 1988; Moini 1995; Kaynak and Kuan, 1993).

In order to determine whether the characteristics of the respondents differ from those of "non-respondents", a sample of 50 non-respondents was contacted by phone to obtain the structural characteristics of their firms. The analysis of data showed that the characteristics of non-respondents concerning size, experience, ownership, and alternative middlemen used did not differ significantly from those of respondents. Tables 1A and 1B present the general profile of respondents in the current study.

Table 1A: GENERAL PROFILE OF THE RESPONDENT EXPORTERS

Number of Full-time Employees	**N**	**%**
Less than 100	15	13.5
100 to 400	25	22.5
401 to 999	29	26.2
1,000 to 3,000	42	37.8
TOTAL	111	100.0
Annual Sales Turnover		
Under US$ 1 million	7	6.4
US$ 1 to 5 million	26	23.4
US$ 5 to 10 million	26	23.4
US$ 10 to 15 million	13	11.7
Over US$ 15 million	39	35.1
TOTAL	111	100.0
Years of International Experience		
Up to 5 years	27	33.3
6 to 10 years	32	28.8
11 to 15 years	22	19.8
16 to 20 years	10	9.0
Over 20 years	10	9.0
TOTAL	111	100.0
Type of Middlemen		
Domestic-based buyers	29	26.1
Domestic-based buying merchants	23	20.7
Domestic-based buying agents	17	15.3
Firms' own export department	9	8.1
Foreign-based agents	16	14.4
Foreign-based merchants	16	14.4
Firms' foreign sales subsidiaries	1	0.9
TOTAL	111	100.0
Kind of Ownership Structure		
Private enterprises under domestic funding	30	27
Private enterprises with foreign funding	22	20
State-owned enterprises	59	53
TOTAL	111	100

Table 1B: TYPE OF FOREIGN MARKETS SERVED

Type of Foreign Markets	**N ***	**% ****
Hong Kong	54	48.6
United States	52	46.8
Japan	47	42.3
Western Europe	47	42.3
Other Asia Pacific countries	40	36.0

* This will not add to 111 because more than one answer could be checked.

** This will not add up to 100 per cent because more than one answer could be checked.

In China, “small” and “medium” sized businesses are defined differently and have up to 450 and 3000 employees compared to 99 and 499 (OECD, 1998). The present sample comprised mainly of medium firms in which 64 per cent of the respondent firms employed over 400 but less than 3000 full-time employees. The majority (70.2 per cent) of firms had an annual sales record of over US$ 5 million. Approximately two-third (66.7 per cent) of the firms had over 5 years of international experience. In addition, nearly two-third (62.2 per cent) of the firms used home-country middlemen. Furthermore, nearly 60 per cent of the firms were exporting to more than three export markets. Table 1B revealed that while nearly half of these exporters were exporting to Hong Kong (48.6 per cent) and the United States (46.8 per cent), about 40 per cent were exporting to Japan and Western Europe, and slightly more than one third (36 per cent) of the firms were exporting to other Asia-Pacific countries. Lastly, about a half (53 per cent) of firms used in the present sample were state-owned enterprises, while the other half (47 per cent) of the firms used in this study were non-state-owned business firms. In this study, the reason for including different types of enterprises in China is that firms that are larger (Chetty and Hamilton, 1993; Reid, 1982), have more international experience (Da Rocha et al., 1990; Norvell et al., 1995), or used more direct distribution channel (Beamish et al., 1999; Chan, 1992) tended to have better performance in export markets. Moreover, it was found that non-state-owned enterprises achieved a higher level of export intensity than their state-owned counterparts in China (Perkins, 1997). As different institutions tend to have different export performance in China, this study covered different types of enterprises to provide a representative sample at an institutional level.

Instrument Development

The survey instrument used for this study was developed through a comprehensive review of the export performance literatures. It takes the form of a structured questionnaire. Twenty exporting firms in China were used for pre-testing the questionnaire through personal interviews. This second step ensured that ambiguity and confusion of wording was minimized.

Dependent Variables

Export performance is defined as the outcomes of a firm’s activities in export markets (Sholam, 1996). Review studies (Katsikeas, Leonidou, and Morgan, 2000; Matthyssens and Pauwels, 1996) on the measurement of export performance show that previous researches measure the construct in terms of economic and non-economic outcomes. This study used non-economic measures of export performance, since operational success of the export channel is assumed to be reflected by the accomplishment of basic strategic tasks (Bello and Williamson, 1985; Bello and Gilliand, 1997; Venkatraman and Ramanujam, 1986). Multiple measures of export performance were used, as different measures of export performance capture different facets of the strategic and operational phenomena that underlie it (Thach and Axinn, 1994; Walters and Samiee, 1990). Managers were asked to rate the export venture’s level of achievement over (a) market-related development in the form of gaining product/market diversification, and (b) product-related development in the form of developing new products, upgrading existing products, improving time-to-market cycle, and gaining accessing to knowledge, technology and tacit know-how of another firm on a scale of five (with 1 = achieved a small extent, 5 = achieved completely). A summated export performance index of 25 maximum points was created incorporating managerial judgment of the export venture’s performance.

Moderator Variables

Change in relationship intensity between exporter and distributor is assessed by requiring respondents to rate the extent to which the relationship aspects (consisting of firm closeness, personal involvement, goal commonness, product range, communication frequency, and formalized regulations) have changed over time on a 5 point scale (with 1 = decreased a lot over time, and 5 = increased a lot over time). A composite index of relationship intensity was summated with a maximum of 30 points indicating greatly increased relationship intensity.

Dynamism in the host market is assessed by requiring respondents to rate the level of change in the overseas market (with regard to diversity in production methods, diversity in marketing tactics, and rate of product/service innovations) during the last three years on a 5 point scale (with 1 = greatly decreased, and 5 =

greatly increased). A composite index of market dynamism was summated with a maximum of 15 points indicated greatly increased market dynamism.

Independent variables

Export control is assessed here by requiring the respondents to rate home office managers' amount of time and effort spent on monitoring twenty foreign pricing, product, promotion, and distribution activities on a 5 point scale (with 1 = very little time and effort, and 5 = a lot of time and effort).

Statistical Analysis

The statistical analysis was divided into three stages. First, exploratory factor analysis was performed to identify the underlying dimensions of export control/monitoring mechanisms. Second, multiple regression analyses were carried out to test the hypotheses (H1, H2, H3, and H4) concerning the association between the four independent variables of export control/monitoring mechanisms and the dependent measure of export performance. Next, the hypotheses concerning the moderating effect (H5, and H6) were tested by hierarchical regression analyses (HMR). The basic principle underlying this analysis is the entry of predictor variables in some pre-specified hierarchy where R^2 is determined at this stage. The significance of the hypothesized relationships was tested based on an F-test for the increase in R^2 at each stage as described by Cohen and Cohen (1983).

Factor Analysis Results

In order to reduce the data pertaining to the independent variables, factor analysis was carried out. A four-factor solution that explained for 69.3 per cent of the total variance was adopted. Factor 1 captured six items reflecting export price control that accounted for 33.5 percent of the total variance. Price controls take place over the provision of credits, list prices, end-user prices, discounts and allowances as well as the related order-processing activities. Factor 2 captured five items pertaining to export promotion control that explained for 19.7 percent of the total variance. Promotion controls are at work over the design of advertising and promotional materials on the one hand and the provision of training, personal selling and other non-advertising promotion activities on the other hand. Factor three is comprised of three items relating to changes of export distribution control that explained 8.7 percent of the variance. Distribution controls were implemented over local transportation, warehousing, and inventory management. Factor four is consisted of four items pertaining to export product control that accounted for 7.4 percent of the variance. Product controls happened in the areas of product-, packaging-, and process- designs, as well as development of new products. These items were consistent with definitions of control within export channel used by Gencturk and Aulakh (1995), Sachdev et al., (1994) and Noordewier, John, and Nevin (1990).

Next, separate reliability analysis was performed for each of the factor-based scales. The coefficient alpha of all the factor-based scales used in the subsequent analyses were above 0.8 indicating satisfactory internal consistency (Hair, Bush, and Ortinau, 2000). Table 2 provides the factor analysis results and the coefficient alpha for the independent, dependent and modertor variables used in this study. Furthermore, Table 3 shows the zero-order correlations among the constructs and provides a general picture of their interrelationships. The confidence interval around the correlation estimate between any two constructs never includes 1.0 that indicates that there is discriminant validity in the factor-based scales.

Table 2: FACTOR ANALYSIS AND RELIABILITY TEST OF INDEPENDENT, DEPENDENT & MODERATOR VARIABLES

Factor-based measurement scales for Independent Variables	loadings
Factor 1: Export price control	
Home office managers have spent a lot of time and effort monitoring foreign credit provisions.	.85
Home office managers have spent a lot of time and effort monitoring foreign list-price specifications.	.81
Home office managers have spent a lot of time and effort monitoring foreign price discounts.	.78
Home office managers have spent a lot of time and effort monitoring foreign end-user-prices.	.75

Home office managers have spent a lot of time and effort monitoring foreign dealer allowances.	.66
Home office managers have spent a lot of time and effort monitoring foreign order processing.	.61
Eigenvalue: 6.03, Percentage of variance explained: 33.50%, Alpha: .87	
Factor 2: Export promotion control	
Home office managers have spent a lot of time and effort monitoring foreign advertising.	.77
Home office managers have spent a lot of time and effort monitoring foreign promotion materials.	.74
Home office managers have spent a lot of time and effort monitoring foreign personal selling.	.74
Home office managers have spent a lot of time and effort monitoring foreign non-advertising promotion.	.72
Home office managers have spent a lot of time and effort monitoring foreign sales force training.	.70
Eigenvalue: 3.55, Percentage of variance explained: 19.71%, Alpha: .85	
Factor 3: Export distribution control	
Home office managers have spent a lot of time and effort monitoring local transportation.	.81
Home office managers have spent a lot of time and effort monitoring local warehousing.	.77
Home office managers have spent a lot of time and effort monitoring local inventory management.	.77
Eigenvalue: 1.56, Percentage of variance explained: 8.68%, Alpha: .85	
Factor 4: Export product control	
Home office managers have spent a lot of time and effort monitoring foreign product design.	.82
Home office managers have spent a lot of time and effort monitoring foreign new product development.	.77
Home office managers have spent a lot of time and effort monitoring foreign package design.	.70
Home office managers have spent a lot of time and effort monitoring foreign process design.	.68
Eigenvalue: 1.34, Percentage of variance explained: 7.42%, Alpha: .84	
Mean scores for dependent variables: export performance	*Means*
The export venture achieved the strategic goal of product/market diversification.	3.14
The export venture achieved the strategic goal of new product development.	3.15
The export venture achieved the strategic goal of new product upgrades.	3.15
The export venture achieved the strategic goal of improving time-to-market lead-time.	3.08
The export venture achieved the strategic goal of gaining access to knowledge of another firm.	2.72
Mean value of summated composite score = 15.24, Alpha: .81	
Mean scores for moderator variables: relationship intensity	*Means*
The exporter has greatly increased the firm's closeness with the distributor.	3.57
The exporter has greatly increased his personal involvement with people working for the distributor.	3.53
The exporter has greatly increased the firm's range of product and service sold to the distributor.	3.50
The exporter has greatly increased the firm's commonness of goal with the distributor.	3.39
The exporter has greatly increased the firm's frequency of communication with the distributor.	3.41
The exporter has greatly increased the firm's formalized contractual regulation with the distributor.	3.26
Mean value of summated composite score = 20.67, Alpha: .83	
Mean scores for moderator variables: market dynamism	*Means*
The exporter perceived greatly increased diversity in production methods needed for the export market.	3.39
The exporter perceived greatly increased diversity in marketing tactics needed for the export market.	3.58
The exporter perceived greatly increased rate of innovation of product and service for the export market.	3.32
Mean value of summated composite score =10.29, Alpha: .78	

Table 3: CONSTRUCT CORRELATION MATRIX

Construct		**X1**	**X2**	**X3**	**X4**	**X5**	**X6**	**X7**
Export Pricing Control	X1	1.0						
Export Product Control	X2	.00						
Export Promotion Control	X3	.00	.00					
Export Distribution Control	X4	.00	.00	.00				
Changes in Relational Intensity	X5	.24 *	.10	.16	.07			

Market Dynamism	X6	.23 *	.08	.15	07	.26 **		
Strategic Export Performance	X7	.24 *	.18	.10	.10	.14	.04	1.0

* correlation is significant at 0.05 level
** correlation is significant at 0.01 level

Multiple Regression Analyses Results

To further examine the association between export control mechanisms and performance outcomes of export ventures, a multiple regression analysis was run for the export performance construct. Table 4 showed that the main effect of export control mechanisms on strategic export performance. The independent constructs together accounted for 6.4 per cent of the variance of strategic export performance, with individual *beta* coefficients support H1 (*B* = .24) at a significance of 0.05 level, and H2 (*B* = .18) at a marginally significant level of 0.10. As hypothesized, these findings indicated that monitoring over pricing and product activities in foreign markets leads to superior strategic performance. No significant effect, however, was observed for the impact of monitoring over promotion and distribution activities on strategic export performance. Hypotheses H3, and H4 were thus not supported. Nevertheless, even though the effect of monitoring over foreign distribution activities on strategic performance was not significant, the effect was in the hypothesized negative direction. (*B* = -.10), thus reinforcing the transaction cost analysts' suggestion of spinning off distribution functions to overseas distributors.

Table 4: REGRESSION ANALYSIS OF EXPORT CONTROL, RELATIONSHIP INTENSITY, AND MARKET DYNAMISM ON EXPORT PERFORMANCE

Independent Variables		**Strategic Export Performance**	**Strategic Export Performance**
Independent variables			
Export Pricing Control	X1	.24 *	.37 ***
Export Product Control	X2	.18 #	.15 #
Export Promotion Control	X3	.10	.03
Export Distribution Control	X4	-.10	-.09
Moderator variables			
Relationship Intensity	X5	.06	.16 #
Market Dynamism	X6	-.07	-.22 *
Interaction variables			
Pricing control times relationship intensity	X1*X5		-.05
Product control times relationship intensity	X2*X5		.03
Promotion control times relationship intensity	X3*X5		.43 ***
Distribution control times relationship intensity	X4*X5		-.19
Pricing control times market dynamism	X1*X6		.02
Product control times market dynamism	X2*X6		-.10
Promotion control times market dynamism	X3*X6		-.03
Distribution control times market dynamism	X4*X6		.26 *
R square		11.5	32.9
Adjusted R square		6.4	23.1

F-change (sig.)	.045	.001
N	111	111

\# significant at 0.10 level
* significant at 0.05 level
** significant at 0.01 level
*** significant at 0.001 level

Hierarchical Regression Analyses Results

When the four export control variables were entered into the regression equation at the first step, they accounted for 6.4 per cent of the total variance. There is a significant increase in explained variance in the strategic export performance (adjusted R square change = 23.1; p = .001) when interaction variables (i.e. export control mechanisms multiplied by relationship intensity on the one hand and export control mechanisms multiplied by market dynamism on the other hand) were entered into the equation at the last step. Table 4 showed the HMR results. With regard to the moderating influence of relationship intensity, the effect of export promotion control (B = .43, p < .001) on strategic export performance outcomes is stronger when there is a greatly increased rather than greatly decreased relationship intensity with the distributor, thus supporting H5. With regard to the moderating influence of market dynamism, the effect of export distribution control (B = .26, p < .05) on strategic export performance outcomes is stronger when there is a greatly increased rather than greatly decreased dynamism in the host market, thus supporting H6. Yet, the other six interaction effect of export control with market dynamism or with relationship intensity were not significant. Collectively, the results provide only partial support for the contingency hypotheses proposed in this study.

Conclusion

Although international channel management theorists assert that management control over foreign distributors can lead to superior export performance outcomes, to data, empirical evidence has been lacking. For the few studies that examined the direct effect of export management controls on performance, they however reported very mixed findings. Furthermore, existent studies failed to consider the fact that different export task have different cost functions and subject to different degree of possible control. To further complicate the link between export control mechanisms and export performance, there is little knowledge concerning the way in which export control mechanisms interact with environmental uncertainty and channel relationship in the context of foreign markets to affect the performance of export ventures. In order to address these voids in the literature, this empirical study tests directly the export performance consequences of management control over different export tasks and their congruence with environmental and channel context. The current results clearly show that export control over foreign pricing and product activities have a significant direct effect on export performance outcomes. The results also support that although controlling foreign promotion (or distribution) activities is ineffective in promoting export performance in exchanges involving a low level of channel relationship (or market dynamism), when relationship intensity (or environmental uncertainty) is high, close control over foreign promotion (or distribution) activities yield an effective means of governance resulting in enhanced export performance. By recognizing these differences, managers should be sensitive to relationship intensity and market dynamism when designing new formal controls or changing existing ones.

Regarding the main effect, an unexpected departure from the initial theoretical position concerns the negative association between export performance and control over foreign promotion and distribution activities. The results revealed that no relationship exits between *export control over promotion/distribution activities* and export performance. Two explanations may partially account for this unexpected result. First, on the part of the exporters, inadequate familiarity with foreign market (Celly and Fraizer, 1996) and inadequate knowledge about the foreign transformation process (Bello and Gilliand, 1997) may prevent optimal manufacturer specification of marketing and selling behavior for overseas distributors. This implies that monitoring overseas distributors' promotion and distribution behavior will not contribute directly to export performance outcomes. Second, on the part of the overseas distributors, experienced distributors have a good exposure to suppliers' product lines and target markets and a good grasp of the cause-effect relationship between their selling efforts and sales performance. Experienced distributor may resent a supplier's attention to their behavioral activities, viewing it as intrusive (Bucklin, 1973), and are expected to be less receptive to behavior-based control efforts (Celly and

Fraizer, 1996). In keeping with Bello and Gilliand's (1997) findings that behavior-based process control has no performance effect, this study found that control over promotion/distribution activities has no impact on export performance outcomes.

With respect to the moderator effect, contrary to the prior expectations but important for its implications is that lack of strong support for the hypothesized contingency relationships between *export control over pricing/product activities* and different levels of market dynamism and channel relationship in determining a unit's export performance. A lack of statistically significant results for the fit of channel relationship and market dynamism with control over pricing/product activities may be attributed to two reasons. First, persuading home office managers to spend time and effort monitoring foreign pricing and product activities is, in line with Jap and Ganesan's (2000) conception, control at work through persuading the supplier to make transaction specific investments (TSIs) as hostages or pledges. It is shown that suppliers use TSIs to enhance retailers' perceptions of supplier commitment in the buildup, maturity, and decline phases of relationship development cycle (Jap and Ganesan, 2000). Given supplier commitment is a powerful determinant of supplier performance, this implies that controlling in the forms of making supplier TSIs has only an independent effect on supplier performance, but neither an interactive association with phases of relationship development, nor an interactive association with relationship intensity.

Second, monitoring foreign pricing and product activities is, in keeping with Sachdev et al.'s (1994) conception of control at work through assessing, evaluating and enforcing performance of export activities. It is reported that environmental dynamism has no significant effect on extent of export control mechanisms (Sachdev et al., 1994). Under a dynamic environment, difficulty in predicting changes in a foreign market may inhibit the manufacturer from pursuing significant control over an export relationship. Dynamism may make manufacturers ambivalent about exporting, and prefer instead operating a foreign sales office in response to market dynamism (Anderson and Gatignon, 1986). It seems that that market dynamism may only predict the type of entry mode environment, but once the exporting mode is chosen, market dynamism has little importance for explaining the extent of monitoring over foreign pricing and product activities.

Managerial Implications

The data demonstrate that export control monitoring over foreign marketing activities is associated with export performance. The results, however, suggest the export performance consequences of control are attributed to monitoring over foreign pricing and product activities (i.e. export tasks with flat cost curves) per se, whereas monitoring over foreign promotion and distribution (export tasks with falling cost curves) has no performance effect. Although monitoring over promotion and distribution activities is ineffective in enhancing export performance in exchanges involving low levels of channel relationship and market dynamism, however, when channel relationship and market dynamism is strong, close monitoring over promotion and distribution activities turns out to be an effective governance bringing about enhanced export performance.

From a practical viewpoint, monitoring pricing and product activities is positively associated with export performance. A key implication of this study is that export managers should motivate overseas distributors by devising programs of careful pricing, reflecting varied magnitude of promotion costs and hence varied discount and alternative price packages. Another major insight here is that export managers should equipped overseas distributors with specialized product knowledge and brand marketing expertise by specifying product, package and process designs and standards and recommending desirable after-sales support from distributor efforts. In its own way, pricing control and product control contributes to superior export performance.

The current findings underscore the important contextual effect of relationship intensity in determining the impact of control monitoring over foreign promotion activities on a unit's export performance. Export managers are advised to tailor inter-organizational strategies according to the intensity of channel relationship. Close monitoring over foreign promotion activities is recommendable only when an intense relationship with overseas distributor has already been fostered.

Furthermore, the present results spell out the powerful contextual effect of market dynamism in determining the impact of monitoring over foreign distribution activities on a unit's export performance. Although close monitoring over foreign distribution activities is an inefficient governance when the host market is stable, when the market is dynamic, close monitoring over foreign distribution activities should be implemented to enhance export performance regardless of the cost of developing and enforcing distribution activity related controls.

Research Limitations and Suggestions for Future Research

While the results of this study are encouraging, they nevertheless should be evaluated with full awareness of its limitations. First, the framework was examined by using data from exporting manufacturers based in the People's Republic of China (PRC) thereby limiting the generalizability of the findings to non-Chinese firms. Additional research needs to extend the study to other samples and business contexts to reinforce our confidence in the generalizability of the findings of this study. Second, the heavy reliance on primary sources of data collection in this study may be prone to common method variance bias, and the use of internally oriented performance measure in this self-report study may also exhibit reliability problem in its performance measures. Performance measurement research, according to Katsikeas et al. (2000), would benefit from future studies making comparison between primary and secondary sources, and between subjective and objective modes of assessment to enhance confidence in reliability and validity of performance measures. Third, the export control mechanisms variables chosen for analysis were incomplete as it does not analyze the effect of other control governance constructs (such as information exchange, output control, process control, relationship/cooperative norms, transaction specific investments, legal/contractual bonds, etc.) on export performance. Additional studies are required to investigate the effect of a full set of control parameters on export performance. Fourth, although this study examined market dynamism as a moderator, different dimensions of uncertainty may influence the use of export control in varied ways (Sachdev et al., 1994). Additional dimensions of uncertainty should be considered in future studies such as technological versus competitive uncertainty (Klein et al., 1990), and external market dynamism uncertainty versus internal task ambiguity uncertainty (Cannon et al., 2000). In addition, even though relationship intensity between exporter and overseas distributor was examined as a source of moderating influence in this study, other variables may define the channel context in which the effect of export control takes place. Future research should consider investigating specific contexts whereby control governances are greatly vulnerable to opportunism such as in cases where relationship development was at the initial exploration phase (Jap and Ganesan, 2000) or in cases where substantial relationship specific adaptations were made (Cannon et al., 2000). In short, although the study provides theoretical and practical insight into the concept and performance consequences of export control monitoring mechanisms, future research is needed to replicate and extend the proposed model to reinforce our confidence in the generalizability of the findings of this study.

References

[1] Achrol, R. S., and L. W. Stern (1988), "Environmental Determinants of Decision-Making Uncertainty in Marketing Channels", *Journal of Marketing Research*, Vol. 25 (February), pp. 36 - 50.

[2] Alchian, A., and H. Demsetz (1972), "Production, Information Costs, and Economic Organization", *American Economic Review*, 62 (December), pp. 777-795.

[3] Aldrich, H. E. (1979), *Organizations and Environments*,. Englewood Cliff, NJ: Prentice Hall.

[4] Ahmed, A. A. (1977), "Channel Control in International Markets", *European Journal of Marketing*, 11 (4), pp. 327-336.

[5] ___________and A. Al-Motawa (1997), "Performance and Related Channel Phenomena in International Markets: The Saudi Car Market", *Journal of International Marketing and Marketing Research*, 22 (1), pp. 3-18.

[6] Anderson E. and B. A. Weitz (1986), "Make-Or-Buy Decisions: Vertical Integration and Marketing Productivity", *Sloan Management Review*, Spring, pp. 3-19.

[7] ___________and H. Gatignon (1986), "Modes of Foreign Entry: A transaction cost analysis and propositions", *Journal of International Business Studies*, 17 (3), pp. 1-26.

[8] Anderson, J. C. and J. A. Narus (1984), "A model of the distributor's perspective of distributor-manufacturer working relationships", *Journal of Marketing*, 48, pp. 62-74.

[9] ____________and B. Weitz (1987), "Determinant of continuity in conventional industrial channel dyads", unpublished working paper, The Wharton School, The University of Pennsylvania.

[10] Aulakh, P. S., M. Kotabe, and A. Sahay (1996), "Trust and Performance in Cross-Border Marketing partnerships: A Behavioral Approach", *Journal of International Business Studies*, (Special Issue), pp. 1005-1032.

[11] Axinn, C. N. (1988), "Export Performance: Do Managerial Perceptions Make a Difference?", *International Marketing Review*, 5 (2), pp. 61 - 71.

[12] Beamish, P. W., L. Karavis, A. Goerzen, and C. Lane (1999), "The relationship Between Organizational Structure and Export Performance", *Management International Review*, 39, pp. 37-54.

[13] Bello, D. C., and N. C. Williamson (1985), "The American Export Trading Company: Designing a New International Marketing Institution", *Journal of Marketing*, 49 (Fall), pp. 60-69.

[14] ____________, and B. J. Verhage (1989), "Performing Export Tasks in Industrial Channels of Distribution", *European Journal of Marketing*, 23 (2), pp. 68-78.

[15] _____________, and David I. Gilliland (1997), "The Effect of Output Controls, Process Controls, and Flexibility on Export Channel Performance", *Journal of Marketing*, Vol. 61 (January), pp. 22 - 38.

[16] Brasch, J. (1981), "Using Export Specialists to Develop Overseas Sales", *Harvard Business Review*, (May-June), pp. 6-8.

[17] Bucklin, L. (1973), "A Theory of Channel Control", *Journal of Marketing*, 37 (January), pp. 39-47.

[18] Cannon, J. P., R. S. Achrol, and G. T. Gundlach (2000), "Contracts, Norms, and Plural Form Governance", *Journal of the Academy of Marketing Science*, 28 (2), pp. 180-194.

[19] Celly, K. S. and G. L. Frazier (1996), "Outcome-Based and Behavior-Based Coordination Efforts in Channel Relationships", *Journal of Marketing Research*, 33 (May), pp. 200-210.

[20] Chan, T. S. (1992), "Emerging Trends in Export Channel Strategy: An Investigation of Hong Kong and Singaporean Firms", *International Marketing Review*, 9 (Summer), pp. 18 - 26.

[21] Chetty, S. K., and R. T. Hamilton (1993), "Firm-level Determinants of Export Performance: A Meta-analysis", *International Marketing Review*, Vol. 10 (3), pp. 26 - 34.

[22] Child, J. (1972), "Organization Structure, Environment and Performance: The Role of Strategic Choice", *Sociology*, 6 (January), pp. 2-22.

[23] Cohen, J., and P. Cohen (1983), *Applied multiple regression/correlation analysis for behavioral science*, Hillsdale, N. J.: Lawrence Earlbaum Associates.

[24] Craven, D. W., T. H. Ingram, R. W. LaForge, and C. E. Young (1993), "Behavior-Based and Outcome-Based Sales Force Control Systems", *Journal of Marketing*, 57 (October), pp. 47-59.

[25] Czinkota, Michael R., and Ilkka. A. Ronkainan (1995), *International* Marketing, 4th edition, The Dryden Press, U.S.A.

[26] Da Rocha, A., C.H. Christensen and C. E. Cunha (1990), "Aggressive and Passive Exporters: A Study in Brazilian Furniture Industry", *International Marketing Review*, 7 (5), pp. 6 - 15.

[27] Eisenhardt, K. M . (1985), "Control: Organizational and Economic Approaches", *Management Science*, 31, pp. 134 - 149.

[28] Gatignon, H. and E. Anderson (1988), "The multinational corporation's degree of control over foreign subsidiaries: An empirical test of a transaction cost explanation", *Journal of Law, Economics and Organization*, 4 (Fall), pp. 305-336.

[29] Gencturk, E., and P. S. Aulakh (1995), "The Use of Process and Output Controls in Foreign Markets", *Journal of International Business Studies*, pp.755-786.

[30] Hair, J. F., Bush, Robert, and Ortinau, J., (2000), *Marketing Research: A Practical Approach for the New Millennium*, McGraw-Hill Higher Education, international edition, USA.

[31] Hunt, S. D., N. M. Ray, and V. R. Wood (1985), "Behavioral dimensions of channels of distribution: Review of synthesis", *Journal of the Academy of Marketing Science*, 13 (3), pp. 1-24.

[32] Jap, S. D. and S. Ganesan (2000), "Control Mechanisms and the Relationship Life Cycle: Implications for Safeguarding Specific Investments and Developing Commitment", *Journal of Marketing Research*, 37 (May), pp. 227-245.

[33] Jaworski, B. J. (1988), "Towards a Theory of Marketing Control: Environmental Context, Control Types, and Consequences", *Journal of Marketing*, vol. 52 (July), pp. 23 - 39.

[34] John, G., and B. Weitz (1989), "Sales Compensation: An Empirical Investigation of Factors Related to Use of Salary Versus Incentive Compensation", *Journal of Marketing Research*, 26 (February), pp. 1-14.

[35] Katsikeas, C. S., Leonidou, L. C., and Morgan, N. A., (2000), “Firm-Level Export Performance Assessment: Review, Evaluation, and Development”, *Journal of the Academy of Marketing Science*, Vol. 28, No. 4, pp. 493 – 511.

[36] Kaynak, E., and W. K. Kuan (1993), “Environment, Strategy, Structure, and Performance in the Context of Export Activity: An Empirical Study of Taiwanese Manufacturing Firms”, *Journal of Business Research*, 27, pp.33-49.

[37] Kirpalani, V.H., and N.B. MacIntosh (1980), “International Marketing Effectiveness of Technology-oriented Small Firms”, *Journal of International Business Studies*, Winter, pp. 81 - 90.

[38] Klein S., G. L. Fraizer, and V. J. Roth (1990), “A transaction cost analysis model of channel integration in international markets”, *Journal of Marketing Research*, 27 (May), pp. 196-208.

[39] Lawler, E. E. III, and J. G. Rhode (1976), *Information and Control in Organizations*, Pacific Palisades, CA: Goodyear Publishing Company.

[40] Lawrence, P., and J. Lorsch (1967), *Organization and Environment: Managing Differentiation and Integration*, Harvard University.

[41] Li, L. Y., and G. Ogunmokun (2001), “The influence of interfirm relational capabilities on export advantage and performance: an empirical analysis”, *International Business Review*, 10pp. 399-420.

[42] Lin, X., and R. Germain (1999), “Predicting International Joint Venture Interaction Frequency in U.S.-Chinese Ventures”, *Journal of International Marketing*, 7 (2), pp 5-23.

[43] Mallen, B. (1973), “Functional Spin-Off: A Key to Anticipating Change in Distribution Structure”, *Journal of Marketing*, 37 (July), pp. 18-25.

[44] Mascarenhas, B. (1982), “Coping with Uncertainty in International Business”, *International Marketing Review*, 6 (4), pp. 41-57.

[45] McGregor, D. (1960), *The Human Side of Enterprise*, New York: McGraw-Hill.

[46] Moini, A.H. (1995), “An Inquiry into Successful Exporting: An empirical investigation using a three-stage model”, *Journal of Small Business Management*, July, pp. 9-25.

[47] Morgan, R. T., and S. D. Hunt (1994), “The Commitment-Trust Theory of Relationship Marketing”, *Journal of Marketing*, 58 (July), pp. 20-38.

[48] Mummalaneni, V. and D. T. Wilson (1988), “The influence of close personal relationships between a buyer and a seller on the continued stability of their role relationships”, unpublished working paper, ISBM, Penn State University.

[49] Noordewier, T.G., and G. John, and J. R. Nevin (1990), “Purchasing Outcomes of Purchasing Agreements in Industrial buyer-vendor relationships”, *Journal of Marketing*, 4 (4), pp. 80 - 93.

[50] Norvell, Wayne, David M. Andrus and Neelima V. Gogumalla (1995), “Factors Related to Internationalization and the Level of Involvement in International Markets”, *International Journal of Management*, Vol. 12 (1), pp. 63 - 77.

[51] Organization for Economic Co-operation and Development (1998), *The Export Credit Arrangement: Achievements and Challenges 1978 – 1998,* OECD, France.

[52] Oliver, R. L. and E. Anderson (1994), "An Empirical Test of the Consequences of Behavior- and Outcome-Based Sales Control Systems", *Journal of Marketing*, 58 (October), pp. 53-67.

[53] Ouchi, William G. (1977), "The Relationship Between Organizational Structure and Organizational Control", *Administrative Science Quarterly*, 22, pp. 95 - 113.

[54] ___________(1979), "A conceptual framework for the design of organizational control mechanisms", *Marketing Science*, 25, pp. 833-848.

[55] Perkins, F. C. (1997), "Export Performance and Enterprise Reform in China's Coastal Provinces" *Economic Development and Cultural Change*, The University of Chicago, 1997.

[56] Reid, S. D. (1982), "The Impact of Size on Export Behavior in Small Firms", in Michael R. Czinkota and George Tesar, editors, *Export Management: An International Context*, New York: Praeger Publishers.

[57] Rosenbloom, B. (1995), *Marketing Channels: A Management View*, 5th ed., Orlando, Fl: The Dryden Press.

[58] Rosson, P. J., and D. Ford (1982), "Manufacturer-Overseas Distribution Relations and Export Performance", *Journal of International Business Studies*,, Vol. 13 (Fall), pp. 57 - 72.

[59] Sachdev, H. J., D. C. Bello and B. K. Pilling (1994), "Control Mechanisms within Export Channels of Distribution", *Journal of Global Marketing*, Vol. 8 (2), pp. 31 - 50.

[60] Sarkar, M. and S.T. Cavusgil, and C. Evirgen (1997), "A commitment–trust mediated framework of International Collaborative Venture Performance," in *Cooperative Strategies: North American Perspectives*, P. W. Beamish and J. P. Killing, eds. San Francisco: New Lexington Press, pp. 255-85.

[61] Sholam, A. (1996), "Marketing-Mix Standardization: Determinants of Export Performance", *Journal of Global Marketing*, Vol. 10 (2), pp. 53 - 73.

[62] Stigler, G. J. (1951), "The Division of Labor is Limited by the Extent of the Market", *Journal of Political Economy*, 54, pp. 185-193.

[63] Stinchombe, A. L. (1985), "Contracts as hierarchical documents", in Stinchombe, A. L. and Heimer, C. A. (Eds.), Organizational Theory and Project Management (pp. 121-171), Norwegian University Press, Norway.

[64] Terpstra, V., and R. Sarathy (1994), *International Marketing*, 6th ed., The Dryden Press, U. S. A.

[65] Thach, S. and C. N. Axinn (1994), "Redefining Export Success: Not Which Measures, But Why Measure.", *Proceedings of Second Annual CIMaR Conference COPPEAD UFRL*, June Brazil.

[66] Venkatraman, N. and V. Ramanujam (1986), "Measurement of Business Performance in Strategy Research: A Comparison of Approaches", *Academy of Management Review*, 11 (4), pp. 801-814.

[67] Vroom, V. H. (1964), *Work and Motivation*, New York: John Wiley & Sons.

[68] Walters, P., and S. Samiee (1990), "A Model for Assessing Performance in Small U.S. Exporting Firms", *Entrepreneurship Theory and Practice*, Winter, pp. 33-50.

[69] Ward, J. (1984), "Your Export Middleman: Making A Wise Selection", International Trade Forum, 20 (April-June), pp. 14-34.

[70] William, N. C., and D. C. Bello (1992), "Product, Promotion and "Free Market" Pricing in the Indirect Export Channel", *Journal of Global Marketing*, 6 (1/2), pp. 31-54.

[71] Wilson, D. T., and V. Mummalaneni (1988), "Modelling and measuring buyer-seller relationships", unpublished working paper, ISBM, Penn State University.

Consumers' Acceptance of Web Marketing Facilities in Macau – The Special Economic Zone of China

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Abstract

The paper attempts to investigate and examine the attitude toward the Acceptance of Web Marketing Facilities (AWMF) in Macau – the Special Economic Zone of China". It is a replication study with components of items taken from Acceptance of Web Marketing Facilities (AWMF) (Kucuk and Arslan ,2000) which is based on Fred Davis' Technology Acceptance Model (TAM). It was found that i) the AWMF does not quite holds for in Macau; ii) although the local infrastructure and the usage of Internet is mature in Macao, the Internet shopping is for the time being not quite popular for young Internet users in Macau and iii) different gender has different attitude towards several items of the AWMF.

Introduction

The evolution of brand management to customer management is one of the important of the change of perspectives that make for successful Net Marketing(Hanson,2000). Internet has be accepted as a common tool and media for consumers to shop without going through retail outlets and it is hence becoming more and more popular and one of the a crucial elements for marketing strategies for multinational corporations (MNCs). Keith (1960) was the one of the first marketers to observe that this technological development initially caused a "depersonalizing" of business. Corporations, no matter MNCs or domestic, endeavor to look for new ways to sell directly to the products and services end-users (customers) in today's marketing world (Schutz, 1997). The traditional marketing-mix (The 4ps') is no longer useful in the real marketplace where marketers are concerned with the virtual value chain and the intermediaries in the distributional channel become redundant for some sellers. (Foreman, 1998; Morris, Marais & Weir, 1997; Hoffman & Novak, 1996). Also, Internet is becoming a vast and new distribution system that can "shipped electronically", that is, the most intangible products (Thomas, 1997). The panorama of customers adopting Internet as a tool of buying and shopping has also in turn evoked business developing their Net Marketing strategy in a new marketing arena of competition. Despites, it is believed that under different cultures in different places may have various acceptance of web marketing facilities (Kucuk and Arslan,2000).

This article attempts to ecxamine the AWMF's scale of the components based on Fred Davis's Technology of Acceptance Model origins (Davis, 1989). The AWMF scale was used to investigate the young Internet users in Macau – the Special Economic Zone of China. The questionnaire was administered to 201 undergraduate students of the School of Business of Macao Polytechnic Institute to see whether the AWMF would be applicable and how the phenomenon the Macanese are having for their shopping behavior and attitude toward Internet Shopping.

The Technology Acceptance Model (TAM)

TAM has been widely been utilized for researchers and practitioners to test, predict and explain users acceptance of technology. (Venkatesh and Morris,2000; Chau and Hu 2001; Agarwal and Prasad, 1999; Davis and Venkatesh ,1996; Doll, Hendrickson and Deng, 1998, and Fenech, 1998; Straub, Keil, and Brenner (1997). The robustness of TAM has also been established through several application and replication (Adam et al, 1992; Davis 1989,1993; Davis et al 1993; Davis and Venkatesh 1996; Gefen and Struab 1997; Igbaria et al, 1997; Mathieson 1991; Morris and Dillon, 1997; Segars and Grover, 1993 and Subramania 1994)

TAM built the model on the system usage intention and behavior as a function of perceived Usefulness(U) and Percieved Ease of Use (EOU) (Davis and Venkatesh, 1996). In general, TAM has two beliefs: perceived U which is the user's perception for the extent to which the system will improve the user's workplace performance, and perceived EOU depicts the user's perception of the amount of effort required to utilize the system or the extent to which a user believes that utilizing a particular system would be free for effort (Davis, Bagozzi, and Warshaw, 1989) as depicted in Figure 1.

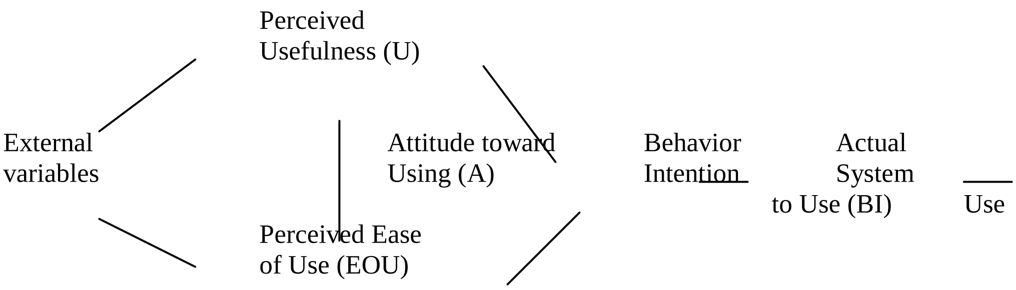

Fig 1: TECHNOLOGY ACCEPTANCE MODEL (DAVIS ET AL., 1989)

Doll, Hendrickson and Deng's (1998) results provided a strong support for the validity and reliability of TAM. Szajna (1994) examined the TAM and found that the U/EUO model indicated reasonable prediction. Also, Szajna (1996) proved that TAM is a valuable tool for predicting intentions to use an information system. Straub, Keil, and Brenner (1997) examined and tested the TAM across Japan, Switzerland and the US. The results indicate that TAM holds for both the US and Switzerland but not for Japan.

Acceptance of Web marketing Facilities

Although there has been a great number of study germane to TAM. Not many have focused on explaining the user acceptance of WMF through the TAM on a cultural, however, French (1998) tested perceived U and perceived EUO to predict user acceptance of World Wide Web and the results indicated a poor fit for the model until the introduction of an additional construct, computer self-efficacy. Agarwal and Prasad (1998) examined individuals' perceptions toward the characteristics of information technology innovations as explanatory and predictive variables for acceptance behavior. Kucuk and Arslan (2000) investigated by comparing the AWMF in TAM basis into three countries of Britain, Denmark and Turkey. It was reported that significance difference was found between Turkey and Britain and Denmark in terms of AWMF, and no significant difference between Britain and Denmark.

The U of WMF

According to Kucuk and Arslan (2000), the U of WM mainly reflects consumers' perception of the extent to which using Internet would have satisfaction through ordering products and services on the Internet. The variables for of the U of WMF include five factors as follows:

Money Saving - the variable that represents consumers' belief whether money would be saved through ordering products and services on the Internet;

Time Saving – the variable which represents consumers' belief in whether the Internet shopping is Time-saved;

Enjoyment of Shopping – the variable represents whether consumers enjoy Internet shopping more than traditional way of shopping;

Ability to access Information – the variable represents if consumer believe that it is more easy to get information on the Internet for the products and services which are not available in their local market;

Security – the variable asking if consumers believe that shopping on Internet is "Safety" in terms of the danger of releasing personal information;

The EUO of WMF

The EUO of WMF indicates consumers' perception of the effort that is required in Internet for satisfying their needs. It includes four factors as follows:

User Friendly Website – the variable represents whether the consumers find web designs easy to use or users friendly to order products and services on the Internet;

Power of Server Provider - the variable to know whether consumers are satisfied with the local Server Provider in providing enough service for them to ordering products and services on the Internet;

User Experience – this variable is simply asking whether users are well experienced with their Internet usage.

Attitude and Intention Toward WMF

The Attitude and Intention Toward WMF has only one factor in whether consumers would have an intention to order products and services if they had accessed to Internet. (See Table 1)

Table 1: TEN ITEMS OF AWMF

The U of WMF	The EOU of WMF	Attitude and Intention
1. Money Saving 2. Time Saving 3. Enjoyment from shopping (visual versus physical shopping) 4. Access products information which are not available in the local market 5. security	6. user-friendly web design 7. Internet speed 8. Local Internet service provider's infrastructure 9. User experience	10. User's intention towards Internet ordering

Methods

A well back-translated questionnaire in Chinese with the ten items AWMF was administered to the 201 students[i] of the School of Business of Macao Polytechnic Institute, Macao. There are totally ten items (sentence) in a scale adopted from Kucuk and Arslan's AWMF. The scale is a seven points Likert scale ranging from 1 to 7 which 1 represents Strongly Disagree and 7 represents Strongly Agree. The data was statistically analyzed by using Chi-square nonparametric test, ANOVA, Reliability test.

Findings

Kucuk, S.U. and Arslan, M. (2000) had comparatively studied the the Consumers' Acceptance of Web Marketing Facilities by adopting TAM in different sample settings. i.e. British group, Turkish group and Danish group. It was found that the scale had different reliability score. In comparing these groups with Macao group. It was found that the Macao group's reliability score is 0.59 representing that the reliability of AWMF is poor ($>5\alpha>6$ is considered as "poor")(George, D., Mallery,P. 2001) and does not hold for Macao sample setting.(See Table 2)

Table 2: COMPARISON OF RELIABILITY TEST OF THE AWMF

Cronbach Alpha (Turkish group)	.72
Cronbach Alpha (British group)	.84
Cronbach Alpha (Danish group)	.84
Cronbach Alpha (Macao group)	.59

A ten-item AWMF inventory of in accordance to the TAM was set for the questionnaire. All of the items were tested by the nonparametric test of Chi-square test. It was found that all are significantly different ($\rho<0.001$). In Table 3, it was depicted that majority of the respondents disagree that "ordering products and services on the Internet can save money"(mean 3.46), but they agree that "Internet shopping is time-saved."(mean 4.54). Most of the respondents do not enjoy Internet shopping than traditional shopping method (mean 2.76), however, they agree that "It is more easy to get information on the Internet about products and services that are unavailable in local market" (Mean 4.93). It was found that respondents do not much believe that "Ordering products and services in the Internet is secure enough", but they agree that website's design is "easy to use and user-friendly to order products and services" (mean 4.49); Majority of the respondents disagree that "The speed of Internet is satisfactory enough for shopping" (mean 2.82) and also disagree that "The local Internet service provider is satisfactory enough for them to order products and services in the Internet" (mean 3.39), and finally, the respondents believe that their experience in using Internet is enough, however, majority disagree that "In accessing Internet, I have an intention to order products and services" (mean 2.5).

Table 3: NONPARAMETRIC TEST – CHI-SQUARE TEST OF THE AWMF ITEMS

PERCENTAGE Items	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree	Mean	X^2/ ρ
1. Ordering products and services on the Internet can save money	45.8%			36.6%	17.9%			3.46	126.677/ρ<0.001
2. Internet Shopping is time-saved	18.4%			24.4%	57.3%			4.54	112.607/ρ<0.001
3. I enjoy internet shopping more than traditional shopping methods	38.7%			24.9%	6.5%			2.76	114.139/ρ<0.001
4. It is more easy to get information on the internet about products and services that are unavailable in local market	11%			24.4%	65.2%			4.93	145.275/ρ<0.001
5. Ordering products and services on the internet is secure enough	57.2%			34.8%	8%			3.11	138.726/ρ<0.001

Table 3 Con't

6. Web design is easy to use or user friendly to order products and services	10%			47.3%	42.8%			4.48	245.433/ρ<0.001
7. The speed of internet is satisfactory enough for internet shopping	62.7%			25.4%	12%			2.82	91.711/ρ<0.001
8. The local internet service provider is satisfactory enough to order products and services on the internet	53.2%			38.3%	8.5%			3.39	206.204/ρ<0.001
9. My experience in using internet is enough	24.9%			35.3%	39.8%			4.20	104.318/ρ<0.001
10. In accessing internet, I have an intention to order products and services	77.6%			14.9%	7.5%			2.50	183.358/ρ<0.001

The above findings depict the behavior and attitude of Internet shopping of Macau young Internet users. Besides that, it was found that different gender has different Internet shopping attitude. It is depicted in Table 4 (the bolded figures) that Gender has significant different in terms of three items. i.e. 1)"I enjoy internet shopping more than traditional shopping methods", male tend to more agree that they enjoy internet shopping than female; 2) "Ordering products and services on the Internet is more secure enough", male believe that Internet shopping is secure more than female do; 3) "In accessing internet, I have an intention to order products and services", for this, male also intend to shop on Internet than female do.

Table 4: ANOVA OF GENDER AND AWMF

		F	**Sig.**
1.	Ordering products and services on the Internet can save money	.214	.644
2.	Internet Shopping is time-saved	.003	.960
3.	I enjoy internet shopping more than traditional shopping methods	14.095	***.000***
4.	It is more easy to get information on the internet about products and services that are unavailable in local market	.052	.821
5.	Ordering products and services on the internet is secure enough	12.089	***.001***
6.	Web design is easy to use or user friendly to order products and services	.195	.659
7.	The speed of internet is satisfactory enough for internet shopping	.120	.729
8.	The local internet service provider is satisfactory enough to order products and services on the internet	3.626	.058
9.	My experience in using internet is enough	1.148	.285
10.	In accessing internet, I have an intention to order products and services	10.848	***.001***

$\rho<0.05$

Conclusion

In general, it was found that Macao young Internet users tend to disagree that ordering products and services through Internet can save money but they believe that Internet is a way to save money for shopping; they do not believe that Internet shopping is secure enough and do not consider Internet shopping can replace their way of traditional shopping methods as enjoyment. As a whole, they are not quite satisfied with the speed of Internet for shopping and not much satisfied with local service provider in serving their Internet shopping activities although they have confidence in saying that their Internet shopping experience is "enough". In conclusion, although it seems that the local infrastructure and the usage of Internet is mature in Macao, it is observed that the Internet shopping is for the time being not quite popular for the young Internet users in Macao.

References

[1] Adam, D.A., Nelson,R.R., and Todd, P.A. (1992). Percieved Usefullness, Ease of Use and Usage of Information Technology : A Replication, *MIS Quartly*. (16:2) , 227-250.

[2] Agarwal R., Prasa J., (1998). A conceptual and operational definition of personal innovativeness in the domain of information Technology. *Information System Research: A Journal of Institute of Management Sciences*, June , Vol. 9. No.2, 204-215.

[3] Davis , F.D. (1993). "User Acceptance of Information Technology: System Characteristics, User Perceptions and Behavioral Impacts. *International Journal of Man-Machine Studies* (38:3) , 475-487.

[4] Davis, F.D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology, *MIS Quartly.* (13:3), 319-339.

[5] Davis, F.D. , and Venkatesh, V. (1996). A Critical Assessment of Potential Measurement Biases in the Technology Acceptance Model: Three Experiments. *International Journal of Human Computer Studies* (45) , 19-45.

[6] Davis, F.D., Gagozzi, R.P., Warshaw, P.R. (19689). User Acceptance of computer technology: A comparison of two theoretical models. Management Sciences. Vol. 35, No. 8, Aug., 982-1003.

[7] Doll,W.J., Hendrickson A., Deng X. (1998). Using Davis's perceived usefulness and ease-of-use instrument for Decision Making: A confirmatory and multigroup invariance analysis. *Decision Sciences*. Vol. 29, 839-869.

[8] Fenech, T. (1998). Using perceived ease of use and perceived usefulness to predict acceptance of the world Wide Web.

[9] *Computer Networks and ISDN Systems,* Apr.,Vol. 30, No.1-7, 629-630.

[10] Foreman, S.K. (1998). Marketing-Marketing on the Internet. *Manager Update*. Spring, Vol. 9, 14-22.

[11] Grorge Darren, and Mallery Paul. (2001). SPSS for Windows Step by Step – A Simple Guide and Reference 10.0 Update.3rd .ed., MA: Allyn & Bacon.

[12] Gefen, D., and Straub,D.W. (1997). Gender Differences in the Perception and Use of E-Mail: An Extension to the Technology Acceptance Model. *MIS Quartly,* 389-400

[13] Hanson, W. (2000). *Principles of Internet Marketing* (1st ed.). Cincinnati: South-Western College Publishing.

[14] Hoffman, L.D., Novak, P.T. (1996). Marketing in Hypermedia Computer-Mediated Environments: Conceptual Foundations. *Journal of Marketing*. Vol. 60. 50-68.

[15] Igbaria, M., Zinatelli, N., Cragg,P., and Cavaye,A.L.M. (1997). Personal Computing Acceptance Factors in Small Firms: A Structural Equation Model. *MIS Quartly* (21:3), 279-305.

[16] Kucuk, S.U., and Arslan,M. (2000). A Cross Cultural Comparison of Consumers' Acceptance of the Web Marketing Facilities. *Journal of Euromarketing*. Vol. 9(3), 27-43.

[17] Mathieson, K. (1991). Predicting User Intentions: Comparing the technology Acceptance Model with the Theory of Planned Behavior. *Information Systems Research* (2), 1730191.

[18] Mathieson, K. (1991). Predicting User Intentions: Comparing the technology Acceptance Model with the Theory of Planned Behavior. Information Systems Research (2), 173-191.

[19] Morris, H.M., Marais, P., Weir ,J. (1997). "Is the Web World Wide?" Marketing Effects in an Emerging Market. *Journal of Strategic Marketing.* Vol.5, 211-231.

[20] Morris,M., and Dillon, A. (1997). How User Perceptions Influence Software Use. *IEEE Software* (14:4), 58-65.

[21] Schultz, J.F. (1997). Revolutionary Selling. *Management Review.* Nov. Vol. 86, 22-24.

[22] Segar, A.H., and Grover,V. (1993). Re-examining Per Calved Ease of Use and Usefulness: A confirmatory Factor Analysis. *MIS Quartly*. 517-525.

[23] Straub, D.W., Keil, M., Brenner, W.H. (1997). Testing the Technology acceptance model across cultures: A Three countries studies. *Information and Management*. Nov.7, Vol. 33, 1-11.

[24] Subramanian, G.H. A Replication of Perceived Usefulness and Perceived Ease of Use Measurement. *Decision Sciences,* (25:516), 863-874).

[25] Szajna B. (1994). Software Evalutiion and choice: Predictive validation of the technology acceptance instrument. *MIS Quartly,* Sept. Vol. 3,319-324.

[26] Venkatesh, V. (2000). Why don't men ever stop to ask for directions? Gender, social influence, and their role in technology acceptance and usage behavior. MIS Quartly, 24(1), 115-137.

[i] The students respondents include day-time and night-time mature students.

Determinants of Import Demand in Thailand: A View from Expenditure Components and Bounds Testing Approach

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Abstract

This study re-investigates the determinants of aggregate import demand function for Thailand by further considering the bias of using single real income variable as its determinant. In this study, real income variable is disaggregated into three macroeconomic components that are public and private consumption, investment expenditure and exports. The result of bounds test (Pesaran, et al., 2001) indicates that the volume of imports, the macroeconomic components of final demand expenditure, and relative price are cointegrated. The results reveal that different final demand components have different effects on imports demand. The study provides some important policy implications.

Introduction

The historical data from the period 1960-1998 shows that Thailand faced a trouble of current account balance over that period, while she enjoyed only a surplus in the year of 1986 and 1998 (World Bank, 2002). A number of existing studies examined empirically the aggregate import demand behaviour in Thailand. Among them are Koshal, et al. (1993), Sihan (1997), Senhadji (1998), Mah (1999), and Arize (2000). They adopted traditional formulation of import demand equation, which relates the volume of import demanded to domestic real income and the ratio of import prices to domestic prices (relative prices). An interesting issue of import demand estimation for a small open economy is its policy implication, particularly devaluation exercise to rectify any trade imbalance. Reinhart (1995, p. 290-291) stated that devaluations have often been used by developing countries to reduce large external imbalances, correct perceived *overvaluations* of the real exchange rate, increases international competitiveness, and promote export growth. In order to accomplish a devaluation policy, one of the conditions is that if trade flows respond to relative prices in a significant and predictable manner. Moreover, the Marshall-Lerner condition incorporated that if the sum of price elasticities (in long run) of demand for imports and the demand for exports (in absolute terms) is greater than unity, the devaluation can be implemented effectively to correct the trade imbalance (Bahmani-Oskooee & Niroomand, 1998).

Koshal, et al. (1993) found that Thailand's import demand was unitary elastic with respect to its own price, but elastic with respect to price of other goods in long run. Sihna's (1997) study indicated that the volume of imports demanded, real income and prices variables were cointegrated over the annual period 1953-90. The Johansen's multivariate approach (Johansen, 1988; Johansen & Juselius, 1990) was employed for analysis. The estimated long run elasticity of price, cross price (with respect to domestic price) and income are -0.77, 0.30 and 2.14, respectively. However, Senhadji (1998) found that real imports, relative price (ratio of imports deflator to GDP deflator) and real income were not cointegrated using annual data from 1960 to 1993. The estimated short run elasticities of income and prices are 0.55 and -0.51 respectively. Mah (1999) used first differenced variables to assure data stationarity, and found that the estimated imports demand elasticity of income and relative prices were 0.74 (insignificant) and -1.53 using annual data from 1963 to 1992. Further Arize, et al. (2000) found a long run equilibrium relationship among import demand, real income and relative price using Johansen approach. They used quarterly data from 1973 to 1996. The estimated long run real income and relative price elasticities are 3.41 and –1.51 respectively based on Johansen approach. The estimated elasticities based on FM-OLS (Phillips and Hansen, 1990) estimator are 3.38 (real income) and –0.81 (relative price). They concluded the results satisfied the Marshall-Lerner condition for successful devaluation to enhance the external balance, i.e the long run price elasticity of imports is greater than one (in absolute terms). According to Engle and Granger (1987), even though an economic series may wander over time, there may exist a linear combination of the variables that converges to equilibrium, that is, the variable are cointegrated. If a cointegration relation is not satisfied for a set of nonstatioanry series, this may lead to spurious regression using ordinary least squares (OLS) estimator.

The traditional import demand function relates the quantity of import demanded to the domestic real income and relative prices term. A conman feature of discussed empirical studies is that they employed traditional import demand formulation follows an assumption that the import content of each macro component of final expenditure (real GDP or GNP) is the same. The intuition is that if the composition of demand changes, the aggregate import propensity would change even though the disaggregated marginal propensities are unchanged. If this intuition were valid, the use of a single demand variable would lead to aggregation bias. This issue has been accounted by Giovannetti (1989), Abbott and Seddighi (1996) and Mohammad and Tang (2000). They estimated an aggregate import demand function by further disaggregating the single demand variable into three macroeconomic final expenditure components namely final consumption expenditures (private and government consumption), expenditures on investment and exports. Their results consistently indicated that the three final demand variables have various effects on aggregate import demand behaviour for the case of Italy (Giovannetti, 1989), U.K. (Abbott and Seddighi, 1996), and Malaysia (Mohammad and Tang, 2000), respectively.

Thus, the present study differs from the previous studies. First, it considers the above assumption by further disaggregate real income variable into three macroeconomic components, that are final consumption goods, expenditure on investment goods, and expenditure on exports. Second, the present study employs a recently developed cointegration approach that is bounds testing approach in Pesaran, et al. (2001). The Pesaran et al.'s approach has two main advantages over the commonly practiced cointegration approaches like Engle-Granger (1987) and Johansen (1988), and Johansen and Juselius (1990). First, the bounds test procedure can be applied irrespective of whether the explanatory variables are I (0) or I (1). Second, this method can be applied for the study that involves small sample size. Mah (2000) employed bounds testing approach (Pesaran, et al., 1996) for estimated disaggregated import demand (information technology products) for Korea with 18 annual observations. Other studies used this approach in estimating import demand equation which involved small sample properties are Pattichis (1999) and Tang and Nair (2002). Those studies used the unpublished manuscript of Pesaran, et al (1996).

The next section is model specification, data and method. Section 3 reports the empirical results and conclusion in last section.

Model Specification, Data and Method

By following Giovannetti (1989), Abbott and Seddighi (1996) and Mohammad and Tang (2000) concerning the disaggregated exercise on real income variable, the import demand function used in this study can be specified as follow:

$$M_t = f\ (FCE_t, EIG_t, EX_t, RP_t) \qquad (1)$$

where FCE is final consumption expenditure; EIG is expenditure on investment goods; and EX is exports; and RP is relative prices term that is the ratio of import rice divided by domestic price. According to Murray and Ginman (1976, p. 76) and Gafar (1988) the use of relative price can reduce estimation problems i.e multicollinearityand thereby decrease standard errors. The log-linear specification for equation (1) is

$$\text{Ln } M_t = b_0 + b_1 \text{Ln } FCE_t + b_2 \text{Ln } EIG_t + b_3 \text{Ln } EX_t + b_4 \text{Ln } RP_t + u_t \qquad (2)$$

where u_t is a random error assumed to be orthogonal to all determinants. Ln is natural logarithmic form. The sign of the coefficients $b_{1,}$ b_2 and b_3 are expected to be positive, and b_4 is expected to be negative.

The data used for analysis covers annual period from 1960 to 1999 (40 observations). The data source and definitions are cited in Appendix A. The quarterly or monthly data particularly for various components of final demand are unavailable for a substantial long period. However, the used of annual data is justified by the followings. Hakkio and Rush (1991) argued that increasing the number of observations by using monthly or quarterly data do not add any robustness to the results in tests of cointegration. The length of the length of the period is essential. Sinha (1997) adopted this argument for estimating Thailand's import demand function using annual data for 1953 to 1990. In addition, Davidson and MacKinnon (1993) stressed that the use of annual data can avoid the bias of using seasonally adjusted quarterly or monthly data in analysis. In addition, Mohammad and Tang (2000, p. 260) stated that the measurement errors might be more serious when data used are constructed data. Further Mah (2000, p. 238) recommended the use of bounds test procedure (Pesaran et al., 2001) to handle the small sample time series study. The bounds test procedure is based on an unrestricted error correction model (UECM) using OLS estimator. The UECM based on equation (2) is specified as follow:

$$\begin{aligned} DLnM_t &= b'_0 + \sum_{i=0}^{l} b'_{1i}\, DLnFCE_{t-i} + \sum_{i=0}^{l} b'_{2i}\, DLnEX_{t-i} + \sum_{i=0}^{l} b'_{3i}\, DLnEIG_{t-i} \\ &\quad + \sum_{i=0}^{l} b'_{4i}\, DLnRP_{t-i} + \sum_{i=1}^{l} b'_{5i}\, DLnM_{t-i} \\ &\quad + b'_6\, LnM_{t-1} + b'_7\, LnFCE_{t-1} + b'_8\, LnEX_{t-1} + b'_9\, LnEIG_{t-1} + b'_{10}\, LnRP_{t-1} + u'_t \end{aligned} \tag{3}$$

where D is first difference series, LnX_t - LnX_{t-1}.

Further, the Wald test (*F*-statistic) can be used for testing the null hypothesis of no cointegration relationship. In this study, the null hypothesis based on import demand function (1) is $H_O : b'_6 = b'_7 = b'_8 = b'_9 = b'_{10} = 0$. The asymptotic distribution of the *F*-statistic is non-standard under the null hypothesis of no cointegration relationship between the examined variables, irrespective whether the explanatory variables are purely I(0) or I(1). In some significance level, if the computed *F*-statistic exceeds the upper bounds, I(1), then the null hypothesis of no cointegration can be rejected. Thus, a long run equilibrium relationship among the variables of the import demand function can be made. For the case, the computed *F*-statistic falls below the lower bounds, I(0), the null hypothesis of no cointegration cannot be rejected. The conclusion is no cointegration. However, if the *F*-statistic falls between the upper and lower bounds, a conclusive inference cannot be made. Here, the order of integration for the explanatory variables must be known before any conclusion can be drawn. The long run elasticity is the coefficient of the one lagged explanatory variable (multiplied with a negative sign) divided by coefficient of the one lagged dependent variable. The coefficient of the fist-differencing variable represents short run elasticity.

Empirical Results

One lag length, *l*=1 was chosen for general UECM (3), considering a set of diagnostic test for *l*=3, *l*=2 and *l*=1. The maximum lag length for cointegration analysis is set to three years, *l*=3 justifying the use of annual data. According to Pesaran and Pesaran (1997) the lag length of one seems to be a reasonable choice in cointegrating analysis by given the annual nature of the data. Further a general-to-specific approach was used to achieve a parsimonious UECM by eliminating the statistically insignificant short run variable (in first difference form, D) downwardly. The estimated parsimonious UECM is reported in Table 1.

Table 1: THE ESTIMATED UECM

Dependent Variable: $DLnM_t$		
Variable:	Coefficient	t-Statistic
$DLnFCE_t$	1.559*	6.193
$DLnRP_t$	-0.698*	-4.710
$DLnM_{t-1}$	0.320*	4.074
LnM_{t-1}	-0.584*	-4.271
LnEt-1	0.378*	3.649
$LnEIG_{t-1}$	-0.025	-0.260
$LnFCE_{t-1}$	0.311***	1.705
$LnRP_{t-1}$	-0.398*	-2.911
Constant	-0.713	-1.114

*, and *** denote significant at 1%, and 10% significant level. The Sample (adjusted) is 1962 to 1999

R-squared: 0.868 Sum squared resid.: 0.090
F-statistic: 23.77 (0.000) Jarque-Bera: 1.63 (0.442)
Ramsey RESET Test [1]: 2.37 (0.124); [2]:2.55 (0.280); [3]: 3.379 (0.337)
LM Test [1]: 1.934 (0.164); [2]: 2.97 (0.227); [3]: 2.98 (0.395)
ARCH Test [1]: 2.712 (0.099); [2]: 2.47 (0.290); [3]: 9.516 (0.023)
( ) is p-value

The final UECM passes a battery of diagnostic tests. The Breusch-Godfrey's LM test rejects the presence of serial correlation up to third order. The Jarque-Bera statistic confirms normality of residual. ARCH test reject first and second order heteroscedasticity in the disturbance term at five per cent significant level. No general specification error as indicated in Ramsey RESET test. Finally, the plot of CUSUM and CUSUM of squares (Fig. 1) reveal that the estimated parameters are stable over the sample period.

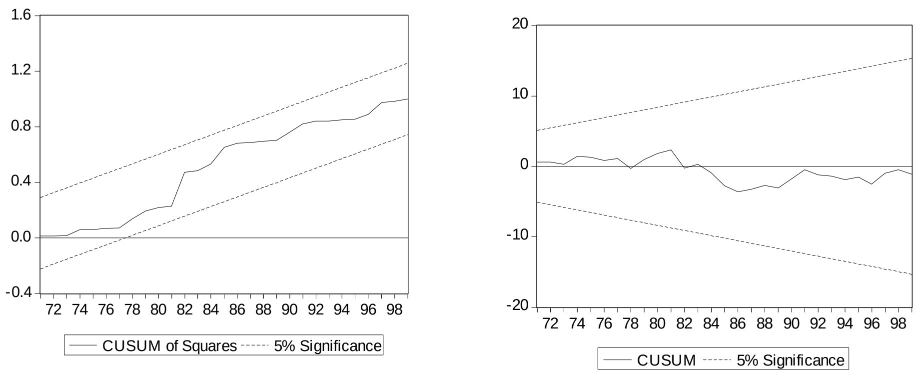

Fig. 1: PLOT OF CUSUM OF SQUARES AND CUSUM TEST

In order to investigate the presence of a long run relationship among the variables in (1), the bounds testing approach from Pesaran et al. (2001) was used. The test statistic (*F*-statistic) is 6.538 that found to exceed the upper bounds value, I(1) of 5.06, for one per cent significant level. The lower bounds value is 3.74, I(0). The upper and lower bounds values is obtained from Pesaran et al., 2001, p.300, Table CI (iii) case III: unrestricted intercept and no trend, with four regressors case (k=4). Thus, the null of no cointegration can be rejected. This result indicates that the volume of imports, final consumption expenditure, expenditure investment goods, export, and relative price are cointegrated. The presence of a cointegrating relationship indicates that the aggregate import demand function used in this study is specified correctly and it to be stable over the sample period. Meanwhile, the Chow test for possible structural break was performed for the two sub period as noted in Mah (1999), 1963-73 (or 1963-78) and 1974-92 (or 1979-92). The results of Chow test show no structural break for those periods.

Table 2 reports the estimated long run and short run elasticity for Thailand's aggregate import demand function. In long run, the elasticity of the three final demand components are numerically different that supports the argument that different final demand components have different import contents. Therefore, the use of single demand variable like real income may lead aggregation bias and discount the policy implication reliability. The determinants found to be inelastic to imports demand in long run. This is interesting finding that in short run, final consumption expenditure is elastic. But, other two final demand components (EIG and EX) are insignificant and dropped from general to specific exercise. The price elasticities are inelastic both in long run and short run. The results in this study run contrary from Senhadji (1998). A possible explanation is the use of finite sample (annual data) with inappropriate estimation approach for cointegration analysis.

Table 2. THE ESTIMATED ELASTICITES

Variables:	Long run	Short run
Ln EIG	-0.042	--
Ln EX	0.647	--

Ln FCE	0.532	1.559
Ln RP	-0.680	-0.698

Conclusion and Policy Implications

The present study re-estimates the Thailand's aggregate import demand function by considering the bias of using single demand variable that is real income. The result of bounds test reveals that the volume of import demanded and its determinants namely final consumption expenditure, expenditure on investment goods, exports and relative prices are cointegrated. The determinants found to be inelastic in long run. The final consumption expenditure variable is elastic, but in short run. The study shows that different final demand components have different effects on import demand behaviour in Thailand. The present study has some policy relevant. An increased in private and government household consumption might have essentially influence on import demand in short run. Fiscal policies formulation on final consumption expenditure and exports are important on reducing import pressure in long run. Both variables are significant at 10 per cent level, but inelastic. On the other hand, the long run elasticity of relative price is inelastic, –0.68. Meanwhile, Arize, et al (2000) found an evidence of parameter instability in the Thailand's export demand function. The results indicate that the Marshall-Lerner condition is hardly to be satisfied for Thailand case, indicating devaluation is inappropriate to correct the trade imbalance. This finding is reasonable with the issues raised by Bahmani-Oskooee and Techaratanachai (2001, p.141) that initial devaluation of the Thai bath is said to be the triggering force behind the Asian economic crisis, and it has unfavourable results on M2 money demand, which could slow down the economic activity. However, the finding in the present study runs contrary to Sihna's (1997) and Arize, et al.'s (2000) studies, who supported that Thai Bath devaluation to improve trade balance. The present study suggests that the fiscal policies on the final expenditure components are more effective in order to manage the import demand in order to improve country's trade balance.

References

[1] Abbott, A.J., & Seddighi, H.R. (1996). Aggregate imports and expenditure components in the UK: an empirical analysis. Applied Economics, 28, 1119-1125.

[2] Arize, A.C., Chooekawong, P., & Prasanpanich, V. (2000). Foreign trade behavior in Thailand: stable or unstable? American Economist, 44, 36-45.

[3] Bahmani-Oskooee, M., & Techaratanachai, A. (2001). Currency substitution in Thailand. Journal of Policy Modeling, 23, 141-145.

[4] Bahmani-Oskooee, M., & Niroomand, F. (1998). Long-run price elasticities and the Marshall-Lerner condition revisited. Economics Letters, 61, 101-109.

[5] Davidson, R., & MacKinnon, J.G. (1993). Estimation and Inference in Econometrics. New York: Oxford University Press.

[6] Engle, R.F., & Granger, C.W.J. (1987). Cointegration and error correction: representation, estimation and testing. Econometrica 55, 251-276.

[7] Gafar, J. S. (1988). The determinants of import demand in Trinidad and Tobago: 1967-1984. Applied Economics, 20, 303-313.

[8] Giovannetti, G. (1989). Aggregated imports and expenditure components in Italy: an econometric analysis. Applied Economics, 21, 957-971.

[9] Hakkio, Craig S., & Rush, M. (1991). Cointegration: how short is the long run?. Journal of International Money and Finance, 10, 571-581.

[10] Johansen, S. (1988). Statistical analysis of cointegrating vectors. Journal of Economic Dynamics and Control, 12, 231-254

[11] Johansen, S., & Juselius, K. (1990). Maximum likelihood estimation and inference on cointegration with applications to the demand for money. Oxford Bulletin of Economics and Statistics, 52, 169-210.

[12] Koshal, R.K, Doroodian, K., & Chaluvadi, A. (1993). The behavior of demand and supply of Thai imports. Journal of Asian Economics, 4, 363-375

[13] Mah, J. S. (2000). An empirical examination of the disaggregated import demand of Korea - the case of information technology products. Journal of Asian Economics, 11, 237-244.

[14] Mah, J. S. (1999). Import demand liberalization, and economic development. Journal of Policy Modelling, 21, 497-503.

[15] Mohammad H. A., & Tang, T. C., (2000). Aggregate imports and expenditure components in Malaysia: a cointegration and error correction analysis. ASEAN Economic Bulletin, 17, 257-269.

[16] Murray, T., & Ginman, P. J. (1976). An empirical examination of the traditional aggregate import demand. The Review of Economics and Statistics, 58, 75-80.

[17] Pesaran, H., Shin, Y., & Smith, R. J. (2001). Bounds testing approaches to the analysis of level relationships. Journal of Applied Econometrics, 16, 289-326.

[18] Pesaran, H., Shin, Y., & Smith, R. J. (1996). Testing for the existence of a long-run relationship. Unpublished manuscript. Department of applied economics, working paper, no. 9622, University of Cambridge.

[19] Pesaran, M. H., & Pesaran, B. (1997). Working with Microfit 4.0: interactive econometric analysis, United Kingdom: Oxford University Press.

[20] Phillips, P.C.B, & Hansen, B.E. (1990). Statistical inference in instrumental variables regression with I(1) process. The Review of Economic Studies, 57, 99-125.

[21] Senhadji, A. (1998). Time-series estimation of structural import demand equations: a cross-country analysis. IMF Staff Papers, 45, 236-268.

[22] Sihna, D. (1997). Determinants of import demand in Thailand. International Economic Journal, 11, 73-83.

[23] Tang, T.C., & Nair, M. (2002). A cointegration analysis of Malaysian import demand function: reassessment from the bounds test. Applied Economics Letters, 9, 293-296.

[24] Reinhart, C. M. (1995). Devaluation, relative prices, and international trade: evidence from developing countries. IMF Staff Papers, 42, 290-312.

[25] World Bank. (2002). World tables. In Dx for windows version 3.0 (The time series data express), EconData Pty. Ltd. (Released data: February 28, 2002).

Appendix A: Data Definitions and Sources

The data covered the available annual period 1960 to 1999. The raw data are obtained from World Bank (2002). The definitions of involved variables are given below:

1. M: Volume of imports for goods and services; the nominal imports (in billions, Thai bath) are divided by implicit price index of imports for goods and service (100=1995).
2. FCE: Final consumption expenditure. It is the sum of household consumption and general Government consumption (in billions, Thai bath). The GDP deflator (1995=100) was used to deflate the series.
3. EIG: Expenditure on investment goods is the nominal fixed capital formation (in billions, Thai bath) deflated by GDP deflator (100=1995).
4. EX: Exports expenditure on goods and services (in billions, Thai bath). The real value is derived by deflating nominal exports by the deflator of exports of goods and services, 1995=100.
5. RP: The relative price variable is derived by dividing the import price index by GDP price deflator (as proxy for domestic price).

Effectiveness of ISO 9000 Adoption, Export Marketing Strategy, and Performance: A Case Study of Thai and U.S. Firms

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Abstract

This study provides a systematic explanation of the relationships between the adoption of ISO 9000, export marketing strategy, and export performance. We examined two types of effectiveness of ISO 9000 adoption--marketing and non-marketing effectiveness. A conceptual model and proposition are provided on how firms select different types of effectiveness of ISO 9000 adoption and export marketing strategy in order to gain superior export performance. In case studies of Thai and U.S. firms, firms have obtained or will obtain ISO 9000 certification because of its marketing benefits and advantages. They tend to exploit this international standard to help them meet customer needs and export to more international markets. It seems that marketing effectiveness is a key priority of adopting ISO 9000. Contributions and suggestions for future research are also discussed.

Introduction

To achieve global competitiveness, firms need to create and develop strategies to deal with changing organizational operations and external environments. This includes situations such as creating business networks, improving productivity and quality, and promoting entrepreneurship orientation. Adopting an international standard is a concrete strategy for increasing competitiveness. ISO 9000 is the most commonly adopted form of such a standard and it refers to a series of five international standards that provide guidance in the development and implementation of an effective quality management system [38]. It was issued by the International Organization for Standardization (ISO) in 1987 and was revised in 1994 and 2000 [28].

ISO 9000 has become an important requirement for exporters and multinational enterprises that wish to do business with the European Union and other countries. In 1992, the European Union required that companies must provide a universal framework for quality assurance of products [36]. In 1999, the National Aeronautic and Space Administration (NASA) also required that all agency sites must become ISO 9000 registered [23]. Thus, international firms that wish to become or remain competitive must attempt to achieve ISO 9000 certification.

Accordingly, ISO 9000 adoption has increased rapidly. To date, some 410,000 firms around the world have obtained

ISO 9000 certification [32]. Prior studies have noted that these firms have also adopted ISO 9000 because of other reasons; internal improvement, marketing positioning, supplier control, customer needs, and regulatory requirements [35]. Firms that have successfully adopted ISO 9000 are likely to exhibit higher levels of quality improvement, business excellence, international competitiveness, cost reduction, sales, human resource development, and customer orientation [29]. ISO 9000 also promotes inter-firm relationships [12].

Even though many articles discussed the applications and benefits of ISO adoption, only limited academic research exists with a systematic explanation for the effects of adopting such standards on a firm's strategy and performance. Hence, the primary purpose of this paper is to study the relationships between ISO 9000 and export performance by using export marketing strategy as a mediator. The key research question is how ISO 9000 adoption affects export marketing strategy that influences export performance. Specifically, we discuss whether effectiveness of ISO 9000 adoption leads to high export performance.

Effectiveness of ISO 9000 Adoption

Both the benefits and problems of adopting ISO 9000 have been extensively examined, but there are relatively few studies that have attempted to link marketing-related concepts to ISO 9000 adoption. Here, we explore effectiveness of ISO adoption by emphasizing both marketing and non-marketing dimensions.

Marketing effectiveness

Marketing effectiveness refers to the outcomes of marketing concepts and approaches that are practiced within firms [48]. It consists of five dimensions: customer philosophy, integrated marketing organization, adequate marketing information, strategic orientation, and operational efficiency [19].

To successfully apply marketing effectiveness concepts, Yukselen [48] notes that planning the number of staff educated on administration/economics, the number of employees, working capacity, survival period, product differentiation strategy, and business philosophy are five key variables for small- and medium-sized firms. Corporate culture, values, beliefs, goals, and market orientation are also significant determinants of the level of marketing effectiveness [19]. However, some studies state that a strategic scenario is a major determinant of marketing effectiveness [16].

Based on the above dimensions of marketing effectiveness, studies on foreign firms report different practices and outcomes. For instance, Korean firms underperform in planning and controlling functions and the service firms are more effective in marketing operations than the manufacturing firms [20]. A comparison of the marketing effectiveness of top performing organizations in Singapore and other countries (Taiwan and Australia) is also examined. Singaporean firms emphasize identifying and meeting customers needs, expansion of the total market, and entry into new markets. Taiwanese firms tend to focus on marketing [25], while Australian firms seem to concentrate on product orientation by creating product managers in the organization [24].

Marketing effectiveness is a concept directly linked to ISO 9000 adoption. As a quality management system, ISO 9000 is concerned with improving the quality of product and services [7]. High quality products and services enable firms to achieve higher customer satisfaction and gain a greater competitive advantage [4]. For instance, firms adopt ISO 9000 because of a concern over customer expectations and satisfaction, and a desire to meet customer needs and requirements [9]. ISO 9000 adoption influences firms to improve the quality of information in finance, operation, management and marketing. It encourages them to create business networks, increase operational efficiency, and achieve business excellence [12], [29].

In addition, Buttle [10] states that firms adopt ISO 9000 because of marketing motivations and benefits. These factors include keeping existing customers, gaining new customers, improving customer service, and increasing customer satisfaction. Firms that are concerned with the marketing effectiveness of ISO adoption thus explicitly emphasize customer needs of quality products and services. Information about customer needs influences firms to integrate marketing and operation activities and to build business strategy. It also encourages firms to achieve efficiency and effectiveness of operation and production [42].

Non-marketing effectiveness

Non-marketing effectiveness refers to outcomes of activities that are practiced within firms in the areas of production and operation. Adopting ISO 9000, firms can improve operational efficiency [18] and reduce costs [10]. Greater operational efficiency results in skill development, cost reduction, continuous improvement and organizational development. Firms also clearly understand processes and activities of operations, responsibilities and authorities in an organization, and cooperation across an organization [1]. Improving operational and manufacturing efficiency can therefore help firms gain competitive advantages in the global market. In addition, cost effectiveness is a primary goal of quality management [9]. For instance, firms can gain and sustain competitive advantage through low costs of products and services [41].

Effective Implementation of Export Marketing Strategy

As mentioned earlier, ISO adoption has been a fundamental requirement for firms that wish to do business in a global market [45]. Prior research notes that ISO adoption has a positive relationship with export performance [29], but it does not directly influence firms to achieve superior performance. We thus propose in our conceptual model the relationship between ISO 9000 adoption and export performance that is mediated by export marketing strategies, as shown in Fig. 1.

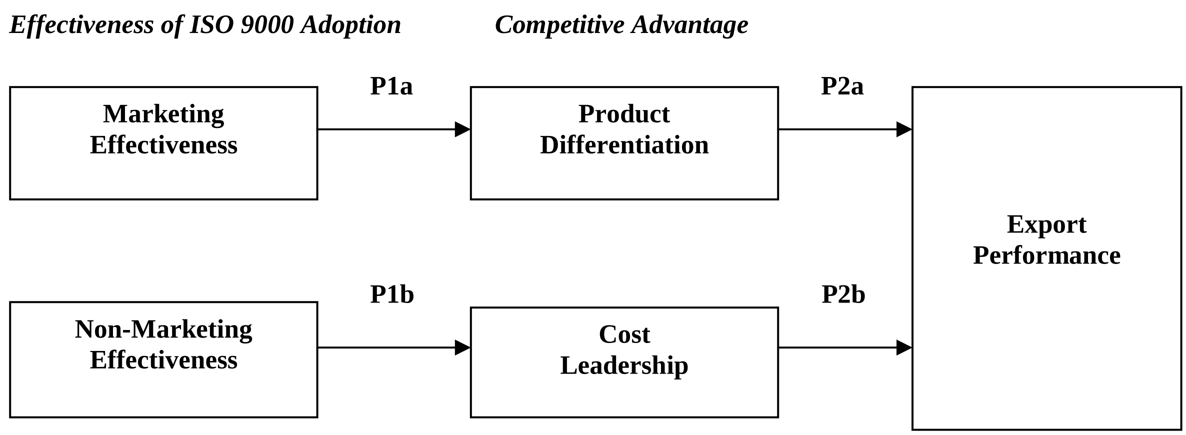

Fig 1: MODEL OF EFFECTIVENESS OF ISO 9000 ADOPTION VIA EXPORT MARKETING STRATEGY AND PERFORMANCE

Generally, firms need to outperform their competition in their product market. In order to sustain competitive advantages, firms also need to continuously increase value and prevent competitors from copying their advantages. Previous research notes that there are two distinct competitive advantages: low cost and differentiation [40]. The differentiation advantage includes quality, features, delivery, follow-up service, ease of use and so on. What advantages do firms that implement quality management systems (e.g., ISO 9000) achieve? According to Reed, Lemak and Mero [41], cost reduction and customer satisfaction are the main objectives of quality management. These outcomes lead to cost leadership and differentiation advantages. Hence, both cost leadership and differentiation are proposed as export marketing strategies.

Export marketing strategies refer to the means by which a firm responds to the interplay of internal and external

forces to meet the objectives of the export venture by involving all aspects of the conventional plan [14]. Relating to the effectiveness of ISO 9000, firms that emphasize marketing effectiveness can differentiate products from their rivals more easily. On the other hand, cost leadership is appropriate for firms that emphasize non-marketing effectiveness of ISO adoption through productivity and operational efficiency. Both product differentiation and cost leadership thus relate directly to SO adoption and export performance.

Product Differentiation

Product differentiation is defined as distinguishing a product or brand from competitors on the basis of an attribute that is relevant, meaningful, and valuable to customers [11], [26]. Erramilli Agarwal and Kim [20] also note a crucial component of product differentiation is creation of positive brand images through the use of marketing promotions including advertising.

Product differentiation is a key strategy for gaining competitiveness in order to diversify multiple and disparate product markets [27]. It is also a main strategy which exporting firms have practiced to sell their products [22], [34], [47]. Bloodgood, Sapienza and Almeida [5] note that product differentiation has been used extensively among new high-potential U.S. ventures.

Marketing effectiveness emphasizes marketing as a firm's need to design, develop, and create existing and new products in order to pursue the satisfaction of customer needs and requirements. Product quality also influences firms to increase customer satisfaction through implementing differentiation strategy [43]. Reed, Lemak and Mero [41] also suggest that quality management helps firms differentiate their products and services by adding more value and producing better products for customers. Different quality management practices lead to success in differentiation of quality and customer satisfaction [21]. The quality of products and services influences firms to create competitive position and gain competitive advantage [4]. Firms can thus implement product differentiation (through improving quality of products and services) in order to meet customer requirements and expectations. Marketing effectiveness of ISO adoption is positively related to product differentiation. Therefore,

P_{1a}: The greater the marketing effectiveness of ISO adoption, the more likely that firms will implement product differentiation.

Cost Leadership

Cost leadership is defined as a managerial action that is directed towards controlling and minimizing costs [17]. It can help firms gain competitive advantage over rivals [15], [30] and create excess or above average returns by providing a basic, or commodity level, product at the lowest cost of production [31].

Firms, generally, can reduce their costs through economies of scale, economies of scope, and economies independent of scale such as learning effects, preferential access to inputs or distribution channels [43]. To compete successfully in a market, firms also need to be concerned with product quality [43]. According to quality improvement of products and services, a key outcome of the improvement activity is cost effectiveness. For instance, ISO 9000 helps firms reduce costs through clearly understanding processes, activities, responsibilities and control across an organization [1]. In addition, cost reduction is a certain benefit of adopting the quality management systems. Thus, lower costs help the firms gain and sustain competitive advantage [41]. While non-marketing effectiveness of ISO adoption does not focus on marketing motivations and benefits, cost leadership is likely to be implemented. Therefore,

P_{1b}: The greater the non-marketing effectiveness of ISO adoption, the more likely that firms will implement cost leadership.

In the next section, we discuss export literature with an emphasis on performance and how competitive advantages (through implementing export marketing strategies) lead to high export performance.

Export Performance

Firms adopt ISO 9000 because they need to achieve cost reduction and meet customer requirements and expectations that lead to customer satisfaction. Both cost reduction and customer satisfaction influence firms to sustain competitive advantages and gain high performance. Hence, we propose performance as an outcome of adopting ISO. While multinational enterprises have used ISO 9000 certification as a tool to export their products to international markets, performance of international markets is explicitly emphasized. Only export performance is thus explored.

Export performance is defined as the outcomes of exporting products and services into foreign markets, including export and performance [44]. Export refers to the international, marketing-related decisions and activities of internationally active firms [13]. Performance refers to export sales (e.g., total export sales, export market share, and number of export markets), export profitability (e.g., return on assets, return on investment, and export gross profit margin) and change (e.g., ratio of export sales to total sales and the absolute size of these sales and market share) [44]. In this paper, export sales growth, export market share and export gross profit margin are three key measures of export performance.

According to export performance literatures, there are many determinants of export performance, including export marketing strategies, organizational characteristics, export commitment, export administrative arrangements, decision-maker characteristics, and foreign target market environment [14], [33]. However, export performance is a direct outcome of the successful implementation of export marketing strategies. For instance, firms that focus on innovative and highly differentiated products generally have superior performance over their rivals [34], [47]. To enhance competitiveness, firms attempt to get a higher value for their products and offer unique features through differentiation [22]. Firms can offer greater potential for customer satisfaction and loyalty through production differentiation. Product differentiation thus is a key strategy for achieving superior performance [27]. Therefore,

P_{2a}: The more product differentiation is implemented, the greater export performance.

On the other hand, firms that focus on cost reduction may compete well, due to low price, and have a satisfactory export performance. This leads to the following proposition:

P_{2b}: The higher effective implementation of cost leadership, the greater export performance.

Based on the proposed relationships, we distinguish how different dimensions of effectiveness of ISO adoption are likely to influence the appropriate choice of export marketing strategy, which in turn affects the level of export performance. In this model, all components have positive relationships based on previous research. Here, export marketing strategy is viewed as essential, mediating the relationships among ISO adoption and export performance.

Case Studies

In this section, we will introduce case studies of firms operating in Thailand and the U.S. to illustrate the ideas we have developed here. These case studies include two Thai firms with the fictitious names of Thai-Japanese Electronics and Northeast Semiconductors and two U.S. firms under the names of American Circuits and Northwest Transmission Enterprise and use in-depth interviews with owners and/or presidents about their particular experiences related to ISO 9000 certification and quality improvement activities.

Thai-Japanese Electronics

This medium-sized company outside Bangkok, Thailand was started in 1997 as a diversification venture by an owner who was a Japanese immigrant. This company has 250 employees including administrative staff and office and production employees. It produces micro motors for mobile phones, printed circuit boards, and integrated circuits for electronics components. The owner of Thai-Japanese Electronics (TJE) has a strong belief, excellent philosophy, and distinguishable policy about his company's products and Thai employees. He said,

"We produce the best quality of goods and services for worldwide customers. Our policy is quality comes first and production comes second. We are committed to better serve our customers by producing the best quality in the world. We encourage Thai people to have an excellent ability to produce goods. In turn, we attempt to give the best to a society."

The owner has attempted to communicate his belief, philosophy, and policy to his organization and employees. Several activities that encourage the company to produce high quality goods and services are implemented, such as quality training and workshop and quality meeting and discussion. TJE also allocates many resources for quality improvement, such as money, equipment, machines, technology, and the implementation of modern production and quality management systems. Likewise, employees regularly have training programs about quality, efficiency and effectiveness of production processes, technological learning, and working as teamwork. In 2000, the company was awarded “the best company’s operations ” from the Thai Industrial Promotion Office. With regard to marketing activities, the company does little because all goods have been sold to contracted-companies in Thailand and Europe. However, it is still concerned with how to meet these customers’ needs, requirements, and expectations. Because the customers’ requirements continually change, especially quality of goods and services, the company has paid much more attention to quality activities and production processes to improve its quality, increase efficiency and effectiveness, and reduce all unnecessary expenses.

For quality activities, the company has implemented several quality management systems (etc., total quality management (TQM), just-in-time (JIT)) to help improve its quality of goods and services. With TQM and JIT, it committed itself first to waste deletion and increased efficiency and effectiveness and then to increased quality goods and services to reach customer satisfaction. Accordingly, the company believes that its goods and services have moved to the highest acceptable level. However, the customers still want TJE to continuously improve its quality of goods and services. Even though the company has implemented many quality management systems, it also plans to implement and obtain ISO 9000 certification in 2002 to assure its current and future customers that it is providing fundamental qualities.

Why does TJE need to implement this international standard? As the owner pointed out,

“We believe that our standard for operations and productions excess ISO 9000’ s requirements. Yet, we attempted to obtain this international standard because ISO 9000 encourages us to have a good working system and meet a basic requirement for quality improvement activities. While existing quality systems are only internally reviewed, ISO 9000 requires a third party to audit and certify our operations. This procedure help evaluate our operations more thoroughly. Likewise, obtaining ISO 9000 conveys our high quality commitment to the customers, including quality training and quality performance and evaluation. Thus, we strongly believe that ISO 9000 certification plays a significant role in guaranteeing our customers about quality goods and services. However, the customers’ requirements affect our qualities. If their requirements are higher, we will attempt to meet them by improving high qualities to gain competitive advantage.”

For Thai-Japanese Electronics Company, ISO 9000 tends to become an important quality system to help it evaluate and improve its quality and operations and meet customer requirements. Accordingly, TJE seems to implement ISO 9000 because of marketing and non-marketing advantages and benefits. Thus, both marketing and non-marketing effectiveness are likely to be main focuses of adopting ISO 9000.

Northeast Semiconductors

The second company, Northeast Semiconductors (NS) is located in the northeastern region of Thailand. NS is a medium-sized enterprise having 150 employees. The owner graduated with a bachelors degree in science and just finished his masters degree. He had worked for about 15 years as a production engineer for Thai manufacturing firms in the electronics industry. He had learned about the production processes of electronics components and parts, including electronics customers, markets, and environments. Over the past five years, he has created his own company to produce electronics parts and accessories. Most of NS’s products are exported to Japanese customers and markets. Some products are sold to companies in Thailand.

Since 1997, NS has been successful with increasing its profits continuously because it produces high quality goods and maintains low prices. In 2002, NS received “the outstanding manufacturing” award from the Thai industrial manufacturing department based on excellent operations, outstanding quality of goods and services, and exploration of local resources, materials, and employees. However, NS’s owner aims at increasing its profits by expanding the business to other lines of goods, such as micro motors, printed circuit boards, and semiconductors. Likewise, he plans to export to more foreign markets. Thus, the company has implemented many quality management systems to improve its quality of goods and services and to meet worldwide customers’ needs, requirements, and expectations. All resources and capabilities are provided to support quality improvement activities.

Through quality improvement activities, NS started to implement ISO 9000’s concepts in 2000 and obtained ISO 9000 certification in 2002. It took two years to understand international standard’s requirements this and to provide and implement them to its organization and employees. NS' owner described the reason for his effort to follow all steps of ISO 9000 certification as follows:

"We want this international standard to guarantee our quality products and services. Because we are a new company, ISO 9000 certification helps us enter new and competitive markets, especially European and U.S. markets. Our current and future customers need us to have ISO 9000 certification. We believe that this international standard definitely enhances its marketing advantages."

For quality activities, NS evaluates the international standard as a tool to promote greater quality commitments and

intensively maintain quality improvement activities. This standard may influence it to improve its quality of goods and services. Further, the owner of the company also pointed out that:

"We have been very happy to obtain ISO 9000 certification and it is necessary for our goods, services, operations,

and productions. However, this standard gives our company more marketing benefits than quality benefits."

With Northeast Semiconductors, it tends to pay more attention to marketing advantages and benefits of ISO 9000 certification. Accordingly, NS seems to emphasize only marketing effectiveness of ISO 9000 adoption. Thus, marketing effectiveness is likely to be a main focus of adopting ISO 9000. Next, we will introduce two U.S. companies with their experience in ISO 9000 certification and quality improvement activities.

American Circuits

American Circuits (AC) produces printed circuit board assembly, chip on board, in-circuit, functional testing, solar module, control board, and so on. It started in 1995 and a small-sized company in the state of Washington having only 20 employees. Its philosophy is "we are your reliable electronics manufacturing services company." AC has been concerned with producing high quality goods and services to serve its customers. Its main customers are European companies, especially those in Germany. It exports all its goods to international markets. Over the past seven years, Ac's financial performance has increased. For instance, its sales and profits in the year 2001 increased 100% and 300%, respectively, from last year. How does AC increase its performance? AC has retained its customers with high quality goods and services, operations, and production. It has met customers' needs, requirements, and expectations. It has built customer satisfaction. Likewise, AC's owner has paid more heed to production processes in all steps. He has brought a bachelors degree in electrical engineering and his experience working with electronics companies to his company's productions. Accordingly, AC has succeeded in doing business.

In the context of quality management activities, AC has implemented TQM to manage quality activities and improve its quality of goods and services. TQM has become a significant tool for encouraging the company to fulfill its goals, including quality and financial performances. AC is customer-oriented and always pays attention to customers' comments and suggestions, such as how to improve the quality of goods and services and what goods they need in the future. It has attempted to find ways to meet their needs. Thus, it seems to have a good relationship with its customers and this is its strength in doing business.

With TQM, all employees at AC are quality controllers. The employees need to check the quality of their outputs before those outputs are sent to other departments. AC also encourages them to work together as a team. AC's owner noted that "we believe that teamwork helps us produce high quality goods and services and it explicitly enhances a good communication in the organization." Even though AC can meet its customers' requirements with existing quality management systems, it is planning to obtain ISO 9000 certification in 2003 to assure the quality of its goods and services for future customers. However, the owner complained characteristics and qualifications of ISO 9000 certification. As he described,

"ISO 9000 certification means higher expenses. It does not guarantee 100 % of quality goods and services. ISO 9000 auditors do not give confidence about evaluation procedures for certifying companies. In reality, this international standard is not significant for the company. We need to obtain ISO 9000 certification because we want to tell all our customers that our products and services meet basic requirements for quality activities. We believe that the standard can help us gain only marketing benefits."

As previously discussed, AC does not believe the characteristics and qualifications of ISO 9000 certification. It tends to evaluate ISO 9000 certification as a marketing tool to help it export to international markets. Accordingly, it seems to exploit ISO 9000 to help gain more marketing advantages and benefits. Thus, marketing effectiveness is likely to be a priority of adopting ISO 9000.

Northwest Transmission Enterprise

The second U.S. company, Northwest Transmission Enterprise (NTE) has been an ISO 9000 certified company since 1997 for all critical design, manufacturing, and business processes. NTE is a medium-sized company with 350 employees. Its products include transmission features, distributors, transformers, breakers, capacitors, motors, generators, and so on. Its philosophy is "making the best electronics parts and components in the world with high reliability and great economy." NTE has grown steadily since it began in 1993. Its reputation for quality, trust, innovation, and dedication is recognized from providing the highest quality equipment and working closely with its

customers and markets. Accordingly, it has succeeded in doing business.

With production processes, each department presents a summary of operations report to a meeting of the board and high level administrators of the company. NTE conducts monthly meetings with key administrative staff to discuss the quality of goods and services, problems in production, the company's goals, and administrators' policies. To increase efficiency and effectiveness of production processes, it has regular training programs for employees. The programs may involve new employee training about the company's rules and regulations, policies and goals, and quality improvement activities. Each department also has a training plan for its employees. Why does the company focus on the training programs? NTE's management believes that these training programs can help it improve and develop the quality of employees that directly and indirectly affect its quality goods and services. In addition, NTE regularly promotes teamwork among individuals, units, and departments. Teamwork encourages it to have good communication which leads to good operation and production.

For quality improvement activities, NTE has presented its quality commitment through obtaining ISO 9000 certification. This international standard helps it provide high quality goods and services to better serve worldwide customers. NTE has easily met customers' needs, requirements, and expectations as described by the owner as follows:

"We have gained many benefits after obtaining ISO 9000 certification, such as financial performance improvement, quality improvement, cost reduction, market expansion, and reputation promotion. The standard helps us easily enter international markets and effectively gain global competitiveness. Likewise, it also encourages our employees to have good communication among individuals and departments. Thus, ISO 9000 certification is a valuable tool to enhance our success and survival."

For Northwest Transmission Enterprise, it is concerned with marketing and non-marketing advantages and benefits through emphasizing quality and operation improvements and customer satisfaction. Accordingly, both marketing and non-marketing advantages seem to become a key attention for ISO 9000 certification. Thus, marketing and non-marketing effectiveness are likely to be main goals of adopting ISO 9000.

In summary, all four companies have emphasized the different advantages and benefits of adopting ISO 9000. With

results of case studies, Thai-Japanese Electronics Company (TJE) tends to implement ISO 9000 because of marketing and non-marketing advantages and benefits. For Northwest Transmission Enterprise (NTE), ISO 9000 helps it improve quality of products and services and meet customers' needs, requirements, and expectations. On the other hand, Northeast Semiconductors (NS) and American Circuits (AC) focus on only marketing advantages of ISO 9000 certification. ISO 9000 is likely to help them meet customer needs and export to international markets. Thus, it seems that there are two types of effectiveness of ISO 9000 adoption: marketing and non-marketing effectiveness. Some companies may emphasize both marketing and non-marketing effectiveness of adopting ISO 9000. For companies who believe that they have produced high quality products and services, ISO 9000 will become a marketing tool to help sell their products and export to international markets.

Contributions and Suggestions for Future Research

This paper provides a conceptual framework for the relationships among ISO adoption, export marketing strategies and export performance. Differences in marketing and non-marketing dimensions of ISO 9000 adoption are useful for explaining the appropriate choice of export marketing strategies (product differentiation and cost leadership) in order to gain global competitiveness.

Even though many studies have discussed ISO 9000, most are applied research, leaving open a need for academic research. Only a few studies have systematically examined the relationships between adopting ISO 9000 and export performance. Future studies should include empirical tests of the propositions stated in this paper. A stronger theoretical foundation for explaining those relationships is called for, such as resource-based theory and network theory. ISO adoption emphasizes good inter-firm relationships that could be appropriately explained by the network theory while it also emphasizes resources and capabilities of firms that fit the resource-based theory well. Future research should attempt to explore other concepts that may work as mediators linking ISO adoption and export performance. In addition, some moderators could also be included (such as environments and organizational characteristics).

Finally, while adopting ISO affects organizational changes, operation practices and employee attitudes, few studies

have attempted to examine the effects of adopting ISO 9000 concerned with those aspects. Because most previous research on this topic focuses on production, future research should also devote more attention to other business functions such as marketing, human resource, organizational structure, finance and accounting.

Conclusion

This paper examines the relationships between ISO adoption and export performance by using export marketing strategy as a mediator. With case studies, the relationships among marketing effectiveness of ISO 9000 adoption, product differentiation, and export performance seem to be confirmed. All four companies have implemented ISO 9000 because ISO 9000 helps them meet customers' needs, requirements, and expectations and export to more international markets. Non-marketing effectiveness of ISO 9000 adoption is also important. Both Thai-Japanese Electronics Company (TJE) and Northwest Transmission Enterprise (NTE) have gained quality and operation improvements from adopting ISO 9000. However, an empirical study should be conducted for further research. As global competitiveness requires increasing international standards, researchers need to help firms understand more clearly the interplay between such requirements, strategies and performance. This study is among a few to attempt to provide such a systematic explanation with a marketing focus. Much academic work remains for theory development and verification.

References

[1] Achrya, U. H. & Ray, S. (2000). ISO 9000 certification in Indian industries: A survey. Total Quality Management, 11 (3), 261-266.

[2] Bandyopadhyay, J. (2000). ISO registration for achieving competitive edge in the world market place. International Journal of Management, 17 (1), 62-67.

[3] Beamish, P. W., Karavis, L., Goerzen, A., & Lane, C. (1999). The relationships between organizational structure and export performance. Management International Review, 31 (1), 37-54.

[4] Belohlav, J. A. (1993). Quality, strategy, and competitiveness. California Management Review, Spring, 55-67.

[5] Bloodgood, J. M., Sapienza, H. J., & Almeida, J. G. (1996). The internationalization of new high-potential U.S. ventures: Antecedents and outcomes. Entrepreneurship Theory and Practice, Summer, 61-76.

[6] Bhaskaran, S. (1999). Marketing orientation and export performance review of the performance of Australian dairy exporters targeting Malaysia. Journal of International Marketing and Marketing Research, 24 (2), 103-111.

[7] Bhuian, S. N. (1998). Saudi companies attitude toward ISO 9000 quality standards: An empirical examination. International Journal of Commercial Management, 8 (1), 28-42.

[8] Brown, S. (1994). Now it can be told. Sales and Marketing Management, 146 (13), 34-35.

[9] Buttle, F. (1996). An investigation of the willingness of UK certificated firms to recommend ISO 9000. International Journal of Quality Science, 1 (2), 40-50.

[10] Buttle, F. (1997). ISO 9000: Marketing motivations and benefits. International Journal of Quality and Reliability Management, 14 (9), 936-947.

[11] Carpenter, G. S., Glazer, R., & Nakamoto, K. (1994). Meaningful brands from meaningless differentiation: The dependence on irrelevant attributes. Journal of Marketing Research, August, 339-350.

[12] Casper, S. & Hancke, B. (1999). Global quality norms within national production regimes: ISO 9000 standards in the French and German car industries. Organization Studies, 20 (6), 961-985.

[13] Cavusgil, S. T. & Nevin, J. R. (1981). Internal determinants of export marketing behavior: An empirical investigation. Journal of Marketing Research, 18 (January), 114-119.

[14] Cavusgil, S. T. & Zou, S. (1994). Marketing strategy-performance relationship: An investigation of the empirical link in export market venture. Journal of Marketing, 58, 1-21.

[15] Corsten, H. & Will, T. (1993). Reflections on competitive strategy and its impact on modern production concepts. Management International Review, 33 (4), 315-334.

[16] Dekimpe, M. G. & Hanssens, D. M. (1999). Sustained spending and persistent response: A new look at long-term marketing profitability. Journal of Marketing Research, November, 397-412.

[17] Dess, G. G., Lumpkin, G. T., & McGee, J. E. (1999). Linking corporate entrepreneurship to strategy, structure, and process: Suggested research directions. Entrepreneurship Theory and Practice, Spring, 85-102.

[18] Douglas, A., Kirk, D., Brennan, C., & Ingram, A. (1999). Maximizing the benefits of ISO 9000 implementation. Total Quality Management, 10 (4-5), 507-513.

[19] Dunn, M. G., Norburn, D., & Birley, S. (1994). The impact of organizational values, goals, and climate on marketing effectiveness. Journal of Business Research, 30, 131-141.

[20] Erramilli, M. K., Agarwal, S., & Kim, S. (1997). Are firm-specific advantages location-specific too? Journal of international Business Studies, Fourth quarter, 735-757.

[21] Flynn, B. B., Schroeder, R. G., & Sakakibara, S. (1995). The impact of quality management practices on performance and competitive advantage. Decision Sciences, 26 (5), 659-691.

[22] Fraser, C. & Hite, R. E. (1990). Impact of international marketing strategies on performance in diverse global markets. Journal of Business Research, 20, 249-262.

[23] Gano, D. L. 2001. Effective problem solving: A new way of thinking. Annual Quality Congress Proceedings, 110-122.

[24] Ghosh, B. C., Schoch, H. P., Kwan, W. W., Kim, T. S., & Yau, O. (1993). Australia and Singapore's top performing organizations: A comparative study of their marketing effectiveness. Journal of International Marketing and marketing Research, 18 (3), 115-139.

[25] Ghosh, B. C., Schoch, H. P., Huang, J. Y., Lai, W. B., & Hooley, G. (1994). A comparative study of marketing effectiveness: Profiles of top performers in Taiwan and Singapore. Journal of International Marketing and Marketing Research, 19 (2), 75-97.

[26] Giannias, D. (1999). Market positioning of differentiated products. International Journal of the Economics of Business, 6 (1), 29-39.

[27] Hitt, M. A., Hoskisson, R. E., & Kim, H. (1997). International diversification: Effects on innovation and firm performance in product-diversified firms. Academy of Management Journal, 40 (4), 767-798.

[28] Houten, G. V. (2000). ISO 9001: 2000: A standard for all industries. The Information Management Journal, April, 28-37.

[29] Huarng, F., Horing, C., & Chen, C. (1999). A study of ISO process, motivation and performance. Total Quality Management, 10 (7), 1009-1025.

[30] Huo, Y. P & McKinley, W. (1992). Nation as a context for strategy: The effects of national characteristics on business-level strategies. Management International Review, 32 (2), 103-113.

[31] Jones, G. R. & Butler, J. E. (1988). Costs, revenue, and business-level strategy. Academy of Management Review, 13 (2), 202-213.

[32] Karapetrovic, S. & Willborn, W. 2001. ISO 9000 quality management standards and financial investment services. The Service Industries Journal, 21 (2), 117-136.

[33] Kaynak, E. & Kuan, W. K. (1993). Environment, strategy, structure, and performance in the context of export activity: An empirical study of Taiwanese manufacturing firms. Journal of Business Research, 27, 33-49.

[34] Knight, G. (2000). Entrepreneurship and marketing strategy: The SME under globalization. Journal of International Marketing, 8 (2), 12-32.

[35] Kochan, A. (1993). ISO 9000: Creating a global standardization process. Quality, 32 (10), 26-31.

[36] Marquardt, D. (1992). ISO 9000: A universal standard of quality. Management Review, 81 (1), 50-53.

[37] Miller, D. (1988). Relating Porter's business strategies to environment and structure: Analysis and performance implications. Academy of Management Journal, 31 (2), 280-308.

[38] Peach, R. W. & Ritter, D. S. (1998). *The memory jogger 9000*. New Hampshire: GOAL/QPC.

[39] Pearch, C. & Kitka, J. (2000). ISO 9000:2000: The new kid on the block. Machine Design, July, 30-35.

[40] Porter, M. E. 1980. *Competitive Advantage: Creating and Sustaining Superior Performance*. New York: Free Press.

[41] Reed, R., Lemak, D. J., & Mero, N. P. (2000). Total quality management and sustainable competitive advantage. Journal of Quality Management, 5, 5-26.

[42] Reed, R., Lemak, D. J., & Montgomery, J. C. (1996). Beyond process: TQM content and firm performance. Academy of Management Review, 21 (1): 173-202.

[43] Reitsperger, W. D., Daniel, S. J., Tallman, S. B., & Chismar, W. G. (1993). Product quality and cost leadership: Compatible strategies? Management International Review, Special issue (1), 7-21.

[44] Shoham, A. (1998). Export performance: A conceptualization and empirical assessment. Journal of International Marketing, 6 (3), 59-81.

[45] Simmons, B. L. & White, M. A. (1999). The relationship between ISO 9000 and business performance: Does registration really matter? Journal of Managerial Issues, 10 (3), 330-343.

[46] Towell, E. R., Lauer, J., & McFadden, K. L. (1996). The role of the information systems organization in ISO 900 registration. Journal of Global Information Management, 4 (2), 25-33.

[47] Walters, P. G. P. (1993). Patterns of formal planning and performance in U.S. exporting firms. Management International Review, 33 (1), 43-63.

[48] Yukselen, C. (1997). Factors associated with marketing effectiveness of small and medium sized firms in Turkey. International Journal of Commerce and Management, 7 (2), 99-105.

Establishing a Category Brand in the United States: A Case Study of Marble from Greece

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Abstract

When one hears the words marble and Greece associated in America, first thoughts are of ancient sculptures and architecture, a positive association in culture and education. However, it was sometimes a negative when trying to sell this as a modern building material in America to the primary combination target market, architects and designers (A&D). From the A&D point-of-view, Italy was king, and no matter what was done, suddenly Greek marble wasn't selling like it had been. That perception and attitude were part of what Shanahan Advertising and Public Relations was asked to help change when assigned projects by the Greek Trade Commission. Cutting the attitudes into thinner, addressable slices would aid in branding and marketing communications. The research tool of choice for further defining attitudes, focus groups, did just that.

Introduction

When one hears the words marble and Greece associated in America, first thoughts are of ancient sculptures and architecture. These are the classics within the domain of this material. That is a positive attribute in culture and education, but sometimes seemed a negative when trying to reach today's architects and interior designers. "Yes, yes, we know… the Parthenon and all that," was sometimes heard when discussing this building material with today's architects. Or, one might hear, "Marble? Here that means Italian stone, doesn't it?" Yet one more, "they haven't got much to select from, do they?" These typical comments and attitudes were part of what Shanahan Advertising and Public Relations was charged with changing when in mid-1992 they took on business-to-business project work from the Greek Trade Commission (GTC) in Chicago.

GTC's impression was that place of origin appeared important for this building material. Italian marble was the epitome in the minds of the specifiers in the United States. The image for marble of any kind from Greece seemed a negative or an old-fashioned one. Opportunities for Greek producers were getting lost. They could not battle this and other perceptions on an individual basis. Therefore, the Greek Trade Commission (GTC) was asked to help the government sponsored trade organization responsible for developing opportunities for the quarries promote Greek marble imports in the United States.

The goal: Build awareness for the category brand.

The strategy: Develop a brand name that could stand for the positive attributes of the product and the services offered by all within this group of independent manufacturers.

The plan: Define the brand as a whole by further delineating those attributes to the market place. This would adjust attitudes; demand would build, which in turn would increase sales.

To start the process, Shanahan, GTC, and the trade organization agreed on the brand name, *Marble from Greece*. The agency felt this was a strong name for the category situation, as it was important to give as much clarity to the subject in as few words as possible, and this did just that. The clarity of the words Marble from Greece for an American audience is, without question, immediate communication that this marble is quarried in Greece, transported, and is available in the United States.

Category branding: This category brand name, as with others, is unlike an individual product or corporate brand name development. Whereas, the individual brand allows one to select a name that may be much more subjective and build a personality around it, the category brand name here needed to be an umbrella under which many individual brands develop. It is less about its own personality, but rather allows that of many other individual brands to flourish. There are many marble manufacturers in Greece; each having its own brand name and personality. As the agency made clear, category branding of this kind is a long-term proposition. Each manufacturer needed to continue on with their individual promotion programs as the bigger and broader concept of Marble From Greece developed.

> (Marble) suppliers need to have a marketing program. This means a clear and proper useful catalog with specification and testing details. Proper color rendition of the stone they are selling also helps. Sample boards with proper names, not fictitious ones, should also be available. Advertising in magazines helps to promote not only the supplier, but their customers (distributors)… Trade shows are becoming so big that a supplier is now conspicuous by his absence… Investing in a market is a long-term goal and must be treated with reverence and respect [14].

Determining the name was the easy part of the early brand development. The real challenge was in determining the brand attributes, separating the perceptions from realities, and further profiling the customer/specifier. “The task of creating a brand image often needs to move beyond attributes or feelings… A positioning strategy that focuses only on attributes or feelings can be shallow and less effective than one that is based on a richer knowledge of the customer” [1]. To do so, it became clear over time that GTC and the trade group would need to hear directly from market specifiers and the distribution channel just what the negatives and positives about the product were, and how doing business in America was different than other markets. It wasn’t that they didn’t know it was different; it was that they didn’t know exactly how or why it was different.

Method

Study design

Given the subjective nature of the study goals, the way to shed light on all this was not traditional analytical research based on survey data, but rather to utilize qualitative research based on in-depth expert-interviews. To do so, focus groups were set up. With this approach, a moderator could expand on subject areas as they developed rather than the agency and client arbitrarily locking down what information the markets wanted to share, and on what scale. “The (focus) group setting allows (ideas) to be developed to their full significance, because it allows for snowballing” [4]. One focus group was with architects and designers (specifiers), the other with distributors (sales channel).

From mid-1992 through mid-1994, the name, logo, participation in the International Tile and Stone Expositions (IT&SE) along with the promotion needed, and an occasional ad were all done on a project rather than program basis, as that is what the budgets would allow.

The marble industry as a whole had been nose-diving, as there had been a world economic slow-down that had begun in the late 1980s [12], and a U.S. recession in 1991. It took a couple years to even start recuperating the loss in sales the Greek marble industry experienced during this time. Jeff Matthews, past President of the Marble Institute of America, and writer, noted in a speech prepared for the GTC that “Greece had the biggest decline in imports of stone to the USA by a drop of 35% in 1991 versus 1990” [13]. Besides the general economic downturn, there was an even larger one looming in a key geographic market for this product, “from 1991 through 1995, California experienced a severe recession. Property values fell throughout the state,” [18]. At that time, not very many in that state were willing to pay out dollars for what Americans consider a luxury item. There was a total drop in stone imports from 1990 until 1995 of 26% [15].

It was believed that when the economy began to get healthy, so would the budget. But, in the meantime, because of the limited budgets, we always searched for ways to get the best value with our opportunities. Likewise, we did not have an exceptional budget for doing these research assignments and were not in a position to do them at multiple locations around the country. We found a way.

Where and when

To draw a cross-section of the markets for these sessions, we held them in Anaheim, California on June 23, 1994 at a hotel facility adjacent to where the International Tile and Stone Exposition (IT&SE) was simultaneously being held. The exposition not only drew our target markets from all over the country, it was an international fair so a number of representatives from the GTC would be coming to the United States, and therefore would be able to attend.

Overall objective

To develop a customer and competitive information base which will be used to aid in the development of marketing strategies/tactics which effectively:

- Enhance customer perceptions of Greek marble in the United States
- Encourage greater usage of Greek marble

Research facility

From the agency point of view this timing was terrific as the client would be able to view the focus group proceedings on closed-circuit television while the sessions were being conducted. Although this approach is not as ideal or comfortable as a dedicated focus group setting, it is a common one outside the United States [4]. They could hear comments and see facial expressions, as well as body language, first hand and in real time. This allowed all of us to make adjustments to subsequent questions and sessions.

Although many finer details of the Marble-From-Greece-specific research in the "method" and "results" sections are client-confidential, the standard structure of the focus group and topics, the broad conclusions, which could be found by studying public information, or information of a general nature are shared. Much of the information in these sections is derived from the Shanahan Advertising and Public Relations archives [17].

Also, to further stretch the budget and strengthen the research, the agency's Account Supervisor and now a Certified Focus Group Administrator, Trish, and the focus group moderator, Kathy, utilized another qualitative research method, one-on-one interviews, which replicated the focus group response [2].

Discussion starter topics

The following points were open for discussion and the moderator would determine usage during the session.

1. The marble selection/purchase process in order to identify issues/problems/opportunities
2. The satisfaction level with current marble manufacturers/product… issues/problems.
3. To understand the relative importance of different benefits, respondents' priority of needs/benefits/services sought from marble manufacturers and products.
4. To aid in assessing how Marble From Greece is positioned in respondents' minds vs. the competition:
    a. Perceptions/feelings about different marble manufacturers/products
    b. Perceptions of actual types/styles of marble currently being specified
5. Perceptions of benefits rendered by different marble manufacturers/products
6. Reactions to unidentified actual samples… likes/dislikes.
7. Exposure and reaction to issues relative to Greek vs. Italian marble
8. As appropriate, a rank order of these stimuli to gain an understanding of which, if any:
    a. Enhances perceptions of Greek marble manufacturers and product… why/why not
    b. Results in greater interest/consideration in using Marble from Greece

Study sample

Of all the participants there was a mix of males and females, ages 35-65.

1. Seven participants for the sales channel (distributors).
2. Ten participants for the specifiers (A&D)
    a. Five designers
    b. Five architects

Apparatus/visual stimuli

1. A color rendering of Cleveland Airport. The floor, walls, and columns were obviously to be fabricated of stone. However, which stone is not clear from the rendering. This display was used to prompt respondents to select stones, which would be appropriate for the design.
2. A photo of the Athens concert hall was displayed as an unspecified building with simple design utilizing an unspecified gray/white marble. Respondents were asked for their reaction to the marble sheathing, its apparent quality, and appropriateness.
3. Three boards of marble samples were developed. Each board contained 6"x6" white, peach/beige and green representative marbles from Greece, Italy and various other countries. To the distributors, there was no visible designations so as to not influence comments, but these boards were designated on the back as Greek, Italian and Various.

MARBLE SAMPLE DISPLAY BOARDS

	Greek:	*Italian:*	*Various:*
1. Green	Tinos Green	Verde Tiffany	Verde Jade (Taiwan)
2. White	Thassos White	Statuario	Mediterranean White (Turkey)
3. Peach/Beige	Desert Peach	Breccia Oniciata	Crema Marfil (Spain)

4. Nine boards were developed each containing a hypothesis about marble, or specifically Marble From Greece. Respondents were asked whether they agreed or disagreed with the following statements:
    a. I can make a better profit with Greek marble than with other marbles.
    b. Greek marble is easily available for immediate installation.
    c. Greek marble is the least expensive marble available today in the U.S.
    d. When I want consistent quality, I can count on Greek marble.
    e. Conducting business with Greek manufacturers is easy.
    f. I prefer to work with a distributor who specializes in and stocks:
        i. A few marbles
        ii. A large variety of marbles.
    g. It doesn't matter where the marble comes from just so long as I can get the right color and veining.
    h. Using an imported marble seems exotic and more valuable to my clients.
    i. I wish I could remember, and pronounce, the names of imported marbles.

Results

These focus groups provided useful insights into the specifiers' and distributors' "perceptions, attitudes, and satisfaction that help define issues to be researched more formally" [9]. And, in this case it was used to confirm to the client some of the trouble spots in the specification and delivery of the product and culture clashes that we at the agency had found in our field information gathering over time. Quantitative research, such as Starch Reports, is regularly provided through many publications. "Readership tests provide a mechanism for breaking a print ad into its more important components (that is, headline, visuals, body copy, logo) and then measuring how these elements are remembered by a sample of readers" [3]. They are often used to confirm or adjust the directions developed for branding and marketing communications that may previously have been based only on focus groups or historical information.

Some of the verbatims, exact verbiage of participants, were restatements of the suspected issues. Although not all the results can be shared here, several of the issues dealt with differences in conducting business, several were financing specific, and more were communications problems having as much to do with cultural differences as language barriers.

Business procedures and language

Business procedures, including finance, could be learned, adjusted, and negotiated as necessary over time. Language problems fall squarely on the shoulders of the Greek manufacturers and their distributors. Obviously the Greek manufacturers could not expect their target markets would learn the Greek language just so they could buy marble. In the stone business in general,

> Suppliers should communicate in the language of the customer or buyer. They should be clear in their communication whether by fax, letter, or phone... The supplier must be responsible to ask the questions, supply all the answers clearly and in a timely manner… When problems occur, which in the stone business they so frequently do, the supplier should communicate this immediately. If the stone is varying in tonality or veining more than what the buyer expected, the supplier should get approval of this variation from the buyer in advance of shipping [14].

At minimum, the Greek manufacturers needed to develop conversational English language skills if they didn't have that capacity. Conversely, they could appoint an American liaison from within their organization, and often did. This language problem will slowly right itself as many of the manufacturers are family-owned businesses with adult children now coming into the companies, many of whom already speak English as a second language.

Cultural differences

There are so many subtleties in one's culture. Many of those subtleties may be meaningless to one, but can be offensive to, or misunderstood by, others from a different culture. Timing is an obvious contrast between the way U.S. businesses and many European companies operate. Where the Americans see some Europeans as running in low gear, many of those same Europeans see the Americans as being frenetic. Neither is the best speed at which to operate, they are just different speeds at which to operate. And those speeds are greatly determined by a total culture, not just an individual's motivation levels.

Cultural differences were not the greatest factor to be found in the findings, but because we are talking about trans-national/trans-cultural sales, it certainly was one with which distributors and manufacturers should be sensitive. See Hodgetts and Luthans' book on the interlacing of country and corporate cultures, *International Management: Culture, Strategy, and Behavior* [7]. Here two of the thought leaders in the study of culture, Geert Hofstede and Fons Trompenaars indicate that U.S. corporate culture and Greek corporate culture to be less than ideally compatible. See Fig. 1 below. With major business style differences being the case, business offerings, negotiations, and transactions are all bound to clash.

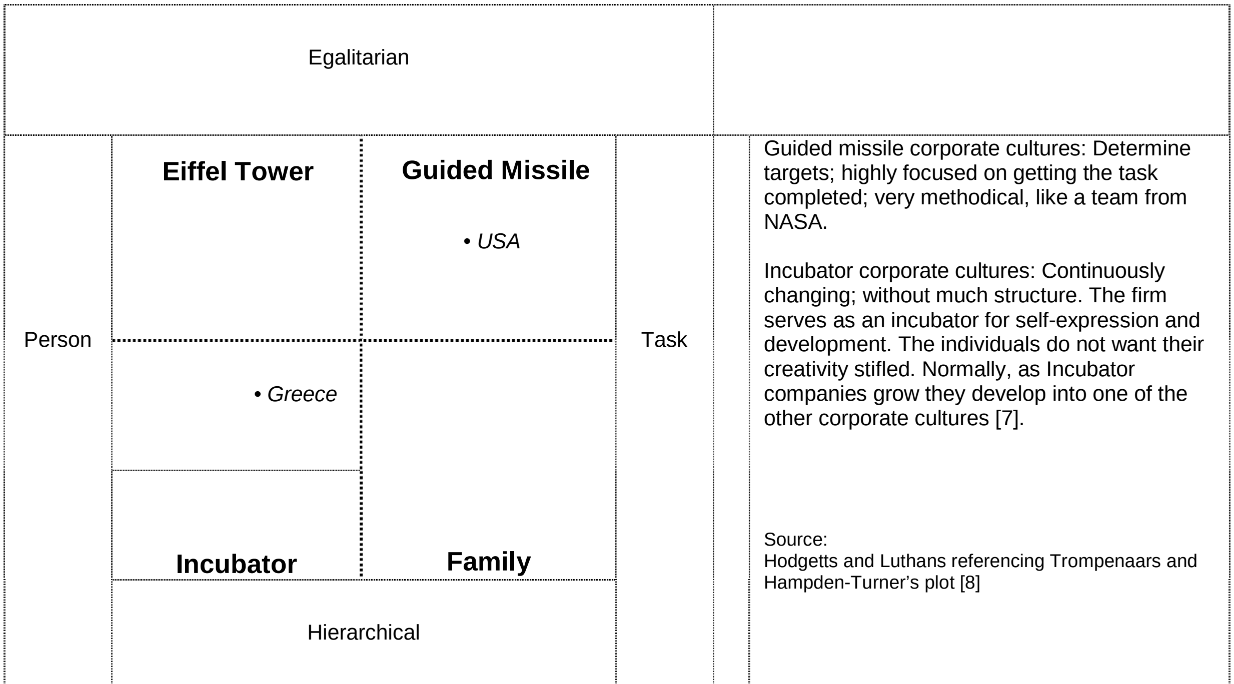


Fig.1: STANDARD CORPORATE CULTURE TYPE BY COUNTRY, BASED ON TROMPENAARS AND HAMPDEN-TURNER'S PLOT.

As an example of cultural perception difficulties, "they (Greek manufacturers) don't seem as warm and friendly. They seem a little colder," [2] was a statement made by a participant in the group. We had just heard so many positive things, so this comment stood out.

The agency was trying to underscore this negative perception to the client, as similar comments had been heard before. But, through its dealings, the agency knew this not to be true. The reality is just the opposite. The Greeks are a very friendly people.

While viewing the group in session, due to this comment, a short discussion was taking place with the primary contact from the GTC. His supervisor walked in with a broad "hello… how is it going?" Within a very few seconds the two from the GTC were standing in the back of the room. With an occasional glance over the shoulder in their direction what could be seen and heard by the agency was arms flailing, voices raised a bit, an occasional grin, and then what appeared to be scowls on their faces. A few minutes later the supervisor left, and the agency inquired if all was well between the GTC co-workers. Had our GTC contact explained the "seem a little colder" comment we just heard from the focus group participant, the agency wondered. His answer, "everything is fine… I just greeted him and told him a humorous story I heard last night… he left to attend another meeting… why do you ask?"

Irony is everywhere. Even though the agency knew the Greeks to be friendly, its perception at that moment had been angst and anger existed where actually there had been humor. The perception didn't come from the language, as no one from the agency spoke Greek. It came from body language and the cultural differences in the greeting and the way humor was presented and received. Kinesics, the study of body language, gestures, and facial expression, as well as paralinguistics, which is concerned with accents, loudness, and tone of voice have been studied in cross-cultural situations [10]. Concerning gestures, the results from a study of foreign college students from several regions of the world, who were being schooled at major American universities, were significant. It was found in the survey that 56% of those students' recognition of gestures was not in keeping with the American meaning [7]. Logic would have it that the converse is true as well. On occasions some Americans must be misinterpreting what the Greek marble manufacturers were expressing to have the take-away, they "seem a little colder". The misinterpretation on the part of the agency was duly noted to the client. Then, the GTC contact better grasped the problem, recollecting the interaction he had with his supervisor and imagining himself as an American observer.

Country of origin

The country of origin issue turned out not to be a selection driver for the architects/designers groups. They perceive little, if any, differences between similar products/colors from different countries. However, they did perceive a romantic notion in imported stone compared to domestic. This selling slant could be imparted to their clients through the concept, presentation, and approval processes. In fact the romance idea was later incorporated into the creative strategy for some of the communications.

Like the architects/designers groups, the marble distributors also do not choose product based on country of origin. They perceive few product differences between similar colors from various countries. In fact, they could not always distinguish between the Greek and Italian marble samples, although they could spot the "other countries" samples immediately. The distributors select based on what they have determined the architects/designers are currently buying and that will continue to be saleable in the near future.

"However, distributors perceive Italian manufacturers to come closest to delivering the bundle of product and service benefits desired with the fewest drawbacks. They view Greek manufacturers as improving, but still not providing all of the service and product benefits that they need" [2]. The perception of the service benefits from one country was overriding the product features from another.

General findings

Product needs and benefits sought:

1. Distributors, as well as the architects and designers, seek marble products with a strong aesthetic appeal, are affordable, have good overall quality, a wide selection, and new introductions.
2. Motivations for selecting marbles are different for each market.

MOTIVES FOR MARBLE SELECTION

Desired Product Attributes	*Architects/Designers*	*Marble Distributors*
Professional appeal	Visual appeal: beauty, color, elegance,	Margin appeal: ability to sell quickly
Affordability	Use of floor or wall materials that look	Ability to sell quickly and keep on budget
Good overall quality	Durable, easy to install	Strong customer service and satisfaction
Wide selection	Options to explore	Offers competitive advantage
New	Colors, textures/patterns, finishes	Offers competitive advantage

3. Distributors live by the phrase, "turn, and earn." Distributors loose too much money on large inventory. Their stock must be sold, turned into profit, and used to seed new inventory. When marble distribution businesses are sold in the United States, one of the appraisal values used is the number of times per year they "turn their inventory". The larger the number, the more value there is in the company.

Service needs and benefits sought:

1. Ease and accommodation of selection is important. If the order is small, the architect/designer will want to select from the slabs in the distributor's yards and to personally tag them. If the order is large, often they will travel to inspect the marble at the quarry.
2. Quality control is imperative. There is always a fear that once an order is placed for marble from anywhere, things will go wrong: incorrect marble will be delivered, an inferior quality will be delivered, the order will

not be consistent in texture, the shipment will not arrive on time, the order will be damaged in shipment, or that they have no recourse if dissatisfied.

3. The distributors as well as the architects/designers all source the products from many suppliers, but both groups desire long-term relationships built on trust with each of those suppliers. Since this is a natural material, consistency and appearance can vary somewhat from even a single manufacturer. The variances must be minimized with the architect/designer dependent on the distributor, who in turn is dependent on the manufacturer.
4. The relationship built on trust is perceived to provide value-added service benefits:
   a. They will receive the product specified in a timely manner.
   b. They are allowed to inspect an order thereby reassuring them of quality.
   c. The manufacturer will allow flexible financing to make their purchase easier.
   d. An on-going relationship allows them to negotiate pricing.
   e. Problems will be solved more efficiently and more effectively.
   f. They will receive advice on specific projects.
   g. They will receive on-going information on new, different colors, types.

The net result of the development of this trusted relationship is greater loyalty to the source who consistently delivers these benefits, enhanced perceptions of the source, and greater likelihood of repeat business.

Strategy considerations

These general insights confirmed knowledge that had been gathered. Coupled with Marble-From-Greece-specific information resulting from the groups, both negative and very positive perceptions and attitudes, the agency was able to infer some definite communications and branding strategy considerations. Chief among these were:

• Greek manufacturers have made great strides improving quality control and service during the past few years. They now need to take more aggressive steps to provide the bundle of product and service benefits that the distributors desire.

• Marble From Greece accomplishments and acceptance in America need to be known in order to change the earlier negative brand image into a positive brand image. This can only be done through consistent, on-going marketing and communications efforts.

• On-going marketing efforts must be used to introduce architects/designers to the full color palette of Marble From Greece, one of the most extensive available, to introduce and keep these marble options top-of-mind.

• Marble From Greece must show architects/designers that they have the colors desired, that those marbles are currently available, and they meet all the quality standards that are needed.

• Methods of earlier marketing efforts are not enough to solve the perception problems that exist.

• GTC should not attempt to compare their marketing strategies to the Italians. The Italians have a good word-of-mouth reputation, which they have earned over time. The Italian marketing efforts may simply consist of occasional reinforcements of that reputation, or new product introductions.

• In the minds of the market, Marble From Greece must first measure up as real competition to the Italian marble trade. Once that happens, Marble From Greece can catch up, and then consider how to surpass the Italian marble trade. The focus needs to be where Marble From Greece is currently, and what realistic goals should be met. The focus should not be how to leap frog the leader, that won’t happen right now.

• The marketing strategy at this time should be to clearly offer major alternate choices in the minds of the architects and designers, as well as the distributors.

Discussion

From mid-1992 through mid-1994 the ripple effects from earlier weak economic times were beginning to lift, but budgets were slow to catch up. Through this time, only the logo, a blue and black duotone effect ad, and a basic black and white dealer directory had been developed for promotion of Marble From Greece. A couple shows had been attended with a bare-bones presence. However, a high level PR event was held in New York for the architects and designers (A&D) market with Costas Kondylis, from the well-respected New York architectural firm bearing his name. For perspective, later his firm designed the world-renowned Trump International Hotel & Tower [22]. By June of 1994 the budget had improved slightly, at least enough to do a bit more promotion for Marble From Greece at the International Tile and Stone Exposition with more extensive displays and a solid dinner and slide presentation PR event on new design directions using marble. More importantly, what would effect Marble From Greece promotion and branding over the next several years took place. There was enough in the budget now to handle a focus group research project.

The information compiled and analyzed from this research project lead the agency to develop several marketing communications strategies to help redefine the image of the Greek marble products and manufacturers in the minds of the primary American specifiers, the A&D community. Conclusions at which the agency arrived were that the distributors and A&D seek the same product features, but both groups seek different benefits. The manufacturers' service benefits were more directly related to the distributor, as the distributors were the links in the trust chain that existed between specifier and manufacturer. To do a better job with A&D an extra effort needed to be made to communicate better with the distributor sales channel people. Educating them more would in turn allow the distributors to educate the architects and designers. A campaign for each group was needed and developed.

The A&D approach was driven by aesthetics: the marble's beauty, elegance, broad range of color options, and newness expressed through originality and uniqueness of visual texture, as well as satisfying color trends. The marble distributor marketing efforts focused on educating this market so they could educate the A&D market. The communications focused on: white marble—one of the most sought after marbles—by showing the Greeks broad range, the wide range of popular and unique colors to satisfy customer needs, and building trust with the manufacturers and a warmth towards Greece as a whole, and seating them as competition to Italian marble.

Keeping Marble From Greece at the top of the distributor's minds was of the greatest importance. Therefore, the Marble From Greece Distribution Network was conceived and implemented to greatly open bi-directional communications. Membership gave them leads and in return, the agency and GTC received valuable input.

By the end of 1994 a plan was in place for the last months of '94 and all of '95 for the promotion of Marble From Greece. It should be noted that from the agency's point-of-view, this was the real start of the Marble From Greece branding promotion program. It was in 1995 that an annual program approach was first implemented rather than spot projects. In previous years when there was a flurry of communications centered around participation in the International Tile and Stone Exposition (IT&SE), very minimal brand support for the balance of the year, and the efforts were pretty well forgotten by the markets before the next IT&SE show rolled around approximately a year later. There was high value in the program approach as it provided a full year with continuity in the communications that would bump up to another year with the same. This was the year of developing and starting implementation of a totally integrated marketing communications effort that would carry on over the next few years. All materials were now produced in full color and were of very high quality. Here is some of what the agency and GTC developed during this time:

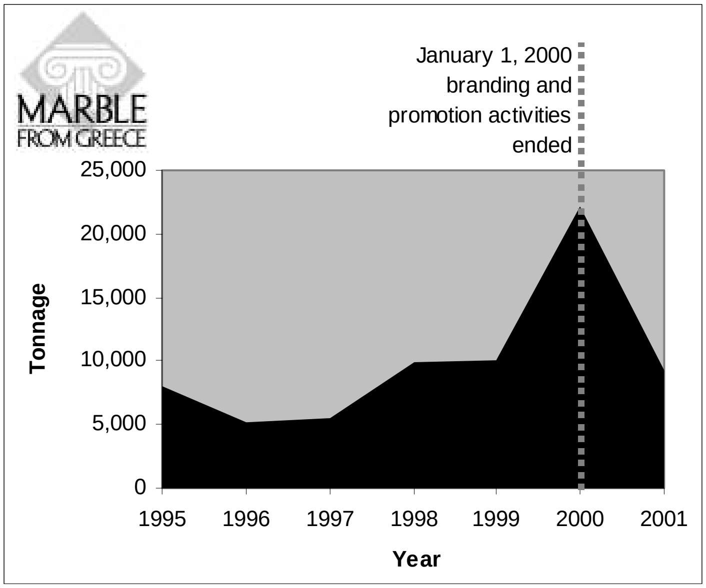
- Print ads specific to distributors
- Print ads specific to architects and designers
- Print ads about the wide range of whites
- Print ads about the wide range of colors
- A&D reference books ad inserts
- Public relations releases to the press
- Speaker and dinner events
- Slide shows
- Interior design continuing education seminar
- Case history sheets
- Posters
- Direct mail
- Swatch books
- Exhibitry
- Total expo pavilion design and management
- Establishment and management of the Marble From Greece distributor network
- Four-color upgrade and extensive expansion of dealer directory
- Database management
- Lead development
- Lead fulfillment
- Web site development and management
- CD-ROM presentation
- Manufacturer's business in U.S. reports
- Manufacturer's seminar

Three 1996 marketing awards for this work showed that the agency and GTC were on the right road. They were: 1) the "Golden Rectangle Award" from Architecture magazine for being a best read ad, which meant architects were paying attention. 2) "Buildings 100—Marble From Greece" recognition award from Buildings, a trade magazine, for being voted a top building product based on reader response to publicity developed by Shanahan. The architects weren't just paying attention; they liked for what Marble From Greece stood. 3) Business Marketing Association's (BMA) "Pro-Comm International Award" for *Rock the World*, an interior design seminar which awarded continuing education credit from the American Society of Interior Designers (ASID). This meant that ASID recognized the seminar program as highly valuable to its membership. It also meant that BMA professional peers in marketing communications recognized the work as high quality strategy, planning, and messaging.

The agency and client continued on this path of continuity and programs until the agency did the last assignments and billing in January 2000. There were several changes that took place at that time that brought an end to the Marble From Greece branding promotion programs. The most notable of which was a major shift in how Greece would be allowed, within the newest guidelines of the European Union, to conduct export promotion work in the future.

Increase in dollar volume on imports of Greek marble into the United States from January 1995 through January 2000 was about 30% [24], but the real goal was to build a ground-swell demand for the material, the marble, letting others worry about pricing and cash flow. So, for this purpose, viewing how much raw product tonnage was moved is more significant. The more the product is specified and successfully used, obviously, the closer Marble From Greece came to critical mass for higher demand of the product.

In Fig. 2 below, a one-year lag period exists between promotion (cause) and tonnage imported (effect) figures being reported. Note: promotion over time has a cumulative effect. Some spot project work was done pre-1995, but annual program work was begun in 1995 contributing to the start of the rise in demand in 1996. Program work stopped again in early 1999 with spot projects for the balance of the year. When the marketing promotion work ended, tonnage dove. Shanahan Advertising and Public Relations recognizes that there are many factors beyond the branding that caused these movements, but it believes the branding work contributed in a significant and positive way.



Sources:
1995-1997, Stone World Magazine [19-21]
1998-2001, U.S.B.C., Foreign Trade Division [23].

Fig. 2: GREEK MARBLE TONNAGE IMPORTED BY UNITED STATES 1995-2001

Today, Marble From Greece, and the Marble From Greece Distribution Network, linger on without any support. One can still find the logo for the dealer network in use on the Web [6] as a mark of belonging to something greater than what the smaller individual businesses represent. The posters, swatch books, and CD-ROM discs are still at the fingertips of specifiers. Greek marble is still being spec'ed by architects. As for them using a classic, white Pentelikon marble, the same that was used to build the Parthenon [11] was recently used for the lobby walls in the renovation of the General Motors building in New York City [16]. And, today's architects and designers no longer think of it only associated with the classics. They know Marble From Greece can be used playfully as well as formally. In the music room of an estate in North Carolina, "a border of piano keys made of Black Absolute granite and Thassos White (Marble From Greece) runs around the perimeter of the room. The piano keys of this border are regulation sized and raised off the floor to simulate actual piano keys" [5]. That's a sweet note on which the Marble From Greece branding and communications programs finished.

References

[1] Aaker, D.A., Batra, R. & Myers, J.G. (1992). *Advertising Management* (4th ed.). Englewood Cliffs, NJ: Prentice Hall, Inc. p. 253.

[2] Andrews, P.C., Shanahan, W. M., & Valdiserri, K. (1994). *Marble From Greece, 1994 Focus Group Research* [Plan for, analysis of, and report on focus group and interview sessions.]. Chicago: W.M. Shanahan, Inc. (business archives).

[3] Burnett, J. & Moriarity, S. (1998). *Introduction to Marketing Communication: an Integrated Approach.* Upper Saddle River, NJ: Prentice-Hall, Inc. p. 603.

[4] Churchill, G. (1999). *Marketing Research Methodological Foundations* (7th. ed.). Ft Worth, TX: Dreyden Press. pp. 110, 112.

[5] Critchley, J. (2001). Stone as a status symbol. *Stone World.* Retrieved August 29, 2002, from http://www.stoneworld.com [kw search: piano room].

[6] Harris. (2002). Excellence, exclusiveness, and emulation in marble products. Harris & Anton Hellenic Marble Imports, Inc. Web site. Retrieved August 20, 2002, from http://www.marbleimporters.com/

[7] Hodgetts, R. M., & Luthans, F. (2000). *International management: culture, strategy, and behavior* (4th ed.). Boston, MA: Irwin McGraw-Hill. pp. 151, 177-179, 211-212.

[8] Hodgetts, R. M., & Luthans, F. (2000). *International management: culture, strategy, and behavior* (4th ed.). Boston,MA: Irwin McGraw-Hill. p. 179. Chart adapted from Fons Trompenaars and Charles Hampden-Turner's plot, *Riding the Waves of Culture: Understanding Diversity in Global Business*, 2nd ed. (New York: McGraw-Hill, 1998), p. 184.

[9] Kotler, P. (1994). *Marketing Management* (8th ed.). Upper Saddle River, NJ: Prentice-Hall, Inc. p. 135

[10] Lascu, D-N. (2003) [previewed 2002]. International Marketing: Managing Worldwide Operations in a Changing International Environment. Cincinnati, OH: Atomic Dog Publishing. p. 91.

[11] Litos. (2002). Ancient Greek Marbles, some still used today. *Litos Magazine (Spain).* Retrieved August 24, 2002, from http://www.litosonline.com/articles/60/ar6003e.shtml

[12] Matthews, J. (1993). United States Economic Forecast. *TII. Dimensional Stone Sourcing and Information.* Retrieved August 16, 2002, from Trade International Inc. http://jbmatthews.home.mindspring.com/articles_forecast.html

[13] Matthews, J. (1993). Greece—Past, Present, Future [speech/seminar]. *TII. Dimensional Stone Sourcing and Information.* Retrieved August 13, 2002, from Trade International Inc.:http://jbmatthews.home.mindspring.com/articles_greekspeech.html

[14] Matthews, J. (1994). What to expect from a supplier. *Dimensional Stone Magazine,* September, 80. Retrieved August 14, 2002, from Trade International Inc.: http://jbmatthews.home.mindspring.com/articles_expected.html

[15] Matthews, J. (1995). Marble and dimensional stone in the United States. *TII. Dimensional Stone Sourcing and Information.* Retrieved August 13, 2002, from Trade International Inc.: http://jbmatthews.home.mindspring.com/articles_oct95.html

[16] Reis, M. (2001). Expressing Trump style in marble and brass. *Stone World.* Retrieved August 29, 2002, from http://www.stoneworld.com [kw search: Trump].

[17] Shanahan Advertising and Public Relations. (1994-2000). [Marble From Greece Files]. Unpublished data, W.M.Shanahan, Inc. (business archives).

[18] Sheffrin, S. M., & Sexton, T. A. (1998). *Proposition 13, the Recession, and the Tax Assessor's Dilemma* [research brief]. Retrieved August 9, 2002, from Public Policy Institute of California: http://www.ppic.org/publications/PPIC114/PPIC114rb/PPIC114rb.html

[19] Stone. (1997). Statistics, imports to the U.S. 1995 Summary [Year end summary figures for 1995-1996 compiled from U.S. Department of Commerce data]. *Stone World, 14*(5), 24.

[20] Stone. (1998). Statistics, imports to the U.S. 1996 Summary [Year end summary figures for 1996-1997 compiled from U.S. Department of Commerce data]. *Stone World*, *15*(5), 28.

[21] Stone. (1999). Statistics, imports to the U.S. 1997 Summary [Year end summary figures for 1997-1998 compiled from U.S. Department of Commerce data]. *Stone World*, *16*(5), 26.

[22] Trump. (1997). Fact Sheet [press information available on Web site]. *Trump International Hotel & Tower*. Retrieved August 12, 2002, from http://www.trumpintl.com/releases/20010101b.html

[23] USBC. (2002). *Imports—Commodity Time Series.* [kw: Marble, Greece]. [Raw data files; later compiled]. Washington, D.C.: United States Bureau of The Census, Foreign Trade Division. Retrieved August 18, 2002, from http://208.243.58.31/wds

[24] USITC. (2002). *U.S. imports for consumption: Greece, marble products, customs value, annual data* [Raw data files; later compiled]. Washington, D.C.: United States International Trade Commission. Retrieved August 20, 2002, from http://dataweb.usitc.gov/scripts/query.asp

Expanding the Role of Marketing in the Development of Small South Pacific Island Nations by Integrating National Environmental Considerations

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Abstract

The premise of international business texts is that the business environment differs among countries. Few of these texts deal extensively with South Pacific island nations (SPINs), or small nations in general, as their markets are relatively small. In addition, major international marketers have not differentiated their offerings specifically for these markets. Thus, their distinctions have been neither adequately recognized nor attended to. This paper adopts the perspective that the national environment is of importance to marketing, and applies the recently-developed triadic model of marketing, development, and environment as a framework to examine the conceptual and practical impacts of marketing on the development of small South Pacific island nations. We aim to facilitate critical understanding of the marketing-development-environment model and demonstrate its application to a fascinating, diverse set of nations that traditionally do not receive substantial academic or commercial attention. Implications for marketers, government policy makers, and future research are discussed.

Introduction

Marketing can be approached from the **micro** (firm or managerial) or **macro** (market or nation) level. Both levels consider core marketing functions and activities (e.g. market research; the 4Ps or product, place, price, and promotion; strategic planning), differing in context and purpose. We have adopted a macro-marketing perspective to explore the relationships among marketing, development, and (national) environment. Our model differs from traditional frameworks that link marketing and development by focusing on the third variable, national environment, heretofore under-emphasized in the marketing literature.

The environment is traditionally treated as a silent, static, but inherent force that may determine, constrain, or facilitate marketing strategies and development goals; we instead characterize it as organic and changing, consisting of both internal and external forces. Developing countries - particularly small ones - each feature their own critical mix of environmental variables that affect the relationship between marketing and development. Given that "marketing is more culture-bound than production or finance, marketing practices and systems (and development priorities and goals) must be adapted to the particular environment in which they operate" [13:44]. Thus, we argue for the addition of a third variable, the environment, as the link that may lead to a "more comprehensive understanding of marketing processes and a long-term view of the desired role of marketing organization and institutions in national economic development" [36]. Corollary to this, applying marketing to a society's developmental needs is the "redemption of marketing and a return to its social scientific roots as a discipline" [22:vix]. By focusing on some solutions to the problems of small island developing countries, marketers can "lend credence to marketing's economic and social utility" [11:3].

The M-D-E Triad Framework

The marketing-development-environment triad framework proposed by Llanes [25] is summarized here, and adopted as the basis for our examination of the relationships among these three separate but interacting constructs (Fig. 1).

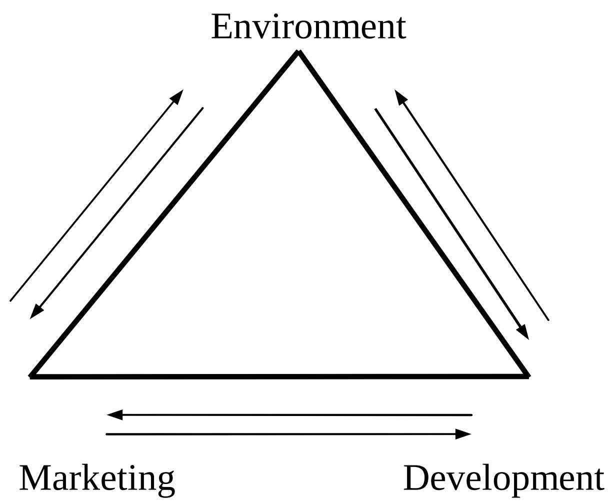

FIG 1: THE M-D-E TRIAD

This section first situates the marketing and development relationship by discussing the variables that define each construct (see Table 1), before conceptualizing the environment construct and its role in marketing and development.

Table 1: FACTORS WITHIN THE M-D-E TRIAD MACRO-FRAMEWORK

MARKETING	DEVELOPMENT	ENVIRONMENT
Functional Role • Strategic Planning • Market Research • Product Planning • Pricing • Promotion/Communication • Distribution *Expanded Role* • Development • Social	*Economic Goals* • Growth • Export diversification *Non-Economic Goals* • Lower population growth • Higher employment opportunities • Human resource development (education and training) • Infrastructure improvement • Political stability • Cultural freedom	*External* • Climate for commodity exports • Export markets • Aid and remittances' flows • Regional cooperation *Internal* • Macro-environmental forces • Market characteristics • Marketing infrastructure • Government • Other key players

Marketing and Development

In a 1958 article considered a classic, Drucker [10] pioneered and stimulated interest in the role of marketing in development. He suggested that marketing, more than manufacturing and construction, is "the most effective engine of economic development, particularly in its ability to develop entrepreneurs and managers" [10:254]. Moreover, marketing institutions serve as the bridge between production and consumption [18]. The renewed interest in marketing and development today may be a result of the increasingly attractive markets of several developing countries (e.g. Asia-Pacific nations), market saturation in developed countries, "the developments in communication and technology, and the desire for an improved human condition by all nations" [29:1].

Relating marketing to "economic development" (employing the broader meaning of the term to include not only purely economic but also related social, political and technological changes) is a neglected area in the economic and public policy literature. This neglect is not surprising given that in developing and small island nations, production, construction, and manufacturing activities are pursued as part of economic restructuring and developmental goals. By contrast, marketing is not only neglected but generally treated with contempt [10]; market intermediaries are considered "schemers who gain profit at the expense of the public" [31:14]. In Papua New Guinea (PNG), such market intermediaries (or middlemen) have a relative monopoly on distribution, which allows them to set high prices and to seek unreasonable profits for their services and capital investment [12]. Further, in island cultures, the competitive behaviors which characterize marketing are frowned upon, limiting the utility and application of marketing research in market competition [4].

Marketing and Development Defined. In a developmental sense, marketing is defined as "the use of techniques of research, product planning, pricing, distribution, and communication to design, organize and implement economic and social programs to influence participation (both public and private concerns) in a nation's development" [Rao, in 18:31].

Implementation of the marketing functions (4Ps) promotes and helps realize the major goal of "development marketing" (as in development economics), which is the satisfaction of a country's developmental and societal goals as well as those of the public or "consumers." While marketing knowledge and techniques may be universally relevant, due consideration must be given to existing social structures and value systems [Shapiro, in 28]. Marketing must therefore, be used beyond the 4Ps [9] [Arndt, in 28]; also see Table 1) when dealing with politics, conflict resolution, negotiation, and administrative procedures in developing countries and small island economies. In many developing countries, although GDP per capita increases, the benefits of development do not reach the poorest sectors [19]. This role of marketing parallels the concept of development which implies not only economic growth, modernization, or socioeconomic transformation, but "distributive justice" or growth with equity associated with the redistribution of economic benefits [13].

Marketing contributes to development in at least three areas: an improved distribution system, an improved marketing information system, and better consumption motivation [Samli, in 18], with emphasis varying both in importance and order depending on the developing country's stage of economic development [18:3]. Rao [in 18:17] maintains that it is the role of government to assume active leadership in creating six basic structural dimensions: physical facilities (e.g. roads, telecommunication capability, etc.), institutional facilities, market accessibility, technology transfer, behavioral factors, and regulations - paralleling several of the developmental goals of the SPINs in Table 1.

Development Paradigms. The discussion so far suggests that marketing and development are linked inseparably with the environment in which they take place, and that development is not only measured in terms of both economic and non-economic goals (Table 1). However, only the relationships between marketing and development have been reviewed in the literature, neglecting the role of the environment. Two schools of thought explain the role of marketing in the development process: the *activist or catalytic school* (e.g. [10] [9]) asserts that marketing initiates and stimulates development, focusing on "how marketing institutions contribute to building the infrastructure required for development" [36:6]; and the *deterministic school* which views marketing as a consequence and response to environmental stimuli and development [20].

Within these perspectives three development paradigms -- modernization, institutional, and radical -- are used to analyze marketing's role in the development of developing countries [36] [17] [13] [38]. The *modernization* paradigm assumes that countries pass through describable stages of development (e.g. Rostow's growth stages model [32] [24]), along a continuum from "traditional, underdeveloped" to "developed," with the latter generally assumed to be the more desirable [36:6]. To move from one stage to the next, government policy makers must be cognizant of both prerequisites (e.g. infrastructure building and improvements in distribution; market structure; capital markets; technology) and barriers (e.g. a typically dualistic economy featuring inequitable distribution of wealth, resources, and population; socio-cultural aspects such as attitudes towards change, material gain, competitiveness, and technology; value patterns; lack of or abundance of entrepreneurial spirit) in marketing and development.

The *institutional* paradigm emphasizes the power of societal institutions (e.g. government, marketing boards, and multinational enterprises) in relation to three key economic control mechanisms (politics, markets, and hierarchies) that shape and affect governing transactions [36]. SPINs' governments not only regulate and promote but also operate certain businesses and industries, e.g. the direct role of the Cook Islands government in coordinating and promoting tourism. On the other hand, the *radical* paradigm focuses on the "pathology of development" by exposing both the development and underdevelopment of a dual economy, and the role of the state [14:27]. It assumes that after decolonization, many developing countries became dependent on developed or "core" countries, becoming no more than the periphery in the world system [36:7], a case tenable for several SPINs which, while now independent countries, were formerly colonies of either the United Kingdom, the United States, Australia, New Zealand, or France.

Linking Marketing, Development, and Environment

Introducing the concept of the environment into the preceding discussion of the relationships among marketing and development leads to the following three propositions:

P1: *The environment shapes its own definitions of the marketing and development relationship.* This suggests an activist view of the environment as the central force that determines marketing and development. Marketers would need to adapt, even change, their marketing strategies to meet society's needs, values, and aspirations.

P2: *The environment mirrors the marketing and development relationship*. This reflects a passive view of the environment, for example, one that is being shaped by marketing and "requires" infrastructures for its successful implementation. Marketers would have freer reign and could apply globalized concepts more liberally.

P3: *The environment, marketing, and development are intertwined*. This suggests a truly interdisciplinary, multi-dimensional relationship among the variables, beyond the traditional either-or perspective (e.g. activist or determinist), forcing new and critical ways of examining the relationships. Marketers would need to adopt a systems perspective and seek mutually beneficial approaches in cooperation with governments and environmental factors such as local cultural expectations.

These propositions also attempt to integrate the variables that define the environment of the SPINs (see Table 1)

The conceptual relationships among the three constructs as defined by the propositions can be characterized from the perspective of marketing as passive, active, and interactive relationships. While the M-D-E framework (Fig. 1 and Table 1) may appear to focus on P3, it does not exclude the two other propositions. Indeed, a limitation of the framework is its inability to provide a sense of balance to the flow and direction of the three constructs, the degree of give-and-take, or even resistance among the factors.

Applying the Framework to South Pacific Island Nations

The relationship of the SPINs' environmental forces to marketing and development are explored in this section. The discussion here clarifies the different external and internal environmental variables listed in Table 1 that may constrain, stimulate, or facilitate doing business in the SPINs.

The South Pacific Island Nations consist of 23 separate political entities of diverse and varying physical and economic environments (Table 2). The SPINs occupy a vast region of over 560,000 sq. km. of land area (about the size of France) stretched over fifty times as much ocean, bounded by the Northern Mariana Islands in the north, Palau in the west, Tonga in the south, and Pitcairn in the east. The region has about 25,000 islands, more than one-half of the world's total [21:27]. The region has three distinctive cultures -- Melanesian, Micronesian, and Polynesian [15] [1]. It is home to 8 million people (half Australia's population, or double New Zealand's - the two major countries in that region) (Table 2), very unevenly spread (half of it in Papua New Guinea to a low of 47 in the Pitcairn Islands) and rapidly growing. Some of the islands' population growth rates, between 2% to over 3% per annum, e.g. the Solomons at 3.5%, are among the highest in the world.

Table 2: SOUTH PACIFIC ISLAND NATIONS: PHYSICAL & ECONOMIC INDICATORS

SPINs	**Land Area Sq. Km.**	**Exclusive Economic Zone Area Sq. Km.**	**Exports (US$ millions)**	**Imports (US$ millions)**	**GDP (US$ millions)**	**GDP US$ per capita**	**Currency in use**	**Population**
American Samoa	199	390,000	500 ('98)	471 ('96)	500 ('00)	8,000	US$	67,084
Cook Islands	240	1,830,000	3 ('98)	85 ('94)	100 (99)	5,000	NZ$	20,611
Fiji	18,270	1,290,000	537 ('99)	653 ('99)	5,900 ('99)	7,300	Fiji $	884,330
French Polynesia	4,167	5,030,000	205 ('99)	749 ('99)	2,600 ('97)	10,800	CFP Fr.	253,506
Guam	549		76 ('99)	203 ('99)	3,200 (/00)	21,000	US$	157,557
Kiribati	717	3,555,000	6 ('98)	44 ('99)	76 ('00)	850	A$	94,149
Marshall Islands	181	2,131,000	28 ('97)	58 ('97)	105 ('98)	1,670	US$	70,822
Micronesia (Federated States)	702	2,978,000	73 ('96)	168 ('96)	263 ('99)	2,000	US$	134,597
Nauru	21	320,000	25 ('91)	21 ('91)	59 ('00)	5,000	A$	12,088
New Caledonia	19,060	1,740,000	411 ('99)	843 ('99)	3,000 ('98)	15,000	CFP Fr.	204,863
Niue	260	390,000	0.1 ('89)	4 ('89)	5 ('97)	2,800	NZ$	2,124
Norfolk Island	35		2 ('91)	18 ('91)	n/a	n/a	A$	1,879
Northern Mariana Islands	477		n/a	n/a	900 ('00)	12,500	US$	74,612
Palau	458		14 ('96)	126 ('99)	129 ('98)	7,100	US$	19,092
Papua New Guinea	462,840	3,120,000	2,100 ('00)	1,000 ('00)	12,200 ('00)	2,500	Kina	5,049,055
Pitcairn Islands	47		n/a	n/a	n/a	n/a	NZ$	47
Samoa *(Western Samoa until 1997)*	2,860	120,000	17 ('00)	90 ('00)	571 ('00)	3,200	Tala	179,058
Solomon Islands	28,450	1,340,000	165 ('99)	152 ('99)	900 ('00)	2,000	SI$	480,442
Tokelau	10		0.1 ('83)	0.2 ('83)	2 ('93)	1,000	NZ$	1,445
Tonga	748	700,000	8 ('98)	69 ('98)	225 ('00)	2,200	Pa'anga	104,227
Tuvalu	26	900,000	0.2 ('89)	4 ('89)	12 ('99)	1,100	A$	10,991
Vanuatu	12,200	680,000	25 ('99)	77 ('99)	245 ('99)	1,300	Vatu	192,910
Wallis and Futuna	274		0.3 ('99)	0.3 ('99)	30 ('97)	2,000	CFP Fr.	15,435
Sources	(1)	(2)	(1)	(1)	(1)	(1)	(1)	(1)
Notes		Estimates; see note below			Purchasing power parity	Purchasing power parity (same year as GDP)		July 2001 est.

Sources: (1) CIA World Factbook 2001 [5], accessed on 16 December 2001. Decimal amounts over 1.0 were rounded to whole numbers. (2) Various sources; a variety of divergent values can be found in the literature; the CIA World Factbook no longer indicates square kilometers but merely cites the typical 200 nautical miles claim.

Substantial quantities of a number of valuable resources are found in the South Pacific, including fisheries, minerals (gold, silver, copper, phosphate), oil, and timber - although some islands are entirely without mineral or agricultural potential. The vast size of the claimed exclusive economic zones (EEZ) of the islands could dramatically enhance their perceived importance when seabed mineral extraction becomes commercially viable; for example, in the case of Tuvalu, the EEZ is 35,000 times the land area. Furthermore, the region holds considerable political and strategic importance for some developed countries, e.g., nuclear testing sites for France (now officially laid to rest), military bases for the USA, and critical sources of fish and timber for Japan. Geographically, the South Pacific islands straddle major trade routes, especially those between the Americas and Asia to Australia and New Zealand [16:48].

External Environment. Four key external factors affect SPINs' marketing and development environment: ***the climate for commodity exports, export markets, flows of aid and remittances***, and ***regional cooperation***. Other exogenous factors to consider are: the effects of cyclones and typhoons, shipping and airline services, and exchange rate fluctuations as most SPINs' currencies are linked to the values of the dominant currencies in use (see Table 2), for example the Australian (PNG, Tuvalu, and Kiribati); USA (American Samoa, Guam, Federated States of Micronesia) or New Zealand (Cook Islands and Niue) dollars.

The SPINs must engage in trade to develop because their domestic markets are small and agricultural-based, making them vulnerable to international commodity price movements and demand. The declines in sugar and copra prices, for example, have affected many SPINs, e.g. Fiji, Vanuatu and Western Samoa [6:1]. The unstable world prices for mineral exports such as gold, copper or nickel, and forestry products could also affect SPINs, particularly PNG and the Solomons. Some of the smallest SPINs, such as Kiribati which exhausted its phosphates production in 1979, and Nauru, whose phosphates revenues are declining, face uncertain future export and development prospects.

Most SPINs' export earnings are limited to a single product, typically an agricultural or mined product, for example: copra (Kiribati, Niue, Tuvalu, Vanuatu, Western Samoa), sugar (Fiji), fish (Guam), timber (Solomons), black pearls (French Polynesia), pumpkins (Tonga), gold (PNG), phosphate (Nauru), and nickel (New Caledonia). However, opportunities exist to diversify agricultural export crops; for example, the success of Tonga's marketing pumpkins to Japan. The Cook Islands have attempted to diversify into miniature banana exports (with two varieties ideal for school lunch boxes), but so far without much success. Tuvalu has appreciated an unusual application of the "new economy" by rerouting telephone calls from its area code to "900" call centers (since 1998) and leasing its ".tv" Internet domain name (since 2000). The impact of such alternative income sources should not be underestimated; in Tuvalu's case, the $50 million earned from leasing ".tv" over 12 years and the $9 million paid by the US government for 1999 fishing rights may be contrasted with the country's total export earnings of $165,000 for the year 1989 (the most recent available data) or 1999 GDP of $12 million [5].

With an increasingly educated, skilled, and comparatively cheap labor force, there are also opportunities for production-sharing or partial assembly of some specialized manufactured products with their metropolitan neighbors Australia and New Zealand. Limited arrangements currently exist, for example clothing in the Cook Islands, knitting in Tonga, and footwear in Fiji. However, the smallness and remoteness of the SPINs constrain their ability to diversify and lessen dependency on one trading partner. Almost all SPINs depend on their main trading partner for more than half of their export revenue. Australia, New Zealand, Japan, and the USA are the principal trading partners of most SPINs.

Intra-Pacific Islands countries' trade is very minimal and limited, suggesting that the Pacific countries have to join together and cooperate as a region to develop their transportation (intra- and inter-island transport as well as to their principal markets) and their telecommunication sectors. These sectors require considerable economies of scale to realize cost effectiveness and efficiencies, but are important in integrating the islands as a Pacific telecommunity [15:155] [6:4].

For many SPINs, the prospects for self-reliance, development, and sustainability dependent on export revenues are bleak and problematic. The primary alternative, particularly for the smaller, resource-poor economies, is "dependent development" based on "aid, migrant-labor remittances, government budgetary assistance, and other rent incomes (e.g.

from foreign fishing vessels), not merely as supplements to local incomes but the very foundations of their economy" [3:809]. In several of the smaller nations, aid from foreign governments exceeds GDP (for example, in 1995 Niue received double its GDP in grants from the New Zealand government [5]). The SPINs are among the highest per capita aid recipients in the world [6:17]. Such dependency suggests that the economic health of the donor countries [e.g. *Australia* (PNG, Tonga, Tuvalu), the *USA* (American Samoa, Guam, Marshall Islands, Micronesia, Palau), *New Zealand* (Cook Islands, Niue, Tokelau), *France* (French Polynesia, New Caledonia, Wallis and Futuna), and *Japan*], and the quality and quantity of their development assistance are vital considerations when planning to market to SPINs.

Bertram [3:821] believes that the sustainability of the migration /remittance linkages between SPINs and the metropolitan economies (i.e., Australia, France, New Zealand, the United Kingdom, and the USA.) are as durable as the transnational family enterprises based on kin networks, an enduring feature of the SPINs regional economy. Paralleling other developing countries, the SPINs do not have a social welfare system; it is the extended family who as migrants in some developed countries regularly sends remittances, thereby benefiting not only their family members but also the islands as a whole.

Internal Environment. Among the forces in SPINs' domestic environments that impinge on marketing and development are: the **macro-environmental factors**, the uncontrollable elements of the environment, including geographic characteristics, socio-cultural, legal, economic, political and technology; **market characteristics** such as size, segments, structure, competition, consumers' buying power and behavior that affect the realities and potential of the market and demand condition; **marketing infrastructure**: roads, transport (land, sea and air), communication facilities (postal service, media, radio and TV), channels whether long or short, types, number and scale of retail and wholesale outlets; and roles of the **key market players**: indigenous marketers, government, and multinational or foreign marketers.

For the SPINs, the importance of geography must be recognized as directly affecting marketing and related activities of communications and distribution. Other environmental factors, particularly the SPINs economic, cultural and social systems could be partly understood in terms of the physical characteristics (Table 2) of each island, as well as the region as a whole. The larger, rugged, mainly volcanic islands of Melanesia, i.e., Fiji, PNG, the Solomons, and Vanuatu, are relatively rich in natural resources: fertile lands, lush forests, and rich mineral deposits. Fiji, the Solomons, and Vanuatu bear substantial gold deposits with potential for commercial development. The smaller atoll islands such as Kiribati, Tuvalu, Nauru, the Marshall Islands, and Niue, are built on coral reefs. They have thin and poor soils, and are vulnerable to typhoons, high seas, and drought. They are also heavily reliant on marine products for their livelihood [34:21], although Nauru is rich in phosphate. Often, fresh water is a scarce commodity. The rich sea and mineral resources of some islands, however, have balanced the limitations of small inland agricultural production. The climate is tropical, which has lured tourists to the islands. Today, tourism is increasingly an important economic sector. The climate, however, may necessitate looking into special packaging and storage requirements.

Consumer behavior is culturally conditioned, like other forms of human behavior. The SPINs are divided into three cultural groupings (Melanesian, Micronesian, and Polynesian) that share basic philosophies and community attitudes; for example, survival on few material possessions and free sharing of perishable commodities such as fruit, pork, vegetables, etc. The "Pacific way of life" suggests a communal and group-based society -- a "distributive" society as opposed to the "accumulative" societies of the West [23:42]. Thus, the "soft" approach (e.g. informative and persuasive) rather than the "hard" approach in selling and advertising is more applicable when marketing to SPINs.

Melanesians are born equal and have a long tradition of trade. In contrast, Polynesians and Micronesians (including the ethnically Melanesian Fijians) inherit their social status within a rank hierarchy. Since material wealth flows from inherited status, members of the chiefly class are disdainful of economic efforts. The hereditary chiefs claim economic rents from ordinary people as well as tribute from other tribes, and today from aid agencies [7:17-21] [16:49]. For example, the permission of the chief has to be secured before anyone can enter and sell any product or service in a village.

The **wantok** system (practiced in PNG and the Solomons) refers to groupings of people coming from the same region or community, implying a strong group orientation and the importance of personal relationships. Wantoks share similar tastes and attitudes toward the consumption of various goods, hence are an important consideration in marketing. An important consideration for agricultural development is that land is not considered a productive factor as most people claim a close, personal relationship to their land [16:50]. In Fiji, land is **vanua**, referring not only to trees, rivers, fish, etc. but to the interconnections of all Fijians. Vanua is a code of conduct, a world view and a way of life [23:38].

The majority of the SPINs' population is Melanesian. In addition to the indigenous people, there are sizable, diverse groups of immigrants, such as the Indians in Fiji, the White and Asian majority in New Caledonia, Australians in PNG and the Chinese in the Solomons implying a heterogeneous market, and that geographic proximity is no guarantee that markets are similar. It is possible to segment marketing efforts to either the indigenous or the immigrant (including the expatriate) groups. SPINs' populations are generally young, suggesting more dependents to feed, clothe, and shelter, and a spending pattern catering to necessities and the young. However, a niche market exists for imported products due to the presence of a sizable number of expatriates in the islands. This market would have a different consumption pattern compared to the indigenous urban or the rural populations.

The SPINS are linguistically one of the most complex regions of the world. Melanesia alone has about 1,200 languages, and another three dozen or more are classified as Micronesian and Polynesian. Many islanders are trilingual, fluent in variations of a pidgin English, a local tribal tongue, and a colonial or international language of which English is the most common. Variations of pidgin English are spoken in PNG, the Solomons, and Vanuatu, providing a lingua franca and a common bond and identity for the people of these three large Melanesian countries [21:27] [35:55], suggesting that language may not be a critical concern when marketing to SPINs.

Religion plays an important role in the life of SPINs. "In the South Pacific Bible Belt from the Cooks to Tonga, Samoa and Fiji, Sunday is church day and everything outside churches grinds to a halt. Only hotel restaurants will be open, buses and taxis will have vanished" [35:56]. Consumption of certain products such as pork, cigarettes, and liquor, is also influenced by religion.

The political and legal systems of SPINs affect entry, risks, and the conduct of business in their markets. Political stability promotes business stability and market predictability [8:63]. Of the 21 separate political entities in the region (Table 2), nine are independent nations, four are self-governing in free association with an independent state, and eight remain dependencies of colonial powers [21:30]. Whatever a SPIN's political status, the role of government or the public sector is pervasive and dominant. It dominates the economy, sets the level of national wage and salary, and is the largest employer. Hence, the SPINs' governments are the dominant economic sector and should be considered as important markets. In the smallest states, government expenditures range from 50 to 95 percent of the value of the gross domestic product.

Wage levels are high compared to productivity, and reflect the lack of skills on all levels and the highly regulated labor market in most SPINs. This dominant role of government has not been conducive to the growth of the private sector as economic activities are subject to extensive regulation by the authorities [34:24-25].

The SPIN economies mostly focus on subsistence agriculture (based on garden produce), exportable agricultural products such as copra and coconut milk, and marine resources. Manufacturing is still nascent, with the narrow manufacturing bases primarily joint ventures with foreign firms, heavily reliant on a limited range of exports. Fiji and the Solomons feature canneries, both joint ventures with Japanese firms. PNG's few manufacturing companies are Australian subsidiaries. This results in heavy reliance on imported manufactured goods and balance of payments deficits. Except for PNG, the Solomons, and Nauru, the countries spend more than what they earn, with ratios of imports to exports reaching seemingly absurd multiples in a few, such as the Cook Islands (28 times) and Niue (33 times), where imports nearly equal GDP. Given their often poor soils and lack of suitable water, many SPINs are dependent on imported foodstuffs, making them vulnerable to global market fluctuations which are beyond their control. To generate electricity, most employ exclusively imported fossil fuels. Due to their remoteness, SPINs depend heavily on one or two foreign markets for exports.

The smallness of the domestic market relates to the co-existence of a dual economic and social system which consists of one large traditional sector almost very poor and excluded from the mainstream market system, and another smaller and relatively wealthy sector in the urban sector [12]. The markets are also highly fragmented, since settlements may be remote and separated by rugged terrain or by sea. Generally, it is difficult and costly to exploit the small market opportunities in the rural areas due to distribution and infrastructure problems, for example in PNG, the Solomons, or Fiji.

The level and extent of development of infrastructures that promote marketing activities such as transportation (land, sea and air); communication facilities (postal, media, radio, and TV); distribution channels whether long or short; types, number and scale of retail and wholesale outlets, also reflect on the economic development of the islands.

Ownership of radios and televisions is low, as is the number of telephone lines in use (e.g., Pitcairn has one telephone line). Postal services are often limited to boxes in post offices, rather than delivery and service can be intermittent, particularly to outlying islands (some of which have become famous for unique postal approaches, e.g. tin can mail where passing ships intercepted sealed cans containing mail). This limited exposure to media and delivery services bears consequences for fundamental marketing approaches such as advertising copy and placement, market research, and product branding. The most frequent advertiser is typically the government sector. Promotion and sales of branded products are problematic, as are attempts at building brand loyalty. However, many islanders have traveled internationally, particularly in conjunction with work overseas or visiting relatives who have emigrated, building brand awareness and developing a taste for goods that are not available at home (e.g., one of the authors found a discarded Big Mac carton on a road verge in the Cook Islands, where there is no McDonald's outlet, and was told it was doubtless brought home from Auckland - 3,000 kilometers - by a returning islander).

Marketing research throughout the SPINs is erratic and sporadic. Detailed information of most forms (other than regarding tourism ventures) is difficult to obtain and is not always considered entirely reliable. Governmental statistics offices provide a range of data suitable for market planning, but even census information can be inaccurate, as one of the authors learned while interviewing islanders completing an objectionably long (by island standards) two-page basic census form in late 2001. Various government ministries and agencies, notably central banks, can provide specialized data on finance, taxation, tourism, immigration, and other topics of potential interest to marketers. However, based on personal observations, few private firms have progressed beyond "selling" to "marketing" within the region. Many potential customers do not come into frequent contact with a choice among competing brands, leading to marketing being primarily an exercise in product placement rather than brand building.

Physical distribution can also be problematic due to inadequately developed infrastructure and well-developed social structures. In addition to the expected difficulties resulting from vast distances, sparse populations, sometimes poor roading, small or no harbors, and outdated equipment, purchasing and consumption patterns are often dictated by tradition. Markets are not merely a place to conduct trade or exchange goods, but also essential social contact venues. Markets are for renewing acquaintances, making new friends, and gathering of wantoks. Further complicating matters, retail channels are typically dominated by specific ethnic minorities, such as Indians in Fiji, Chinese in the Solomons, and Australians in PNG.

There are thus three key participants in marketing in SPINs, determining how and to what extent marketing is used to carry out economic development activities: the indigenous marketer, governmental marketers (through social programs and state-run organizations e.g. Commodity Boards in PNG), and multinationals (MNCs) or foreign marketers, e.g. Burns Philps, Fletcher Challenge, British Petroleum, etc.

Conclusion

Using a macro-marketing perspective, we have argued that marketing and development processes must fit into a particular environment. Both the functional and expanded roles of marketing as well as the economic and non-economic measures of development should be adapted to the local environment. We presented propositions to help define as active, passive, and interactive the conceptual relationships among the three constructs of marketing, development, and environment. A simple framework integrating the environment with marketing and development was developed, and shown to apply to developing Pacific Island nations, providing a basis for firms and marketers to clarify their motives when marketing to the SPINs and to understand the opportunities and challenges that small developing island countries offer.

The environmental analysis covered the islands' unique geographic, socio-cultural, political, and economic characteristics and their implications to marketing and development. Given the diverse and complex environments, and peculiarities of small developing island nations, opportunities, challenges, and problems exist in attempts to transplant marketing practices and development theories from developed countries to local practice. Why market to small island developing economies? “The answer lies in both current and future opportunities. As many markets in developed economies are almost saturated, markets in developing countries, including small economies (e.g. SPINs are import dependent), will become increasingly important as they provide better returns on investment than developed countries” [8:69].

For small developing island nations, marketing efforts directed by their governments fulfil developmental objectives. With the inclusion of marketing in small developing island nations’ national development plans, a balanced and strategic perspective is obtained, since both means (strategies) and ends (outcomes) are focused, constituting more than just an audit of national resources, expenditures, and budget. Further research, specifically empirical studies, should be conducted into the role of marketing in “balancing” firms’ profit orientation and the small developing economies’ developmental goals within the context of their particular environments. In addition, to further test the appropriateness of the M-D-E framework, studies should be conducted on small developing countries in other areas of the world, e.g. the island nations in the Caribbean.

References

[1] Albinski, H.S. 1989. South Pacific Trends and U.S. Security Implications: An Introductory Overview. In Albinski H.S., Kiste, R .C., Herr, R., Babbage, R. & McLean, D., *The South Pacific: Political, Economic and Military Trends*. A Publication of the Institute for Foreign Policy Analysis, Inc. Washington: Brassey's (US), Inc.

[2] Barnett, R. 1994. The Limits of Competence. England: SRHE and Open University Press.

[3] Bertram, G. 1986. "Sustainable Development" in Pacific Micro-economies. *World Development*, 14(7):802-22.

[4] Boyd, H.W., Jr., et al. 1964. On the Use of Marketing Research in the Emerging Economies. *Journal of Marketing Research*, November: 20-23.

[5] CIA. 2001. *World Factbook 2001*. Washington, DC: Central Intelligence Agency. http://www.odci.gov/cia/publications/factbook/index.html.

[6] Cole, R.V. & Parry, T.G. (eds), 1986. *Selected Issues in Pacific Island Development, Papers from the Islands/ Australia Project*. Canberra, Australia: National Centre for Development Studies, Australian National University

[7] Crocombe, R. 1987. *The South Pacific, An Introduction*. Auckland, NZ: Longman Paul.

[8] Dahringer, L.D. & Muhlbacher, H. 1991. *International Marketing, A Global Perspective*. Reading, Massachusetts: Addison-Wesley Publishing Company, Inc.

[9] Dholakia, N. & Dholakia, R. 1984. Missing Links: Marketing and the Newer Theories of Development. In Kindra, G.S., *Marketing in Developing Countries*. London & Sydney: Croom Helm Ltd.

[10] Drucker, P. 1958. Marketing and Economic Development. *Journal of Marketing*, 252-59.

[11] Duhaime, C.P, McTavish, R., & Ross, C.A. 1985. Social Marketing: An Approach to Third-World Development. *Journal of Macromarketing*, Spring: 3-13.

[12] Farhood, A. 1995. Marketing in Papua New Guinea. In the *1995 Proceedings of the Marketing Educators and Researchers International Conference*, Sogar, D.H. & Weber, I. (eds), 2-5 July, Griffith University, Gold Coast Campus, Gold Coast, Australia. 362-377.

[13] Hosley, S. & Wee, C.H. 1988. Marketing and Economic Development. *Journal of Macromarketing*, 43-53.

[14] Joy, A. & Ross, C.A. 1989. Marketing and Development in Third World Contexts: An Evaluation and Future Directions. *Journal of Macromarketing*, 17-31.

[15] Jussawalla, M. 1994. Pacific Island Nations. In *Telecommunications in the Pacific Basin, An Evolutionary Approach*, Noam, E., Komatsuzaki,S. and Conn, D.A. (eds), Oxford, U.K.: Oxford University Press.

[16] Kasper, W. 1991. The Economics and Politics of South Pacific Development: An Outsider's View. In Bauer, P. T. *Aid and Development in the South Pacific*. Australia & New Zealand: The Centre for Independent Studies.

[17] Kaynak, E. & Hudanah, B.I. 1987. Operationalizing the Relationship Between Marketing and Economic Development: Some Insights from Less-Developed Countries. *European Journal of Marketing*, 48-65.

[18] Kaynak, E. 1986. *Marketing and Economic Development.* New York: Praeger.

[19] Kazgan, G. 1988. Marketing in Economic Development. In Kumcu, E. & Firat, A.F. (eds). *Research in Marketing- Marketing and Development: Toward Broader Dimensions.* Greenwich, Connecticut: JAI Press Inc.

[20] Kinsey, J. 1988. *Marketing in Developing Countries*. England: Macmillan Education Ltd.

[21] Kiste, R.C. 1989. The Island States as Actors in the Region, in Albinski H.S., Kiste, R .C., Herr, R., Babbage, R. & McLean, D., *The South Pacific: Political, Economic and Military Trends.* A Publication of the Institute for Foreign Policy Analysis, Inc. Washington: Brassey's (US), Inc.

[22] Kumcu, E. & Firat, A.F. (eds). 1988. *Research in Marketing- Marketing and Development: Toward Broader Dimensions*. Greenwich, Connecticut: JAI Press Inc.

[23] Leonard, B. & Leonard, S. 1993. Duavata: "Working Together" in Fiji. *Training and Development*, 36-44.

[24] Llanes, V., Hawkins, B., & Everett, A. 1996. Inviting Controversy -- Relating Rostow's Stages of Growth Model, Trade Development Policies and Stage of Marketing Development: Insights Into Marketing and Development In a Developing Country. Proceedings of the Academy of International Business Southeast Regional (AIBSEAR) conference, Dunedin and Queenstown, New Zealand, 89-95.

[25] Llanes, V.A. 1997(a). The Environment, Marketing and Development Triangle: Insights into Doing Business in Small Developing Pacific Island Nations. Proceedings of the Conference of the International Management Development Association, Hamilton, Bermuda. 328-335.

[26] Llanes, V.A. 1997(b). The Marketing, Development and Environment Triad: Small Developing South Pacific Island Nations' Perspective. *Borneo Review*, 8(2): 141-157.

[27] Mentzer, J.T. & Samli, A.C. 1981. A Model for Marketing in Economic Development. *Columbia Journal of World Business*, 16(3): 91-101.

[28] Mitchell, L.A. 1991. Two Case Studies in Formulating Theories of Marketing and Development. In Proceedings of the World Marketing Congress, International Conference Series. Frankenberger, K.D., Larsen, H.H., Hansen, F., Friestad, M., & Albaum, G.S. (eds), 5: 240-45.

[29] Mitchell, L.A. 1994. Windward Islands' Marketing, Development and Canadian Linkages. *Bulletin of Eastern Caribbean Affairs*, 19(3): 1-16.

[30] Phillips, C. et.al. 1994. *International Marketing Strategy, Analysis, Development and Implementation*. London: Routledge.

[31] Reddy, A.C. & Campbell, D.P. *Marketing's Role in Economic Development*. Westport, Connecticut: Quorum Books.

[32] Rostow, W. W. 1960. *The Stages of Economic Growth: A Non-Communist Manifesto*. Cambridge, U.K.: Cambridge University Press.

[33] Samli, A. C. 1978. Marketing and Distribution Systems In Eastern European Economies. New York: Praeger.

[34] Siwatibau, S. 1991. Some Aspects of Development in the South Pacific: An Insider's View, in Bauer, P. T *Aid and Development in the South Pacific*. Pacific Papers 2. Australia & New Zealand: The Centre for Independent Studies.

[35] Stanley, D. 1989. *South Pacific Handbook*. Chico, California: Moon Publications, Inc.

[36] Taylor, C.R. & Omura, G.S. 1994. An Evaluation of Alternative Paradigms of Marketing and Economic Development - Part I. *Journal of Macromarketing*, 14(2): 6-20.

[37] Thomson, P. W. 1989. *Trade and Investment in the South Pacific Islands, A Diagnostic Study*. Pacific Islands Development Program, East West Center, Honolulu, Hawaii.

[38] Wood, V.R. & Vitell, S.J. 1986. Marketing and Economic Development: Review, Synthesis and Evaluation. *Journal of Macromarketing*, 28-47.

Explaining Country Entry Considerations: Look before You Leap

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Abstract

Marketing managers in exporting firms face decisions on foreign market entry when they adopt geographical diversification strategies. Using a transactions cost framework, we discuss and empirically investigate entry considerations, their antecedents and their diversity.

Introduction

The world-wide increase in international trade is a well established fact. The increase is more marked in manufactures than in commodities, with volumes of the former about four times that of the latter (The World Bank: World Development Report 1995). Small and medium enterprises play a large role in exporting manufactured goods. For instance, exporters of manufactured goods from the US using traditional channels earned more than 3.5 times the dollar volume of the world's top fifty non-financial MNC foreign sales in 1992. Calof [1] concludes from an empirical study that smaller firms may well have the appropriate resources to engage in exporting behavior, and managerial perspectives on exporting should focus on issues other than firm size.

Trade increase is possible in two ways: through larger volumes with the same partner countries, or through wider participation or geographic diversification. This second form of increased trade requires export managers to increasingly face entry decisions. While previous research has investigated market selection and entry mode choice, little is known on the antecedents of specific entry considerations [2]. Does previous exporting experience shape future entry considerations? Erramilli [3] reviews the literature on experience effects on market selection and entry mode choice, and finds that in service firms as well experience is a driver of geographic / cultural distance diversification. Other issues of marketing concern besides market selection and mode of entry that are largely under-reported are the characteristics of exporting channels relations, contractual agreements, and product characteristics, among others. We consider here how specific experience with contractual agreements in bilateral distribution channels and other antecedents affect managers' perceptions of the set of entry considerations. While specific entry considerations have been identified in past research, their relative importance in different entry situations has been under-researched. Different situations exist where one or the other entry consideration is likely to be of more or less importance. We envisage the export manager as evaluating a particular entry decision at a given time, rather than evaluating entry criteria in general. The entry decision framing is likely to have an impact on what specific considerations are mentioned and perceived as important. What is the evoked set of considerations in a *particular* entry decision? What is the *relative* perceived importance of these considerations within the evoked set? The research is again sparse on these questions.

We propose to tackle in this paper a subset of these general research challenges. Firstly, we develop a measure of diversity in the evoked set of entry considerations, similar to previous entropy measures. We then formally relate the entropy measure to opportunism costs, a central construct in TCA (transaction costs analysis). We then develop a measure of perceived importance of contractual agreements, derived from TCA constructs. These basic measures enable us to test whether sources of opportunism (related to the diversity of entry considerations) has antecedents in export managers' perceived importance of contractual agreements in previous channels. We test several hypotheses with data collected from US based exporters who use independent channels of distribution. We next briefly review the TCA and the entry considerations literature, followed with the model and hypotheses in section 3; the methodology in section 4; analysis and results in section 5; the discussion of our key findings in section 6; and end with some envisaged directions for future research and the implications for partnering, negotiation and relationship building.

Literature Review

Williamson [4] discusses contractual relationships in the Transaction Cost Analysis (TCA) paradigm. Research based on TCA has explored channel decisions in international contexts, and significant empirical evidence of TCA's predictive value for channel integration has been published [5], [6]. We are particularly concerned here with situations where vertical channel integration is not an option. These qualify as "bilateral" structures as opposed to "unified" structures that come about with vertical integration. This is as opposed to situations of neo-classical contracting where third-party assistance is sought to resolve disputes and breach of contract. The central idea in bilateral, relational contracting of TCA that we find relevant to entry considerations is the hazards of opportunism. Williamson explains opportunism as referring to "a lack of candor or honesty in transactions, to include self-interest-seeking with guile." The long term relational contracting nature of international distribution makes the hazards of opportunism a particular concern.

We interpret entry considerations as a manager's concern with the dimensions along which opportunism may occur. For instance, in a situation of political instability, the scope for opportunistic behavior is increased. In a situation where a manager is familiar with the distribution infrastructure, the scope for opportunism is reduced.

Early research in entry decisions provides a detailed framework for a variety of foreign market entry modes. In a recent paper, Wood and Robertson [7] identify the dimensions of information sought by exporters in their entry decision. They relate the perceived importance along various dimensions to industry classifications, and channel modes. Their exploratory study enhances our understanding of the major dimensions of entry considerations. They reduce some 200 items on qualitative research criteria to a manageable set of sixty decision variables. Through a quantitative analysis of a survey, they then identify five primary considerations, which are in decreasing order of mean importance: market potential, legal, politics, infrastructure, economics, and culture.

Their research relied on importance rating scales (five points from extremely important to unimportant, with a don't know option). Responses were from a judgement sample of 137 respondents from exporting companies in northwestern US. Their main result on the hierarchy of importance indicates a plausible heuristic process export managers follow in entry decisions, and they propose this as an exploratory finding to be tested by other research.

Recent research appears to be sparse on the antecedents of entry considerations. The next section develops our hypotheses.

Hypotheses

The diversity of entry considerations is a measure of how many different entry considerations are considered equally important. When diversity is higher there is greater hazard of opportunism. Conversely, when few entry considerations are considered relatively more important, the hazards of opportunism are fewer. There are various control variables that we identify as influencing the diversity of entry considerations. These are whether the country is developing or industrialized, whether the country is English speaking, and whether the country is Asian. We propose to fix the base-case as non-Asian developing countries, and relate the other categories to this base case (see Exhibit 1). In addition, we identify two product related control variables; whether the product is a consumer sector or industrial sector product, and whether the product is finished or an unfinished good. One hypothesis deals with the geographic diversity of the firm's exporting experience. The main hypothesis is that prior perceptions of contractual agreements in salient product - channels will determine the diversity of entry considerations.

Asian developing countries have enjoyed greater attraction on average than many non Asian developing countries. Four of the top five rankings for overall market attractiveness are Asian developing countries in a recent ranking study (Market Potential Indicators for Emerging Markets, October 1997, Michigan State University, CIBER, USA). However this advantage does not carry over to the top twenty developing markets, of which only nine are Asian. Moreover, Asian developing markets are distant from North American markets and suffer from poorer accessibility. The following hypothesis is therefore proposed:

H1 a: Developing Asian countries result in no different diversity of entry considerations relative to Developing non-Asian countries.

Industrialized countries generally have fewer comprehensive laws and regulations on foreign investments and marketing of imports than developing countries. The industrialized countries would more likely share a Universal Commercial Code approach derived from common business law. In general this leads to lesser diversity for industrialized countries than for developing countries entry considerations. The industrialization of markets improves many of the attendant institutions of market exchange, and lessens the hazards of opportunism. We therefore expect the diversity of entry considerations to decrease on this count. Deriving from the mitigation principle, the existence of alternatives to the distribution relationship would limit the hazards of transaction costs. This principle states that parties to a contract would agree to minimize contingency costs, by assigning the responsibility of mitigation to that party best able to reduce the unforeseen costs. But evasion of this obligation is a form of opportunistic behavior that is a strategic possibility. With opportunism as a real possibility here, the existence of "substitute performances" will put an automatic ceiling on the costs of opportunism. For this to occur there should be substitutes which is more likely to be the case in industrialized countries. Hence,

H1 b: Industrialized English countries result in lower diversity of entry considerations relative to developing Non-Asian countries.

While the use of English as the language of business in the host country is likely to be an asset to communication. Hazards of opportunism are likely to be perceived as less likely to occur for failure of communication. The above situation is therefore similar for non-English speaking industrialized countries. The existence of cultural distance and encoding/decoding gaps is proposed as a *reducer* of the hazards of transaction costs, since cultural blinders fall. Cultural self-awareness increases with exposure to foreign cultures. Hence,

H1 c: Industrialized non-English countries result in lower diversity of entry considerations relative to developing Non-Asian countries

As a whole, exports to the consumer sector are more elastic than to the industrial sector. Economic organization and policies of host countries would affect imports of consumer good more than of industrial goods. Moreover, consumer goods are more easily distributed, and substitute brands and products often exist. Consequently, the hazards of opportunism are perceived to be higher, and the diversity of entry considerations is likely to be higher. Hence,

H2: Diversity in entry considerations in the Consumer Sector will be higher than in the Industrial sector.

Finished goods are not sold to value added resellers, but are sold through the channel to OEM companies. Since a market for the finished good exists without the need for further processing, the transaction costs are likely to be lower for the finished good. The costs of further factors in the production process in the host country for the finished good become irrelevant to the exporter. The reduction in uncertainties and dimensions to consider leads to lowered diversity of entry considerations. Hence,

H3: Diversity in entry considerations for finished goods will be lower than for unfinished goods.

The prior experience of managers leads to their perceptions of contractual agreement importance. This importance is perceived to be more the greater the firm’s diversity of distributor or company owned outlets around the world. The degree of importance determines the emphasis they put on bargaining and negotiations in the export process. Early recognition exists that business people put emphasis on four categories, namely, description of contracts, contingencies, defective performance, and legal sanctions. However, contractual agreements may not always be considered important, since flexibility and informality has advantages in business transactions. One reason why contractual agreements may be important is when it is used internally by the exporting organization to enforce discipline and communicate within the firm. In relational contracting situations an emphasis on the formal contract as a reference point allows the parties to enter into more ambiguous long-term recurrent transactions with greater faith. Far from implying termination, more complicated contractual agreements are self-enforcing ways of regulating behavior in more complex situations where hold-up problems may emerge as the relationship unfolds in the future. Perceptions on importance of contractual agreements often will be used to reduce the hazards of transaction costs caused by opportunism from hold-ups and "hostage" situations. Hence,

H4: Perceived importance of contractual agreements increases the diversity of entry considerations.

The following section describes the process adopted to empirically test these hypotheses.

Methodology

The data set used for this paper was collected national mail survey of exporters across several SIC industry classifications. The sample was developed from a 1991 Department of Commerce listing of US Exporters. Survey instruments were mailed to CEOs or VPs of Marketing of companies engaged in exporting. The Survey took about twenty minutes to complete, and had five sections: overall company characteristics, primary export product characteristics, exporting function characteristics, primary market characteristics, and entry considerations. The instructions led the respondent through the survey, asking them to think about their primary export product, primary country of export for this product, and then primary distribution channel in a sequenced fashion, ending with the comparative importance rating question on entry considerations.

The survey itself was pilot tested, with a sample of fifty respondents from three mid-Atlantic USA states. The revised survey was mailed to the national sample of two thousand firms. Respondents who sold only through export houses or had only company owned branches were screened out. Qualified respondents were those who had at least one independent distribution channel or representative abroad. Of the surveys 87 percent were delivered, and 178 usable responses were obtained, of which 148 were completed in all variables. Assuming that qualified respondents were between one-fifth (as indicated by the pilot study) and two-fifth of the original sample, the effective response rate was between 20 and 40 percent. This response rate is acceptable for field research.

The economic regions where independent distributors or representatives were used broke down as Canada 71.7 %, Mexico 63.6%, Western Europe 58.4 %, South East Asia (excluding China) 52.6%, South America 52.0 %, Central America 49.1%, Australia / New Zealand 48.6 %, Africa (excluding Middle East) 31.8%, China 30 %, Eastern Europe 24.3 %, Pacific Rim 13.3 %.

Exhibit T 1: SUB-CLASSIFICATION OF PRIMARY CHANNEL COUNTRIES (24 OF 178 WERE MISSING COUNTRY DATA).

Classification	Sub-classification	Primary product-channel Country	Number, Percent of Sample
Industrialized	English speaking	Canada, UK, Australia, New Zealand	59, 24.5 %
	Non-English speaking	Switzerland, Japan, France, Italy, Spain, Israel, Germany, Belgium, Argentina, Netherlands	38, 38.1 %
Developing / Industrializing	Asian	Philippines, China, Thailand, Taiwan, Hong Kong, Korea, other far east,	18, 11.7%

	Non-Asian	Mexico, Puerto Rico, Saudi Arabia, Venezuela, Brazil, Nigeria, Sierra Leone, Chile, Turkey, Colombia, Ecuador, other Latin America	39, 25.3 %

The median age of the firm was 38 years, with the median number of years exporting 19 years. Median number of employees was 57, and median annual sales were $6 million. Median sales from all exports as a percent of total sales were 0.1. The median number of competitive brands for the primary product-market was 5. The median number of years exporting the *primary product*, 15, to the *primary country*, 12, through the *primary channel*, 8. The median volume of sales through this channel was $0.25 million. Finally, the median *primary* country share of the world wide market of the product was 0.10. We next describe the analysis procedures.

Analysis & Results

This section describes measure development and hypotheses tests in turn.

Measures: The categorical variable Industrial Sector or Consumer Sector captured whether the primary export product was an industrial or consumer product. The categorical variable Semi-Finished or Finished Product captured whether further processing of the product was necessary prior to sale in the host country. Both these control variables regarding the primary product were coded as 0 or 1.

Thirty-nine countries were listed as host countries for the primary channel for the primary export product. We do not present an exhaustive frequency listing here; however, the Exhibit 1 captures the sub-classification we develop for further analysis. The sub-classifications of Industrialized English, Industrialized Non English, Developing Asian, and Developing Non-Asian countries were represented by indicator variables, and were used as control variables in the hypotheses tests.

Entry considerations were measured on a constant sum comparative rating scale. The respondent was asked to "divide 100 points among the following factors describing a hypothetical country in order to reflect their relative importance to your entry decision with your *primary* product." The Exhibit 2 presents the relative importance summary data.

Exhibit 2: RELATIVE IMPORTANCE OF ENTRY CONSIDERATIONS (N=148).

	Minimum	Maximum	Mean	Std. Deviation
Familiarity with Distribution channels	.00	1.00	.17	.21
Currency Stability	.00	.900	.15	.14
Political Stability	.00	.500	.13	.11
Ease of Capital repatriation	.00	1.00	.13	.18
Market potential	.00	1.00	.12	.24
Availability of Local capital	.00	1.00	.09	.15
Discrimination and Controls	.00	.90	.08	.11
Country's attitude to foreign ownership	.00	.40	.05	.07
Local Inflation rate	.00	.22	.05	.06
Other		.60	.04	.11

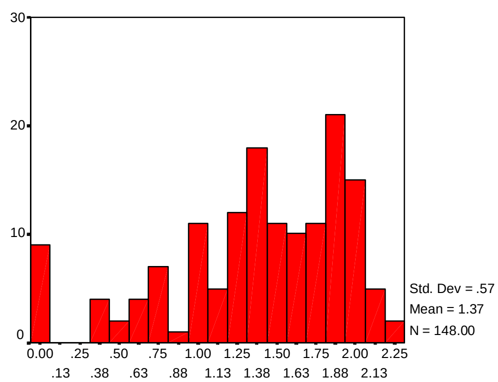
Several key features are worth noting in the measurement approach. These are (a) the relative importance rating scale; (b) the specific set of alternatives (c) the "hypothetical" country framing of the question. First, the constant sum scale, allows determination of the relative importance on a comparative rating or ratio scale. Where no points were allocated, the entry was assigned zero. All considerations have this minimum as zero. The actual entries were normalized to total to 1.00 points in the usual fashion when the sum of the points entered for all considerations was either below or above 100 points. The normalized score had a theoretical maximum of 1.0, but some of the considerations did achieve this maximum. Exhibit 2 ranks the entry considerations in order of decreasing mean relative perceived importance.

Second, the framing of the entry considerations question asked respondents to think of a “hypothetical” country. This frees the respondent from consideration of the primary country where the focus was in the earlier part of the survey instrument. The respondent could have any country in mind, but one specific country is the focus of their thoughts. Other approaches were rejected on the grounds that comparative ratings would not be elicited. If the respondent were thinking of different country situations for different entry considerations, the scale would have failed. The intention was to focus on the evoked set of considerations for a given (though unnamed) country. Over the sample, a variety of country situations would emerge in the aggregate.

Thirdly, note that we restrict the set of alternatives to eight listed entry considerations, although two other open-ended considerations were allowed. About 38 respondents used the other options for additional entry considerations. In decreasing order of frequency these Other item were: market potential, 13; good distribution potential, 13; and technical expertise, and communications, 11. Others mentioned were regulations, local competition, product fit / complementarity, and country accessibility, each less than 4 cases. Notice that one such open-ended criterion came at the middle of the ranking and the other was at the bottom rank in relative importance. The most important entry consideration (familiarity with channels) was about four times as important as the least important, on average. We therefore conclude that omission of a key entry consideration was not a critical factor, especially since the measure we use of diversity of entry considerations is not sensitive to pre-specification of the other entry categories.

Clearly, the diversity of entry considerations is related to the exposure to opportunism. A higher perceived incidence of opportunistic behavior follows directly from a larger evoked set of entry considerations. Entry consideration diversity was measured with an entropy scale. This is similar to the transformation on fractions of a relative distribution adopted in measures of product diversity or geographical diversity [8] in an international context. Thus, the entry decision entropy scale (EDE) is measured as the summation over the set of entry considerations, of the product of importance proportion, p, and its negative logarithm transform, i.e., $-\Sigma p*\ln(p)$. Exhibit 3 presents the distribution of EDE obtained.

Exhibit 3: DISTRIBUTION OF EDE, ENTRY DECISION ENTROPY.



The EDE scale measures the degree to with multiple entry criteria is important. If only a few entry considerations had overwhelming importance, the EDE would be low. In the extreme it would be zero. If the relative importance of entry considerations were evenly distributed across many criteria, the EDE would be high. In the extreme for ten entry considerations it would be 2.30.

The scale for measuring the perceived importance of contractual agreements was constructed by averaging five items of perceived importances (7= Very Important, 1 = Not at all important). The items captured various dimensions of contracts: quantity discounts, fees, royalties, promotions, and profit sharing. This Perceived Importance of Contract Agreements (PICA) scale had a coefficient α of 0.72, which is acceptable for field research.

These measures were used to test the hypotheses, as described in the next section.

Tests of hypotheses

The main hypothesis was regarding the effects of perceptions arising from exporting experience on perceptions of future entry considerations. Put differently, managerial perceptions antecedent to entry considerations were hypothesized to lie in the manager's exporting experience. We hypothesized that the perceived importance of contractual agreements in the primary export product-channel was positively related to entry consideration diversity. Control variables were identified as whether the primary product was an industrial or consumer good; and whether the product was semi-finished or a finished good. Secondary hypotheses related to the effect of host country sub-classification of the primary product-channel experience. We hypothesized that the Industrialized (both English and non-English speaking) countries would lower the entry considerations diversity, whereas the Developing (Asian and non-Asian) countries would increase the level of entry consideration diversity. These hypotheses were tested simultaneously with a regression model. The dependent variable was EDE and the independent variables were PICA, with dummy variables for country sub-classification and dummy variables for primary product as control variables. A small percentage of missing variables for PICA were substituted with the series mean. Results are reported in Exhibit 4.

Exhibit 4: REGRESSION RESULTS FOR HYPOTHESES TESTS.

N = 128, F (p-value) = 3.767 (.002); Adjusted R-Square =.115. The dependent variable is EDE. Missing values for PICA substituted by series mean.

Model	Coefficient	Standardized	p-value (Sig.)
Constant (Base case is Developing Non-Asian, Industrial Sector, Semi-finished Product)	1.155		.000
Developing Asian (H1a)	-.087	-.050	.598
Industrialized, English (H1b)	-.123	-.104	.322
Industrialized, Non-English (H1c)	-.269	-.201	.054**
Consumer Sector (H2)	.216	.170	.051**
Finished Product (H3)	-.155	-.100	.236
PICA Perceived Importance of Contractual Agreements (H4)	.154	.311	.000 ***

*** Sig. at <.000; * Sig at < .10 ; all others not significant.

The regression model was clearly significant, and could be applied to the target population. The explained variation (R-Square) in the EDE variable was 15.6 % . The most significant effect was that of the perceived importance of contractual agreements, PICA, followed by Consumer Sector, and then industrialized Non-English speaking countries. We observe that hypotheses H1b, and H3 were not supported; however, H1a, H1c, H2 and H4 were supported.

The primary product characteristics were hypothesized to have an effect on the diversity of entry considerations. We find that H2 is supported (p = .051) indicating that consumer products have higher entry consideration diversity, EDE. However, H3 is not supported (p=.200) indicating the finished product category is no different from the semi-finished product category in effects on EDE.

The K-means clustering for three clusters yielded the results in Exhibit 5 below. The differences among clusters in selected variables means indicates three groups with clearly different diversity in entry considerations. Cluster 1 (39.32 % of sample) can be termed the “Transacters” group, since they tend to place higher importance on considerations of financial and control conditions affecting cross-border transactional exchange. These had the highest diversity or EDE. Cluster 2 (45.50 % of sample) can be in contrast termed “ Cooperators” group since they tend to find their cross-border specific cooperative character to be of higher importance. They had medium diversity or EDE. Cluster 3 can be termed the " Developers " group granting relatively more importance to market potential and growth. Clearly, these firms are in the minority (15.17% of sample) but they emphasize their few considerations heavily. They have the lowest diversity or EDE. Clearly, the EDE measure helps distinguish the three types of entry consideration clusters. We next turn to the implications of the analyses.

Exhibit 5: ENTRY CONSIDERATION RELATIVE IMPORTANCE RATINGS.

	Cluster 1	Cluster 2	Cluster 3
Currency stability	<u>21.21</u>	13.39	3.56
Political stability	<u>17.63</u>	11.72	6.67
Ease of capital repatriation	<u>21.06</u>	9.33	2.04
Familiarity with channels	7.34	<u>28.33</u>	8.22
Controls on foreign enterprise	<u>11.89</u>	6.13	2.07
Availability of local capital	7.41	<u>14.98</u>	2.04
Attitude to foreign ownership	<u>8.47</u>	3.80	.04
Local inflation rate	<u>5.48</u>	<u>5.38</u>	1.48
Other (Market Potential, Growth rates, etc)	1.88	9.45	<u>77.59</u>

Discussion

The importance of contractual agreements within the primary channel appears to have the major influence on the perceptions of export managers regarding diversity of entry considerations. H4 was strongly supported. Contractual agreements of the neoclassical kind considered here would be necessary when managers are unable to obtain much information on contingent outcomes. The increase in uncertainty and information asymmetries across borders drives increased contractual agreements. These uncertain and contingent situations will also lead to increased dimensions along which managers consider entry decisions. The carry over effect that exists here is not unusual. The rationale is that salient perceptions in one situation of importance will affect the perspective of the manager.

Previous research on entry considerations has asked respondents to consider the overall importance, or generalize across several situations. The focus here on the primary product to a hypothetical country funnels the respondent to a *particular but non-defined* situation. The situation that the manager focuses on, therefore, appears to bear a resemblance to the primary product-market channel, in contrast to the general situation across all countries, channels and products. The higher the perceived importance of previous channel agreements, the higher is the entry considerations diversity.

H1a was supported and H1b was not supported, implying that non-Asian Developing Countries do not significantly differ from Asian developing countries (as expected), nor do they differ from English speaking Industrialized countries (which was unexpected) vis-à-vis EDE. These could all therefore be viewed as one category. H1c was supported, implying that only non-English industrialized hosts had significantly lowered diversity of entry, EDE. The industrialization of the host country tends to create better information flows and less uncertainty in the economy, implying that multiple entry considerations will not be in play. The industrialized non-English speaking countries differed in the following entry considerations from the other three sub-classifications.

Aggregate data for distribution of exports from a set of 5 industrialized countries in 1990 to their top 20 host countries are available in [9] Hejazi and Safarian (1999). We calculate an entropy measure from their Table 2, over the host countries, in order to indicate the geographic diversity in exporting for the set of five industrialized countries. UK leads with 2.635, followed by Germany, 2.607; Italy, 2.413; USA, 2.271; Japan, 1.868; and Canada, .865; of a maximum possible of 3.045. This indicates that at the aggregate level exporters in these countries are not geographically diversified as they could be, and further entry decisions are likely to be made by many firms in these countries.

The final section concludes with a summary of our main findings, and their implications, and directions for future research.

Conclusion

In this paper we develop and test a model of export market entry considerations. Our main concern is the diversity of an evoked set of entry considerations. In contrast with the independent measures of previous importance perceptions, we elicit comparative measures of perceived importance from a larger pre-specified set of entry considerations. We also focus perceptions on a particular entry decision, rather than generalizations over several entry situations by a manager across independent entry criteria. A new measure of diversity in entry considerations is proposed, similar to the entropy measures of product diversity and geographic diversity in research on the multi-national enterprise drawing from transaction costs analysis (TCA), we develop a measure of the perceived importance of contractual agreements.

We find that this perceived importance of contractual agreements is positively related to diversity of entry considerations. Prior experience does therefore affect future entry decisions. In rapidly evolving world environment for business, future entry decisions of US exporters will continue to be influenced by transaction costs in their exporting experience of the past. Distributors in host countries should seek to factor in this knowledge when seeking entry from firms from the US. We also find that when the prior channel influence is in non-English speaking industrialized nations, the diversity in entry considerations is reduced. The evoked set is smaller. Wider entry considerations are evoked when prior experience is in developing nations or English speaking industrialized nations. Distributors should focus on these differences in partnering with US exporters, as should export facilitating public agencies. Finally, consumer products are likely to need a wider set of considerations. Importers of US consumer products would need to be sensitive to this in their negotiations. In sum, the paper identifies several influences on the diversity of perceived relative importance of entry considerations, many of which have implications for international partnering and negotiations.

Future research is desirable on this difficult and under-researched area. Other antecedents of entry considerations based on different theoretical underpinnings are possible. These will serve to discriminate between entry situations and partnering concerns. The specific dimensions and criteria that are important in entry decisions need to be inter-related in other ways, drawing on international business paradigms. The impact of entry considerations on post-entry behavior, negotiation and relationship marketing is important in of itself.

References

[1] Calof, Jonathon L. (1994) "The relationship between firm size and export behavior revisited," *Journal of International Business Studies*, 25 (2) ; 367-88.

[2] Root, Franklin R. (1987), "*Entry Strategies for International Markets*," Lexington Books, MA, USA.

[3] Erramilli, M. Krishna (1991) "The experience factor in foreign market entry behavior of service firms," Journal of International Business Studies, 22 (3); 479-501.

[4] Williamson, Oliver E. (1986), "*Economic Organization: Firms, Markets and Policy Control*," New York University Press, NY.

[5] Klein, Saul, Gary L. Frazier, and Victor J. Roth (1990), "A Transaction Cost Analysis Model of Channel Integration in International Markets,*" Journal of Marketing Research*, Vol. XXVII, May.

[6] John, George, and Barton Weitz, (1988), "Forward Integration into Distribution: empirical test of transaction cost analysis," *Journal of Law, Economics, and Organization*, 4, 121-39.

[7] Wood, Van R. and Kim R. Robertson, (2000). "Evaluating International Markets: The Importance of Information by Industry, By Country of Destination, and By Type of Export Transaction," forthcoming *International Marketing Review.*

[8] Hoopes, David G. (1999). "Measuring Geographic Diversification and Product Diversification," Management International Review, Vol. 39, 3, pp. 277-292.

[9] Hejazi, Walid and A. Edward Safarian (1999) "Trade, Foreign Direct Investment, and R&D Spillovers," *Journal of International Business Studies*, 30, 3, pp. 491-511.

International Marketing Strategies For Global Competitiveness

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ABSTRACT

Most of the firms are eyeing at the global marketplace to improve their competitiveness. Considerable controversy has arisen in recent years, concerning the most appropriate strategy in international markets. Deciding how to deal with the globalization of markets, poses tough issues and choices for managers and their firms. They must consider both – external environmental forces and internal organizational factors, before they arrive at an international marketing strategy.

The growing integration of international markets as well as the growth of competition on a worldwide scale implies adoption of a global perspective in planning marketing strategy. The paper is divided into three parts. The first part deals with the factors that enable the industry to globalize. The second part examines the concept of global competitiveness and studies the factors leading to global competitiveness. Finally, in the third part, on the basis of the points discussed in the two earlier parts, a general approach is suggested for the firms to achieve global competitiveness.

In this paper, ideas from available literature are integrated in a comprehensive conceptual framework in which strategies can be formulated. The paper, further presents a basis for developing international marketing strategies alongwith a comprehensive discussion on developing global competitiveness.

Introduction

Globalization can be defined generally as the growth of economic activity spanning politically defined national and regional boundaries. It finds expression in the increased movement across the boundaries of goods and services, viz. Trade and investment, and often of people via migration. It is driven by the actions of individual economic actors – firms, banks, people – usually in the pursuit of profit and often spurred by the pressures of competition.

According to Theodore Levitt (1983), new commercial reality – the emergence of global markets have come up because of advances in technology, communication, transport, etc. Those corporations geared to the new reality, benefit from enormous economies of scale in production, distribution, marketing and management. By translating those benefits into reduced world prices they can decimate competitors that still live in the disabling grip of old assumptions about how the world works.

An industry does not globalize on its own and every industry cannot be a global one. There are certain drivers which determine the potential for industry globalization.

Industry Globalization Drivers

There are four broad groups of industry globalization drivers – market, cost, Government and competition (Table-1 below). Together, these four sets of drivers cover all the major critical industry conditions that affect the potential for globalization. Drivers are primarily uncontrollable by the worldwide business. Each industry has a level of globalization potential that is determined by these external drivers.

Table 1: INDUSTRY GLOBALIZATION DRIVERS	
Market Drivers	**Cost/ Economic drivers**
• Convergence of lifestyles & taste • Increased travel creating global consumer • Growth of global and regional channels • Establishment of world brands • Push to develop global advertising • Shortening product life cycle	• Continuing push for economies of scale. • Accelerating technological innovation • Advances in transportation • Emergence of NIC • Increasing cost of product development
Government Drivers	**Competitive Drivers**
• Reduction of tariff barriers • Creation of trading blocs • Decline in role of government • Reduction in non-tariff barriers • Shift in open market economies	• Increase in level of world trade • Increase in foreign acquires of corporation • Companies becoming globally centered • Increased formation of global strategic alliances • Globalization of financial markets

Source: Yip, G.S. (1991)

However, as mentioned earlier, every industry cannot be a global industry, and some have to adopt 'multi-domestic strategy'. Table-2 lists five dimensions and their respective positions under pure multi-domestic strategy and a pure global strategy. For each dimension, a multi-domestic strategy seeks to improve worldwide performance by maximizing local competitive advantage, revenue or profits. On the other hand, a global strategy seeks to maximize worldwide performance through sharing and integration.

Table 2: INTERNATIONAL MARKETING STRATEGIES

Dimensions	Setting for Pure Multi-domestic Strategy	Setting for Pure Global Strategy
Market Participation	No particular pattern	Significant share in major markets
Product offering	Fully customized in each country	Fully standardized world wide
Location of Value-added Activities	All activities in each country	Concentrated one activity in each (different) country
Market Approach	Local	Worldwide uniform
Competitive Moves	Stand-alone by country	Integrated across country

Source: Henry Mintzberg, James Brian Quinn, 1996, The Strategy Process Concepts, Contests, Cases.

Strategic Implications of Globalization

As pattern of international competition shifts towards globalization, there are many implications for strategy formulation. In a global industry, functions of finance, marketing, business and Government relationship change according to global configuration and co-ordination.

(a) International Alliances:

International alliance is another implication of globalization. International coalition, linking firms of the same industry based in different countries have become an even more important part of global strategy.

(b) Organizational Challenges :

The need to configure and co-ordinate globally in complex ways creates some obvious organizational challenges such as organizational structure, reporting hierarchies, communication linkages and reward mechanisms.

(c) Government Relations:

In the globalized era, the selection of foreign market to enter and the mode of entry will, by and large, depends on the negotiations with the foreign Government, and the 'muscle power' of the global firm can be crucial in deciding the shift of power equilibrium. A global firm must 'manage' its relationship with the foreign Government to its advantage. A shining example of what happens if it fails to do so is Enron in India.

(c) Competition:

A global firm may be in a better position to compete with its global rival as it can augment its resources globally.

These implications of globalization will lead companies to take care of these issues forcing them to formulate an appropriate strategy to handle them.

Strategy for Global Competitiveness

The research carried out in the past reveals that competitiveness depends upon internal as well as external factors. It also depends on the macro-environmental factors such as the policies of the home country Government (whether favoring competition, support offered to the industries in terms of taxation, rebates and incentives, fiscal and credit policies, etc.), the degree of consumerism in the home country, the nature of competition. However, there is lack of a single model for measuring global competitiveness.

Competitiveness

Competitiveness depends upon internal as well as external factors. However, there is a lack of a single model for measuring global competitiveness. Various scholars have done research on global competitiveness either on one or only on a few functional based competitiveness parameters.

According to Hoff, Fisher, & Miller (1997), the term competitiveness can be applied to firms, industries, markets, and nations. The relationship between organizational competitiveness and market, industry, or national competitiveness is not well understood. In fact, economists have not yet devised a formal definition or theory of competitiveness. Neoclassical economists tend to associate competitiveness with external, market-based concepts such as comparative advantage, market distortions and price.

Hoff, Fisher, & Miller (1997) have summarized the work done by scholars of industrial organization. These scholars have cited internal determinants of efficiency and quality as aspects of competitiveness. Jusran (1992), has suggested that competitive analysis must include: first, an evaluation of competitiveness of product features; and second, an evaluation of the features of the process or internal operations used to produce the products and the subsequent process yields. According to Skiner (1984), competitiveness is connected to the internal operations of a firm and the technology used in those operations. Martin et al. (1991), defines competitiveness as the "Sustained ability to profitably gain and maintain market share".

Cook and Bredahl (1991), argue that an adequate definition of competitiveness must include place, product and time.

According to Hoff, Fisher & Miller (1997), competitiveness is the ability to produce goods and services that meet or exceed quality expectations of the customer; deliver these goods or services at the time, place and price required by the customer; deliver these goods or services in the form and quantity required by the customer.

However, a different viewpoint is presented by the scholars from area of strategic management.

Barlett and Ghoshal (1989) have developed an understanding as to why a few could overcome the problems whereas the others could not. They reached following major conclusions that “by the mid-1980s, the forces of global integration, local differentiation, and worldwide innovation had all become strong and none could be ignored. To compete effectively, a company had to develop global competitiveness, multinational flexibility and worldwide learning capability simultaneously.” Let’s elaborate each feature:

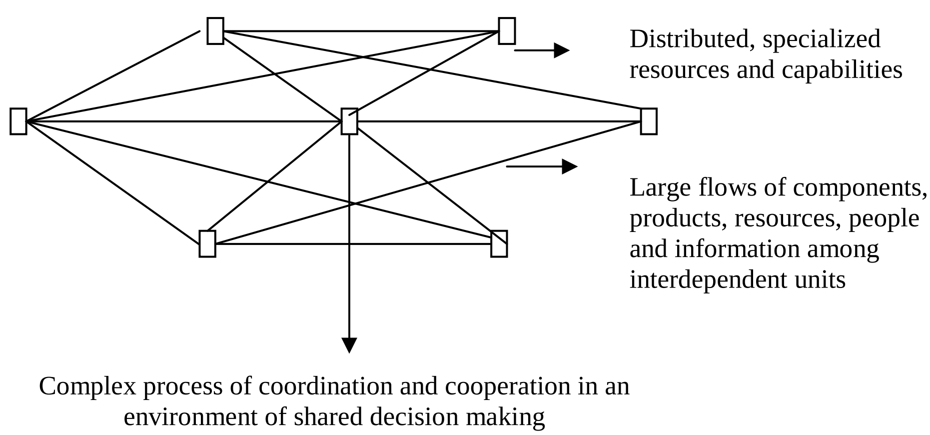
(a) Global Competitiveness:

To achieve global competitive advantage, cost and revenue have to be managed simultaneously; efficiency and innovation are both important, since innovations can take place in different parts of the organization, selective decisions have to be made instead of centralizing or decentralizing assets.

Certain resources and capabilities are best centralized within the home country operation, not only to realise scale of economies, but also to protect certain core competencies and to provide necessary supervision of corporate management, such as R&D activities.

Some resources may be decentralized, on a local basis, either because of small potential economies of scale compared to the benefits of differentiation or because of the need to create flexibility and to avoid exclusive dependence on a single facility.

The result is a complex configuration of assets and capabilities that are distributed; yet specialized. The Figure-1 below shows this complex configuration.



Source: Barlett Christopher A. & Ghoshal Sumantra, 1989, Managing Across borders - The transnational solution.

Fig 1: INTEGRATED NETWORK

Global competitiveness increasingly requires the simultaneous optimization of scale, scope, and factor cost economies, along with the flexibility to cope with unforeseen changes in exchange rates, tastes, and technologies.

(b) Multinational Flexibility

The real challenge today is not only to be responsive, but also to build the capability to remain responsive as tastes, technologies, regulations, exchange rates, and relative prices change. Flexibility in sourcing, pricing, product design, and overall strategies is now the key to maintaining differentiation.

(c) World-wide Learning

The pressure of competition has led companies to develop an ability to sense emerging trends, to develop creative responses, and to diffuse their innovations worldwide. This has certainly been the case in the telecommunications industry. Learning is also rapidly becoming the central game in consumer electronics and is emerging as a key competitive capability in branded package goods. Centrally designed products and processes still play an important global role, but innovations are created by the subsidiaries as well.

Porter's Global Strategy: Configuration and Co-ordination of Organizational Resources

According to Porter (1986), "Competitive advantage is a function of either providing comparable buyer value more efficiently than competitors (low cost), or performing activities at comparable cost but in unique ways that create more buyer value than competitors and, hence, command a premium price".

A global strategy can be defined as one in "which a firm seeks to gain competitive advantage from its international presence through either a concentrated configuration, co-ordinating among dispersed activities or both".

In the above definition, configuration refers to firm's activities worldwide, where each activity in the value chain is performed in different places; whereas co-ordination refers to the way similar or linked activities performed in different countries, are co-ordinated with each other.

A firm has a choice of options in both configuration and co-ordination. Configuration options range from concentrated performing of an activity in one location and serving the world from it, for example, one R&D lab, one large plant – to dispersed, that is performing the activity in every country. In the extreme case, each country would have a complete value chain.

Co-ordination potentially allows the sharing and accumulation of know-how and expertise among dispersed activities. A firm co-ordinating internationally may also receive early warning of industry changes by spotting them in one or two leading countries before they become broadly apparent in other countries. So, they can transfer the knowledge to guide other activities elsewhere. Co-ordination may also allow a firm to respond to shifting comparative advantage, where movements in exchange rates and factor costs are significant and hard to forecast.

Managing Time as a Competitive Advantage

According to George Stalk Jr. (1991), time is the next source of competitive advantage. He argues that like competition itself, competitive advantage is a constantly moving target. The key is not to get stuck with a single simple notion of its source of advantage. The best competitors know how to keep moving and always stay on the cutting edge. He states that time is the determinant factor to become competitive. The way companies manage time – in the area of production, development and marketing –represent the most powerful new sources of competitive advantage. In fact, as a strategic weapon, time is equivalent of money, productivity, quality even innovation. For example, in 1980s, managing time has enabled top Japanese companies not only to reduce their cost but also to offer broad product lines, cover more market segments, and upgrade the technological sophistication of their products. These companies were time-based competitors.

Global Competitiveness

What drives companies to become globally competitive? Is it vision or ambition that will bring global competitiveness? As mentioned by Hamel and Prahalad (1989), leading global companies of the last two decades invariably began with ambitions that were out of proportion to their resources and capabilities. They created an obsession with winning at all levels of the organization and then sustained that obsession over 10 to 20 years' quest for global leadership. The desire of a company to achieve global competitiveness together with technology, innovation, quality, productivity, efficiency, etc. will bring global competitiveness.

A company's desire to achieve global competitiveness is communicated through vision. Hence, communication vision and strategy implementations are the next steps.

Stace and Dunphy (1991) emphasize the fact that the strategic process is more important than the repositioning of the strategy. According to them, there is too much attention on the strategic repositioning of the organization and "Writers representing this strategic emphasis are Porter (1980 and 1985); Miller (1986); Harrigan (1985); Murray (1988); and Ohmae (1987) : theirs is an emphasis on content, direction and repositioning rather than process. Yet, a critical factor in the successful repositioning is the internal capability of the organization, generated appropriately chosen change and human resource strategies".

Strategy formulation and strategy implementation can be best described with two words: 'What' and 'How'. As Kogut and Bownan discuss "The 'how' and 'what' are linked …… what a company wants to be capable of doing, depends on how it does things". It has happened too often in the past that an attractive idea has turned out to be a nightmare in the implementation process.

In international competition, companies compete with global strategies, involving not only in trade but also in foreign investment. A nation must provide a favorable home base for companies that compete internationally. The home base (Porter; 1986 calls it as Global Platforms) is the nation in which the essential competitive advantages of the companies are created and sustained. According to the Porter a country is the desirable platform in an industry if it provides an environment yielding firms domiciled in that country an advantage in competing globally in that particular industries. Porter has identified two determinants of a good global platform in an industry. The first is comparative advantage, or the factor endowment of the country as a sight to perform particular activities in that industry. Today, simple factors such as low-cost unskilled labor and natural resources are increasingly less important to global competition compare to complex factors such as skilled scientific and technical personnel and advanced infrastructure. The second factor is the characteristics of the countries' demand. Local demand conditions provide two potentially powerful sources of competitive advantages to a global competitor. The first is first - mover advantages in perceiving and implementing the appropriate global strategy. Pressing local needs, particularly peculiar ones, lead firms to embark early to solve local problems and gain proprietary know-how. This is then translated into scale and learning advantages as firms move early compete globally. The other potential benefit of local demand conditions is a base load of demand for product varieties that will be sought after in international markets.

Apart from the two factors identified by Porter, the third determinant for a global platform is the support lent by the government of the country where the headquarter of the company is situated in. The government can support a firm by offering incentives, having low tax-structure or encouraging internationalization of it’s activities by offering various subsidies/ incentives.

Effective strategies start from what the company is distinctively good at, not from what it would like to be good at, and is adaptive and opportunistic in exploiting what is distinctive in these capabilities. Strategies should be adaptive and opportunistic. Planning should start with an assessment of the firms’ distinctive capabilities. Building distinctive capabilities is a task of exceptional difficulty because if it were not, the capability would soon cease to be distinctive. It is easier to identify distinctive capabilities than to create them. Strategy begins with an understanding of what these distinctive capabilities are.

A capability can only be distinctive if it is derived from a characteristic which other firms lack, yet it is not enough for that characteristic to be distinctive. It is necessary also for it to be *sustainable* and *appropriable*. A distinctive capability is sustainable only if it persists over time. A distinctive capability is appropriable only if it exclusively or principally benefits the company which holds it (Kay 1993).

From Capabilities to Competitive Advantages

A distinctive capability becomes a competitive advantage when it is applied in an industry and brought to a market. The market and industry have both, product and geographic dimensions. Sometimes, the choice of market follows immediately from the nature of a distinctive capability. An innovation usually, suggests its own market.

Some firms have distinctive capabilities based on their architecture and the same architecture advantage can often been employed in a wide range of industries and markets.

Reputations are another distinctive capability. They are created in specific markets. A reputation necessarily relates to a product or a group of products. It is bounded geographically too.

Many reputations are very local in nature. For instance, a doctor or a good retail store. But an increasing number of producers of manufactured goods like Coca Cola, IBM, Sony, etc. have established reputations worldwide and branding has enabled international reputations to be created and exploited.

A firm can only enjoy a competitive advantage relative to another firm in the same industry. A competitive advantage is a feature of a particular market. The value of a competitive advantage will depend on the strength of the firm's distinctive capability, the size of the market and the overall profitability of the industry. If there is an excess capacity in the industry – as in automobiles – then even the last competitive advantage may not yield substantial profits. Profits come not only from distinctive capabilities but from possession of strategic assets – competitive advantages which arise from the structure of the market rather than from the specific attributes of firms within that market.

The theme of this research is based on the premise that the competition is dynamic and evolving; it attempts to seek answers to questions like - Why some companies based in some countries are more competitive than others?

Business Forms and Competitiveness: New Age Organizations

Beinhocker (1997) used a metaphor to describe the complexity of environment and to develop strategies : "Anthills are marvelous things. With elaborate labyrinths of tunnels, layouts reflecting their occupants' social hierarchies, chambers dedicated to specific functions and carefully cited entrances and exits. Yet, who is the engineer? Where is the blueprint?"

There is no layout, of course. Rather, the community of ants is an example of a complex adaptive system (CAS). A CAS has three features:

- They are open, dynamic systems
- They are made up of interacting agents
- Complex adaptive systems exhibit emergence and self-organization

Moving from CAS, number of economists started to say that economies are CASs. Although this work is still in its infancy, there is enough evidence to suggest what the key features could be: "First the new economics will be based on a realistic model of cognitive behaviour. Second, the new economics will see agents as interacting with one another in a dynamic web of relationships. Third, markets will be viewed as inherently dynamic rather than static systems". It seems promising regarding the fact that "traditional economics has never been able to explain innovation and growth" (Beinhocker 1997).

Achieving Global Competitiveness

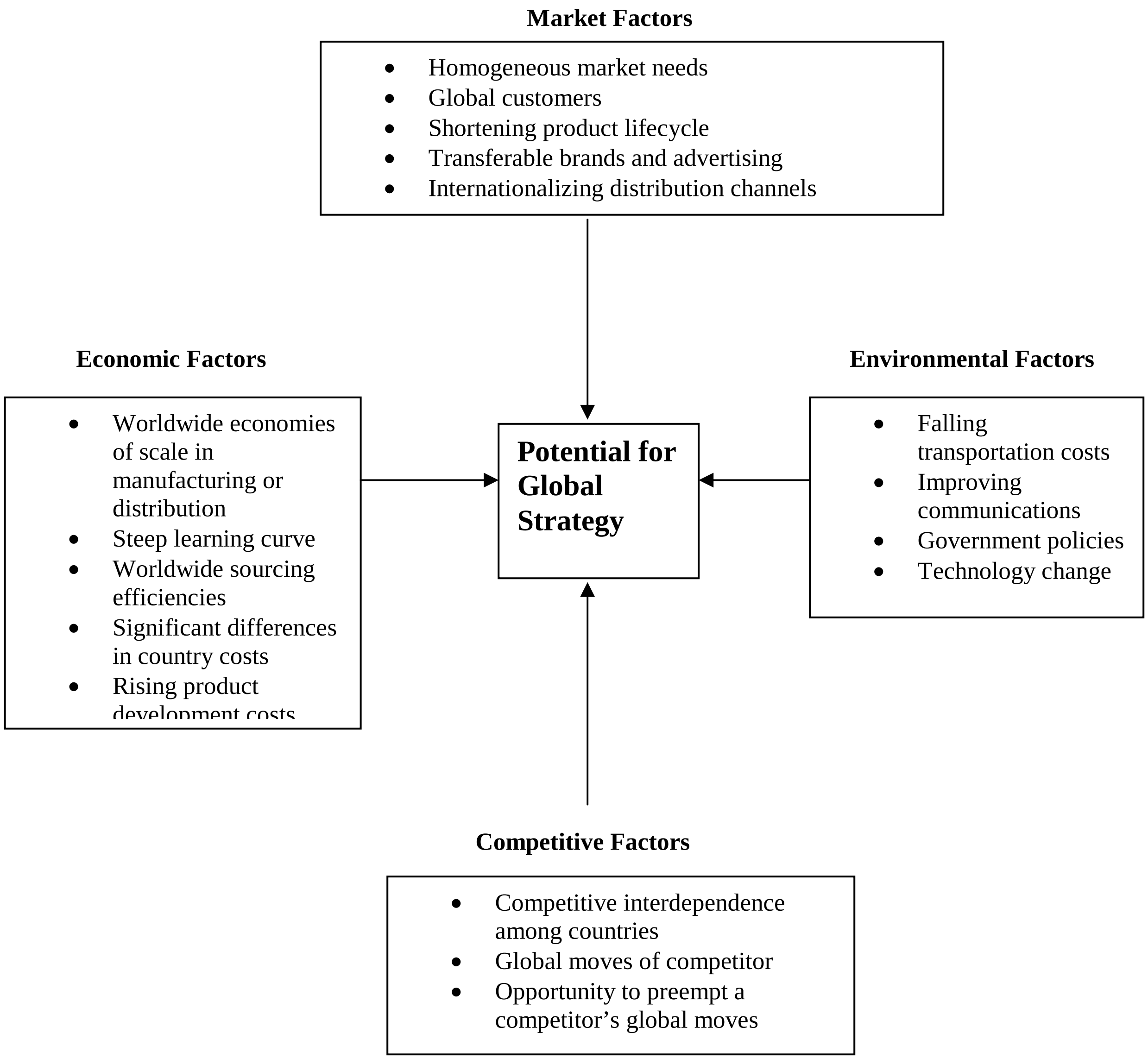
Many companies today are struggling to achieve a global competitiveness and a globally integrated organization retains the capability for local flexibility and responsiveness. Organization provides the vehicle by which strategy can be formulated and implemented. The nature of organization also affects the kind of strategy that can be developed. This is particularly true of global strategy. Building the kind of company capable of formulating and implementing total global strategy is not easy. The task is achievable if managers break it down into digestible pieces and if they relate changes in organization to the specific changes needed in global strategy.

The following four factors affect a company's ability to formulate and implement global strategy (Yip, et. al 1988):

- **Organization structure** comprises the reporting relationships in a business - the 'boxes and lines'.

- ❖ **Management process** comprises the activities such as planning and budgeting that make the business run.
- ❖ **People** comprise the human resources of the worldwide business and include both managers and all other employees.
- ❖ **Culture** comprises the values and unwritten rules that guide behavior in a corporation.

These four factors are explained further in the Figure-2 below:



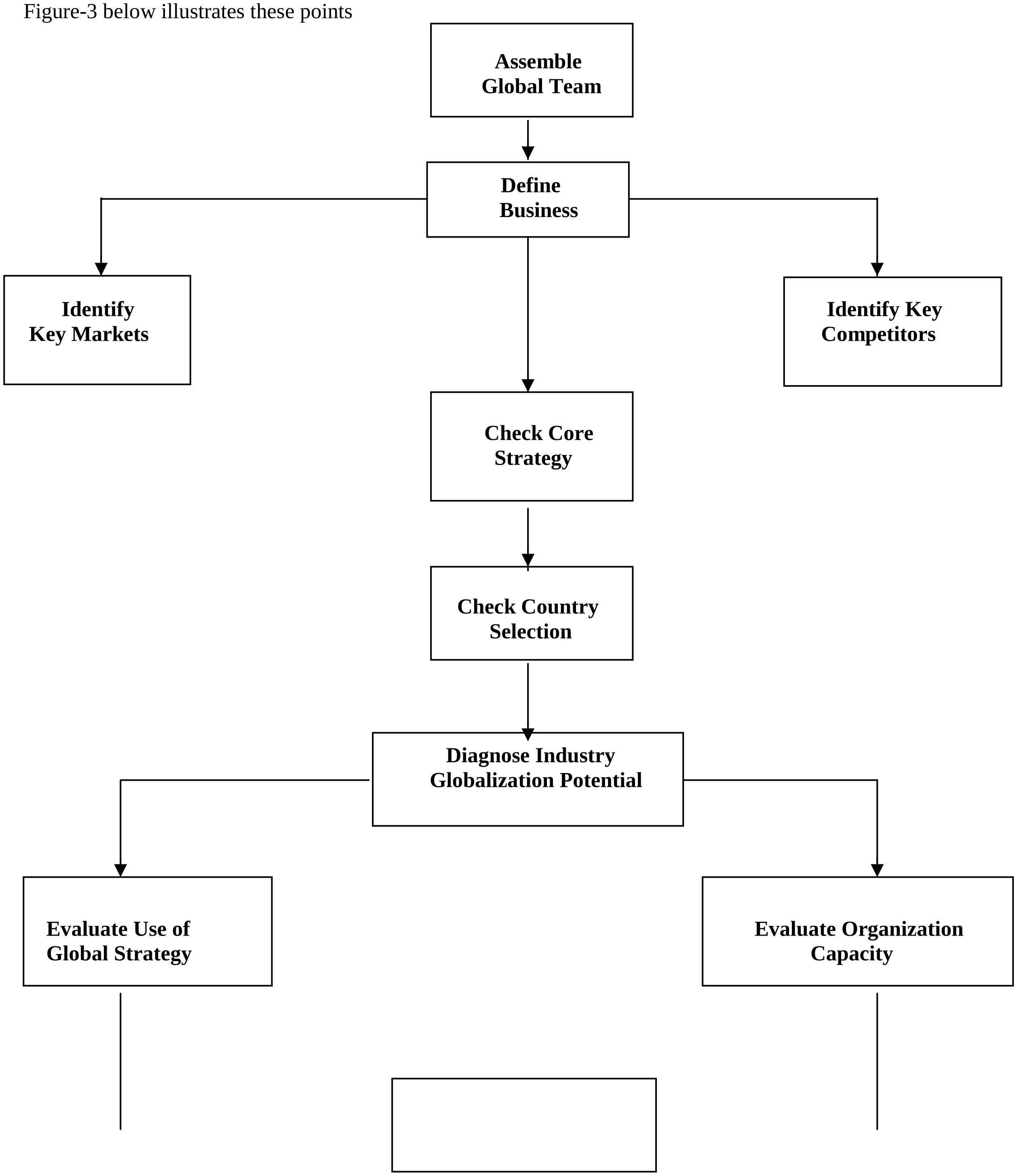
Source: Yip, et. al. (1988)

Fig.2: EXTERNAL DRIVERS OF INDUSTRY POTENTIAL FOR GLOBALIZATION

Besides these, to become globally competitive, the company needs to focus on the following:

- Developing a marketing plan with universal appeal.
- Help employees understand the company's global vision.
- Benchmark off mistakes that other have made in the past.
- Select the right partners for joint ventures overseas.

Figure-3 below illustrates these points



Develop Global Program

Fig. 3: STRATEGY FOR GLOBAL COMPETITIVENESS

Managers responsible for marketing in a multinational enterprise must design appropriate marketing programs for each national market. To some extent, each country must be treated as a separate marketplace because each has it’s own currency, legal and political requirements, and methods of doing business. However, by co-ordinating operations on a regional or global scale, multinationals can gain important competitive advantages. Fig.-3 above illustrates some of the major issues involved in the development of international marketing strategy for global competitiveness.

Success in world competition turns on efficiency in production, distribution, marketing and management and inevitably becomes focused on price. The most effective world competitors incorporate superior quality and reliability into their cost structures. They sell in all national markets, the same kind of price, quality, reliability and delivery for products that are globally identical with respect to design, function and even fashion (T Levitt ; Harvard Business Review. "The Globalization of Markets" - May/June 1983).

The growing integration of international markets as well as the growth of competition on a worldwide scale implies that adoption of a global perspective in planning marketing strategy. However, to conclude that this mandates the adoption of a strategy of global standardization appears over-generalized. It ignores the inherent complexity of operations in international markets and the formulation of strategy to penetrate these markets. While global products and brands may be appropriate for certain market ad in targeting certain segments, adopting such an approach as a universal strategy in relation to all markets may not be desirable and may lead to major strategic blunders. Moreover, it implies a product orientation and a product-driven strategy, rather than a strategy based on a systematic consumer behavior and market characteristics[3].

Summary

Global competitors must have the capacity to think and act in complex ways. They must understand and accept the fact that this is an era of competition and only those who are competitive will remain in the race. They must, therefore, design their strategies such that they manage the cost and revenue simultaneously. Due credit must be given to efficiency and innovations.

Globally competitive firms would know how to manage their resources globally and how to strike a balance between centralization and decentralization, so that they take advantages of both - economies of scale and the benefits of differentiation and adaptation. They will have to learn to adopt combinations of these alternatives.

The key to success is a careful analysis of the obstacles to this approach. Both should be carefully evaluated on the basis of company's strength and the company's competitive advantage in exploiting them before arriving at an international marketing strategy.

References

[1] Agnihotri Prafulla (1997), "Achieving Global Competitiveness Through Flexibility in Management: A Conceptual Analysis". A research paper presented at and published by IIT, New Delhi at an International Conference on Management of Technology.

[2] Ali Abbas J. (2001), "Globalization of Business: Practice and Theory". Jaico Publishing House.

[3] Barlett Christopher A. & Ghoshal Sumantra (1989), "Managing Across borders - The transnational solution".

[4] Barlett Christopher A. and S. Ghoshal (1992), "Transnational Management: Text, Cases, and Readings in Cross Border Management", *Irwin*.

[5] Bate S. P. (1996), "Towards a Strategic Framework for Changing Corporate Culture", Strategic Change.

[6] Beinhochker Eric D.(1997), "Strategy at the Edge of Chaos", Mckinsey Quarterly (1): 1997.

[7] Berggquist William H. (1993); "The Postmodern Organization : Mastering the art of Irreversible Change"; San Francisco : Jossey – Ban Publishers.

[8] G. Stalk, Jr. in C.A. Montgomery and M.E. Porter (eds) (1991): "Time – The Next Source of Competitive Advantage"; Strategy – Seeking and Securing Competitive Advantage, A Harvard Business Review Book Series, Boston, M.A.

[9] George Stalk Jr. (1991)

[10] Ghoshal S. (1987) "Global Strategy: an Organizing Framework"; Strategic Management Journal, Vol. 8, pp 425-40.

[11] Hamel Gary and Prahalad C.K in H. Mintzberg and J.B. Quinn (1986): "Strategic Intent"; The Strategy Process – Concepts, Contexts, Cases: Third edition; Prentice Hall.

[12] Hamel Gary and Prahalad C.K. (1985) "Do You Really Have a Global Strategy?"; Harvard Business Review, July – August pp. 139-49.

[13] Hamel & Prahalad (1989) "Strategic Intent", *Harvard Business Review*, May-June, 63-76.

[14] Harrigan (1985)

[15] Hoff, Fisher & Miller (1997)

[16] Jackson Harry K, Jr. and Normand L Frigon, "Achieving the Competitive Edge: A Practical Guide to World Class Competition", *John Wiley & Sons Inc*.

[17] Jain A. K., “Managing Global Competition: World Class Performance”, *Wheeler Publishing.*

[18] Jusran (1992)

[19] Kay John (1993), “Foundations of Corporate Success”. Oxford University Press.

[20] Kenichi Ohmae in C.A. Montegomery & M.E. Porter (eds) 1991: “Managing in a Borderless World”; Strategy-Seeking and Securing Competitive Advantage, A Harvard Business Review Book Series, Boston, M.A.

[21] L. William and M. William (1995) “Organizational Capability and Competitive Advantage Debates, Dynamics and Policy”;. Edward Elgar Publishing Ltd.

[22] Levitt T. (1983), “The Globalization of Markets”, *Harvard Business Review*, May-June, 92-102.

[23] Martin (1991)

[24] Miller (1986)

[25] Mintzberg Henry, and James Brian Quinn, (1996), “The Strategy Process Concepts, Contests, Cases”.

[26] Murray (1988)

[27] Ohmae (1987)

[28] Ohmae Kenichi, “The Borderless World”; *ISBN 0006383645*.

[29] Percy Barnevik and Afterword by Rosabeth Moss Kanter; “Global Strategies – Insights from the Worlds Leading Thinkers” with a Preface A Harvard Business Review Book Series, Boston, M.A.

[30] Porter M.E (1986), “Competition in Global Industries”; Harvard Business School Press.

[31] Porter M.E. (1990), “Competitive Advantage of Nations”; McMillan Co.

[32] Porter Michael (1990), “What is National Competitiveness”, *Harvard Business Review*. March-April.

[33] Porter Michael E. (1998), “Competitive Advantage: Creating and Sustaining Superior Performance”, *The Free Press.*

[34] Skiner (1984)

[35] Stace & Dunphy (1991)

[36] T. Levitt in C.A. Montegomery & M.E. Porter (eds) 1991: “The Globalization of Markets”; Strategy – Seeking & Securing Competitive Advantage, A Harvard Business Review Book Series, Boston, M.A.

[37] Yip (1991) G.S. “Total Global Strategy – Managing for Worldwide Competitive Advantage”; Prentice Hall.

[38] Yip, George S., Pierre M. Loewe, and Michael Y. Yashino (1988), "How to Take your Company to the Global Market", *Columbia Journal of World Business*, (winter), 37-47.

End Notes

1. For the purpose of this article, the term **global industry** is defined as one which has standardized products, specialized activities like R & D performed only at the headquarter, uniform market positioning, and an integrated competitive strategy and a **multi-domestic** industry is defined as one in which the products may be adapted to suit the needs of different markets, specialized activities performed at various locations, differing market positioning strategies in different markets, and different competitive strategy for each region or even country.
2. There is no common and globally accepted definition of the term c**ompetitiveness**. In fact there are as many versions of the meanings and definitions of 'competitiveness' as the number of experts in this field. Hence, the term is defined in this paper as ***the ability of a firm to compete effectively in international markets.***
3. For a discussion, see Agnihotri Prafulla (1997), "Achieving Global Competitiveness Through Flexibility in Management: A Conceptual Analysis". A research paper presented at and published by IIT, New Delhi.

Internationalization of Commercial Services: Global Dispersion

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Abstract

Recent world trade statistics emphasise rapid globalisation of commercial services (CS) and underpin the criticality of a country's positioning strategy in the growing world CS market. Drawing on trade statistics of 77 countries, this paper assesses configurations and composes a matrix of CS internationalisation as a framework to classify and map countries in the world CS market. Overall the study differentiates between countries based on the structures of country export and CS trade ratios. Key findings are that there are the two distinctive patterns of country CS internationalisation among the G7 countries, and that the country CS trade success (measured by CS trade balance per capita) appears to be determined by a country's CS internationalisation mode.

Introduction

Commercial Services (CS) constitute a variety of service related and oriented business activities. The concept is hard to define and statistics and data on CS are affected by the lack of clear definition. The World Trade Organisation (2002) defines services as all transport, travel for business, health and education purposes, communication, construction, insurance, financial, computer and information, royalties, license fees, copyrights, trademarks, other business services (a large variety) and personal, cultural, and recreational services (http://www.wto.org/english/res_e/statis_e/technotes_e.htm). Cross-border trade in CS has emerged as a significant driving force behind the development of world trade. Statistics confirm the rise of trade in CS which marks the dawn of internationalisation of post-industrial commercial activities. In 2000, world export of CS reached US$1.4 trillion (some 18% of world trade) reflecting a growth rate of 400% since 1980 (http://www.wto.org/english/res_e/statis_e/service_e.xls). Data indicates that world CS trade is growing faster than world goods trade, a trend that is expected to accelerate further. The trend is also reflected in the General Agreement on Trade in Services (GATS) focussing on transforming government policies that conventionally cater for manufacturing industries into more services-oriented ones. In addition, ever-advancing technologies are transforming many services that have long been regarded domestic activities into internationally viable businesses.

Increasing interdependence in the production and distribution of services across countries emphasises the importance of a country's positioning strategy in the world CS trade market. However, publicly available statistics provide little insight into this matter. This paper attempts to take the first step to fill the gap. Drawing on the available country trade statistics, we investigate configurations of country CS internationalisation defined by structures of country export and CS trade. This is used to develop a matrix of country CS internationalisation modes, based on the country configurations, as a framework to classify and map countries in the world CS market. Finally, we examine the different internationalisation modes in the matrix against per capita CS trade intensity and success.

Methodology

For this study, three sets of data sources available on the Internet were consulted: the World Trade Organisation's (WTO) *Historical Series* of both '*Goods Trade'* (http://www.wto.org/english/res_e/statis_e/webpub_e.xls) and '*Commercial Services Trade'* (http://www.wto.org/english/res_e/statis_e/service_e.xls) for country trade statistics and the World Bank Group's *World Development Indicators* (http://www.worldbank.org/data/wdi2002/index.htm) for country populations. Due to the non-availabilities of some country statistics of the year 2001 across the three data sources we compiled country statistics of the year 2000 for our database.

For the purpose of this paper we chose six of the 77 countries in the database, on which to focus, namely the U.S., Japan, Australia, Singapore, Malaysia and Thailand. These countries were selected for their presence in the Asia and Pacific region, and their unique country profiles. Table 1 summarises those characteristic profiles.

Table 1: COUNTRY PROFILES OF THE SIX COUNTRIES

	U.S.	Japan	Aust.	Sing.	Malay.	Thai.
GDP[1] (US$billion)	9,800	4,800	390	92	90	122
Services, etc., value added[2] (% of GDP)	n.a.	66.4	70.7	65.2	45.5	49.5
Export of goods & services[3] (% of GDP)	10.7	10.0	19.9	166.5	125.5	67.0
Country Classification by Income Group[4]	High Income	High Income	High Income	High Income	Upper Middle Income	Lower Middle Income

Note [1, 2, and 3]: Country Profile of The World Bank Group 1999 Figures.
[4]: GNI per capita: US$9,206 or more is High Income, $2,976- $9,205 is Upper Middle Income, $746-$2,975 is Lower Middle Income.
Source: The World Bank Group, Data and Statistics, Data by Country, http://www.worldbank.org/data/countrydata/countrydata.html

As points of reference we included the world average and the Group of seven (G7) countries average (the U.S., Canada, Japan, the UK, France, Germany, Italy).

The paper is based on the following four research variables: 1) CS export to total export in value, 2) CS export to import in value, 3) CS trade total per capita, and 4) CS trade balance per capita. The first variable intends to measure the contribution of a country's CS export to the total export. In an absolute sense, a ratio larger than 50% suggests CS to be the source of the country's comparative advantage. The second variable denotes a country's CS trade balance ratio as a creditor or debtor in world CS trade. A value greater than 100 % indicates a CS trade surplus and defines the country as a CS export-driven economy. The remaining two variables, which measure a country's CS trade intensity and success adjusted by population, were included to provide a further insight into different internationalisation modes.

Findings And Discussion

In order to position different countries in terms of world figures, Table 2 summarizes the total exports, CS exports and imports of the world, G7 and six selected countries.

Table 2: TOTAL TRADE STATISTICS

	Total Export	CS Export	CS Import
World	7,799.4	1,435.4	1,436.9
G7	3,606.3	697.8	688.2
USA	1,055.7	274.6	198.9
Japan	547.6	68.3	115.7
Australia	81.6	17.8	17.7
Singapore	164.5	26.6	21.3
Malaysia	111.8	13.6	16.6
Thailand	81.9	12.8	14.7

Note: Values are expressed by U.S. billion dollars.

In 2000, the value of world total (goods and CS) export amounted to US$7,799.4 billion while CS export amounted to US$1,435.4 billion. Noteworthy is the contribution of the G7 countries which together accounted for 46.2 % of world total export, and over 48.6% of world CS export. The G7 countries ranked in the top 7 places in the world total and CS export with the exception of Canada which ranked 11th in the world CS export. Their dominance in world CS trade is also evident in Table 3 which indicates a larger CS export/ total export ratio compared to world statistics (19.3% vs. 18.4%).

Table 3 summarises rankings and values of the six countries, the World, and the G7 countries across the four variables. Table 3 also includes those countries whose values ranked at the top and bottom for each variable.

Table 3: A SUMMARY OF CONFIGURATIONS OF COUNTRY CS INTERNATIONALISATION

CS Export / Total Export (%)	CS Export / Import (%)	CS Trade per Capita (US$)	CS Trade Balance per Capita (US$)
1. Cyprus (75.4)	*1. Macao (426)*	*1. Morocco (144,469)*	*1. Morocco (34,281)*
28. The U.S. (26.0)	21. The U.S. (138)	3. Singapore (11,918)	7. Singapore (1,340)
34. Australia (21.8)	30. Singapore (125)	***G7 (1,987)***	17. the U.S. (269)
G7 (19.3)	43. Australia (101)	28. Australia (1,847)	***G7 (14)***
World (18.4)	***G7 (101)***	30. the U.S. (1,682)	41. Australia (5)
52. Singapore (16.2)	***World (100)***	33. Japan (1,450)	***World (0)***
55. Thailand (15.7)	52. Thailand (87)	36. Malaysia (1,296)	54. Thailand (-31)
62. Japan (12.5)	55. Malaysia (82)	***World (474)***	66. Malaysia (-137)
63. Malaysia (12.1)	66. Japan (59)	50. Thailand (454)	71. Japan (-373)
77. Venezuela (3.1)	*77. Venezuela (23)*	*77. Czech Rep. (13)* *Ethiopia (13)*	*77. Ireland (-3,177)*

Country Export Structure: a CS Export/ Total Export Ratio

The examination of CS export/ total export ratio by country revealed a large disparity between the top and bottom ranked countries. At the top end Cyprus recorded a CS export / total export ratio of 75.4%; at the other extreme Venezuela recorded a mere 3.1% ratio. This signifies the diversity in country export structure ranging from highly CS-driven to highly goods-driven export. In total there were only six countries with the CS export / total export ratio greater than 50%, namely Cyprus, Bahamas (68.7%), Egypt (67.4%), Panama (67.0%), Jamaica (60.4%), and Macao (China) (50.6%). In the absolute sense, these countries possess a CS-based export structure which defines the source of their comparative advantage in the CS.

Considering the selected countries, the U.S. had the largest (26%) CS export/ total export ratio (although this was only the 28th largest ratio of 77 countries). The ranking of other countries are as follows: Australia (34th), Singapore (52nd), Thailand (55th), Japan (63rd), and Malaysia (64th). These rankings provide a very different insight into country positions in the world CS export market from the rankings by country CS export by value as indicated in Table 2. There it shows that the following sequence: the U.S. (1st), Japan (5th), Singapore (15th), Australia (20th), Malaysia (25th), and Thailand (27th). Australia, as the 20th largest CS exporter, outranked the World and the G7 averages, Singapore and Japan with a CS export/ total export ratio of 21.8%. Conversely, Japan as the fifth largest CS exporter could not match the World or G7 average, or any of the other selected countries except Malaysia. Its CS export/ total export ratio was only 12.5%.

Findings in this section emphasize distinctive export structures across countries (sources of comparative advantage and extents of the competitiveness) which cannot be captured by country statistics on CS export value alone.

Country CS Trade Structure: a CS Export / Import Ratio

As shown in Table 2, the G7 countries were the major driver behind world CS import. The G7 countries collectively accounted for almost 48% of world import worth US$1,436.9 billion, occupying the top eight spots in the world CS import rankings (Canada ranked 8th). The CS export / import ratio of the G7 was 101% (US$697.8 billion / US$688.2 billion), just above the World's 100% ($1,435.4 billion/ $1,436.9 billion).

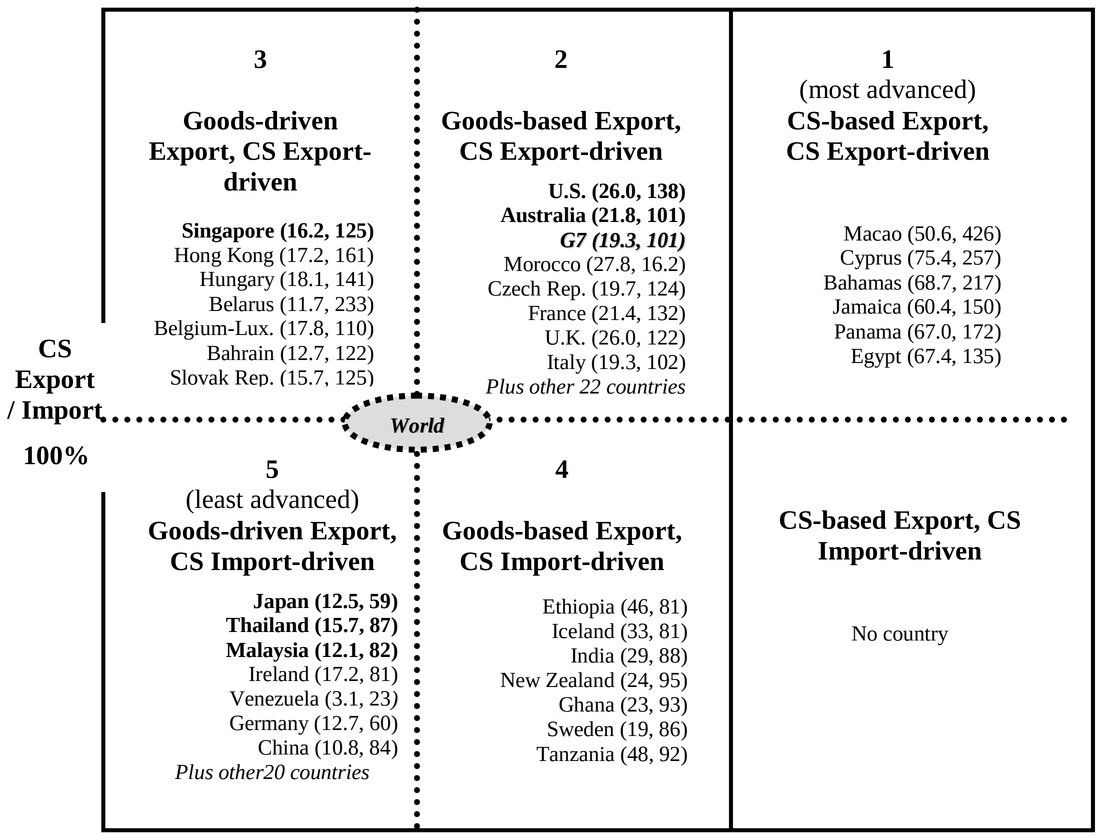
The cross-country analysis, identified 42 countries with a CS export / import ratios greater than the break-even point of 100%. Within this group, Macao was found to be the most CS export-driven (426%) and Australia the least CS export-driven (101%). Among countries whose CS export / import ratios did not exceed the break-even point, New Zealand and Venezuela recorded the highest (95%) and the lowest (23%) ratio respectively. These findings confirm the diversity in the CS trade structure across the countries as highlighted by the ratio difference between Macao and Venezuela (426% vs. 23%).

Among the six selected countries, three exceeded the break-even point, defining themselves as CS export-driven CS traders. They are the U.S. (138%, 21st), Singapore (125%, 30th), and Australia (101%, 43rd). The other three countries - Japan (66th), Malaysia (55th), and Thailand (52nd) - were found to be CS import-driven. It is noteworthy that Japan was the only country that failed to meet the break-even point among the four high income countries, recording a CS trade deficit of over US$47 billion. Moreover, Japan's CS export/ import ratio of 59% does not compare well even with the Upper Middle Income country (Malaysia: 82%) and the Lower Middle Income country (Thailand: 87%).

A Matrix of Country CS Internationalisation Modes

For analysis of countries' CS internationalisation configurations, we developed a three-by-two matrix of country CS internationalisation modes. The first step in constructing the matrix was to group the 77 countries based on their export structure (CS export/ total export ratios) in the light of the world average of 18.4% and the absolute cut-off ratio of 50.0%. The second step was to group each country according to their CS trade structure (CS export / import ratio) in the light of the CS trade break-even point of 100%. The cross-referencing of these two categories placed each country in one of the six possible cells in the matrix. Figure 1 presents the matrix with descriptive labels for each cell and some of the representing countries. The matrix depicts six modes of country CS internationalisation as defined by distinctive structures of country export and CS trade.

Fig 1: A MATRIX OF INTERNATIONALISATION MODES OF COUNTRY CS



0 *18.4%* **50%**

CS Export/ Total Export

Note: Values in parentheses are country CS export/ total export and CS export/ import ratio, respectively. These values determine a country's relative position in the matrix.

Considering the matrix, four points deserve some attention.

- Among the 77 countries, only six countries were found to be CS-based Export, CS Export-driven. These countries had a comparative advantage in the CS production and an export-driven CS trade structure.
- No country was located in the CS-based Export, CS Export-driven segment of the matrix. This finding together with the previous finding seems to suggest that *when a country is said to possess a comparative advantage in CS production, the country enjoys a trade surplus in the sector.*
- The six selected countries were spread across three sub-models of the goods dominated export structure. Japan, Malaysia, and Thailand were found to be Goods-driven Export, CS Import-driven, characterised by the dominance of goods in their export and a large dependence on CS import relative to CS export. Singapore is isolated as an export-driven economy and has a Goods-based Export, CS Export-driven composition. The uniqueness of this mode lies in the fact that countries experience a CS trade surplus, despite a dependence on goods export in their export structures. The U.S. and Australia are located in the Goods-based Export, CS Export-driven cell of the matrix. Yet, by the world average (CS export/ total export of 18.4%), the mode could be interpreted as an advanced CS internationalisation mode despite its goods-dominated export structure.
- The observed distribution of the G7 countries in the matrix highlights remarkable differences in CS internationalisation modes among the seven countries. While the U.S., the UK, France, and Italy were found in the more advanced CS internationalisation mode, Japan, Germany, and Canada were found in the least advanced CS internationalisation mode. These findings suggest within-group similarity and between-group dissimilarity in economic structures and country positioning strategies in the world CS market. In particular, the similarity and dissimilarity can be highlighted by the country CS internationalisation configurations of the following four G7 countries: the U.S. (26, 138), the U.K. (26, 122), Japan (12.5, 59) and Germany (12.7, 60).

In an attempt to generate a further insight into the matrix, we analysed the five valid CS internationalisation modes in the light of country CS trade intensity and success per capita.

Country CS Trade Intensity and Success: CS Trade and CS Trade Balance per Capita

In 2000, the world population was over 6 billion people, with a notional per capita CS transaction involvement of US$474. The figures are higher for the G7 countries. The seven countries, accounting for 23.5% of the world population, engaged in CS trade worth US$1,987 per capita and recorded a US$14 per capita trade surplus.

Regarding the six countries of interest, Singapore recorded the highest value for both CS trade and trade balance per capita (US$11,918 and US$1,340). It was the only country that exceeded the G7 values for both variables. In CS trade per capita, Singapore was followed by Australia (US$1,847: 28th), USA (US$1,682: 30th), Japan (US$1,450: 33rd), Malaysia (US$1,296: 36th) and Thailand (US$454: 50th). For CS trade balance per capita, the order was the U.S. (US$269: 17th) that led Australia (US$5: 42nd), Thailand (-US$31: 54th), Malaysia (-US$129: 66th) and Japan (-US$373: 71st). It should be noted that Australia was found to be a more active per capita CS trader than the USA; yet, Australia's per capita CS trade balance performance was notably poorer than the latter (US$5 vs. US$269). Also, Japan could not match the per capita CS trade performance of any of the other five countries. In fact, its per capita CS trade performance was the seventh poorest amongst the 77 countries.

To allow a cross-profile analysis, group averages of CS trade and CS trade balance per capita were calculated. Table-4 presents the results.

Table 4: CS TRADE INTENSITY & SUCCESS PER CAPITA ACROSS THE FIVE MODES

CS Internationalisation Modes	CS Trade Per Capita (US$)	CS Trade Balance Per Capita (US$)
1. CS-based Export, CS Export-driven	4,127	1,832
2. Goods-based Export, CS Export-driven	7,230	1,425
3. Goods-driven Export, CS Export-driven	4,408	597
4. Goods-based Export, CS Import-driven	2,122	-177
5. Goods-driven Export, CS Import-driven	1,183	-274

Table 4 provides some insights into the impact of different CS internationalisation modes on the CS trade and trade balance per capita. In terms of per capita CS trade intensity, the Goods-based Export, CS Export-driven mode (i.e., the U.S., Australia, the U.K., Morocco, Czech Republic) was found to be the most active per capita CS trader. Decreasing activity was recorded in the sequence of Goods-based Export, CS Export-driven (i.e., Singapore); CS-based Export, CS Export-driven (i.e., Cyprus and Macao); Goods-based Export, CS Import-driven (i.e., New Zealand); and Goods-driven Export, CS Import-driven (i.e., Japan, Thailand, Malaysia, Germany, and Venezuela). This order indicates that, on a per capita base, countries that have Goods-based Export and a CS Export-driven internationalisation mode are the dominant driving force of world CS trade.

Considering CS trade success as measured by CS trade balance per capita, the most advanced CS internationalisation mode (CS-based Export, CS Export-driven) was found to be the most successful. Success decreased from Goods-based Export, CS Export-driven, to Goods-driven Export, CS Export-driven, to Goods-based Export, CS Import-driven to the least advanced CS trading mode (Goods-driven, CS Import-driven). This suggests a systematic relationship between the CS trade balance per capita and the CS internationalisation modes. That is, *when a country shifts from a more goods-oriented to a more CS-oriented export structure and/or from a more CS import-driven to a more CS export-driven CS trade structure, its CS trade balance per capita improves.* The observed rankings of the CS internationalisation modes in Table 4 positions the five CS internationalisation modes on the continuum in terms of per capita CS trade success.

Conclusion

The findings in this paper are subject to some limitations, requiring some caution in interpretation. First, as noted in the data sources employed in this study, country statistics on CS trade are subject to likely errors (inaccuracies) due to existing inconsistencies in data compilation (classification) methods across countries. In this respect, the current international collaboration to improve quality of international CS trade statistics under the United Nations has been long waited and is highly welcomed.

Second, more specific to this study, the study findings are just a snapshot of world CS trade based on the year 2000 trade statistics of the 77 countries. Future researchers are encouraged to deploy time-series statistics so as to investigate stability of country relative positions and their positional changes over years. Outcomes of such a study are potentially very useful to policy makers in their formulation of foreign direct investment policies and investment policies for services infrastructure. Furthermore, though subjected to future availability of more detailed country CS statistics (by CS sub-classes) and wider country coverage, future researchers should also aim to provide explanations for country relative positions in the world CS trade market and pursue statistical validations of research findings. Without such refined country CS statistics, researchers' analytical opportunities and capacities remain largely limited, and research propositions emerging from this study cannot be tested statistically.

Despite these limitations, this study successfully generated valuable insights into configurations of country CS internationalisation and relative positions in the world CS market. The analysis not only sheds light onto multi-dimensionalities of country CS internationalisation but also identifies five modes of country CS internationalisation in the matrix as the framework for the mapping of countries in the world CS market. If, as implied in this study, the success of CS trade is determined by country CS internationalisation modes (CS internationalisation configuration), policy makers need to direct serious attention to the country's CS internationalisation mode, configuration, and relative position in the world CS trade market for successful economic management.

References

[1] World Trade Organization, *Historical Series: Merchandise Trade*, [Online], Available: http://www.wto.org/english/res_e/statis_e/webpub_e.xls. [2002, July. 10].

[2] World Trade Organization, *Historical Series: Commercial Services Trade*, [Online], Available: http://www.wto.org/english/res_e/statis_e/service_e.xls. [2002, July. 10]

[3] World Trade Organization, *International Trade Statistics: Technical Notes*, [Online], Available: http://www.wto.org/english/res_e/statis_e/technotes_e.htm. [2002, July. 20]

[4] The World Bank Group, *World Development Indicators 2002*, [Online], Available: http://www.worldbank.org/data/wdi2002/index.htm. [2002, July. 20]

[5] The World Bank Group, *Data and Statistics: Data by Country*, [Online], Available: http://www.worldbank.org/data/countrydata/countrydata.html. [2002, July. 20]

[6] The World Bank Group, *Data and Statistics: Country Classification*, [Online], Available: http://www.worldbank.org/data/countryclass/countryclass.html. [2002, July. 20].

Internationalization of Retail/Service Businesses Strategic Opportunities and Challenges

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Abstract

Retail/service businesses have increasingly become international, especially within the last sixteen years. This situation is likely to change even more significantly within the next decade. This paper discusses this development by focusing on four key themes: (1) evolution of internationalization of retail/service oriented businesses; (2) key drivers for internationalization of retail/service businesses; (3) routes to achieve internationalization; (4) strategic opportunities and challenges. It concludes by making eight key observations which are important for retail/service businesses wanting to internationalize their operations

Introduction

Retail/Service Businesses have increasingly become international, especially over the last sixteen years. The situation will change even more dramatically into the millennium, as retail/service businesses from the developed countries become more outward-looking in seeking opportunities beyond their local, regional and national markets in the emerging markets of developing economies such as Thailand, India, China, etc, in order to sustain future company sales and profit growth. This paper will discuss this development by focusing on four key themes:

(1) Evolution of internationlization of retail/service oriented business
(2) Key drivers for internationalization
(3) Routes to achieve internationalization
(4) Strategic opportunities and challenges

Evolution of Internationalization of Retail/Service Oriented Business

Internationalization of retail/service oriented businesses has been slow to develop. Prior to the 1970's, the majority of these organizations had focused their activities mainly in their own local, regional or national markets as these markets were exhibiting attractive growth, market expansion opportunities. There were, however, a few exceptions, such as Woolworth's entry into Canada in 1907 and later into Europe; Sears Roebuck's expansion into Cuba in 1942; Marks & Spencer's entry into Canada in early 70's; C&A's entry into several European countries in late 1960's etc. There were also some important overseas retail/manufacturing networks established by manufacturers such as Bata Shoe Corporation of Canada and Singer Company of USA, having set up hundreds of company owned or franchised outlets across the world in 50's, 60's and 70's.

Today it is clear that for an increasing number of these businesses, national boundaries have ceased to be a constraint to their activities and ambitions. They are becoming more outward looking in seeking opportunities beyond their local, regional and national markets for sustaining company sales and profit growth.

It is anticipated that this pace of change will accelerate as we move further into the Millennium. Several factors which are emerging will make global operations of organizations not only more feasible, but in many cases, absolutely imperative.

(1) Conclusion of the new "GATT" Agreement
(2) The integration and enlargement of the European Union
(3) Introduction of "free market" economies to Central and Eastern European and several Latin American countries.

(4) Integration of the North American Economy
(5) Increasing consumerism of the near and Far East.
(6) Within developed countries, we are seeing actual and/or perceived maturing markets, increasing costs and static or falling sales in real terms, intense competition, as well as limited growth opportunities in USA, several European Countries, Japan, Singapore and Australia, which will lead retail/service organizations from these countries to seek newer markets in order to sustain their sales and profits.
(7) Attractive profit/growth opportunities in several emerging markets
(8) It is often said that most internationalization moves are driven essentially by "offensive" or expansionary motives. It is likely that in many sub-sectors, as domestic markets become increasingly vulnerable to competition from foreign organizations, more companies may look to internationalization as a means to defend their current positions.
(9) Many emerging organizations from developing countries may seek "niche" opportunities in mature markets.

This new wave of internationalization will be unique in its scale, geographical orientation and motivation underpinned by new developments in communication networks and technology, and the global customer and supply chain, making it possible for retail/service organizations to "control" their businesses as well as "localize" them in far flung locations.

Key Drivers for Internationalization of Retail/Service Businesses

It is critical for retail businesses wanting to internationalise their operations to understand how key economic, political, legal, social, cultural and technological environments impact on resource, competition and distribution dimensions, leading to the establishment of main drivers for international expansion.

The combination of these drivers which, incidentally, will be unique for each organization, and its strategic and financial objectives, its capabilities and culture, will lead to the formation of appropriate entry strategies for the internationalization of operations. There is also another important factor playing a critical role in the internationalization process, which is that of Growth Patterns/Time Horizon.

The next issue we need to examine concerns the main motives for overseas expansion. These are many and varied and can be divided into 'hard' factors and 'soft' factors. The hard factors can be sub-divided into push factors, pull factors and facilitating factors. For each individual retail company, as discussed above, the final decision is a unique combination of these hard factors, soft factors and facilitating factors and, in turn, that determines the most appropriate route for international expansion.

It should be emphasized that these factors highlight many of the motives for international expansion, but not necessarily for successful expansion. Success or failure in the international arena by organizations can be ascribed to many other factors and/or to the execution aspect of the chosen strategy.

Routes to Achieve Internationalization

Organizations have a choice of a wide range of market entry strategies in order to expand their operations internationally.

In the past, many organizations adopted mainly acquisition of a local business and/or partial equity strategies where they were unsure of successfully transplanting their offer into the host country. However, where they were reasonably certain of success, where they had a distinctive offer which could appeal to 'similar' target markets across a variety of nations and which could be readily transported or adapted to the host countries' markets, concepts which required tight control of image/positioning aspects etc, they chose organic growth and/or franchising strategies.

One of the important market entry strategies in recent years has been that of 'strategic alliances'. These alliances are either development-led, purchasing-led, skills-based or multi-functional.

Another form of the internationalization process is ‘management know-how transfer’, whilst many businesses, especially when establishing their operations in developing economies, follow the concept of ‘limited-term management contracts’ whereby a company may provide business know-how in specific areas without making any capital investment and gaining valuable knowledge about the partner country’s business and consumer markets, competitive environment and trends.

The mode of entry into an international market is a reflection of the relative importance assigned to the following criteria:

- Extent of ‘payback’ required to meet overall sales/growth targets
- The level of ‘control’ the organization wishes to exercise over its interests/concepts overseas
- The amount of ‘resources’ it is willing to commit to international expansion
- The ‘flexibility’ it wishes to retain to allow its interests internationally to change their activities or operations quickly and at low cost.

We can summarize various routes to achieving internationalization of operations for retail/service organizations as follows:

a. Internal (organic) expansion, in which a company opens individual outlets using in-company resources
b. Merger or takeover, with the acquisition of control over a firm in the host country
c. Franchise-type agreements in which the franchisee in the host country uses the ideas of the franchiser based in the home country
d. Joint ventures, which may take a variety of forms for the joint operations, including concessions, between a firm in the host country and in the home country
e. Non-controlling interest in a firm in the host country being taken by a firm in the home country.

These can be summarized as shown in Table 1, below.

There are also a number of other factors that need to be highlighted when discussing the internationalization of the operations:

- Many efforts to internationalize operations have been characterized above all by caution and a desire to trade in familiar environments which minimize primarily socio-culture but also, in some cases, geographical distances, e.g. US retailers into UK/Canada/Mexico.
- As an organization accumulates experience of operating internationally, so the emphasis on minimizing socio-cultural distance diminishes, e.g. Ikea, Marks and Spencer, Carrefour, Walmart.
- High control strategies appear to be the most favoured mode of entry into overseas markets, especially for retail/service organizations with limited overseas experience and/or those wishing to exercise tight control over concepts/formats, etc, e.g. Gap, Toys’R’Us.
- In their early phase of internationalization, several companies made their first moves into overseas markets by establishing subsidiaries as a high control mode of entry, e.g. M&S, Walmart, and Gap.
- For many retail/service organizations with more experience of trading in overseas markets or for whom operating transnationally is a part of the company culture rather than primarily a response to a tough climate at home, the preferred route is usually for a lower/medium control strategy that would be less costly in terms of company resources, e.g. Benetton – franchised shops, Body Shop (company-owned – franchised outlets).

Some of the most successful efforts to internationalize have been made by retail/service businesses selling unique products/services and/or operating with a unique trading format (sometimes after “suitable” modifications) e.g. KFC, MacDonald, and Service Master.

Table 1

Routes	Advantages	Disadvantages
Internal Expansion	Can be undertaken by any size of firm. Experimental openings are possible with modest risk and often modest cost. Ability to adapt operation with each subsequent opening. Exit is easy (at least in early stages) Allows rapid prototyping.	Takes a long time to establish a substantial presence. May be seen by top management as a minor diversion. Requirement to undertake full locational assessment. More difficult if host market is distant from home market.
Merger or takeover	Substantial market presence quickly achieved. Management already in place. Cash flow is immediate. Possibility of technology transfer to home firm. May be used as a way to obtain locations quickly for conversion to the chosen format.	Difficult to exit if mistake is made. Evaluation of takeover target is difficult and takes time. Suitable firms may not be available. Substantial top management commitment necessary.
Franchise-type agreements	Rapid expansion of presence possible. Low cost to franchisor. Marginal markets can be addressed Local management may be used. Wide range of forms of agreement available. Use locally competitive marketing policy. Way of overcoming entry barriers.	Possibly complex legal requirements. Necessary to recruit suitable franchises. Difficult to control foreign franchisees. May become locked into an unsatisfactory relationship.
Joint venture	Possible to link with firm already in market. Help available in climbing learning curve. Possible to move later to either exit or make fully entry into the market.	Necessary to share benefits. Difficulties in finding a suitable partner.
Non-controlling interest	Find out about market with minimal risk. Allows those who know the market to manage the operation.	Passive position. Investment made over which little influence.

Source: Dawson, 1994 [3]

It should be pointed out that the internationalization varies from company to company, but even within one company there can be many different approaches. The company may pursue more than one method as it develops the scale and variety of its international operations. An interesting example is that of Marks and Spencer in the UK, who acquired existing retail companies in Canada as well as opening their own stores, acquired Brooks Brothers in USA, developed organically their operations in France and Belgium, undertook a joint venture in Spain, used franchise-type arrangements in Greece and initially in Hong Kong, entered Hungary through a joint venture before moving to a franchise-type arrangement, and had a non-controlling interest in the company that sold their St. Michael branded products for several years in Japan. The expansion pattern of Foot Locker, on the other hand, highlights a pattern whereby the first step was by internal expansion to a nearby and/or culturally similar country (e.g. Canada, UK, Australia), then expansion into other European countries, and finally expansion across a broad front, including Japan, S.E. Asia and Latin America, involving small acquisitions and single outlet openings.

Another key issue here is the extent to which managerial decision-making is centralized at a head office in the home country or is delegated to host country operations. This aspect of management is related to whether the retail operations are virtually the same from country to country (e.g. Toys-R-Us, McDonald) or whether the outlets reflect the local, regional and national society in which they operate (e.g. Carrefour's individual Hypermarkets, Ikea). However, recently we have witnessed the emergence of hybrid formats with mixed control.

Salmon & Tordjman [4] make this distinction, terming the retailer "global" if there is great similarity in operation from country to country (e.g. Benetton, Toys-R-Us) and multi-national if there are pronounced national differences (e.g. Woolworths, C&A). In reality, there is a continuum between the extremes of one global identity and locally tailored identity, and any of the five routes discussed earlier may be applied at the global or the multinational sections of this continuum.

There are also other two variables that need to be examined:

1) The market position of the retail offer e.g. discount store, premier brand store, etc
2) The format of retailing e.g. hypermarket, supercentres, mail order etc.

It is argued that these two variables will affect both the mechanism of international establishment and the position on the global-multinational axis. Perhaps a strong premier brand might lead to a global approach through internal expansion or tightly controlled franchising e.g. Dunhill, Ralph Lauren, and Body Shop. Alternatively, the large floor space outlets might lead to a multinational approach with joint ventures or possible takeover of suitable companies in target countries. However, in reality, as discussed earlier, a single firm may use several of the routes to internationalise their operations.

In summary, this pace of change in the internationalization of retail/service organizations has produced very diverse styles of operation, ranging from global to multinational organizations. Global organizations such as Benetton, Gap, etc, vary their format very little across national boundaries, achieving the highest economies of scale but showing the least local responsiveness. Multinationals, on the other hand, tend to develop or acquire a diversity of formats internationally, usually achieving rather lower benefits from integration. A middle course is usually called "transnational", whereby the company seeks to achieve global efficiency while responding to national needs, opportunities and constraints. Some of the more recent developments by companies like Tesco, Toys'R'Us (and even McDonalds in India!) show that they are becoming more transnational, recognising that even the most successful retail formats within the domestic market may require adaptation to suit market/consumer needs when going overseas.

Strategic Opportunities and Challenges

More and more developing countries are recognizing that attempts to enhance agricultural and industrial growth would be of no avail, unless efforts are made simultaneously, to streamline the distribution systems, to ensure the availability of essential goods and services to the wider community in a most efficient way. For many of these countries, consumers' needs and wants are shifting dramatically and markets are segmenting along the variety of socio-economic groupings. In the process, modern goods and service food stores and large shopping centres are serving consumer's side-by-side with traditional mom and pop stores with limited assortments and small outfits and personalized service. The key point to understand here is that, in the foreseeable future, in many of these emerging economies, both of these formats will run parallel, with consumers picking and choosing appropriate bits from each one. The key factors for success will include knowing which bits from where by whom. All these developments are creating significant opportunities for 'western' goods and service retailers in medium to long term.

However, any suggestion that these developing countries are "ripe for picking" would be an insult to the governments and established industries of these nations. It must be remembered that selling and investing in developing nations is hard work. The days of colonial controls, imperialist attitudes and demands are long gone. Any serious approach to these emerging markets will require thorough planning, evaluations and personal contacts. It is crucial to develop personal long-term relationships with local management, distributors, relevant community and government personnel and key clients and suppliers.

One must also be aware of regional problems of countries with small per capita GDP, wide income disparity between urban and rural populations and a high degree of government regulations and controls. Great care should be exercised in trying to evaluate the "true" potential and efficiency of these markets, whereby some of the traditional "western" measurement criteria may not provide an accurate picture.

In many of these developing countries, there is a growing demand for modern and sophisticated retailing of goods and services, and a developing distribution infrastructure. In the long run, these markets will represent very significant business opportunities indeed which, in turn, will attract large number of American, European and Japanese goods and service retailers in some form of involvement to take advantage of that substantial growth.

All too often, prospective retail companies shy away because they feel the customers, customs and ways of doing business are too different to justify the risk of doing business in a foreign country. However, the key principles of doing business are usually the same in overseas countries as they are in the home country. The differences between operating in a foreign market and the home market are largely of degree, not always of fundamentals. Old-fashioned business skills – sometimes called critical success factors – are similar:

- Buy well
- Operate efficiently
- Sell well
- Be very focused
- Be non-competitive

Thinking about operating in foreign markets does not necessarily mean re-inventing the wheel, coming up with highly innovative store formats or concepts. The right product, good quality, service and value, delivered in the right way will sell anywhere, with the necessary fine-tuning. Research suggests that, contrary to popular belief, there are no mystical powers, special 'guanxi' (or connections) or unique business practices for successful companies operating overseas. These companies focus on business vision and strategy execution, HR and control issues and getting right the key components of their marketing mix – things that made them successful in other parts of the world.

Research also suggests that, for these successful companies, profits do not take a long time to materialise – for many, it is within three years. However, the profit margin may be lower. Usually most, if not all, key factors impacting on profitability are within the companies' grasp and can be leveraged successfully.

It must also be understood that joint ventures, no matter what their legal status, are not marriages between equals. Many prospective Indian partners, for example, may lack many of the technical, marketing and operational skills and these are the very competencies they are often seeking to acquire from the partnership with foreign companies.

Another key issue for foreign businesses is to decide on the type of involvement or chosen method of expansion. As discussed earlier, some of the key strategic alternatives are:

(i) Global retail entry strategies, e.g. organic growth, franchising

(ii) International retail entry strategies, e.g. acquisition or controlling equity share of local retailer, joint venture, minority equity in local operations, etc

(iii) 'Arms-length' retail entry strategies, e.g. licensing, provision of technical assistance, etc.

It needs to be pointed out again that a company may try a variety of entry strategies in different markets and/or different strategies in the same market at different times.

If handled correctly, internationalization of goods and services retailing activities could provide greater strength to the business through know-how transfer, improved access to international sourcing and an increased ability to attract and develop high calibre management. However, it must be emphasised that the path to internationalization is never easy. It requires long-term time horizons and a careful step-by-step approach. It must also be understood that the home market strength is critical and must take priority. Unless an organization is able to win in its home markets, it is very unlikely that it will able to succeed abroad. Early steps must be evaluated carefully in terms of cost/benefit and avoiding too much diversion of management attention from the crucial task of running day-to-day home-based business successfully.

Another issue that needs to be thought through carefully is about the types of response strategies which need to be applied to the competitive environment:

(1) Outpacing Strategies – confronting competitor head-on, to gain cost, service and other advantage.
(2) Innovation Strategies – entrant company to modify the rules of the game by novel product, concept, service at an acceptable cost.
(3) Synergistic Strategies – strategic alliances may be formed with appropriate partners to provide a complimentary offering – adding values – with appropriate customer appeal and economies and minimizing competitive intensity.

It is crucial that a company thinking about internationalizing their operations tries to avoid some of the following strategic pitfalls:

Don't go to collect flags, go to own the markets.

Don't go in a mad rush to expand rapidly in as many markets as you can to gain a market presence. It is far better to start with one or two markets at a time and create a critical mass of outlets in those markets to sustain the cost-effective infrastructure and management time and resources to be successful. Be careful to create right image and positioning for your organization (even projecting a slightly bigger picture than what you are, in some cases).

Don't underestimate the cost of entry and the time to reach profitability.

Usually organizations overestimate the opportunity, and underestimate the costs, whilst it should really be other-way round. You must calculate not just direct costs of entry but also to take into account indirect (hidden) costs. Ask yourself whether these international opportunities will provide returns greater than those employing the same resources/capital in home markets, at least in the medium to long term. Invariably you will have to work on long time horizons to achieve desired profitability in international operations. In the end, it will be balancing between the sales/profit requirements and future growth requirements.

Use local resources where possible, but don't forget about control.

Do use local management because of language, knowledge of local culture and sensitivity to local shopping habits and courtesies. But control the core functions. There are four key levers of control:

(i) Control over key policy decisions including strategic directions, re-investment policy and profit distribution.
(ii) The nomination of the key personnel and heads of certain core functions – to maintain key competencies.
(iii) Control over key parameters by providing resources under contract – legal contracts to provide security for foreign technology, to guard against leakage, to guarantee quality standards and to secure an income stream from royalties, as and where relevant. However, enforcement of contract could be a problem in some countries.
(iv) Non-contract support – includes product know-how, marketing assistance, management systems, training etc.

The overall aim is to capitalise on local partners' contacts, connections and local knowledge to get the business started and fusing it with the foreign retail proposition and key competencies with necessary fine-tuning to keep the business going and create future prosperity. This must be handled correctly, creating the right climate, connections and getting the timing right, otherwise problems could arise, as could be demonstrated by several examples from China and India.

It used to be a rule of product/service retailing that companies that succeeded overseas were those that "sold their country", whose image and products were closely associated with a particular nation. <u>Today this may not be the 'entire story'</u>. Companies such as Roys'R'Us, Walmart and Ikea may dominate the market they enter not only because they are American or Swedish, but also because they sell a bigger range of better products than their competitors, at better prices, in a much better way. They also sell a concept, format, and a life-style. They all focus on their USP – Unique Selling Point. Early in the life of a company in a foreign market, its foreign origin are important, but the day quickly comes when the appeal is more about the width and depth of the offer, value and service. Transplanting a concept or a format is not enough, even in the age of global village and world citizen. The complexities of local customs, tastes, preferences and culture must also be catered for.

Conclusion

In summary, the following observations are important for retail/service business wanting to internalize their operations.

a. Globalization of marketplace – the scale/speed/scope will accelerate in the future.
b. Organizations will either affect or be affected.
c. Competitors who have never been recognized before will emerge.
d. There will be a desire to reach different and distant markets.
e. Businesses will need to lock on to the customers.
f. They will also have to learn how to erect barriers by creating compelling competitive advantage.
g. They will have to develop rapid reaction to changing markets.
h. They will also have to learn to re-deploy resources quickly/ efficiently/effectively in response to these changes in the markets/marketplace.

References

[1] Alexander, N. and Morlock, W. (1992) “Saturation and Internationalization”, *International Journal of Retail and Distribution Management*, 20 (3), 33-39.

[2] Burt, S.L. “Retail Internationalization: Evolution of Theory and Practice”, *International Retailing – Trends and Strategies*, Pitman Publishing, 51-71.

[3] Dawson, J.A. (1994) “Internationalization of Retail Operations”, *Journal of Marketing Management*, 10, 267-282.

[4] Salmon, W.J. and Trodjman, A. (1989) “The Internationalization of Retailing”, *International Journal of Retailing*, 4 (2), 3-16.

[5] Sanghavi, N. and Treadgold, S. (Eds) (1990) *Developments in European Retailing*, Dower House, Yeovil.

[6] Sanghavi, N. (1995) “Internationalization of Retailing – A Study of Retailing in Developing Economies of South East Asia, India and China”, *2nd International Conference on Recent Advances in Retailing and Service Science*, Australia, 1995.

[7] Treadgold, A. (1990/91) “The Emerging Internationalization of Retailing: Present Status and Future Challenges”, *Irish Marketing Review*, 5, (2), 11-27.

New Views of International Trade in the New Economy: The Analysis of Intellectual Products' Intra-Industry Trade between Developing and Developed Countries

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Abstract

Beginning with a definition of general intellectual products and primary intellectual products, this paper analyzes the vertical and horizontal intra-industry trade pattern of intellectual products between developing and western developed countries. Based on this, the paper empirically interprets the importance of the intellectual products' exportation with the use of the linear regression model. Then, in order to form the sectional comparative advantages, it points out that the developing countries' governments should support the export of domestically produced intellectual products in the exportation strategy, in order to accumulate capital to promote the upgrading of the industry structure.

Introduction

Since the absolute advantage theory of Adam Smith was established, the theorists are always discussing the real reason of international trade. For many years, international differences in factor endowments were the basis of the dominant positive theory of international trade, and they were considered as the substantial motivation of international trade and division of labor. As the development of practices, the theorist gradually realized the conventional static models of comparative advantage did not give an adequate account of the real world trade, this especially true of trade in manufactured goods (Krugman, 1983). Both from the angle of the macro level of aggregate trade flows and from the angle of the micro level of market structure and technology, it is hard to reconcile the trade of manufactured goods with the conventional international trade theories.

Hence, since the end of seventies of the 20th century, a new tide has sprung up in the theory field of international trade that is “new trade theories”. The new theories developed into two branches (Krugman, 1983): one is the theory of intraindustry trade; another is the theory of technological competition. The theory of intraindustry think the conventional theories based on the differences in factor endowments have only explained the trade patterns among inter-industries, while in practice the trade is more generated by the scale economies, increasing returns to scale and imperfect competition. After being introduced the industrial organization theory in the end of seventies and eighties of the 20th century, considering the micro market structure, and developments provided by Krugman(1979,1980,1981), Helpman(1981), Brander(1981), Lancaster(1980) and etc, the intraindustry theory has been a well-developed theory. Another branch is the theory of technological competition. The account of the conventional trade theories on the technological innovation is focused on the normal static economy of scale, while the new trade theories think that the technological innovation is formed in the process that increasing returns to scale are formed in the industries of imperfect competition, it's connected with the learning economy and R&D. However, so far the theory hasn't a crediting dynamic model that can endogenize the technological innovation, learning economy and R&D. Thereby, this branch is in the poor-developed state.

While the international trade and the system of division of labor set up by the above theories in practice only made the developed countries get more trade gains, the developing countries attending the free trade in total haven't reduced the difference with the developed. Furthermore, the income difference is continuous enlarged between the developing and the developed (Lindert and Williamson, 2001), which leads the developing to stepping into "the static comparative advantage trap" (Hong Yin-xing, 1997). The good result is at most that the developed transit their setting sun industries into the developing, while the developing follow the developed to make the circle of the industry structure. Because of this, some scholars (Xu Jian-bin and Yin Xiang-shuo, 2002) question the effectiveness of the strategy of comparative advantage. They think when the minor developing countries exploit their comparative advantages to attend the international division of labor, they can temporarily gain the comparative welfare; but after more and more countries enter the world market, as the comparative population of developing countries are increasing too, so the total terms of trade of the developing countries is continuously worsening; this is so-called "synthetic contradiction".

Thereby, so far there is not a satisfactory model that can provide a theoretic basis of the formulation of trade strategy and the realization of industrialization for the governments of the developing countries. We hope this paper can contribute to the trade theories of the developing countries. And this paper specially takes the intellectual products that are a most potential industry for an example to exposit the trade patterns between the developing and the developed.

This article discourses upon the issues as follows. At first the paper defines general intellectual products and primary intellectual products. The third part analyzes vertical intra-industry trade of intellectual products based on traditional comparative advantages between developing countries and developed countries. The fourth part analyzes developing countries' and developed countries' intellectual products' horizontal intra-industry trade mode. Using the regression model, the fifth part narrates the significance of exporting intellectual products for developing countries' national economy and takes China as an example. At the end, in allusion to the regression result in the fourth part, the last part provides the suggestion that developing countries should promote the policy of exporting intellectual products.

Defining General Intellectual Products and Primary Intellectual Products

The 21st Century is an era in which human science, technology, and economy are developing with high speed in all social directions. Most importantly, the 21st Century is an intellectual economic era. The essential difference between the intellectual economy, agricultural economy and industry economy is that the intellectual economy had the effect of centralizing intellectual property, which means intellectual definitely dominates other production factors. Intellectual economic distinguishing features are the trades' output value based on intellectual occupies more than 50% of GDP in developed countries. High-tech output value has occupied 25% of manufacturing industry's total value of output, twice as much as twenty years ago. The intellectual economy's effects converge on displaying information, intellectual achievements and talents. As the "Creation of Technology, Productivity and Work" concluded, reported by OECD in 1996: "Today, every kind of intellectual is playing a pivotal part in economic process. The speed of investing in intangible assets is much faster than the speed of investing in tangible assets. The people who are more learned can be paid more. The enterprise that has more intellectual is the market's winner. The country that has more intellectual has higher output."

Currently, the intellectual economy's most typical manifestation is the alleged "New Economy", which is driven by the information technology revolution and taken the lead by high-tech industry. The New Economy is an intensive incarnation of the intellectual economy and its core significance is innovation. We can say that the old economy thought highly of comparative advantage and its factor endowment decides one country's trade structure, while the New Economy pays great attention to technological and intellectual advantages. The New Economy's products have features of high-fixed-cost and low marginal cost. Therefore, the intra-industry trade based on the intellectual economy has become the international trade's mainstream under the new situation.

As has been said before, a major distinguishing feature of the intellectual economy is intellectual products' tremendous materializing effect. "Intellectual products" means those products in which intellectual takes ascendancy. Intellectual products include higher form general intellectual products and lower level primary intellectual products. Before undertaking the following analysis, the article explains general intellectual products' definition. General intellectual products are a kind of intelligence intensive products, and can also be seen as innovation products. Concretely speaking, general intellectual products are that by means of outgoing intelligent work in order to recast the nature and society, the human race makes some achievements by taking creative activities mainly depending on knowledge and intelligence.

In term of existent form, general intellectual products can be divided into hard general intellectual products and soft general intellectual products. Hard general intellectual products are tangible products that can be felt by people's senses, mainly including information technology products, biology technology products, and new material products. This kind of product materializes human's new findings from the nature, human's new understanding, and the change of new concepts, new technical inventions and reconstructive harvest. Soft general intellectual products are intangible products that cannot be seen or touched by people, including intangible asset (for instance, enterprises' management level, innovation ability, brand, and trademark), information service trade etc. This kind of product is similar to operational mark and operational credit standing brought forward by Professor Wu Handong.[i] General intellectual products' production relies on intelligence, whose value is rooted in intellectual work. Therefore, it has distinguishing features different from other material products:

1: Innovation. General intellectual products are fruits created by human being's intelligence, and innovated products. It embodies a kind of reconsideration and re-exploring towards the world.

2: Accumulative. General intellectual products can be accumulated during people's brainwork. Through long term imperceptibly influence, the value is made. During struggle for production, scientific experiment and social practice, people create social property with commercial values.

3: Positive direction feedback. General intellectual product neither reduces profit nor decreases incremental revenue because one more person using it doesn’t lead to diminishing marginal revenue. Some general intellectual products can be reproduced largely in stead and used by various people. Thus it can produce value for different users.

Relative to general intellectual products, there is another important conception: primary intellectual product. The primary intellectual product we are talking about here is not identical with the generalized primary product meaning in the Statistical Yearbook (namely including agriculture, animal husbandry, fishery and light industry product). The concept is in a narrow sense category. Concretely speaking, the primary intellectual product in this article is neither labor-intensive product like agriculture in traditional sense, nor capital-intensive product like steel. It means a generally used technology-intensive product, e.g., popularized electromechanical product.

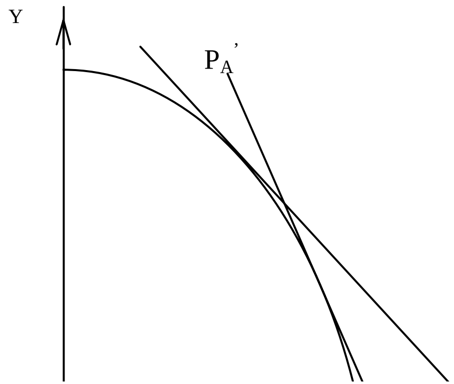
Vertical Intra-Industry Trade Analysis of General Intellectual Product and Primary Intellectual Product

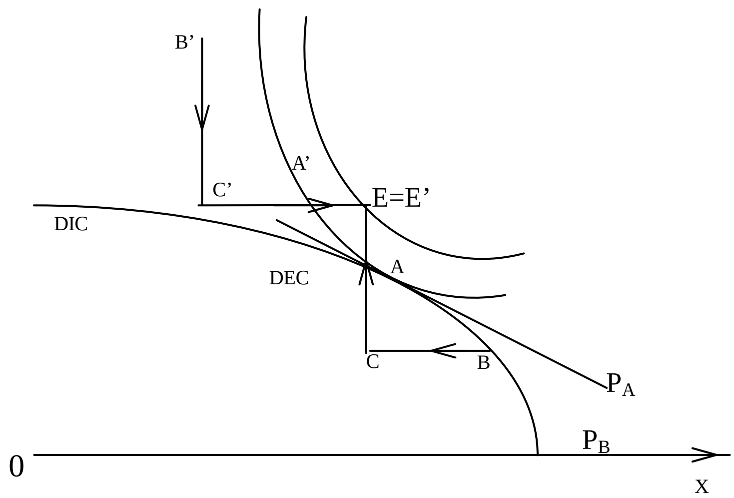
(1) Vertical intra-industry trade static analysis of developed and developing countries: Traditional trade theory deems inter-industry trade reflects factor endowment difference. While intra-industry trade embodies scale economy's advantage. But this article indicates that vertical intra-industry trade between developed and developing countries is still evoked by factor endowment's difference. While, the static analysis here indicates that the intra-industry trade analysis based on factor endowment's difference during certain period. This type of vertical trade reflects technological difference between developed countries and developing countries. The technological difference is evoked by factor endowment. As the western developed countries have advantages in financial resources, talents and techniques, those countries have advantage of producing general intellectual product. However, the primary intellectual products in this article are those generally applied technology intensive products, whose most important cost is labor cost. According to factor endowment theory, under this circumstance the countries with low paid laborers have advantage in this kind of product. Because developing countries have large reserves of extremely cheap labor, they have great comparative advantage in producing primary intellectual products. Expressed as a formula:

$$a_X / a_X' < a_Y / a_Y'$$

a_X represents developing countries' input when they produce one unit primary intellectual product. a_X' represents western developed countries' input when they produce one unit primary intellectual product. a_Y represents developing countries' input when they produce one unit general intellectual product. a_Y' represents western developed countries' input when they produce one unit general intellectual product.

Known from the traditional comparative advantage theory, developing countries' primary intellectual products are domestic abundant resources intensive products, but general intellectual products are their resources scarce products. Developing countries should specialized in production of primary intellectual products and export them to western developed countries, meanwhile, import general intellectual products from western developed countries. Now, both sides can gain benefit from cross trade. The article is going to use 2*2*2 model in the Salvatore classic textbook to further illustrate how two sides achieve their Pareto optimality through primary intellectual products' and general intellectual products' trade.





DIC curve represents developing countries, DEC curve represents developed countries. X represents primary intellectual products, Y represents general intellectual products

Suppose two types countries' social indifference curves were same, namely, two sides' consumers had the same tastes for the same kind of products. Western developed countries are intellectual abundant countries that have comparative advantage in intelligence intensive type general intellectual products. But, developing countries are labor abundant countries that have low-paid labor comparative advantage in producing technique intensive type of primary intellectual products. As shown in the diagram above, when two sides are autonomous policy countries before trading, the social indifference curve I contacts western developed countries' and developing countries' production frontiers separately at point A' and point A. However, point A' and point A are precisely the two sides' equilibrium point of social production and consumption before trading. Then, two sides are at the Pareto optimality before trade.

When the two sides' equilibrium points are at point A' and point A, primary intellectual products' relative price's P_A at point A is less than $P_A^{'}$ at point A' (we can tell the difference from the tangent gradient). Because $P_A < P_A^{'}$, developing countries have comparative advantage in primary intellectual products, western developed countries have comparative advantage in general intellectual products. Therefore, developing countries specialize in the production of primary intellectual products, while, western developed countries specialize in the production of general intellectual products (please pay attention to the arrow direction on the product's production frontiers of both sides countries in the diagram). Till developing countries' specialized production reaches point B and developed countries' reaches B', then P_B line contacts two sides' production frontiers at point B and point B'. At this moment, the two curves' relative price of primary intellectual product are equal, and the social indifference curve II is tangent with P_B line at point E or E' point . In other words, the two sides' social production and consumption equilibrium point is at point E (or point E'). Then, both sides' social welfare achieves maximization and stands in the Pareto optimality. No people are motivated to change this state. Express it as a formula, namely at the point E (or point E'):

$$MRS_{XY}=MRT_{XY}=P_X/P_Y=MU_X/MU_Y$$

Namely, at that point, X's and Y's marginal rate of substitution, marginal rate of transformation, relative price and marginal utility ratio are equal. According to microeconomics' knowledge, both sides reach the Pareto optimality in production and consumption.

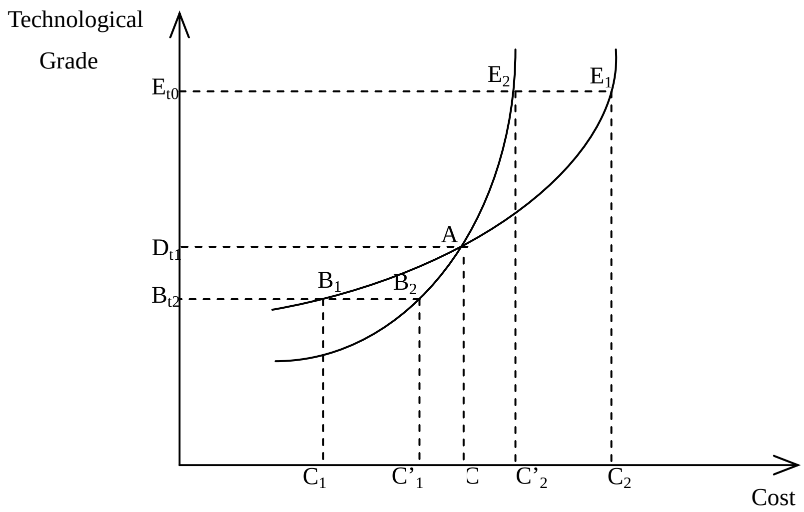
At point E, developing countries use BC unit primary intellectual product in exchange for EC unit general intellectual product. Accordingly, at the point E', western developed countries take B'C' unit general intellectual product in exchange for C'E' unit primary intellectual product. Except point B and point B', no points are equilibrium points. For instance, when P_X / P_Y < P_B, developing countries want to export less of X product than western countries want to import at this low relative price of X, accordingly, demand exceeds supply. P_X / P_Y primary intellectual product's relative price ascends approaching P_B. Till it reaches P_B. When P_X / P_Y > P_B, developing countries want to export more of X product than western countries want to import at this high relative price of X, accordingly, supply exceeds demands. P_X / P_Y primary intellectual product's relative price descends approaching P_B. Till it reaches P_B.

Realistic circumstances are assuredly similar with the theoretical analysis as above. Developing countries export a great deal of primary intellectual product (e.g., export products rely mainly on assemble, model product and generalized electromechanical product . Meanwhile, developing countries largely import western developed countries' high-tech products. Take China as an example, according to statistical figure, electromechanical products have become China's principal export products since 1994. In 1998, the whole year exported electromechanical products were worthy of 66.54 billion US dollars, occupying 36.2% of the same year's total export amount.[ii] However, in 2000, China's electromechanical products' export value rapidly increased to 105.31 billion US dollars, occupying 42.3% of the same year's total export amount.[iii] Just because China has such an enormous human capital advantage, China is daily on the increase to become the "global processing factory". The technique in China imported from western developed countries has been fully ripe in developed countries. And China largely exports those goods that are produced by these techniques to the world. For instance, a lot of transnational companies move domestic production line to China. Especially, Japanese Toshiba Company has moved all its colored-TV production line to China. This tendency can be told from the foreign trade figures as follow. In 1999, foreign capital invested in enterprises' electromechanical products whose export value was 46.42 billion US dollars, occupying 60.3% of the whole country's electromechanical products' total export amount. From 1993 to 1999, foreign capital invested in electromechanical products' export annual increasing rate achieved 33.6%, far higher than domestic enterprises' electromechanical products' 12.5% export annual increasing rate in the same period. During this period, foreign investing enterprises' contribution rate for electromechanical products reached 70%.[5] These figures are enough to show that China is becoming a global production base. This tendency will be further strengthened with gradual cancellation of the non-tariff trade barriers after China enters the WTO.

(2) Developed countries' and developing countries' vertical intra-industry trade's dynamic analysis. Considering the lapse of time, product will change with techniques' development, which is dynamic analysis. The Economics Vernon thinks products are like organisms that have newborn, ripe and decline, completing a cycle in order. He believes in products' life cycle's different periods, the comparative importance of all kinds of investments in cost will change. However, each country has different comparative advantage in every kind of investment. Therefore whether a country has comparative advantage in different periods depending on all kinds of investments' comparative importance in cost.

Product Cycle theory's reflection on international trade is intra-industry trade whose major commodities are technological discrepant goods. Advanced industrial countries' technological level is high, that constantly innovate high-tech intellectual products. Because of low cost, junior developing countries mainly produce some normalized general technological type product primary intellectual product . Accordingly, the same kind of products at different life cycle's periods will emerge dynamic intra-industry trade.

As follow, through a Technological-Grade Cost Curve Model, the article will address itself to this kind of developed countries' and developing countries' intra-industry trade motivation.



Curve represents developing countries,   Curve represents western developed countries

As the diagram above, there are two technological-grade cost curves. Both of them ascend obliquely, which means the higher the products' technological grades are the higher the expenses of research and development. Therefore, the products' costs are higher. Developing countries' product technological-grade cost curve should be gentler than developed countries'. Just shown as the diagram above, the I curve is gentler than curve that is because western developed countries have abundant scientific research foundations and large number of scientific research talents. At the equivalent degree for raising technological grade, they spend less cost than those developing countries that have lower scientific research level and less unsubstantial scientific foundation. The two technological-grade cost curves have one intersection point, A, which is called "intellectual innovation point" by the writer. The technological grade product above point A (e.g. E_{t0}) is initial phase product during the product life cycle. At this time, the product research and development expenses occupy the major part of that kind of product's cost. Therefore, research and development expenses are this kind of product's cost deterministic factor. Developed countries with talents and capital advantage have comparative advantages. The technological grade product below point A(e.g. B_{t2}) are mature period product. This kind of product has achieved standardized producing. Labor cost is the deterministic factor of this kind of product. Developing countries with large number of low paid labor have comparative advantages. The product at point A indicates that developing countries have high productivity in the product that is produced with advanced technology (Perhaps it is the result of economy of scale, e.g. China' household electrical appliance industry and India's software industry). Low production cost has almost the price at the fairs with developed countries'. In visual form of the diagram, when the labor beneath point A becomes the most important cost, e.g. the product at grade B_{t2}, developing countries' production cost is C_1, smaller than developed countries' cost, C_1'. But, above point A, when research and development expenses have become the most important cost, developed countries have comparative advantage. For instance, the developed countries' product at grade E_{t0} is C_2', smaller than developing countries' production cost, C_2.

Accordingly, when two sides don't have restrictive trade barriers and some strategic consideration, their intellectual product intra-industry trade pattern is that western developed countries will export technological grades products above point A (e.g. E_{t0}) to developing countries and constantly transfer surplus technology of lower grade to developing countries. In addition, because of imitation and innovation, developing countries' intellectual product's trade structure will continually advance. Thus, developing countries can achieve dynamic comparative advantages.

General Intellectual Product Horizontal Intra-Industry Trade Analysis

The previous part analyzed intellectual product's vertical intra-industry trade based on technological difference. This trade modality is developing countries' and developed countries' mainstream trade. But under the new economy's condition, developing countries can achieve breakthroughs in some high-tech realms under certain circumstances. Thus, they can accomplish monopoly advantages in production scale or technology at sectional general intellectual production. Accordingly, they can surpass the factor endowment division of labor foundation, as well as undertake horizontal intra-industry trade with developed countries directly and win the maximum benefits.[6] Then, two kinds of countries' producers' benefits are mainly from markets' enlargement. Consumers' benefits are mainly from the increase of commodity options. Here, the writer uses welfare analysis model brought forward by Greenaway to illustrate.

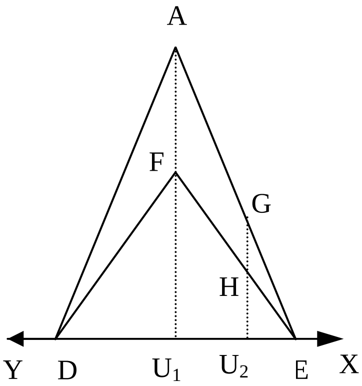


Diagram 1 Welfare state before horizontal intra-industry trade

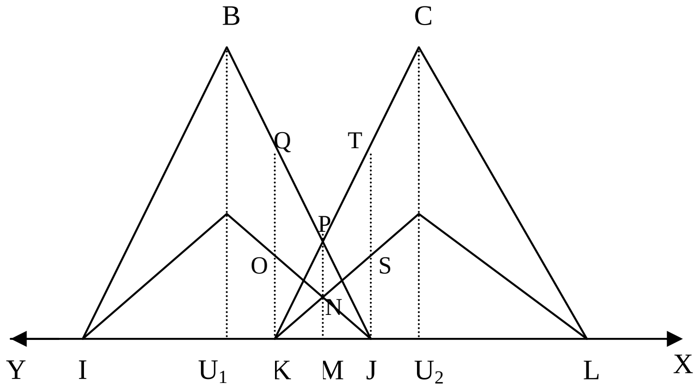


Diagram 2 Welfare state after horizontal intra-industry trade

before trade.

ectual product has two attributes, and , whose different

[6] The most obvious example would be India' software industry. In the late 80's of 20th Century, Indian government made a long-term strategy of concentrating on developing computer software according to the stream of modern IT's development. From the early 90's of 20th Century, Indian computer software industry rapidly increased at a speed of over 50% annual speed. Through more than ten years' effort, India has become the second largest computer software kingdom of the world next to the US, which was highly praised by the Secretary General of the UN, Kofi Annan, as the developing high-tech's model of all developing countries. The global famed consulting company, Mckinsey, estimated that till 2008, Indian software industry output value will achieve 85 billion US dollars, and export value will be 50 billion US dollars.

combinations form countless differentiated commodities belonged to this product. As shown in the diagram, every point at the horizontal axis represents a kind of combination. U_1 is one of the combinations. However, consumers' preferences might be a combination represented by any point at the horizontal axis. Suppose that every combination had its fixed production cost, a unit's products' cost would decrease as increase of the output. Thus, because of economy of scale or technological monopoly, a supplier would not produce all combinations. Suppose a country only produced one kind of combined intellectual product, which means some consumers could not buy their preferred goods. Diagram 1 shows this country only produces a kind of combination, namely, U_1. However, consumers' preferences are all kinds of combinations from D to E. Thus, every consumer's gained utility is determined by how close is one's preference away from U_1. In the diagram, ADFE are all consumers' surplus. AF represents the consumer surplus of the consumer whose preference is U_1. GH represents the consumer surplus of the consumer whose preference is U_2. The consumer whose preference is at U_1 gain the biggest consumer utility. But the consumer whose preference is at D and E has zero consumer surplus.

Now, we will analyze producers' benefits. As shown in Diagram 1, DFE represents producer surplus. The consumer whose preference is close to D and E maybe only pursues very few U_1 to satisfy one's preference. Therefore, the producer surplus brought by this part of consumers are small. The consumer whose preference is U_1 has large need of U_1.Therefore, they want to offer high prices. Through this part of deal, producers' producing surpluses are biggest. Thus, triangle-sized DFE can indicate the whole producer surplus. Combined with the previous analysis of consumer surplus, triangle DAE represents when U_1 is under production the welfare gained by this country. After the horizontal intra-industry trade, this welfare condition will change. When country B is dealing with country C on intellectual product, suppose that the product is only formed by two types of attributes, and . The two countries have certain different preferences in this kind of product. As shown in diagram 2, before trade, country B produces U_1 combination products. Country C produces U_2 combination products. After two countries' deal, the two countries' consumers can get the product closer to their preferences. Concretely speaking, country B prefers that consumers at J can buy U_2 combination goods in country C. U_2 is closer to their preference than U_1. Country C prefers that consumers at KM can buy U_1 kind combination goods in country B. U_1 is closer to its preference than U_2.After trade, two sides' consumers can be greatly satisfied. Thus, the producer surplus and consumer surplus are bigger than before the trade. As shown in the diagram, country C prefers that producer surplus at KM and consumer surplus increase from KNM and KPN pre-trade to KONM and OQPN post-trade. Country B prefers that producer surplus at MJ and consumer surplus increase from MNJ and NPJ pre-trade to MNSJ and NPTS post-trade. Generally speaking, after trade, country B's and country C's net increasing welfare are KQP and JTP, including producer surplus and consumer surplus. After the horizontal intra-industry trade based on preference difference, the two countries' producers' and consumers' net welfare have increased comparing with pre-trade. In addition, if two countries' preferences are more overlapped, the two countries can gain more benefits from intra-industry trade.

Thus, developing countries' economical development is lead by high-tech products' export, which constantly increases GNP. As known from Linder's overlapping demands theory, with the income level's improvement, which will lead developing countries' and developed countries' preferences' overlap become bigger and bigger. They can earn more and more benefits through intra-industry trade.

Empirical Demonstration Analysis of Intellectual Products' Export Contribution: Taking China as an Example

From the angle of international trade theory, previous parts have expounded that because developing countries have comparative advantage in labor cost as well as high-tech innovation in partial fields, the economic globalization is making economic and technology permeate increasingly among countries. In the intellectual product realm, the intra-industry trade has become an irresistible trend either in developing countries or in developed countries. Reflected in the global export commodities' structure, intellectual products' share in all countries' export trade are on a daily increase. Taking China as an example, this part is about to demonstrate the importance that intellectual product export to developing countries.

Recently, under the new economy's stimulation, China's general intellectual products (high-tech products)export is on a stable daily increase. Reflected from certain degree that under new economy's condition developing countries can break through factor endowment division of labor foundation in partial industries and undertake horizontal type intra-industry trade with developed countries directly. We can tell this tendency in table 1:

Table 1: CHINA HIGH-TECH PRODUCTS' IMPORT CONDITION & EXPORT SHARE IN THE INDUSTRIAL PRODUCTS 1991-1999

	1991	1992	1993	1994	1995	1996	1997	1998	1999
Export Amount billion US dollars	2.877	3.996	4.676	6.342	10.091	12.663	16.310	20.251	24.704
Import Amount billion US dollars	9.438	10.712	15.909	20.595	21.827	22.469	23.893	29.201	37.598
Competitive Index [(a-b)/(a+b)]	-0.53	-0.46	-0.55	-0.53	-0.37	-0.28	-0.19	-0.18	-0.21
Share in the Industrial Products %	5.2	5.9	6.2	6.3	7.9	9.8	10.3	12.4	14.1

Source: Bao Xiaohua's estimation, originally published in Financial Theory and Practice, 2001.2.106 109

The article is going to take electromechanical production as an example to further demonstrate the importance of intellectual products to China' foreign trade using the linear regression model.

Firstly, two definitions need to be explained. The first is intellectual product[7] export contribution degree. It means one country's intellectual product's approximately equal to electromechanical products export value's share in total export amount. The other one is export dependence degree. It means one country's export goods' total value's share in GNP.

Suppose intellectual product export contribution degree, Y, is dependent variable and export dependence degree, X, is explanatory variable. b_0 and b_1 are unestimated parameters. Then, a unitary regression equation can be set up as:

$$Y_i = b_0 + b_1 X_i + \varepsilon_i$$

Table 2: STATISTICAL DATA ABOUT Y AND X X_I, Y_I UNIT: %

YR / PR	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99
X_I	9.0	10.6	12.3	11.8	11.6	16.1	17.7	17.5	15.3	22.3	21.7	18.8	20.7	19.8	20.1
Y_I	6.1	8.0	9.8	13.0	15.8	17.9	19.6	23.0	24.7	26.4	29.5	31.9	32.5	36.2	39.5

Note: the reason why the data started from the year of 1985 is that China didn't set up a pattern of normative accounting system before 1985. In the diagram, Y,= electromechanical product export value/ total export value. X= export total value/ GNP. The figures like export amount in the diagram are listed in the attached list.

Table 3: CHINESE COMMODITY EXPORT VALUE, GNP

Item / Year	**GNP billion RMB**	**Export Amount**		**Electromechanical product billion US dollars**
		Billion RMB	**Billion US dollars**	
1985	**898.91**	**80.89**	**27.35**	**1.68**
1986	**1020.14**	**108.21**	**30.94**	**2.48**
1987	**1195.45**	**147.00**	**39.44**	**3.86**
1988	**1492.23**	**176.67**	**47.52**	**6.16**
1989	**1691.78**	**195.60**	**52.54**	**8.32**
1990	**1859.84**	**298.58**	**62.09**	**11.09**
1991	**2166.25**	**382.71**	**71.84**	**14.12**
1992	**2665.19**	**467.63**	**84.94**	**19.55**
1993	**3456.05**	**528.48**	**91.74**	**22.71**
1994	**4667.00**	**1042.18**	**121.01**	**32.00**
1995	**5749.49**	**1245.18**	**148.78**	**43.86**
1996	**6685.05**	**1257.64**	**151.05**	**48.21**
1997	**7314.27**	**1516.07**	**182.79**	**59.32**

1998	**7696.71**	**1523.16**	**183.81**	**66.54**
1999	**8042.28**	**1615.98**	**194.93**	**76.97**

Source: 1.1985-1995, electromechanical products export value can be found in *China's Electromechanical Products' Ten-Year-Export, 1986-1995*, China City Publishing Company, 1996

2.1996-1999, electromechanical products export amount can be seen in *International Trade* relevant years.

3. GNP and export value can be found in *Statistical Yearbook: 2000*, China Statistical Publishing Company

After regression, we can get the equation as follow:

$$Y=-12.4238+2.1209X$$

$$t\ (-2.3384)\ (6.7411) \qquad (n=15)$$

$$R^2=0.7776 \quad \bar{R}^2=0.7604 \quad D.W=1.3522 \quad F=45.4424$$

We can see that the equation can pass the t and F test very well and the adjusted goodness of fit is above seventy-six percent. It’s very satisfactory.

So through the regression of X, we got a unitary formula, $Y=-12.4+2.12X$..It indicates Y intellectual product export contribution degree is X's export dependence degree increasing function. It also shows that with the increase of Chinese economy's export dependence degree (shown as China's trade with all countries is becoming broader and broader, especially, after China enters WTO), intellectual product export contribution degree is becoming bigger and bigger. It is shown that intellectual product export's share is becoming larger and larger in China's export trade total value. It also indicates that western developed countries transfer mature technological products are increasing with China's tariff largely fall and non-tariff trade barriers gradually cancel. Finally, China will become the global super-processing factory. Thus, this part has supplied the previous two parts' theoretical analysis by using demonstration. It has unveiled intellectual product's importance to developing countries' foreign trade from both theoretical and demonstrative angles. It also reflects developing countries should persist in propping up domestic enterprises' specialization production and exporting intellectual products in export strategies. Accordingly, the countries will have partial comparative advantage as well as accumulate capital and technology. They will achieve industrial structure's up-grading finally.

Conclusion

This article abstractly explains developing countries' and developed countries' intellectual products vertical and horizontal intra-industry trade model in the second and third parts. Taking China as an example, the fourth part demonstrates the intellectual product export is becoming more and more important with the increase of China's open to the world degree (especially after entering WTO). Thus, the intellectual product export increasingly impacts on national economy. It aims at what kind of industry policy will be of the utmost importance to China's economical development. Developing countries' and developed countries' inter-industry trade, vertical intra-industry trade and horizontal intra-industry trade should be the reflection of developing countries catching up with and surpassing developed countries in the foreign trade realm. In history, the Japanese and Southeast Asian "four little dragons" have taken the same road. Therefore, it is the tasks of top priority to broaden intellectual product's intra-industry trade with western developed countries and promote the product's intra-industry trade's grade. Thus, during the course of new economy globalization integration, developing countries' governments should constantly hold opportunities, mightily support domestic intellectual intensive industry and improve domestic intellectual product's export. Accordingly, the writer brings forward some policy suggestion as follow:

1.The government should encourage and support to export high-tech and intellectual product with big additional value (e.g., large-scale whole set electromechanical facility). The government should also carry out industrial policy incline towards this kind of product.

2.To those enterprises that mainly export technology intensive products (e.g., electromechanical enterprises), the government should carry out policy-related financial support. For instance, the government can practice export credit to encourage enterprises to enlarge production scale and reduce production cost. Therefore, the enterprises can occupy more foreign market share.

3.The government should draft the technical progress policy to help high-tech enterprises to improve competitiveness. For instance, the government can implement customs duties free of those imported advanced machines for the enterprises that want to do technical reformation and improve their technological grades.

4.The government should encourage enterprises to undertake strong-strong incorporate, superior enterprises purchase and annex inferior enterprises, according to improve the industry concentration ratio. Therefore, the enterprises can form economy of scale to reduce the whole industry's production cost.

5.The government can set up an industry information service center abroad. Replacing enterprises, the government will search industry and offer legal consultant. Thus, it will greatly decrease the enterprises' information cost and additional loss caused by ignorance of local law and custom.

References

[1] Arnoud De Meyer,2001, "Technology transfer into China: Preparing for a new era", *European Management Journal*, April ,Vol.19

[2] Brander James A.,1981, "Intra-Industry Trade in Identical Commodities", *Journal of International Economics*, February,Vol.11

[3] Dominick Salvatore,1995, *International Economics*, 5th ed., NJ:Prentice Hall

[4] Helpman Elhanan,1981,“International Trade Under Economies of Scale and Imperfect Competition: A Chamberlin-Heckscher-Ohlin Model”, *Journal of International Economics*, August ,11

[5] Hong Yinxing,1997, “From Comparative Advantage to Competition Advantage—A Account of the Drawbacks of the Comparative Advantage Theory of International Trade”,*Economic Research Journal*,Iss.6

[6] Jiang Xiaojuan, 1999, "The Changes of Using Foreign Capital Mode and Economic Growth Mode", *Management World*,Iss.2

[7] Krugman Paul,1979, “Increasing Returns, Monopolistic Competition, and International Trade”, *Journal of International Economics*,November,9

[8] Krugman Paul,1980, “Scale Economics, Product Differentiation, and the Pattern of Trade”, *American Economic Review*,70

[9] Krugman Paul,1981, “Intraindustry Specialization and the Gains from Trade”, *Journal of Political Economy*,89

[10] Krugman Paul,1983, “New Theories of Trade Among Industrial Countries”, *American Economic Review*,May,73

[11] Lancaster Kelvin, 1980,“Intra-Industry Trade Under Perfect Monopolistic Competition”, *Journal of International Economics*,May,10

[12] Lindert Peter H. and Jeffrey G. Williamson,2001, “Does Globalization Make the World More Unequal?”, NBER working paper 8228

[13] Long Guoqiang, etc., "Prolong the Production Chain", *International Trade*, 2001, Feb., P4

[14] Tharakan P.K.M.,1984,"Intra-Industry Trade Between the Industrial Countries and the Developing World", *European Economic Review*, Oct/Nov , 26

[15] Wang Zhongming, 2000, *Sudden Huge Profits---- New Economy, Intellectual Economy and Human Resource's Rethinking* Economics Science Publishing Company

[16] Wu Handong, 2000, "On Reconsideration the Intellectual Property's Noumenon, Subject and Object---- Taking Property Ownership as Comparative Study Object", *Law Review*, Iss.5, P12—13

[17] Xu Jianbin and Yin Xiangshuo,2002, "The Worsening of Terms of Trade and the Effectivity of the Strategy of Comparative Advantage", *World Economy*,Iss.1

[18] Xue Jingxiao and so on, 2000, *International Economics*, Higher Education Publishing Company

End Notes

[i] **Wu Handong**, 2000, "On Reconsideration the Intellectual Property's Noumenon, Subject and Object---- Taking Property Ownership as Comparative Study Object", *Law Review*, No.5 of 2000, P12—13

[ii] "Developing Countries' Major Import and Export Commodity Magnitude" *International Trade*, 1999, Feb.

[4]"Developing Countries' Major Import and Export Commodity Magnitude" *International Trade*, 2001, Feb.

[5] **Long Guoqiang**, etc., "Prolong the Industrial Chain" *International Trade*, 2001, Feb. P4

[7] Convenient for empirical demonstration analysis, it takes intellectual product as electromechanical products approximately, among which there are a few general intellectual product (e.g., large-scale whole set electromechanical appliance) and a great deal of general primary intellectual product.

The Differential Impact of Japanese and U.S. Foreign Direct Investments on Exports of Indian Manufacturing

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Abstract

The Indian government, since1991, has adopted various reform measures to attract foreign direct investment (FDI) in the export sector of India. However, most of the studies have found that FDI has not played any significant role in export-promotion of Indian industries. In this study we show that the impact of FDI on the export-intensity varies with respect to the source country of FDI. The impact of U.S. FDI in the non-traditional exports industries is found to be significantly positive. But the impact of Japanese FDI in these industries is not found to be significant. It can therefore be said that U.S. FDI in India has led to diversification of India's exports. The results also show that the export-spillovers on the domestic firms are larger from U.S. FDI as compared to the Japanese FDI. The analyses are undertaken using Random Effects Model at the industry-level and Tobit model at the firm-level for period 1994-95 to 1999-2000.

Introduction

One of the most fiercely debated issues in the literature of development economics is the role played by inward foreign direct investment in export promotion of developing countries. The success stories of East and South East Asian countries suggest that FDI is a powerful tool of export promotion. However, studies have shown that the impact of FDI on export performance of industries will vary not only with respect to the conditions specific to the host economy but also according to the type of FDI or the motive of FDI and the type of industries that FDI enter. Studies for the Indian economy have found that FDI in India have not entered the export-oriented industries and have little impact on the exports of India. It has therefore been concluded that FDI in Indian manufacturing has been domestic market oriented and not efficiency seeking in nature [Sharma 2000, Siddharthan 1999, Kumar 1995, Aggarwal and Goldar 1999]. However, these studies have, in general, ignored the country-of-origin of FDI in determining the impact of FDI on exports. Literature posits that FDI from different sources differ with respect to their ownership advantages and may internalize different locational advantages in the host country. FDI from different countries may therefore differ with respect to their impact on the host economy. Given the vast literature on the differences between Japanese and U.S. FDI and the rising shares of these FDI[1] in Indian economy since the mid 1980s we attempt to compare the impact of FDI from these two source countries on the exports of the Indian manufacturing industries. The paper has two main objectives. First, it aims at examining whether FDI from Japan and U.S. have differential impact on the exports of Indian industries. Secondly, it attempts to examine the spillovers effects on the exports of Indian firms from Japanese and U.S. FDI.

The analysis is undertaken in two steps. First, industry-level analysis is undertaken for 74 three-digit level industries for the period 1994-95 to 1999-2000. The analysis is carried out separately for traditional export sector and non-traditional export sector[2]. The differential impact of Japanese and U.S. FDI is studied at the industry level. Secondly, spillover effects on export-intensity of 1,448 domestic firms from Japanese and U.S. FDI are studied. Panel data estimation techniques are applied for the industry-level analysis and Tobit model is estimated for the firm-level analysis. The scheme of the paper is as follows: Section 2 discusses the analytical structure of the paper. Section 3 provides some empirical evidence on the impact of FDI on exports and postulates some hypotheses regarding the impact of FDI on exports of Indian industries. Section 4 discusses the sample, variables and the model used in the study. Section 5 presents the empirical results for the industry-level analysis and the spillover analysis. Finally, section 6 concludes.

Is Source of FDI Important?

The importance of the source of FDI in export promotion was first discussed by Kojima [1973]. Kojima argued that there is an inherent difference in FDI originating in the West and in Japan and therefore source of FDI plays an important role in determining the impact of FDI on exports. According to the theoretical framework developed by Kojima [1973, 1975, 1978, 1982] American FDI originates from capital exporting country's advantaged industry into the host country's disadvantaged industry. Therefore, FDI is a substitute for trade but in the case of Japanese FDI the host country's production frontier expands in such a direction that the comparatively advantaged industry expands and the comparatively disadvantaged industry contracts, thus enhancing the basis for trade. However, Kojima's approach has been criticized on various grounds. It is considered to be a static approach that ignores vertical specialization within the industrial sector [Dunning 1981]. Many of the arguments made by early commentators, such as Ozawa [1979], who emphasized the importance of relative factor endowments in driving Japanese FDI have also not withstood the test of time and empirical examination [for criticisms see Hill, 1990; Ramstetter, 1987]. Along with this the importance of global trends to which all firms must respond regardless of home base, inspires caution in any attempt to make *a- priori* comparisons between Japanese FDI and US FDI.

However, the above criticisms of Kojima's theory do not negate the view that FDI from different sources may differ in their impact on exports promotion in the host country. The debate about whether significant differences exist between Japanese and US FDI has a long if not altogether distinguished history. Also, the characteristics of Japanese corporations displayed in their domestic operations have been regarded as unique [Aoki 1988] and it has been argued that if these characteristics are changing at all they are doing so only slowly [Yamamura 1994]. This suggests that it is likely that the operations of Japanese FDI will continue to differ from those of US FDI. This is vastly supported by the empirical evidence that has found fundamental differences in the pattern, organization and role played by these FDIs in the host economies. One of the reasons put forward in the theory for the differences in Japanese and U.S. FDI is that in the American economy there exists a dualistic structure in industry i.e., a) innovative and oligopolistic industries, or, in brief, new industries; and b) traditional industries (textile, steel, agriculture, etc.) which are price competitive and technologically stagnant. The U.S. foreign investment successively takes place mostly from within the first group, i.e., new industries of the capital and knowledge-intensive type move abroad through U.S. FDI before they are standardized. It can therefore be said that the U.S. direct investment is based heavily on a comparative advantage in the generation of innovation and is associated with oligopoly [Vernon 1979]. On the other hand, the share of small and medium firms [SMEs] is greater in Japanese FDI as compared to the U.S. FDI and investments from these SMEs are more likely to be driven by location-specific advantages such as cheap labor. The Japanese FDI is therefore more likely to concentrate in labour-intensive sectors [JETRO 1995]. This process has been described by Kojima as a "catching-up product cycle" contrasting with the "product-cycle hypothesis" of Vernon [Kojima 1978].

The literature also posits that differences in the factor endowments along with the differences in the financial, political and legal environment existing in the home countries of the multinational enterprises (MNEs) may lead to differences in the ownership advantages of FDI as well as in their structures and practices. Dunning [1995] suggested that the ownership advantages would differ according to (i) the country-of-origin of the investing companies; (ii) the characteristics of value activities financed by the FDI (usually considered as industry specific characteristics); and (iii) the economic and behavioral attributes of the investing firms themselves. This may lead to internalization of different locational advantages offered by the host country, i.e., the locational advantages in the host country facing U.S. direct investment may differ from those facing Japanese direct investment, if these advantages are taken relative to the home countries of the FDI. In other words, the industrial composition of the home country gives rise to specific ownership advantages to the firms. These advantages have to be used by the firms in conjunction with the locational advantages offered by the host countries. Since the ownership advantages differ along with the structures and practices of the MNEs from different countries-of-origin, therefore the role played by them in export-promotion in the host country may also differ.

The empirical evidence vastly supports this argument. Kojima [1991] has compared the industrial pattern of direct investment from Japan and the U.S. for some of the Asian countries [Korea, Hong Kong, Singapore, Taiwan, Indonesia, Philippines, Malaysia and Thailand] and for the whole of Asia. He found that the U.S. FDI followed a remarkably uniform industrial pattern across countries and across time while the industrial pattern of Japanese FDI differed significantly between resource-abundant countries and resource-scarce countries and also over time. Schroath, Hu and Chen [1993] have empirically tested the country-of-origin effects for China and found them to be significant with respect to the industrial pattern of FDI. Dunning [1995] has compared the patterns of Japanese and U.S. owned economic activity in Western European manufacturing industry. He estimated the Japanese Concentration Coefficient (JCC) and found that Japanese investment is more prominent than U.S. investment in textiles, wood-related products, electrical and electronic equipment and transportation equipment in Western Europe. The pattern of foreign direct investment in the host country has therefore been found to differ according to the country-of-origin of the FDI. Thus from the above theoretical and empirical evidence it can be concluded that Japanese and U.S. FDI have been found to differ with respect to their orientation, pattern of investment and organisation . It can therefore be expected that their impact on the host economy's exports may also differ.

FDI and Indian Exports: Some Hypotheses

The role played by FDI in the export promotion in developing countries has been extensively debated by many theoretical and empirical studies. [for a detailed survey see Jenkin 1991, Dunning 1993, Kumar and Siddharthan 1997]. MNEs have evidently played an important role in rapid growth of manufactured exports of Asian newly industrializing countries viz., Taiwan, Singapore, Hong Kong, Malaysia, [Nayyar, 1983]. Empirical studies, however, have reported mixed findings on the role of MNEs in expansion of manufactured exports of developing countries [see Dunning 1993]. Among LDCs, some studies have found positive effects [Haddad 1996, Willmore 1992, Lall & Mohammed 1983]. Other studies have found that firms with foreign equity stakes export more if they are in high technology industries, but not otherwise [Aggarwal 2000, Harrison 1996, Kumar & Siddharthan 1994]. In still other studies, FDI effects vary by industry [Athukorala et al 1995, Lall 1986]. Thus, the contributions of MNEs to the expansion of exports in developing countries varies a great deal depending on the type of FDI, pattern of FDI, government policies and the capabilities of the economy.

The Indian economy in the 1990s underwent a structural change following the economic reforms of 1991. The impact of FDI on exports in the new regime has now drawn attention of many economists and studies have tried to re-analyze the role of FDI in the post reforms period [Siddharthan and Nolan, 2000, Siddharthan 2001, Agarwal and Goldar 1999, Sharma 2000, Pailwar 2001] These studies have analyzed the role of FDI in export expansion in the Indian economy taking into account the impact of technology transferred, the extent of R&D activities undertaken by the foreign firms, the industrial distribution of FDI and the import of knowledge capital by foreign firms. These studies show that the majority of the inward FDI aim to explore India's sizeable and expanding domestic market and has not significantly contributed to exports. It is felt that it may be too early to expect such efficiency seeking FDIs to start flooding the country. Also, in an era of stiff competition among developing countries to attract export-oriented FDIs, liberalization of policies alone may not be sufficient to attract export-oriented FDI. However, one common criticism that applies to all the above studies is that these studies have considered aggregated FDI ignoring the source of FDI. These studies have also not tried to examine whether FDI has led to any diversification in Indian exports, that is to say whether in the non-traditional export industries has FDI encouraged exports. A close examination of the share of industries in world exports (Table 1) reveals that the share of Indian industries in non-traditional export sector has in fact increased in the post reform period. These are also the industries where foreign direct investments have entered (Table 2). It is therefore possible that FDI has led to a diversification of India’s exports. Given the ownership advantages due to which the FDI have entered the industries it is expected that the same ownership advantages also give the foreign firms higher comparative advantage vis-à-vis the domestic firms to export. From this we derive our first hypothesis.

Table 1: INDIA'S SHARE [%] IN WORLD EXPORTS BY COMMODITY DIVISIONS AND GROUPS

Non-Traditional Export Industries	1985	1990	1995	1997	1998
Manufactures of Metals	0.4	0.5	0.6	0.6	0.6
Machinery and Instruments	0.1	0.1	0.1	0.1	0.1
Transport Equipments	0	0	0	0.1	0.1
Iron and Steel	0.1	0.3	0.7	0.9	0.8
Electrical Goods	0	0	0.1	0.1	0.1
Road Vehicles	0.1	0.1	0.2	0.2	0.1
cereals and cereal preparations	0.6	0.6	2.7	1.5	1.6
organic chemicals	0.1	0.3	0.7	0.9	0.9
inorganic chemicals	0.1	0.2	0.3	0.4	0.4
Essential oils, and perfume materials, soaps etc	0.7	0.1	0.5	0.5	0.4
plastic materials, artificial resins, cellulose &others	0	0	0.1	0.1	0.1
Chemical materials and products	0.2	0.2	0.4	0.6	0.6
office machinery and ADP equipment	0.1	0.1	0.1	0.1	0.1
Total Exports	0.5	0.5	0.6	0.6	0.6

Note: The industries whose average share in the world exports in the period 1985 to 1990 is more than 1% are taken to be industries in the traditional export sector. Source: Economic Survey (2000-2001)

Table 2: INTER-INDUSTRY DISTRIBUTION OF FOREIGN, JAPANESE AND U.S. EQUITY INVESTED IN THE INDIAN MANUFACTURING SECTOR [PERCENTAGE SHARES]

INDUSTRY	**Foreign direct investment**	**Foreign direct investment from U.S.**	**Foreign direct investment from Japan**
Air-conditioners	**0.55**	**2.47**	**0.63**
Auto Ancillaries	**9.84**	**6.47**	**18.14**
Auto-LCV/HCV	**13.33**	**3.77**	**12.75**
Auto-M Cycle/Mop	**1.68**	**0**	**9.12**
Bearings	**2.8**	**5.1**	**0**
Chemicals-organic	**6.35**	**10.63**	**0.07**
Chemicals-inorganic	**1.65**	**6.06**	**3.6**
Cigarettes	**2.71**	**1.82**	**0**
Compres/Dril Eqp	**1.23**	**5.6**	**0**
Computer-SW-	**1.84**	**4.18**	**0.4**
Cycles & Access.	**0.04**	**0**	**3.03**
Domestic Appliances	**3.36**	**1.45**	**2.52**
Dry Cells	**0.05**	**0.73**	**1.54**
Dyes & Pigments	**0.15**	**0.33**	**0.92**
Electric Equip	**3.01**	**2.68**	**4.19**
Electrod-Graphi	**0.09**	**0**	**1.09**
Electronic-Comp.	**5.75**	**8.72**	**4.1**
Electronic-Cons.	**8.91**	**2.19**	**18.62**
Engineering	**3.56**	**4.75**	**2.84**
Engines	**1.53**	**3.53**	**0**
Food-Processing	**4.33**	**3.28**	**0**

Glass & Gl. Products	**2.6**	**0**	**9.02**
Packaging	**1.94**	**3.22**	**0.09**
Personal Care	**2.04**	**4.07**	**0**
Pharm-Ind-Formul	**0.03**	**1.15**	**0.09**
Pharm-others	**2.3**	**8.68**	**0**
Text-Cott. Blend	**0.55**	**0**	**1.2**
Text-Manmade	**1.11**	**0**	**1.57**
Tires	**0.9**	**2.4**	**0.05**
TOTAL	**100**	**100**	**100**

Source: *Capitaline* Note: Averages of equity shares invested in an industry for the period 1995-96 to 1999-2000 are taken.

First Hypothesis: FDI in India have not been attracted to traditional export-oriented industries but they have led to diversification in India's exports.

To examine the impact of FDI on exports we first analyze the inter-industry pattern of FDI and the export intensity of different industries. The industrial pattern of FDI in India (Table 2) shows that foreign shares are high in electrical (especially electric equipment, electronic components and electronic consumer goods), chemical, pharmaceuticals, automobiles and automotive components, engineering, glass and glass products, cigarettes, domestic appliances and food-processing industries. However, the traditional export-oriented industries according to their share in world exports, (see Table 1) are mainly, tea, leather and leather manufactures, gems and jewelry, garments, iron ore and metalliferrous ores, and medicinal and pharmaceutical products. Though all the traditional export industries, with the exemption of tea and gems & jewelry have received some foreign participation, it can be said that the traditional export-oriented industries have not received FDI in a big way and FDI has more or less concentrated in non-traditional export sector. It is interesting to note that the share of almost all the non-traditional industries in world exports has increased since 1990. The share of total exports of India in World exports has also increased from 0.5% to 0.6% since 1995. Given the higher levels of technological skills, marketing skills and international orientation of MNCs, it can be expected that FDI in the non-traditional export sector have led to higher exports and therefore helped in diversifying Indian exports.

Second Hypothesis: Japanese and US FDI are likely to have differential impact on the export intensity of the industry.

Japanese and U.S. FDI are not only expected to differ with respect to their industrial pattern; but within the same sector they are also expected to have different levels of comparative advantages in different types of activities. Their industrial pattern is expected to differ because of the type of FDI that originates from Japan and US differ. As discussed earlier, the U.S. FDI is based heavily on comparative advantage in the generation of innovations and therefore is associated with oligoplistic firms, On the other hand, Japanese FDI have a larger share of small and medium sized firms that are likely to be drawn by locational specific advantages. Kodama and Honda [1986] estimate a cross section model which classifies industries according to three patterns of R&D activities. The fundamental insight of the model is that the rapidity of technical innovation in an industry can be characterized by the likelihood of "survivability" of a given research project as it moves from exploratory research to investment for production. Three typologies are developed. In the "traditional pattern" the likelihood of project cancellation, once investment for production has begun, goes to zero. In the "science based pattern" the likelihood of project cancellation remains constant throughout the life of the project. In between these extremes, is the "high-tech pattern" in which the likelihood of project cancellation declines, as the project progresses, but the probability of termination always remain non-zero. Even at the point of investment, the introduction of competing technologies may lead to termination of the project.

This perspective has the implication for the pattern of specialization within the high-tech areas. Science-based industries such as chemicals will be dominated by large firms, which can finance the basic science research necessary for the innovation. This may help explain why Japan still has not developed a strong comparative advantage in chemicals despite Japan's abundant endowments in human and physical capital. Japan's unexpected weakness in chemicals has been identified by Dixit[1987]. Conversely, Japan has fared better in high-tech pattern industries where research is more products specific, and management of research activities more important. Thus, sources of FDI may have different industrial patterns depending on their comparative advantage. US FDI in manufacturing is usually undertaken in most technologically sophisticated industries with not yet standardized products that are more capital-intensive in nature while Japanese FDI generally enter industries that are less capital-intensive producing standardized products that are less technology-intensive. Within the same sector, the two may differ with respect to their levels of technology, modes of transferring technology and they might be undertaken by different size of firms. It is therefore possible that they have differential impact on the exports.

Third Hypothesis: US FDI are expected to have larger spillover effects as compared to Japanese FDI on exports of domestic firms since they are expected to have higher linkages with the domestic firms in the host country.

The eclectic theory of FDI has emphasized the OLI advantages of MNCs over the domestic firms. Proponents of importance of FDI in LDCs argue that such (OLI) advantages can spill to the local firms [Lall and Mohammad 1983]. This argument assumes that MNCs institute horizontal linkages within the LDCs firms and consequently create changes in the structure, conduct and performance of the local firms [Blomstrom and Pearson 1983]. The main argument is that even if a relationship may exist between the diffusion of technology knowledge and industry enhanced factor productivity, as suggested by Haddad and Harrison [1993] and others, it is difficult to provide causal interpretation that is devoid of the time frame factor, strategic trade and investment policy changes, and the general industry trend. Overtime various policy changes interfere with the spillover development and the network relationships between MNCs and local firms change as the levels of operational conflicts increases/decreases. This is more common where intra-industry and inter-industry trade is part of the export trade development process.

The empirical studies on Japanese and U.S. FDI have also found that Japanese MNEs are internationally vertically integrated and therefore generally do not engage in both “downstream” activities and “upstream” activities in the host country. They therefore do not add much value in the host country, measured by ratio of value-added to total sales. U.S. direct investment by contrast are horizontally integrated and therefore the “upstream” and “downstream” activities are both undertaken in the same host country. Some economists have, however, criticized this distinction regarding Japanese MNEs as vertically integrated and U.S. MNEs as horizontally integrated and have attributed this difference to the ‘vintage effect’, i.e., the stage of industrialization. However, in a study by Encarnation [1992] it was estimated that Japanese MNEs account for three-quarter of all Japanese imports while only two-fifth of all U.S. imports is channeled through intra-firm trade. According to Imai, Nonaka and Takeuchi [1984], Japanese MNEs are mutually related units usually located in related positions rather than standing as completely independent units. Interpenetrating markets and inter-related organization is thus the theoretical foundation of the network organization. Encarnation [1999] found that during 1992, intra-company trade between the parents and subsidiaries of Japanese multinationals was roughly twice the comparable level of intra-company trade recorded for American multinationals. All this suggests that Japanese subsidiaries tend to be more networked with their subsidiaries in other countries as compared the U.S. subsidiaries that form greater linkages with the local firms in the host country. This suggests that spillovers to exports of domestic firms will be higher from U.S. firms as compared to Japanese firms.

Sample, Variables and Methodology: Industry Level and Firm Level Analyses

Sample

In order to estimate the export intensity at both industry and the firm level, we have collected data from corporate data base *Capitaline*, produced by Capital Markets Ltd, an Indian information services firm. The database provides panel data for about 7,000 companies that are listed on an Indian stock exchange as well as some unlisted companies. This is supplemented with data taken from various issues of Annual of Survey of Industries (ASI), various issues of National Accounts Statistics and some publications of Ministry of Industry. Industry level analysis uses a balanced panel of 74 three-digit level industries for the years 1995-96 to 1999-2000 while the firm level analysis is based on data of 1,717 firms for the above period.

Variables

Many studies have used the sales of foreign firms to total sales in the industry as a proxy for foreign presence. However, this is the market share of foreign firms, which may not truly capture the extent of presence of foreign firms in an industry. Foreign firms in large industries may have smaller market share. Also, the market share of foreign firms is likely to be correlated with the exports of the firms. Therefore, the variable used in the study for foreign presence is the proportion of foreign equity invested to total equity invested in the industry at the industry level and foreign equity invested in the total equity of the firms at the firm level. The variables representing foreign presence therefore are:

a) Foreign equity as a ratio of total equity invested in the industry [FEQ]
b) Japanese Equity as a proportion of total equity invested in the industry [JEQ]
c) US Equity as a proportion of total equity invested in the industry [USEQ]
d) Foreign equity as a ratio of total equity invested in the firms [FE]
e) Japanese Equity as a proportion of total equity invested in the firms [JE]
f) US Equity as a proportion of total equity invested in the firms [USE]

The export intensity of the industry [EXPINT] is found to be related to some industry-specific variables like capital intensity in the industry; R&D intensity of the industry, imports of knowledge capital goods in the industry; outward-orientation of the industry and policy regulations controlling the industry. To examine the impact of FDI on the export intensity of the industries it becomes important to control for the following variables.

Industry specific variables

a) Size of the Industry, total fixed assets / number of firms in the industry [SIZE]
b) Effective Rate of Protection in the industry [ERP]
c) Capital-Labour Ratio in the industry [K/L]
d) R&D intensity of the industry [R&D]
e) Advertisement Intensity [ADVT]
f) Skill intensity, i.e., number of high-salaried employees / total number of employees [SKILL]
g) Gross profitability in the industry with a lag [GP]
h) Extent of vertical-integration in the industry [VI]
i) Concentration Ratio of the industry. [CR4]
j) Capital imports by the industry [IMPCAP]
k) Imports of Spares and stores in the industry [IMPSPS]
l) Payments for royalty and technical fees in the industry [ROY]
m) Import of Embodied technology in industry [IMPEMD], [IMPEMB = IMPCAP + IMPSPS]

For the firm level analysis it is expected that the export intensity of the firms [$EXPINT_F$] is dependent on both industry-specific as well as firm-specific variables like size of the firms, age of the firms, R&D intensity of the firms, etc. To control for firms-specific variables the following variables are considered:

Firm specific variables

a) Size of the firm i.e., log of sales of the firms [$SIZE_F$]
b) Capital-Intensity of the firm [KI_F]
c) R&D Intensity of the firm i.e., R&D expenditure/sales [$R\&D_F$]
d) Advertisement intensity in the firm [$ADVT_F$]
e) Gross profitability in the firm in the lag period [GP_F]
f) Capital imports by the firm [$IMPCAP_F$]
g) Imports of Spares and stores by the firm [$IMPSPS_F$]
h) Payments for royalty and technical fees by the firm [ROY_F]

The data on foreign equity invested for the years 1994-95 and 1995-96 has been constructed using ratio of the dividends paid in foreign exchange by the firms to total dividends paid. This may also include the dividends paid to foreign institutional investors. However, it is not expected to be large for this period. The ERP series estimated by NCAER for the years 1995-96 to 1998-99 has been used. One of the limitations of the *Capitaline* database is that it does not include fully foreign-owned firms or joint ventures that are not listed on any Indian stock exchange.

Methodology

The Model estimated is as follows:
X_{jt}=f[[ERP_t, $SIZE_t$, K/L_t, $R\&D_t$, $ADVT_t$, $SKILL_t$, GP_{t-1}, VI_t, $CR4_t$, $IMPCAP_t$, $IMPSPS_t$, ROY, FP_{jt}]
Where X_{jt} is the export-intensity of the jth industry in period t;
Where t= 1995-96, 1996-97,… 1999-2000; j = 1, 2, ..74, FP_{jt} is foreign presence.
In this equation, FP_{jt} is the variable that captures the effect of FDI. In some equations, foreign equity as a proportion of total equity invested in the industry [FEQ] is used to capture the effect of FDI. In other equations, JEQ and USEQ are used so as to capture the differential effect of Japanese and U.S. FDI. Exports are further divided into exports from traditional sector and non-traditional sector. Random Effects Models have been estimated since it is more appropriate for panel data with small time series data. To estimate the spillover effects from foreign, Japanese and U.S. foreign direct investments on the export-intensity of the domestic firms the export-intensity of domestic firms is used as the dependent variable and industry-specific as well as firm-specific variables are controlled for. To take into account the fluctuations in the world demand for exports and industry-specific effects that are not captured by the model, time dummies as well as industry dummies are introduced. The usual panel data estimation techniques are applied for estimating the impact of FDI on export-intensity of the industries. While the *Tobit* model, using [0,1] as limits is used for the analysis of the spillover effects of FDI on the exports of the domestic firms. The application of Tobit model is appropriate because many of the firms may have zero values for exports.

Empirical Results: Industry-Level Analysis

The industry-level analysis is undertaken for 52 industries in the non-traditional export sector and 22 industries in the traditional export sector and total of 74 disaggregated industries in the manufacturing sector for the period 1994-95 to 1999-2000. Table 3, 4 and 5 presents the results for industries in non-traditional export sector, traditional export sector and aggregate manufacturing sector respectively. Using the random effect model, as supported by the Hausman statistic, we find that the impact of FDI on the export-intensity of the industry in non-traditional export sector is positive and significant. The results remain qualitatively the same in the OLS model. The export-intensity is found to be higher in industries, which have low protection; are labour-intensive with low level of skills; higher profitability (in the lagged period) and have lower royalty payments. However, FDI is not found to have a significant influence on export-intensity of industry in traditional export sector (Table 4) and is found to be insignificant for all industries in aggregate manufacturing sector (Table 5). The result for all industries taken together is consistent with the results of earlier studies for all industries, which have also found that FDI has not played any role in improving export performance of the industries. However, the results support our hypothesis that FDI has led to a diversion in exports from India.

Table 3: IMPACT OF JAPANESE FDI, U.S. FDI AND AGGREGATE FDI ON EXPORT INTENSITY OF INDUSTRIES IN NON-TRADITIONAL EXPORT SECTOR

VARIABLES	OLS	RE M	OLS	RE M
Constant	**0.19**	**0.102*** **	**0.12**	**0.081*** **
	[0.67]	**[3.35]**	**[0.41]**	**[2.44]**
FEQ	-	-	0.031***	0.04***
	-	-	[2.29]	[2.51]
JAPEQ	0.01	-0.002	-	-
	[1.03]	[-0.193]	-	-
USEQ	0.03***	0.028***	-	-
	[2.53]	[2.64]	-	-
KI	**-0.001*** **	**-0.001** **	**-0.001*** **	**-0.001** **
	[-2.41]	**[-1.81]**	**[-2.34]**	**[-1.8]**
ADVT	**-0.53* **	**-0.458**	**-0.478**	**-0.406**
	[-1.71]	**[-1.08]**	**[-1.53]**	**[-0.967]**
SKILL	**0.09**	**-0.12* **	**0.093**	**-0.143*** **
	[1.34]	**[-1.76]**	**[1.32]**	**[-2.01]**
SIZE	**-0.0001**	**-0.00005**	**-0.0001**	**-0.00005**
	[-0.65]	**[-0.444]**	**[-0.976]**	**[-0.419]**
GP	**0.72**	**0.33*** **	**0.693*** **	**0.322*** **
	[10.06]	**[5.82]**	**[9.82]**	**[5.59]**
VI	**0.0001**	**0.0004**	**0.00003**	**0.00003**
	[0.20]	**[0.734]**	**[0.04]**	**[0.765]**
CR4	**0.01**	**0.022**	**-0.001**	**0.01**
	[0.53]	**[1.1]**	**[-0.089]**	**[0.744]**
R&D	**-1.47**	**-0.788*** **	**-0.994**	**-0.583**
	[-1.15]	**[-9.23]**	**[-0.799]**	**[-0.719]**
IMPCAP	**-0.02**	**-0.045**	**-0.02**	**-0.382**
	[-0.16]	**[-0.61]**	**[-1.157]**	**[-0.528]**
IMPSPS	**-0.42**	**0.058**	**-0.363*** **	**0.03**
	[-2.35]	**[0.484]**	**[-2.02]**	**[0.319]**
ROY	**3.56**	**2.6**	**3.89* **	**2.92* **
	[1.49]	**[1.47]**	**[1.61]**	**[1.66]**
ERP	**-0.0001*** **	**-0.0002*** **	**-0.0002** **	**-0.0001*** **
	[-2.18]	**[-2.87]**	**[-1.78]**	**[-2.22]**
Adj.R^2	**0.27**	**0.19**	**0.27**	**0.17**
N	**312**	**312**	**312**	**312**
LM	**398.38*** **		**407.15*** **	
Hausman st	**16.06**		**16.15**	
F Test	**9.46*** **		**9.91**	

Note: 1. For notations see table of definitions. 2. Autocorrelation corrected estimates and hetroscedasticity consistent standard errors are presented. 3. Hausman statistic tests Random Effects vs. Fixed Effects Model

Table 4: IMPACT OF JAPANESE FDI, U.S. FDI AND AGGREGATE FDI ON EXPORT INTENSITY OF INDUSTRIES IN TRADITIONAL EXPORT SECTOR

VARIABLES	OLS	REM	OLS	REM
Constant	**0.71*** **	**0.51*** **	**0.77*** **	**0.61*** **
	[5.65]	**[5.19]**	**[5.87]**	**[6.12]**
FEQ	-	-	-0.05	-0.07**
	-		[-1.38]	[-1.91]
JAPEQ	-0.02	-0.004	-	-
	[-0.61]	[-0.09]	-	-
USEQ	-0.01	-0.04	-	-
	[-0.53]	**[-1.12]**	-	-
ERP	**-0.00001**	**-0.0006**	**-0.001**	**-0.0009**
	[-0.93]	**[-0.94]**	**[-1.12]**	**[-1.3]**
SIZE	**-0.0004*** **	**-0.0002* **	**-0.0007*** **	**-0.0002*** **
	[-6.40]	**[-1.97]**	**[-6.62]**	**[-2.6]**
KI	**-0.01*** **	**-0.004*** **	**-0.006*** **	**-0.004*** **
	[-3.58]	**[-2.44]**	**[-3.71]**	**[-2.84]**
R&D	**23.05*** **	**11.94**	**24.05*** **	**12.74** **
	[2.12]	**[1.56]**	**[2.4]**	**[1.84]**
ADVT	**-4.82*** **	**-1.25**	**-4.86*** **	**-2.4**
	[-2.46]	**[-0.61]**	**[-2.54]**	**[-1.29]**
SKILL	**-0.71*** **	**-0.398*** **	**-0.78*** **	**-0.44*** **
	[-2.86]	**[-2.27]**	**[-3.1]**	**[-2.72]**
GP	**1.09*** **	**0.16**	**1.09*** **	**0.18**
	[5.21]	**[0.9]**	**[5.61]**	**[1.09]**
VI	**-0.67*** **	**-0.39*** **	**-0.73*** **	**-0.468*** **
	[-4.88]	**[-2.47]**	**[-5.48]**	**[-3.26]**
CR4	**0.07*** **	**0.03**	**0.08*** **	**0.04* **
	[2.45]	**[1.29]**	**[2.79]**	**[1.72]**
IMPCAP	**-0.66* **	**0.02**	**-0.65* **	**-0.02**
	[-1.70]	**[0.13]**	**[-1.74]**	**[-0.13]**
IMPSPS	**7.80** **	**2.38**	**9.46*** **	**3.23**
	[1.85]	**[0.96]**	**[2.15]**	**[1.35]**
ROY	**-9.27**	**-0.59**	**-5.07**	**1.05**
	[-0.99]	**[-0.05]**	**[-0.47]**	**[0.99]**
Adj.R^2	**0.44**	**0.27**	**0.45**	**0.311**
N	**132**	**132**	**132**	**132**
LM	**74.06*** **		**70.77*** **	
Hausman st	**44.73**** **		**65.14*** **	
F Test	**8.47*** **		**28.51*** **	

Note: 1. For notations see table of definitions. Autocorrelation corrected estimates and hetroscedasticity consistent standard errors are presented. 3. Hausman statistic tests Random Effects vs. Fixed Effects Models

Table 5: IMPACT OF JAPANESE FDI, U.S. FDI AND AGGREGATE FDI ON EXPORT INTENSITY OF ALL INDUSTRIES

VARIABLES	OLS	REM	OLS	REM
Constant	0.21***	0.19***	0.192***	0.198***
	[6.38]	[6.2]	[5.34]	[5.64]
FEQ	_	-	0.02	0.006
			[1.13]	[0.30]
JEQ	-0.01	0.005		
	[-0.52]	[0.3]		
USEQ	0.01	0.012		
	[0.90]	[0.75]		
ERP	-0.02	-0.001**	-0.0002	-0.0017*
	[-1.40]	[-1.89]	[-1.23]	[-1.77]
SIZE	-0.01***	-0.0005	-0.0005***	-0.0005
	[-2.74]	[-0.37]	[-2.86]	[-0.37]
KI	-0.001	-0.0019***	-0.001	-0.001***
	[-1.33]	[-2.11]	[-1.35]	[-2.11]
R&D	1.10	0.177	0.829	0.299
	[0.56]	[0.17]	[0.43]	[0.30]
ADVT	-1.44***	-0.408	-1.37***	-0.397
	[-2.97]	[-0.71]	[-2.84]	[-0.69]
SKILL	-0.31***	-0.225***	-0.29***	-0.22***
	[-3.59]	[-2.92]	[-3.48]	[-2.97]
GP	0.70***	0.268***	0.70***	0.26***
	[7.33]	[4.07]	[7.59]	[4.03]
VI	0.01	0.0003	0.0007	0.0003
	[0.56]	[0.65]	[0.54]	[0.67]
CR4	-0.01	-0.007	-0.007	-0.008
	[-0.39]	[-0.87]	[-0.40]	[-0.90]
IMPCAP	0.11	0.034	0.125	0.031
	[0.63]	[0.41]	[0.71]	[0.37]
IMPSPS	-0.87	-0.044	-0.854	-0.04
	[-3.03]	[-0.29]	[-2.99]	[-0.37]
ROY	-680.00**	-2.54	-7.31***	-2.67
	[-1.93]	[-1.08]	[-2.05]	[-1.14]
Adj.R^2	0.16	0.09	0.16	0.09
N	444	444	444	444
LM	736.59***		734.47***	
HAUSMAN	15.58		14.85	
F Test	7.09***		7.68***	

Notes: 1.autocorrelation corrected estimates and hetroscedasticity consistent standard errors are presented.
2. *** indicates significant at 1%, ** indicates significant at 5% and *indicates significant at 10% level of significance. Figures in the parenthesis are the t-ratios. 3. Hausman statistic tests Random Effects Vs. Fixed Effects Models.
4. for notations see Table of definitions

The results on the impact of Japanese and U.S. FDI on the export-intensity of the industry in non-traditional export sector, traditional export sector and taking all industries together are also reported in Tables 3,4,and 5 respectively. The results of REM, show that in the non-traditional export sector (Table 3) U.S. and Japanese FDI have differential impact on the export-intensity of the industry after controlling for other industrial characteristics like size of the industry, R&D intensity, skill level, profitability, etc. The U.S. FDI has a positive and a significant impact while Japanese FDI do not have a significant effect and also has a negative sign. The other industrial characteristics leading to higher export-intensity are low protection, higher labour-intensity, low R&D intensity, low level of skills, and high profitability in the lagged period. The result seems probable since the industries where US FDI are prominent are industries like chemicals, pharmaceuticals, personal care and electrical. These industries are also the industries whose share in the world exports has increased after 1995 (Table 2). However, we find that the impact of Japanese and U.S. FDI in the traditional export sector (Table 4) and taking all industries together (Table 5) is not significant.

Thus, the industry level analysis support our hypotheses that FDI has led to the diversification of Indian exports and Japanese and U.S. FDI have differential impacts on the export intensity of the industry. The results show that U.S FDI have a positive impact on exports in Indian industry while Japanese FDI does not have a significant impact. This is contrary to Kojima's hypothesis [1973]. However, the results are consistent with those found by Encarnation [1999] for the two decades, 1970s and 1980s. He found that Japanese multinationals have been less reliant on their foreign subsidiaries' sales to generate international trade in Asia than have American multinationals.

Empirical Results: Spillover Effects of FDI

To examine the spill effects of foreign firms on the export-intensity of the domestic firms, Tobit model is estimated with the export-intensity of domestic firms as the dependent variable and extent of Japanese, U.S. and foreign equity in the industry as the spill variables. Only industries where Japanese and/or U.S. FDI are present are considered. Since the spill effects are found to be industry-specific these industries are divided into ten broad categories and nine industry dummies are included to control for the industry-specific effects. Five time-dummies are also included to control for the year- to- year fluctuations in the world demand for exports. The results are presented in Table 6. The results show that after controlling for industry specific effects like size of the industry, R&D intensity of the industry, skill-intensity of the industry, import of embodied technology in the industry, etc higher is the U.S. equity in the industry higher is the spillover effects on the export-intensity of the domestic firms, while Japanese equity in the firms does not have any significant spill effects. Foreign equity as a whole also has positive and significant spillover effects. The other characteristics of the domestic firms that lead to higher export-intensity are the size of the firm, R&D intensity of the firm, imports of capital goods, spares and stores and royalty payments by the firms. Positive export spillovers from foreign firms have also been found by Aitken, Hansen and Harrison [1997] for Mexican firms and by Kokko, Tansini and Zejan [1996] for Uruguayan firms. However, these studies had not distinguished the between the source of FDI.

The firm-level empirical results therefore support our hypotheses. The results show that U.S. firms operate at a higher level of technology in the non-traditional export sector and therefore have comparative advantage vis-à-vis Japanese firms in exports. The spillover effects from U.S. firms are also higher as compared to Japanese firms. A probable reason for this could be the higher level of technology brought in by the U.S. firms and also the probability that U.S. firms have higher linkages with the domestic firms since unlike Japanese firms they are more vertically integrated within the host economy.

Table 6: SPILLOVER EFFECTS FROM JAPANESE FDI, U.S. FDI AND AGGREGATE FDI ON EXPORT-INTENSITY OF DOMESTIC FIRMS: DEPENDENT VARIABLE IS EXPORT-INTENSITY OF DOMESTIC FIRMS

	Coefficient	t-statistic	Coefficient	t-statistic
CONSTANT	-0.31***	-10.11	-0.34***	-10.75
FE	-	-	0.23***	3.39
USEQ	0.21*	1.62	-	-
JEQ	0.06	0.33	-	-
$SIZE_F$	0.05***	22.56	0.05***	22.68
KI_F	0.0003	0.51	0.0003	0.52
$R\&D_F$	0.06***	2.29	0.06***	2.33
IMPCAP	0.02***	6.52	0.02***	6.5
IMPSPS	1.42***	8.63	1.4***	8.47
ROY	1.69*	1.84	1.63*	1.77
ERP	-0.0004	-0.33	0.0004	0.02
SIZE	-0.0001***	-4.33	-0.0001***	-4.72
CR4	0.0001	0.012	-0.003	-0.31
IMPEMBTECH	-0.0007	-0.02	0.005	0.21
R&D	2.76***	2.67	2.91***	2.81
EXPINT	1.24***	39.78	1.25***	40.06
SKILL	0.03	0.45	0.04	0.72
DT2	-0.006	-0.54	-0.007	-0.62
DT3	-0.02**	-1.97	-0.02***	-2.15
DT4	-0.02***	-2.03	-0.03***	-2.33
DT5	-0.28	-0.7	-0.09	-7.32
DT6	-0.28***	-17.94	-0.02***	-18.15
IND1	-0.05***	-2.69	-0.04***	-2.06
IND2	0.01	0.9	0.03*	1.79
IND3	-0.05***	-2.44	-0.03*	-1.66
IND4	0.25***	6.48	0.25***	6.64
IND5	-0.03	-1.52	-0.023	-0.89
IND6	0.003	0.021	0.01	0.97
IND7	-0.01	-0.81	0.002	0.14
IND8	0.01	0.93	0.02	1.2
IND9	0.01	0.76	0.02	1.24
ADJ.R SQUARED		0.27	0.27	
LOG LIKELIHOOD	-3082.92		-3078.53	
NO.OF OBSERVATIONS		8688	8688	

Notes: for notations see Table of definition
Period of the analysis is 1994-95 to 1999-2000

Conclusion

In the last decade the Indian government has adopted various structural reform measures and has made several changes in the regulatory framework to attract foreign direct investment in India. The role that FDI can play in promoting exports, either directly or indirectly, has been recognized and various policies have been adopted to attract export-promoting FDI. However, in spite of various incentives, the country has not been able to attract FDI in the export-oriented areas. This has led to the belief that FDI has not played any significant role in export-promotion of India. However, the main findings of the study are that FDI has to some extent led to diversification of India's exports. The study also brings out the significance of the source-country of the FDI in influencing exports.

The study undertakes industry-level analysis for the period 1994-1995 to 1999-2000. The industry-level analysis uses the panel data for 74 disaggregated manufacturing industries. The analysis is carried out separately for traditional and non-traditional export sectors. The results show that FDI has a significant effect on the export-intensity of industries in the non-traditional export sector and therefore has, to some extent, led to diversification in India's exports. The impact of FDI on exports, however, differs with respect to the source-country of FDI. U.S. FDI are seen to have a positive and significant effect on export-intensity of industries in non-traditional export sector, while the impact of Japanese FDI is not significant. In the traditional export sector, FDI has no impact on the export-intensity of the industry. The spillover effects of FDI on exports of domestic firms are also examined in industries where Japanese and/or U.S. FDI are present. The analysis shows that U.S. firms have larger spill effects on the exports of domestic firms as compared to Japanese firms. Differences in the inter-industry pattern; and within the same industry, higher level of technology and more networking within the host country by U.S. firms vis-à-vis Japanese firms seem to be some of the probable reasons for the differential impact of Japanese and U.S. FDI.

In the context of the growing importance of FDI in the developing economies and existing competition amongst these countries in attracting FDI, it is important for an economy to formulate policies that not only encourage FDI but are also conducive to maximizing the contribution of FDI to the growth of the economy. In this respect, with regards to the Indian economy, the study draws attention of the policy makers to the differential impact of Japanese and U.S. FDI, in particular their impact on the exports of the Indian industries. The spillover effects of U.S. foreign direct investment on the exports of domestic firms are found to be larger than those of Japanese foreign direct investment. One of the reasons found for this differential impact was lack of integration of Japanese firms with the domestic firms. This highlights the importance of formulating appropriate fiscal and tariff policies to encourage greater vertical integration of FDI in the host economy. The study finds that the impact of FDI on exports of non-traditional exports sector is larger those of traditional export sector. This emphasizes the need to formulate favorable export policies with respect to the non-traditional export sectors where foreign direct investments concentrate the most. These policies would help to maximize the contribution of FDI in the industrial growth of the economy. Thus, the study draws attention to the importance of the country-source dimension of the FDI and strongly puts forward the case for taking into account the heterogeneity of FDI while analyzing any aspect of FDI and while formulating FDI policy.

TABLE OF DEFINITIONS

	Industry-specific variables
R&D	ratio of research & development expenditure to total sales.
K/L	ratio of gross block to employee cost
SKILL	number of high-salaried employees / total number of employees
EXP	ratio of exports to total sales
SIZE	total fixed assets / number of firms in the industry
CR4	four firm concentration ratio
ADVT	ratio of advertisement expenditure to total sales
ERP	effective rate of protection
IMPDT	ratio of import of disembodied technology
GP	Gross profitability in the industry with a lag
VI	Extent of vertical-integration in the industry
IMPCAP	Capital imports by the industry
IMPSPS	Imports of Spares and stores in the industry
ROY	Payments for royalty and technical fees in the industry
IMPEMD	Import of Embodied technology in industry
	Firm-specific variables
$SIZE_F$	Size of the firm i.e., log of sales of the firms
$R\&D_F$	R&D Intensity of the firm i.e., R&D expenditure/sales
XI_F	Export Intensity of the firms
KI_F	Capital-Intensity of the firm
$ADVT_F$	Advertisement intensity in the firm
GP_F	Gross profitability in the firm in the lag period
$IMPCAP_F$	Capital imports by the firm
$IMPSPS_F$	Imports of Spares and stores by the firm
ROY_F	Payments for royalty and technical fees by the firm
GAP	Gap between initial productivity levels of domestic firms and average productivity levels of foreign firms
GAPJ	Gap between initial productivity levels of domestic firms and average productivity levels of Japanese firms
GAPUS	Gap between initial productivity levels of domestic firms and average productivity levels of US firms

References

[1] Agarwal, R.N. and Goldar B.N., 1999. Technology Imports, Growth, Efficiency and Export Performance of Indian Engineering Firms in the Pre- and Post-Reform Period,Working Paper Series, No. E/201/99, Institute of Economic Growth, India.

[2] Aitken, B., Gordon H. Hansen and Ann E. Harrison., 1997. Spillovers, Foreign Investment, and Export Behavior, Journal of International Economics, 43, 103-132.

[3] Aoki, M.,1988. Information, Incentives and Bargaining in the Japanese Economy. Cambridge: Cambridge University Press.

[4] Athukorala, Premachandra, S. Jayasuriya and E. Oczkowski [1995], “Multinational firms and export performance in developing countries: Some analytical issues and new empirical evidence”, *Journal of Development Economics*, 46: 109-22.

[5] Blomstrom, M., 1990. Transnational Corporations and Manufacturing Exports from Developing Countries, New York, United Nations.

[6] Blomstrom, M. and Lipsey, R.E., 1993. Foreign Firms and Structural Adjustment in Latin America: Lessons from the Debt Crisis, in G. Hanson, ed., Trade, Growth and Development: The Role of Politics and Institutions, London and New York; Routledge.

[7] Blomstrom Magnus and Hakan Persson, 1983, “Foreign Investment and Spillover Efficiency in an Undeveloped Economy: Evidence from the Mexican Manufacturing Industry*”, World Development Vol. 11.*

[8] Dixit, A., 1987. Prospects for High-Technology Industriesand Trade between the U.S. and Japan, paper presented at MITI symposium on "Comparative Development of the Japanese and U.S. Economies", Tokyo, Japan.

[9] Dunning, John, 1981, 'Explaining the International Direct Investment Position of Countries: towards a dynamic or developmental approach',*WeltwirtschaftlicheArchiv*,117,

[10] Dunning , J.1993, *Multinational Enterprises and the Global Economy*, Reading: Addison -Wesley and Rajneesh Narula, chp4.

[11] Dunning, J., 1994, 'Transpacific FDI and the Investment Development Path: the Record Assessed', University of South Carolina Essays in International Business, No. 10.

[12] Dunning, J. 1995. The Strategy of Japanese and US Manufacturing Investment in Europe. In Encarnation Dennis.and M. Mason. editors, *Does Ownership Matter? Japanese MNCs in Europe*: Clarendon Press Oxford.

[13] Encarnation, Dennis. J. 1999. *Japanese Multinationals in Asia: Regional Operations in Comparative Perspective*, Oxford University Press, New York.

[14] Haddad, Mona; deMelo, Jaime; and Horton, Brendan. 1996. “Morocco, 1984-89: Trade Liberalization, Exports, and Industrial Performance,” in Roberts, Mark J. and Tybout, James R. [eds.], *Industrial Evolution in Developing Countries*. Oxford: Oxford University Press [pp. 285-313]

[15] Haddad, M., and Harrison, A., 1993, Are there Positive Spillovers From Foreign Direct Investment? Evidence from Panel Data for Morocco. *Journal of Development Economics*, 42, 51-74.

[16] Harrison, Ann. 1996. “Determinants and Effects of Direct Foreign Investment in C̃te d’Ivoire, Morocco, and Venezuela,” in Roberts, Mark J. and Tybout, James R. [eds.], *Industrial Evolution in Developing Countries*. Oxford: Oxford University Press [pp. 163-186]

[17] Helleiner, G. K. [1973], "Manufactured Exports from less Developed Countries and Multinational firms", *Economic Journal 83*.

[18] Hill, H., 1990. Foreign Investment and East Asian Economic Development. Asian-Pacific Economic Literature 4,2 [September]

[19] Imai, K., Nonaka, I. and Takeuchi, H. 1984. Managing the New Product Development Process: How Japanese Companies Learn and Unlearn. Paper presented at the Harvard Business School Colloquium on Productivity and Technology, Boston, Mass.

[20] Jenkins, R.O., 1991. The Impact of Foreign Investment on Less Developing Countries: Cross Section Analysis Versus Industry Study, in P..J. Buckley and J. Clegg [ed.] Multinational Enterprises in Less Developed Countries, Basingstoke: Mac Millan.

[21] Japan External Trade Organization. 1995. *JETRO White Paper on Foreign Direct Investment 1995*. Tokyo: JETRO.

[22] Kodama, F. and Honda, Y., 1986. Research and Development Dynamics of high-tech industry--Toward the Definition of High Technology, *Journal of Science Technology and Resource Management*, 1, 65-74.

[23] Kojima, K.,1973. A Macroeconomc Approach to Foreign Direct Investment, *Hitotsubashi Journal of Economics*, Vol. 14, 1-21.

[24] Kojima 1975, International Trade and Foreign Investment; Substitutes or Complements, *Hitotsubashi Journal of Economics*, Vol. 16

[25] Kojima, K., 1978. Direct Foreign Investment: A Japanese Model of Multinational Business Operations. London: Croom Helm.

[26] Kojima 1982. Macroeconomic Versus International Business Approach to Direct Foreign Investment, Hitotsubashi Journal of Economics, Vol. 23, 1-10..

[27] Kojima, K., 1986. Japanese-Style Direct Foreign Investment. *Japanese Economic Studies* 14,3[Spring]: 52--82.

[28] Kojima, K., 1991. Japanese and American Direct Investment in Asia: A Comparative Analysis. In H. W. Singer, N. Hatti and R. Tandon, editors, *Foreign Direct Investments.* New Delhi: Indus Publishing Company.

[29] Kokko, A., Tansini, R., and Zejan, M.C., 1996. Local Technological Capability and Productivity Spillovers from FDI in the Uruguayan Manufacturing Sector. Journal of Development Studies 32 [4], April, 602--11.

[30] Kumar, Nagesh and Siddharthan, N.S. 1994. "Technology, firm size, and export behaviour in developing countries: the case of Indian enterprise," *Journal of Development Studies*, vol. 31, no. 2 [December], pp. 289-309.

[31] Kumar, Nagesh [1998], "Multinational enterprises, regional economic integration, and export-platform production in the host countries: An empirical analysis for the US and Japanese corporations", Weltwirtschaftliches Archiv, 134[3]: 450-83.

[32] Kumar 1995, Industrialization, Liberalization and Two Way Flows of Foreign Direct Investments: The Case of India, Discussion paper series 9504, INTEC, United Nations University, Institute for New Technologies, Netherlands

[33] Kumar, Nagesh and N.S.Siddharthan 1997. *Technology, Market Structure and Internationalisation,* Routledge New York and London.

[34] Lall, Sanjaya. 1986. "Technological development and export performance in LDCs: Leading engineering and chemical firms in India," *Weltwirtschaftliches Archiv*, vol. 122, pp. 80-91.

[35] Lall, Sanjaya and Mohammed, Sharif. 1983. "Foreign Ownership and Export Performance in the Large Corporate Sector in India," *Journal of Development Studies*, vol. 20, no. 1, pp. 56-67.

[36] Lall Sanjaya, [1982], "Export Orientation versus Import Substitution Once more: A review Article", *Journal of Development Economics.*

[37] Lall, S., 1980. Vertical Inter-Firm Linkages in LDCs: An Empirical Study, Oxford Univetrsity Press.

[38] Nayyar, Deepak., 1983, International Relocation of Production and Industrialisation in LDCs, Economic and Political Weekly, 18: PE 13-26.

[39] Ozawa, T., 1979. Multinationalism: Japanese Style. Princeton, N.J.: Princeton University Press.

[40] Pailwar, V., 2001. Foreign Direct Investment Flows to India and Export Competitiveness, *Productivity*, Vol 42, No.1, April-June.

[41] Ramstetter, E. D., 1987. The Impact of Direct Foreign Investment on Host Country Trade and Output: A Study of Japanese and US Direct Foreign Investment in Korea, Taiwan and Thailand. In: Naya S., et al [Eds.], Direct Foreign Investment and Export Promotion: Policies and Experience in Asia, Honolulu: East-West Resource Systems Institute, pp. 223-57.

[42] Schroath, Frederick W., Michael Y. Hu and Haiyang Chen. 1993.Country-Of-Origin Effects of Foreign Investments In the People's Republic of China. *Journal of International Business Studies*, Second quarter: 277-290.

[43] Sharma, K. [2000], Export Growth in India: Has FDI Played a Role?, Centre Discussion Paper NO. 816, Economic Growth Center Yale University.

[44] Siddharthan [1999] Technology Transfer, WTO and Emerging Issues, paper presented at the National Seminar on, "Economy, Society and Polity in South Asia: Retrospect and Prospects at the Dawn 0f the Next Millennium", November 16-17, 1999, at the Institute of Economic Growth. India.

[45] Siddharthan, N.S. and Nollen, S., [2000] Export Performance and Strategic Groups of Firms: The Roles of Foreign Collaboration and Knowledge Transfer; Paper presented at the annual conference of the Academy of International Business, Phoenix, Arizona, US, November 17-20.

[46] Vernon, Raymond. 1966. "International Investment and International Trade in the Product Cycle,"*Quarterly Journal of Economics*, vol. 80, pp 190-297.

[47] Wakelin, Katharine. 1997. *Trade and Innovation: Theory and Evidence*. Cheltenham, UK: Edward Elgar

[48] Willmore, Larry. 1992. "Transnationals and foreign trade: Evidence from Brazil," *Journal of Development Studies*, vol. 28, no. 2 [January], pp. 314-335

[49] Yamamura, K., 1994. Comment. Does Ownership Matter? in: Mason, M., and Encarnation, D., [Eds.], Japanese Multinationals in Europe, Oxford: Clarendon Press, pp. 87--90

End Notes

[1] In the period 1991 to 2001 U.S. is the largest investor in Indian manufacturing while Japan is the third largest investor, after U.K.

[2] The industries whose average share in the world exports in the period 1985 to 1990 is more than 1% are taken to be industries in the traditional export sector.

The World Textile and Clothing Trade: Globalization versus Regionalization

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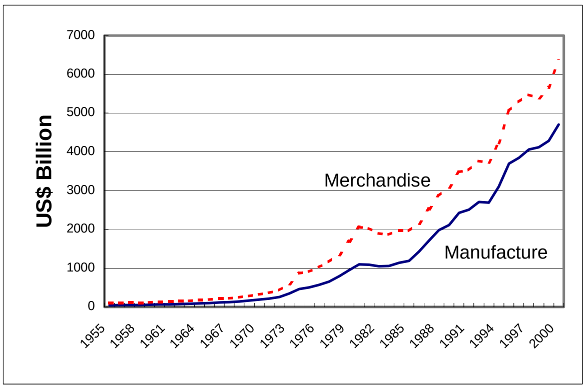
Abstract

The World Trade Organization (WTO) was formed to foster world trade and remove the various kinds of tariff and non-tariff trade barriers. For textile and clothing (T&C) trade, it is identified that the proliferation of regional trading blocs would undermine the broader effect. This paper in delineating the changing patterns of T&C trade in existing trading regions of EU and NAFTA has identified that intra trade for the latter is significant. It indicates that regionalization has an impact on the development of global T&C trading.

Introduction

From 1955-2000, world export trade in total merchandise had increased by 64.8 times from US$ 96 bn. to US$ 6,243 bn. For the same period, total manufactures' exports demonstrated an amazing increase by 112 times from a value of US$ 41 bn. accelerated to US$ 4,630 bn. (Fig. 1). For the textile and clothing (T&C) export trade, despite having been conducted through a series of quantitative export restrained stages, also demonstrated increases of 34 times and 249 times respectively (Fig. 2).



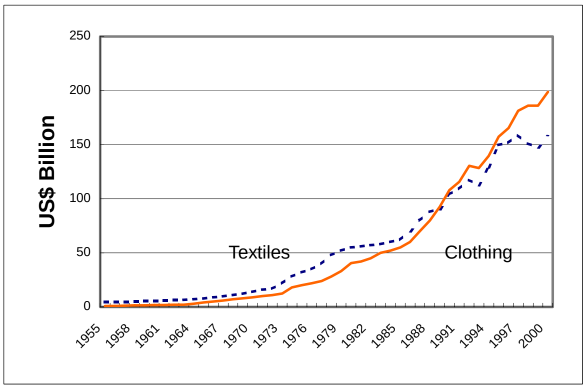


Fig. 1: WORLD MERCHANDISE AND MANUFACTURE TRADE, 1955-2000.

Source: WTO Statistics

Fig. 2: WORLD TEXTILE AND CLOTHING TRADE, 1955-2000. Source: WTO Statistics

Before WWII, advanced industrial countries in Western Europe and the US dominated the world economy and controlled most of the industrial production. The less-developed countries tended to concentrate in the production and supply of raw materials. Starting from the late 1940s, major T&C industrial production has shifted out from developed countries and moved to Japan. Since then, Japan was the leader in industrialization and economic development in the Asian region. In 1970s, the high cost of production and labor shortages had compelled Japanese T&C firms to invest their production in other Asian nations.

Following Japan, Hong Kong, South Korea and Taiwan became three of the four Asian newly industrializing countries (NICs) with T&C as their major export industry. In 1975 the average wage for US clothing workers was US$3.79 per hour, compared to US$0.75 in Hong Kong, US$0.29 in Taiwan and US$0.22 in South Korea [3]. NICs' cheap labor cost was the main attraction for the US and Japanese T&C firms to locate their productions overseas. Moreover, the Asian NICs quickly added other benefits including improved quality level, flexibility of production and stylish merchandise. Thus the NICs can offer good quality T&C products at a relatively lower price [2].

In response to the imposition of quotas by the US and other Western nations, the traditional Asian T&C producers have shifted their production to other less developed countries (LDCs) in Asia including China, Indonesia, Thailand, Pakistan, Sri Lanka and Vietnam since the 1980s. Boosted by Japan's foreign direct investment, China's clothing supplies accelerated to 74.7% of Japan's total clothing imports in 2000, compared with 27.4% in 1990 [12]. Hong Kong T&C firms, in search for more quota holdings, also moved their production sites to mainland China. According the Hong Kong Trade Development Council survey conducted in 1998, about 54% of Hong Kong's clothing exports were produced in mainland China [8]. China has now become the largest T&C exporter with other Asian countries such as India, Indonesia, Pakistan and Thailand also become the major exporters in the global T&C market.

The shifts of T&C production to the Asian countries have witnessed the reliance of Asian economies on the T&C industry to gain their early economic successes. Today, quite a number of the major global T&C exporters are located in the Asian region. However, facing T&C trade restrictions and the establishment of regional trading blocs, this paper attempts to delineate the changing patterns of T&C trading scenarios in the EU and NAFTA regions.

Background of Textile Trade Restrictions

One of the reasons leading to the T&C production shifted from NICs to other Asian LDCs is the arbitrary quantitative export restriction. T&C export restraints to developed countries were in fact, imposed since the 1950s. The first sign of a wider protectionism measure in the textile trade was marked by the "Short Term Arrangement

(STA)" of July 1961 as textile exports from Asia began to penetrate the developed country markets. Regarding to the textile imports from LDCs increased rapidly and employment in western textile industries fell sharply, more severe trade restrictions such as the "Long Term Arrangement (LTA)" was introduced then.

World T&C trade was under the regime of the Multi Fiber Arrangement (MFA) effective on January 1, 1974 and lasted for two decades. The MFA provides guidelines for member nations regarding trade in T&C. Under the system, the US and other developed sometimes have negotiated bilateral agreements with most major T&C suppliers to their markets. Facing the growing restrictions on T&C products, most of the developing (exporting) countries chafed and made it clear that they would not proceed with the new round of trade talks (Uruguay Round) unless trade restraints on their textile exports were lowered [5]. Thus, the Uruguay Round lasted for 8 years from 1986-1994 and culminated the formation of the World Trade Organisation (WTO) in 1995. With the completion of the Uruguay Round, the MFA regulatory framework governing import quantities of T&C products into developed countries was replaced by the Agreement in Textile and Clothing (ATC). The ATC provides eventual elimination of quotas in T&C trade over 10 years in a 3-stage transitional period, meaning the global T&C trade will be liberalized by 2005. This marked the beginning of liberalization of world T&C trade with the anticipated application of free trade norms.

Globalization and Regionalization: The Concepts

Globalization

"Since 1945, Globalization has become a fashionable concept in social sciences, a core dictum in the prescriptions of management gurus, and a catchphrase for journalists and politicians of every stripe" [7]. Since then, the globalization of the world economy has also made considerable progress. Globalization can be defined generically as the growth of economic activity or spanning politically of national and regional boundaries. It means the increased movement across those boundaries of goods and services, via trade and investment, and often of people, via immigration. It is driven by the actions of individual economic actors, such as firms, banks, people usually in the pursuit of profit, and often spurred by the pressures of competition. Globalization also refers to the production and distribution of products and services of a homogeneous type and quality on a world-wide basis. For liberals, globalization promotes the disappearance of trade barriers and state regulation [9].

Economists tend to regard "globalization" as a blessing for trade [13]. They see it as freeing the forces of competition that help to channel the energies of people and the resources of countries into activities where they are likely to be most productive, i.e. global production would increase efficiency by allowing each country to specialize in its strengths. Less-developed countries are able to provide low-cost and abundant labor supply, while developed countries provide management, technical and financial resources. Consumers, in particular, are seen as the great beneficiaries in this global integration program.

Regionalization

Regionalization started during the 1950-60s. Among the developed countries, regionalization in Western Europe was by far the most advanced and significant. The creation of the European Coal and Steel Communities in 1952, the 1957 Treaty of Rome in turn created the European Economic Community (EEC) which led to the virtual elimination of intra-EEC tariffs by the late 1960s [13]. In North America, the US-Canada auto agreement, the predecessor to the 1988 Free Trade Agreement was signed in 1965. Following the EU unification efforts in 1992, other countries expressed concerned that they might have more restricted access to the large EU market-that is, the EU might become “fortress Europe” [5]. The formation of EU has proliferated the growing interest in trading with neighboring nations as well as the fear of being excluded from the existing blocs.

Krugman [10,11] and Frankel *et al.* [6] had debated on whether the global trend towards the formation of trading blocs would be beneficial or otherwise. Unfortunately, there is still uncertain whether the existence of trade blocs would increase or decrease the welfare of the world [14]. It was implicitly assumed that regional agreements signed or trading blocs formed would induce some inherent benefits to the participating countries, such as the reduction of customs duties and non-tariff barriers (e.g. quota) among member nations. In some free trade areas, such as The Canada-U.S. Free Trade Area (CUSFTA), all T&C trade between the US and Canada have been conducted with non-tariff or unrestricted regulatory measures. Furthermore, in the member countries’ view, trading blocs would encourage them to participate in trade with the other member countries and share the higher monopoly power of stepping into a broader participation. The consumers in the region can have more choices and better prices from a greater number of producers within the bloc. On the other hand, trading blocs may simply divert rather than trade creation because it is causing reduced demand for products from outside the bloc. For outside bloc countries, powerful trading blocs may be inclined to push for trade policies that benefit bloc members, therefore individual countries not in the blocs will be at a disadvantage.

The European Union (a 15-country member Union established in 1992) and the North American Free Trade Agreement (NAFTA), including the US, Canada and Mexico, was established in 1994. The two groups accounted for 36.4 percent and 22.9 percent respectively of the world merchandise trade in 2000, was the world’s first and second largest trade blocs [20]. Other than EU and NAFTA, the economic leaders of Asia-Pacific Economic Cooperation (APEC) have decided to achieve the goal of “free and open trade and investment in the Asia-Pacific” no later than the year 2010 for member countries with more trading activities [1]. With the deeper regional integration in America, European and Asian countries, this phenomenon creates a great impact to the non-members and greatly influences regional T&C trading. It seems that two opposite and inter-related trends, namely globalization and regionalization are currently affecting T&C trading in the world.

Regional Trade Integration versus World Trade Growth

Textile Asia reported that intra-Asia trade flows in T&C exports recorded 17% and 23% growth respectively from 1999 to 2000. The flow of textiles from North America to Latin America had increased by 29%, and the value of clothing exports from Latin America to North America had also increased by 23% for the same period [18]. The trend towards regionalism has become evident. In the following section, the growth of world trade and the intra trade of EU and NAFTA (the two largest trading blocs) in the last decade is compared. The analysis is based on the total merchandise and the T&C trade.

Total Merchandise Trade

According to WTO and OECD statistics, it was revealed that world merchandise trade had increased from US$3,442 billion in 1991 to US$ 6,243 billion in 2000, with about 7% annual compound growth rate. For the same period, the total intra trade of EU has recorded a 4.6% average growth (US$897 billion in 1991 to US$1,347 billion in 2000), which was below the world's average. In contrast, the total intra trade of NAFTA had recorded a 13.4 % average annual growth in the last decade (from US$221 billion to U$ 683 billion), which was nearly double the average growth rate in world trade (Fig. 3).

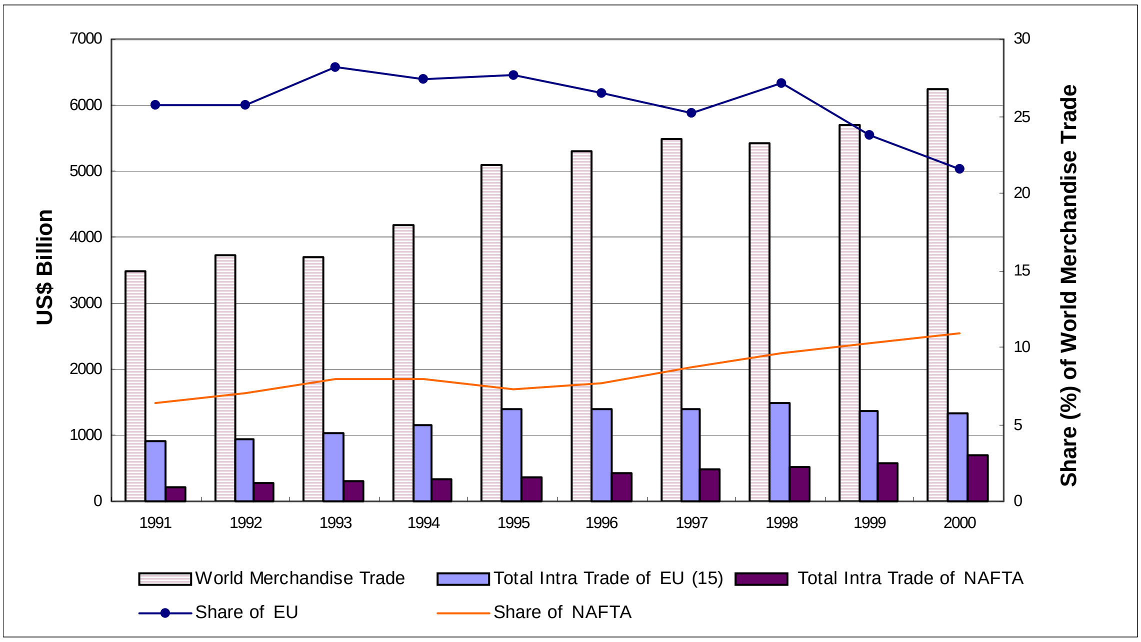


Fig. 3: WORLD MERCHANDISE TRADE COMPARE WITH THE TOTAL INTRA TOTAL OF NAFTA AND EU,

1991-2000.

Sources: WTO Statistics and OECD Trade Statistics.

Sapir [15] pointed out that increased integration within the EU had impacted negatively on EU imports from other European Union countries and prompt their applications for EU membership. Moreover, Soloaga and Winters [16] had identified that the overall intra trade in EU showed a strong negative trend since 1986. Although the EU is still the largest trading bloc in the world, the shares of EU's total intra trade in the world merchandise was 26% in 1991 and has gradually decreased to 21% during the last ten years as shown in Fig. 3.

A USITC (1997) sector-by-sector study [19] on NAFTA found that, for 9 out of 68 sectors including T&C products had a significant effect on trade. For the remaining 59 out of the 68 sectors analyzed, NAFTA had a negligible effect on US trade value, due in part to the already low-trade-weighted average duties. On the other hand, imports from Mexico are entitled to preferences under the GSP and duty-free treatment for US inputs. Those imported from Canada were substantially liberalized by the previously implemented US-Canada FTA in 1988. Nevertheless, the OECD statistics showed that, the total intra trade of NAFTA with regard to the world merchandise trade had steadily increased from 6% to 11% during 1991-2000 (Fig. 3).

Textile Trade

The textile complex in Western Europe had an illustrious past that included England's launching of the Industrial Revolution with textile production as well as France and Italy's positions as the fashion centers of the world for more than a century. However, the textile trading pattern has been changed. Both the value and share of T&C export trade from the less-developed countries grew at a faster rate than exports from the developed countries. Textile production and employment are projected to decline further in Western Europe as companies relocate some or all of their manufacture activities to lower-wage countries. Although Germany, Italy, France, UK and Belgium are still the leading global textile exporters, their aggregate shares have decreased from 24.2% in 1991 to 13.6% in 2000. Thus, the reduction in trading volume also led to reduce shares in EU's intra textile trade. Except for the year after the EU formation, the share was seen to increase from 29% to 36% between 1992 and 1993, and then gradually decreased to 24% in 2000 (Fig. 4). For the NAFTA market, the US, Canada and Mexico altogether accounted for 6.9% of world share in 2000 and their intra textile trade also recorded a positive growth. For the period 1991-2000, the value of textile exports from Mexico to the US had increased by 12 times.

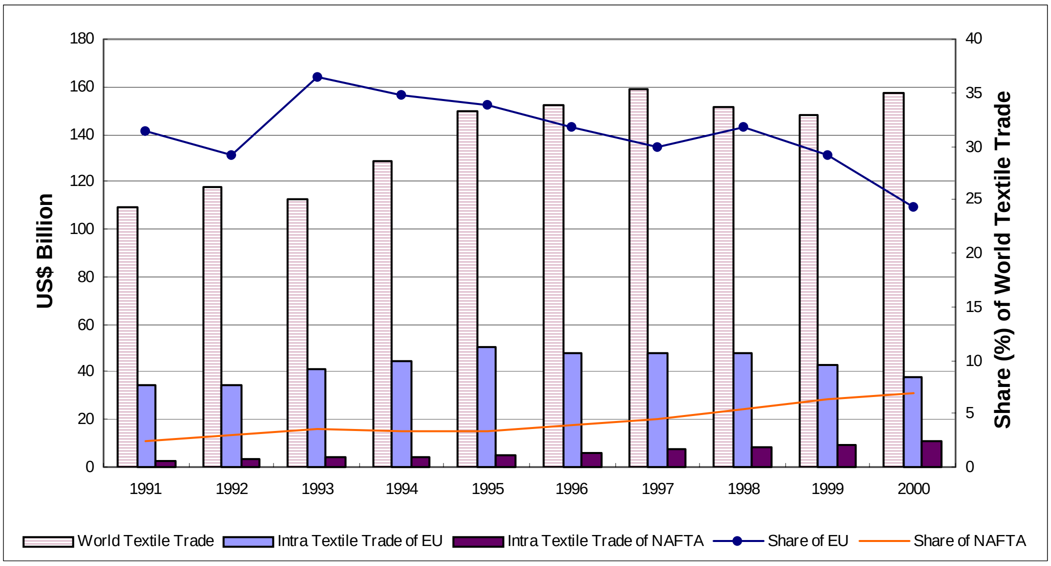


FIG. 4: INTRA TRADE AND WORLD TRADE VALUES IN TEXTILES, 1991-2000

Sources: WTO Statistics and OECD Trade Statistics.

Clothing Trade

Global clothing trade shifts are very much similar to the textiles, there was a marked increase in the less-developed countries' shares at the expense of the developed countries. Owing to the labour-intensive characteristics of apparel production, along with the minimal technology and capital requirements had fostered production shifts to occur far more dramatic than the textiles counterpart. This trend could be reflected by the increasing clothing supply delivered to the US from Mexico with value jumped from US$ 71 million in 1991 to US$ 8,193 million in 2000 which was 115 times higher. It also indicated that the intra trade for clothing in NAFTA had increased from 1% to 7% for the same period (Fig. 5).

According to the USITC study, clothing is one of the sectors that showed significant imports on NAFTA intra trade, the study had found evidence of trade diversion in clothing products; there were significant increases in US imports from NAFTA partners with commensurate decreases in imports from the Caribbean Basin countries, especially the Pacific Asian economies [19, 21]. For instance, traditionally US is the major market for Hong Kong's clothing products; however, its share in the US has reduced from 15% in 1991 to 7% in 2000 [4]. With a commonly shared Canadian-US-Mexican interest in exporting to each other's markets, this simply implies a reduction in market share for other exporters in the world.

In the EU scene, the share of EU's intra trade in clothing had decreased form 26% in 1991 to 16% in 2000 (Fig. 5). This can partly be explained by the fact that the EU group gives preferential treatments to the Mediterranean basin countries including Cyprus, Egypt, Turkey and Morocco and other developing countries, many of which were former European colonies. Goods from these countries entering the EU are entitled to special trade privileges (treated with fewer restrictions) or free of customs duties [5]. For proximity and cost reasons, developed European countries also turn to purchase clothing from Eastern Europe countries such as Turkey and Romania instead of the Asian producers. Traditionally, the Asian countries were the biggest supplier to the EU markets in both textiles and clothing, however, products from Central and Eastern Europe are now filling the market at the expense of Asian suppliers.

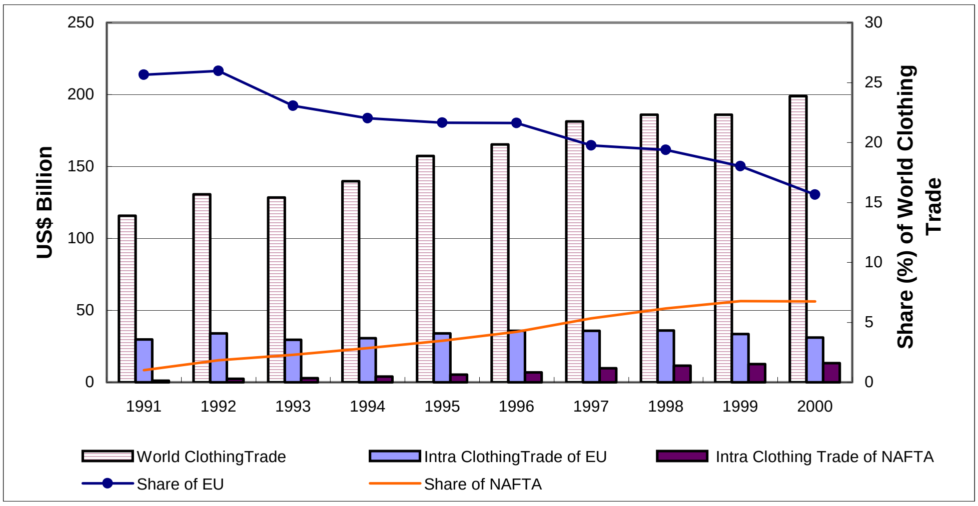


FIG. 5. INTRA TRADE AND WORLD TRADE VALUE OF CLOTHING, 1991-2000.

Sources: WTO Statistics and OECD Trade Statistics.

Comparison between the EU and NAFTA

For developed countries' markets of T&C, the most striking similarity between the EU and US is that these two regions are the world's most attractive importers of T&C products in terms of their population, GDP and high average purchasing power. The two regions constitute the most important market outlets for the exporting countries situated in Asia [17].

As the EU and NAFTA are the most dynamic and important blocs affecting the global T&C trade, it is important to analyse further (by Independent-Samples T Test) on their overall, textile and clothing intra trade in order to determine the impact of regionalization on the emerging pattern of global T&C trade. To test the significance of the EU in the last decade, three periods are used from 1992 to 1994, 1995 to 1997 and 1998 to 2000. While NAFTA was formed at a later stage, three periods are used with 1991-1993 (pre-formation period) compared with two periods after formation, i.e. 1994 to 1997 and 1998 to 2000 in order to identify the existence of significant differences.

According to the analysis, by comparing the three periods of intra trade for the EU market, only the overall intra trade for periods of 1992 to 1994 and 1995 to 1997 show significance with a mean difference of around US$350 billion (Table 1). While for the periods of 1995 to 1997 and 1998 to 2000, the mean difference of overall intra trade was only US$5 billion. It indicated that the EU integration had not induced significant increases in the overall intra trade after 1995 and also little impact on the T&C intra trade during 1992 to 2000.

Table 1: INTRA TRADE COMPARISON BETWEEN EU AND NAFTA, 1991-2000

	EU				NAFTA			
	(1992-1994 & 1995-1997)		(1995-1997 & 1998-2000)		(1991-1993& 1994-1997)		(1994-1997 & 1998-2000)	
	Sig.	MD**	Sig.	MD**	Sig.	MD**	Sig.	MD**
Overall	0.022*	-350.52	0.901	5.41	0.014*	-139.67	0.029*	-198.67
Textile	0.093	-8.81	0.168	5.81	0.037*	-2.17	0.025*	-3.83
Clothing	0.08	-3.80	0.368	1.67	0.035*	-4.50	0.015*	-5.83

Notes: * Significant at 0.05 level (2-tailed test), **MD - Mean Difference in US$ billion.

In contrast, it is found that the formation of NAFTA has stimulated the total intra trade and intra textile and clothing trade within the blocs in the three periods under investigation. The significant intra trade in NAFTA can be explained that many US T&C importers has changed their sourcing pattern and are increasingly purchased from Mexico or Canada due to the establishment of tariff-free status and nil quota requirement in clothing exports under the NAFTA. Although the formation of EU did not stimulate the intra T&C trade within the bloc, Eastern European countries such as Czech Republic, Hungary, Poland, Romania, Slovakia and Turkey have become EU's important T&C suppliers due to their geographic proximity and preferential treatments granted by the EU. The scenario has indicated that Asian T&C firms are at disadvantage in supplying the US and EU markets with the creation of regional trading blocs in the North America and Europe.

Conclusion

Globalization is a catchword nowadays. The trend towards regionalization has become evident, such as the formation of EU and NAFTA, and the new regional integrations in East Asia, South America, Southern Africa and the Greater China. While we realize that the WTO was formed to foster and facilitate world trade with the removal of tariff and non-tariff barriers, with the new wave of regional blocs formation, it seems the proliferation of regional trade blocs have somewhat undermined the broader effect. In this paper, it is shown that NAFTA has had a significant impact on the US-Mexican T&C trade and Mexico had become the largest clothing supplier to the US and a large proportion of this was in garment assembly. On the other hand, the share of EU's total, and T&C intra trade has been decreasing, it indicates that the formation of EU has not stimulated the intra T&C trade within the 15 member countries, the purchasing pattern of Western European T&C buyers are shifting to the Eastern European and other less developed neighboring countries.

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References

[1] APEC (1994). *APEC Economic Leaders' Declaration of Common Resolve*. Retrieved Aug. 9, 2002 from the World Wide Web: http://www.apecsec.org.sg/

[2] Bonacich, E., Cheng, L., Norma, C. Hanilton, N. and Ong, P. (1994). The Garment Industry in the Restructuring Global Econoy. In Bonancich, E., Cheng, L., Norma, C. Hanilton, N. and Ong, P. (Eds.), Global Production : The Apparel Industry in the Pacific Rim (pp. 3-18). Philadelphia: Temple University Press.

[3] Bonacich, E. and Waller, D.V. (1994). Mapping a Global Industry: Apparel Production in the Pacific Rim Triangle. In Bonancich, E., Cheng, L., Norma, C. Hanilton, N. and Ong, P. (Eds.), Global Production : The Apparel Industry in the Pacific Rim (pp. 21-41). Philadelphia: Temple University Press

[4] CSD (1991-2001). Hong Kong External Trade, various issues. Hong Kong: Census and Statistics Department.

[5] Dickerson, K.G. (1999). Textiles and Apparel in the Global Economy, 3rd edition. Prentice-Hall, Inc.

[6] Frankel, J.A., Stein, E. and Wei, S.J. (1994). Trading blocs and the Americas: The natural, the unnatural, and the super-natural. Journal of Development Economics, 47, 61-95.

[7] Hirst, P. and Thompson, G. (1996). Globalization in Question. Cambridge: Polity Press.

[8] HKTDC (1999b). Practical Guide to Exporting Clothing. HK: Research Department of Hong Kong Trade Development Council.

[9] Jilberto, A.E.F. and Mommen, A. (1998). Globalization versus Regionalization. In Jilberto, A.E.F. and Mommen, A. (Eds.), Regionalization and Globalization in the Modern World Economy (pp.1-26). London: Routledge.

[10] Krugman, P. (1991a). Is bilateralism bad? In Helpman, E. and Razin, A. (Eds.), International Trade and Trade Policy. Cambridge, MA: MIT Press.

[11] Krugman, P. (1991b). The Move toward Free Trade Zones. Implications of Trade and Currency Zones. A

Symposium Sponsored by the Federal Reserve Bank of Kansas City. WY: Jackson Holy, August, 7-42.

[12] OECD (2001). *OECD Statistics*. Retrieved Aug. 9, 2002 from the World Wide Web: http: www.SourceOECD.org

[13] Oman, C. (1994). Globalisation and Regionalisation: The Challenge for Developing Countries. France: Development Centre of OECD.

[14] Reardon, J., Kling, N.D., McCorkle, D.E. and Miller, C. (2002). The Formation of Regional Trade Blocs: A Theoretical Perspective using Game Theory. American Business Review, 20, 91-99.

[15] Sapir A. (1998). The political economy of EC regionalism. European Economic Review,42, 717-732.

[16] Soloaga, I. And Winters, L.A. (2000). Regionalism in the nineties: What effect on trade? The North American Journal of Economics and Finance, 12, 1-29.

[17] Stengg, W. (2001). *The Textile and Clothing Industry in the EU*. Retrieved July 15, 2002 from the World Wide Web: http://europa.eu.int

[18] TA (2001). Management Features: World Trade in Textiles & Clothing, 2000. Textile Asia, November, 50-62.

[19] USITC (1997). The Impact of the North America Free Trade Agreement on the US Economy and Industries: A Three-Year Review. Washington: US International Trade Commission Publication No. 3045.

[20] WTO (2001). *WTO Trade Statistics*. Retrieved Aug. 8, 2002 from the World Wide Web: http://www.wto.org/english/res_e/statis_e/statis_e.htm

[21] Wylie, P.J. (1995). Partial Equilibrium Estimates of Manufacturing Trade Creation and Diversion Due to NAFTA. North American Journal of Economics & Finance, 6, 65-84.

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A Survey to Assess the Views of SMEs regarding Business Formation Options

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Abstract

The 1995 marketing plan of the Corporations Directorate identifies, without much specificity, that its primary target markets are small and medium-sized businesses in the growing provincial economies of British Columbia, Alberta and Ontario. It should be noted, however, that small and medium-sized businesses account for over 99 percent of all business firms in Canada. Also, even within these three provinces, economic growth varies greatly from sector and community. Thus, before implementing its marketing plan, the Corporations Directorate must formulate a clearer and more precise understanding of its target markets of end-users, or incorporators, and then develop a marketing strategy that will focus on more narrowly defined marketing opportunities for its services and products.

The term "small business" is generally understood to include businesses with fewer than 100 employees in manufacturing and fewer than 50 employees in other sectors, while "medium sized" businesses are those with 100 to 500 employees. Large businesses have over 500 employees. To date, all but approximately 2000 of the more than 2.1 million businesses in Canada were either self-employed individuals or small and medium-sized enterprises (SMEs).

From 1981 to 1991, the fastest growing segment of Canadian business was the self-employed group: the number of self-employed businesses increased by 69 percent, from 678,000 to 1,146,000 firms. Over the same period, the number of employer businesses, having less than 100 employees, increased by 32 percent, from 688,359 to 910,898 firms. The slowest growing segment was large business, having more than 499 employees, which actually decreased by 0.5 percent, from 2030 to 2020 firms. (Please see Table 1 for details)

Table 1: NUMBER OF BUSINESSES BY PROVINCE

	1983		**1993**		
Province	**No.**	**National Share (%)**	**No.**	**National Share (%)**	**Net change in %**
NFLD	14,250	1.8	22,540	2.4	+0.6
PEI	5,618	0.7	7,257	0.7	---
N.S.	24,127	3.1	31,962	3.4	+0.3
N.B.	21,399	2.8	26,926	2.8	---
QC	189,767	24.4	224,575	23.6	-0.8
ONT	253,865	32.6	305,629	32.2	-0.4
MAN	32,020	4.1	35,129	3.7	-0.4
SASK	40,780	5.2	40,799	4.3	-0.9
ALB	88,815	11.4	107,711	11.4	---
BC	105,810	13.6	144,123	15.2	+1.6
YK.	1,031	0.1	1,537	0.1	---
NWT	1,455	0.2	2,283	0.2	---
	778,937	100.0	950,471	100.0	
CANADA	753,518		922,182		

Source: ESBO (1995b).

Extracted from: Industry Canada, "Small Business in Canada: A Statistical Overview", December 1995, p. 11.

From 1990 to 1993, there have been at least 140,000 business start-ups each year, of which, on the average, slightly over 6 percent have been new federal business incorporations.

Business services, which accounted for 79.3 percent of the total net change in business start-ups and exits, represented only 8.3 percent of all business exits. In comparison, the sectors accounting for the least number of start-ups included fishing (0.6%), mining (0.6%), communications (0.6%), transportation (3.7%), manufacturing (4.1%) and agriculture (5.3%).

There is a clear emergence of a more knowledge-based economy that is less dependent on older and traditional sectors, such as manufacturing, for new job creation. The latest available business formation statistics provide additional evidence that Canada's dependence on a commodity- and resource-based economy is diminishing, as production of knowledge-intensive goods and services increases.

Based on the cumulative net business formation by industry, from Q1 1993 to Q1 1995, three sectors accounted for ***49 percent of all business start-ups across Canada: retail trade (19.9%), construction (14.9%) and business services (14.2%)***

The greatest increase was recorded by British Columbia whose share increased from 13.6 percent in 1983 to 15.2 percent in 1993. The greatest loss was recorded by Saskatchewan whose share fell from 5.2 percent in 1983 to 4.3 percent in 1993, closely followed by Quebec whose share fell from 24.4 percent in 1983 to 23.6 percent in 1993.

Also, self-employment has grown fastest in the services, finance, insurance and real estate and construction sectors. Alberta, British Columbia, Quebec and Manitoba have experienced the largest increases in the number of self-employed persons.

At the end of 1995, approximately 32 percent of the self-employed were women. Only 20 percent of self-employed women have incorporated their business. There is, however, a growing trend for women to establish incorporated businesses.

Survey

This report addresses the hypothesis that small and medium-sized business in Canada does not give due consideration to federal incorporation as a viable and practical alternative to other legal forms of organization or operation. The Corporations Directorate of Industry Canada recently commissioned a market research firm, to conduct a critical analysis and assessment of its marketing function (Kindra, G.S., 1996).

Based on its review of various Corporations Directorate marketing initiatives, including client mail-out surveys, focus groups and telephone interviews and surveys, which were primarily targeted at such marketing intermediaries as lawyers and name search firms, the Report observed that "very little effort had been directed at understanding and knowing the end-users or incorporators". Moreover, the Report added that "knowledge of the motives, perceptions and attitudes of incorporators was almost completely lacking". It was recommended that the Corporations Directorate undertake more narrowly defined market research in order to better understand their target customer, small and medium-sized businesses. (Kindra, G.S., 1996).

As a follow-up, the Corporations Directorate commissioned a survey small and medium-sized businesses across Canada on their views and perceptions of different legal forms of organization such as sole proprietorship, partnership and provincial and federal incorporation.

The Questionnaire

The eight-page questionnaire, which was intended to solicit the views and perceptions of small and medium-sized firms on different forms of legal organization, consisted of four sections.

Section A asks a series of six questions whose answers will be used to construct a "snapshot" of the composition of the small business sector in terms of different legal forms of organizations.

Section B of the questionnaire is intended to provide valuable insight into how persons starting a business decide what legal form of organization is most appropriate for their business.

Section C of the questionnaire evaluates the role and performance of federal and provincial governments as providers of information and services related to the formation of new businesses.

Section D of the questionnaire examines how small and medium-sized businesses perceive the relative costs and benefits of unincorporated versus incorporated businesses.

Frame Design and Survey Response

The sample was stratified by region, size, industry, incorporation status and age of business.

According to Statistics Canada definition of SMEs, the total in-scope population was 338,867 business establishments. A sample of 4000 such business establishments was used.

The 8-page questionnaire consisting of 22 questions was pre-tested with 30 individuals. Minor wording and format changes were made on the basis of the pre-test results. A stamped, self-addressed return envelope was provided.

In April 1996, the questionnaire was sent out by mail to 4000 SMEs - i.e. businesses having 99 or fewer employees and which, when taken together as a group, represent a cross-section of the Canadian economy.

Usable, complete questionnaires, suitable for analysis, totaled 1,002 for a response rate of 25 percent.

Findings

Small- and Medium-Sized Businesses

Of the 1002 responses received, 517, or 51.6 percent of all respondents were from companies with 0-9 employees. "Larger" small businesses having 10-24 employees accounted for 296 firms, or 29.5 percent of all respondents. Therefore, "small" businesses having fewer than 25 employees accounted for 81.1 percent of all respondents (please refer to Table 6).

Business Size and Legal Form of Organization

Based on the 1002 responses received, and irrespective of business size, provincial incorporation was by far the most popular legal form of organization. Approximately 70 percent of all respondents were provincially incorporated. In comparison, only 12 percent of all respondents were federally incorporated. Therefore, provincial incorporation was almost six times more common than federal incorporation. Sole proprietorships accounted for 10.3 percent of all respondents and partnerships accounted for 7.6 percent of all respondents.

Approximately 19 percent of small businesses were unincorporated, compared with 15 percent of medium-sized businesses.

The relative popularity of federal incorporation is greater for medium-sized businesses. As figure 1 indicates, the federal incorporation share grew from 10.8 percent for small businesses to 17.7 percent for medium-sized businesses. Meanwhile, the relative shares for sole proprietorship and, more importantly, provincial incorporation, both fell.

Industrial Activity and Regional Distribution

The respondents were classified, by their activity into two categories: goods and services. Nationally, approximately 83 percent of all respondents were in the service sector, with the highest percentage being in Western Canada. Atlantic Canada had the lowest percentage of respondents in the service sector. In fact, based on the survey's findings shown in Table 5, the relative importance of the service sector grew progressively from east to west across the country. Almost 90 percent of all respondents from British Columbia reported that they were in the service sector.

Changes to Legal Form of Organization

Approximately 3 percent of all respondents intend to change their form of organization within the foreseeable future. Provincial incorporation is the anticipated choice of about 60 percent of these individuals, whereas, federal incorporation is the choice of about 15 percent.

Information Sources

Preliminary Sources of Information

Respondents identified trade associations and banks, closely followed by business seminars and courses, as the most important sources for information on starting a business. Government offices were ranked next, closely followed by public libraries and self-help guides on starting a business. The least important sources were Entrepreneurship and Small Business Centers, Federal-Provincial Business Service Centers and Chambers of Commerce and Boards of Trade (see Table 2 for details).

Whereas banks provide general information on starting a business and the legal requirements that must be satisfied before opening a commercial account, trade associations, especially in regulated trades and professions, provide information that is specific to operating a business in their sector of activity. Many respondents subscribe to very trade-specific publications and association newsletters for their industry information.

It is interesting to note the relatively low importance that respondents gave to government and community-run small business promotion and information centers. Their low importance might be due to low public awareness, combined with non-use of such facilities.

Table 2: SOURCES OF INFORMATION SOUGHT BY BUSINESSES (N = 860)

Source of Information	**Sample Mean Score**[1]	**Sample Standard Deviation**	**Mean Rank**[2]	**Count**[3]	**Count Rank**	**Not Applicable**	**Total Count**[4]
Library, self-help publications	1.98	1.28	5	379	8	481	860
Entrepreneurship and Small Business Centers	1.76	1.08	8	382	7	478	860
Federal-Provincial Business Service Centre	1.80	1.16	7	406	5	454	860
Chambers of Commerce/Boards of Trade	1.84	1.12	6	396	6	464	860
Banks	2.60	1.40	2	552	1	308	860

Government offices	2.18	1.31	4	485	3	375	860
Business seminars/courses	2.57	1.36	3	480	4	380	860
Trade Associations	2.64	1.45	1	488	2	372	860

[1]Level of importance on a Likert scale ranging from 1 = low to 5 = high.
[2]Rank determined by mean importance.
[3]Number of responses ranked.
[4]Total responses ranked and not applicable.

Publications

There was a general consensus that, nationally, the most important and widely read business journals, newspapers and magazines were ***The Globe and Mail***, followed by ***The Financial Post***. Respondents chose ***The Globe and Mail*** ahead of ***The Financial Post*** by a ratio of 6 to 4. Neither newspaper was of significance in Quebec where the most popular journal was ***Les Affaires***.

Expert Advice on Starting a Business

Approximately 70 percent of all respondents sought expert advice when deciding their legal form of organization.

The survey found that ***accountants, and not lawyers, were the most important advisors. Lawyers and notaries were the second most important advisor, followed by persons who are "familiar" and "trusted"***: the entrepreneur's friends, family, business colleagues and bank manager.

Furthermore, in spite of an abundance of available low cost, self-help information on starting a business, a large majority of entrepreneurs continue to seek out professional advice, or counseling, from accountants and/or lawyers and notaries when determining their legal form of organization. As noted earlier, 70 percent of all respondents had sought expert advice.

Table 3: SOURCES OF INFLUENCE ON FORM OF ORGANIZATION DECISION

Persons	**Sample Mean Score[1]**	**Sample Standard Deviation**	**Mean Rank[2]**	**Count[3]**	**Count Rank**	**Not Applicable**	**Total Count[4]**
Lawyer	4.16	1.18	2	582	2	83	665
Notary[5]	3.25	1.65	3	138	10	527	665
Accountant	4.43	0.91	1	633	1	32	665
Bank Manager	2.66	1.39	6	414	3	251	665
Management Consultant	2.18	1.52	8	201	7	464	665
Financial Advisor	2.44	1.57	7	221	6	444	665
Search Firm	1.27	0.74	11	133	11	532	665
Teacher/Seminar lecturer	1.75	1.18	9	170	9	495	665
Business Colleague	2.68	1.41	5	280	5	385	665
Government Official	1.66	1.09	10	201	7	464	665
Friend or Family	2.73	1.44	4	300	4	365	665

[1]Level of importance on a Likert scale ranging from 1 = low to 5 = high.

[2]Rank determined by mean importance.
[3]Number of responses ranked.
[4]Total responses ranked and not applicable.
[5]Available in Quebec Only.

Dealings with Government

As was noted earlier, respondents ranked government officials second to last in terms of their importance in influencing their choice of legal form of organization. They also ranked the Federal-Provincial Business Service Centers second to last in terms of their importance in providing information on starting a business.

It is interesting to note that a higher number of respondents (i.e. 28.7 percent) had dealings with Revenue Canada than all other agencies combined (21.3 percent).

This would suggest that the Corporations Directorate ought to coordinate information services related to the legal requirements for starting a business with other federal government departments and agencies like Revenue Canada as well as the BDB in order to tap into a broader business clientele.

Dealings with the ICCD

About 21 percent of all respondents have had direct dealings with either the ICCD or their provincial counterparts. More than two-thirds, or 145 firms, contacted only the provincial authorities, while only 7.5 percent, or 16 firms, contacted only the ICCD. Based on these findings, incorporation-related inquiries to the provinces out-number similar inquiries to the ICCD by a margin of 9 to 1.

Also, 9.8 percent of the 214 respondents to the questions, indicated that they had dealt directly with the ICCD prior to submitting their application for federal incorporation.

Respondents measured the importance of ICCD services on the basis of their information value in helping them to decide to incorporate.

Table 4: How ICCD Can Improve Its Service Delivery

	Sample Mean Score[1]	**Sample Standard Deviation**	**Rank[2]**	**Count[3]**
Fast Service	2.27	0.87	2	79
More professional and knowledgeable service	2.53	0.90	5	79
Lower incorporation fees	2.25	1.01	1	79
More friendly, courteous, and thoughtful service	2.51	0.93	4	79
More accessible service (e.g. via regional offices or electronic/fax filings	2.42	0.98	3	79
More convenient business hours.	2.54	0.80	6	79

[1]Level of agreement on a Likert scale ranging from 1 = strongly agree to 5 = strongly disagree.

[2]Rank determined by mean importance.
[3]Number of respondents.

Respondents were consistently in favor of lower incorporation fees, followed by faster and more accessible service. They were least concerned about convenient business hours or the knowledge level and professionalism of ICCD service agents.

When asked to comment on ICCD service levels, about one-half of all respondents had neither a positive or negative opinion. It should be noted, however, that as many as 15.4 percent of respondents strongly disagreed that ICCD service levels satisfied their federal incorporation needs. On the other hand, over one-quarter of respondents were satisfied with ICCD service levels.

Business Perceptions

For unincorporated respondents, financial considerations were the most important factor. Incorporation implied higher costs that small business cannot seem to afford. Secondly, respondents felt that incorporation was for more established businesses and thirdly, respondents followed the advice of experts who recommended the establishment of either a sole proprietorship or a partnership.

When incorporated respondents were asked their reasons for incorporating, the most important factor was limited liability, closely followed by tax advantages. Like unincorporated respondents, the third most important reason given was their expert advisor's recommendation to incorporate. The prestige associated with incorporation (i.e. stability, success and permanence) was ranked low in terms of importance, slightly ahead of last place "business license or franchise requirements". The relative importance of the three primary factors does not vary with the size of the respondent's business. Less important factors did vary in terms of their ranking when medium-sized businesses were examined separately. However, the variance is insignificant and does not affect the relative importance of the primary factors involved in selecting incorporation as a legal form of organization.

For provincial incorporations, the primary reasons for selecting a provincial incorporation are: first, planning to operate in one province only; second, following one's expert's recommendation; and third, feeling that a federal incorporation offers no additional benefit.

Follow-Up Telephone Survey

A follow-up telephone survey of 50 respondents, chosen at random, was conducted to seek further clarification on certain issues. Majority of the sample indicated that the price of incorporation was not the sole consideration. Rather, most respondents surveyed cited the local nature of their business as a primary reason for selecting to incorporate provincially. They did not perceive nor were not aware of any benefits from being federally incorporated. The respondents felt that a federal incorporation fee within a narrow range of their provincial incorporation fee would be most acceptable.

Telephone respondents confirmed the key role of expert advisors like lawyers, accountants, friends, and bank managers. Respondents also confirmed that information about federal incorporation should be made available to such intermediaries, or expert advisors, on a regular basis in the form of mail-outs and brochures. Brochures, or information packages targeted directly at potential entrepreneurs should focus on cost and procedural information as well as explain the key advantages of a federal incorporation.

Implications of the Survey's Findings

The survey has demonstrated that lower incorporation fees must be accompanied by two key changes: enhanced service delivery, improved communications and promotion targeted at small businesses and their key advisors: accountants and lawyers of federal incorporation.

Secondly, the majority of lawyers seem to have a personal preference for provincial incorporation, which is reflected in the responses received. Incorporators, on the other hand, place their trust in the better judgment and expertise of their expert advisor.

Third, the survey revealed the primary importance of accountants as an alternative distribution channel for information on ICCD products and services. Not only do accountants have greater market penetration in the small business community, different branches of the accounting profession such as the CGAs and the CMAs provide a cost competitive alternative to more expensive CA services.

Fourth, the bank manager was identified as a trusted and respected source of information for entrepreneurs starting a small business. Given his position as "an objective" provider of information, the bank manager occupies a key position at the front end of the information chain. The bank manager will not prepare the incorporation papers, but he can maintain a level playing field by assuring that his clients are made aware of all alternative forms of legal organization, including federal incorporation. Therefore, the ICCD should involve Canadian banks as an integral component of its information and public education strategy.

References

[1] Baldwin, John R. *Strategies for Success: A Profile of Growing Small and Medium-sized Enterprises (GSMEs) in Canada.* Ottawa: Statistics Canada Catalogue No. 61-523R, 1994.

[2] Baldwin, John R. and Garnett Picot. *Employment Generation by Small Producers in the Canadian Manufacturing Sector.* Research Paper Series No. 70. Ottawa: Statistics Canada Catalogue No. 11F0019MPE, 1994.

[3] Betcherman, Gordon et al. *The Canadian Workplace in Transition.* Kingston: Queen's University Press, 1994.

[4] Canada. Entrepreneurship and Small Businesses Office. *Small Business in Canada: A Statistical Overview*. Ottawa: Industry Canada, December 1995.

[5] Canada. Entrepreneurship and Small Businesses Office. *Quarterly Report on Small and Medium-Sized Enterprises*. Ottawa: Industry Canada, March 1996.

[6] Canada. Entrepreneurship and Small Business Office. *Quarterly Report on Small and Medium sized Enterprises.* Ottawa: Industry Canada, 1995.

[7] Canada. Entrepreneurship and Small Business Office. *Reference Handbook on Small Business Statistics.* Ottawa: Industry Canada, 1995.

[8] Canada. Entrepreneurship and Small Business Office. *Regional Extension to the Reference Handbook on Small Business Statistics.* Ottawa: Industry Canada, 1991.

[9] Canada. The Small Business Working Committee 1994. *Breaking Through Barriers.* Ottawa: Industry Canada, 1994.

[10] Canada. Industry Canada. *Building a More Innovative Economy.* Ottawa: Industry Canada, November 1994.

[11] Canada. Statistics Canada. *Canadian Business Patterns (Counts of Businesses by Industry and Province): Business Register*. Ottawa: Statistics Canada, 1994.

[12] Canada. Statistics Canada. *Industrial Research and Development.* Ottawa: Statistics Canada Catalogue No. 88-202, 1994.

[13] Canada. Statistics Canada. *Labour Force Annual Averages.* Ottawa: Statistics Canada Catalogue No. 71-529, annual.

[14] Canada. Statistics Canada. "National Survey on the Financing of Small Business." *The Daily,* November 15, 1994. Ottawa: Statistics Canada Catalogue No. 11-001E.

[15] Canada. Statistics Canada. *Science and Technology Indicators.* Ottawa: Statistics Canada Catalogue No. 88-201, 1994.

[16] Canadian Federation of Independent Business. *Business Growth in Canada: Business Formations in Fiscal 1992/93*. December 1993.

[17] Manley, John and Paul Martin. *Growing Small Businesses.* Ottawa: Supply and Services Canada, 1994.

[18] Picot, Garnett, John Baldwin and Richard Dupuy. *Have Small Firms Created a Disproportionate Share of New Jobs in Canada? A Reassessment of the Facts.* Research Paper Series 71. Ottawa: Statistics Canada, Catalogue No. 11F0019MPE, 1994.

[19] Riding, Allan Lance and George Haines. *Access to Credit: Lending Priorities and SMEs.* Ottawa: Carleton University, August 1994.

[20] United Nations. *Small and Medium-sized Transnational Corporations: Role, Impact and Policy Implications.* New York: United Nations, 1993.

An Overview of the Implementation of Voluntary Labor Standards and Codes of Conduct in the Thai Garment Industry

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Abstract

This paper provides an outline of the labor environment in the Thai garment industry. We intend to provide a brief overview of the garment and textile market in Asia followed by an outline of the key factors, which effect the implementation of voluntary labor standards (VLS) in Thailand. A discussion of the factors governing work conditions in apparel factories is following by summary of the status of trade unions. Finally, we provide a synopsis of issues related to occupational health and safety in the industry. An understanding of the forces at play in the international and domestic garment market allows the reader to better conceptualize labor standards and to draw conclusions regarding future prospects and challenges faced by Thai industry.

Brief History

The garment industry in Asian developing countries is marked by a distinct garment product cycle or value chain, which is evidenced by three producer tiers. Throughout the 1960s the newly industrializing Asian economies (NIE), Hong Kong, the Republic of Korea, Singapore and Taiwan, began to export simple, standardized garments to the U.S. in large scale. The emergence of a second tier of exporting countries, Indonesia, Malaysia, Thailand and China in the late 1970s forced the former into the production of higher valued added products. These NIEs managed a smooth transition to better quality garments beginning in the 1980s.

Despite their successful upgrading, NIEs had lost much of their market share to second tier countries by 1996. The newly industrializing economies' garment exports accounted for more than three quarters of total exports from developing Asia in the 1970s, but for just over one quarter by 1996 (Yand and Zhong, 1999). Increased labor costs in these countries resulted in a shift of the Asian garment industry to the less skill and less capital-intensive second tier countries. China captured the bulk of this market share, becoming the worlds' largest garment exporter. Only Thailand and Indonesia have expanded their garment exports at a similar rate. The Philippines have recently began to increase exports and India's exports have improved gradually since the mid-1970's, while lagging behind those of China, Thailand and Indonesia. Second tier countries like Thailand however, need to follow the same evolution to high value added goods, in order to remain competitive as wage rates and labor's skill levels increase.

India, Vietnam, Cambodia and Sri Lanka comprise a third tier of garment producers. Wage rates in these countries, reflecting the availability of unskilled labor, give them a distinct advantage in the production of simple, standardized garments. Exports in China, Indonesia and Thailand may have already peaked and Thailand has already experienced a scarcity of unskilled labor (Warr, 1998).

Table 1 Garment exports in total manufactured exports

1965-1997

	1965	1970	1975	1980	1985	1990	1995	1997
Asia developing	12.8	19.2	21.9	17.8	18	15	10.6	10.5
China	6.8	8.9	10.7	19.5	26.5	21.1	19.2	20.3

Indonesia	0.6	0	2.8	18.4	13.8	18.4	15.1	10.2
India	1.6	3.5	9.9	13.3	17.6	21	18.7	18
Korea, Rep.	19.9	33.6	27.7	18.8	16.1	13.2	4.4	3.6
Philippines	1.6	0.6	8.4	13.2	10.1	12.2	16.4	11
Singapore	4.9	6.5	5	4.1	4	4.1	1.4	1.4
Taiwan	10.6	19.6	20.6	13.9	12.7	6.3	3.1	2.8
Thailand	4.3	1.6	14.6	14.9	20.9	19.1	11.6	8.7
World	2.7	3.2	3.2	3.5	4	4.3	4.1	4.3

Source: UN COMTRADE.

The world garment industry can be viewed as perfectly competitive. Start-up equipment costs are low and minimal training is required while few natural barriers to entry exist. Additionally, the Multi-fiber Agreement (MFA) established export limits, managed as voluntary export restraints (VER) by each producing country, which increases domestic competition for quotas. The Agreement on Textiles and clothing will augment the level of competition amongst garment producers. In light of such competition, the survival of Thailand's garment industry lies in its ability to shift to the production of higher value added garments. Specifically, pressure from international markets, and adherence to international labor standards will be key to the industry's success.

Today the Thai garment industry has a ninety percent (90%) share of the domestic garment industry. We have already mentioned that the export of clothing is important to Asian developing countries. In 1997 garments represented 10.5 per cent of total manufactured exports. A potential reduction in Thai garment exports, the majority of which go to the U.S. represent a legitimate concern for Thai government. For instance, China's share of the international garment market dwarf's that of any other country and its recent acceptance into the WTO increases pressure on its Asian competitors to meet international labor standards, increase productivity and control costs. Simultaneously, internal lobbying by U.S. based garment manufacturers will continue to create pressures on Thai exports as well.

Current Status

Employing over eight hundred thousand, with a total dollar value of $3.16 billion in 2001, the Thai garment industry is a key revenue and employment source for the nation-- it represents the third largest export industry of the country. The industry experienced high growth rates over most of the last decade. Present growth prospects are more conservative in light of increased competition and a global economic slowdown over the past three years. Asia's economic meltdown, in 1997 brought specific pressures to bear on the garment industry. Several factors directly and indirectly affect the labor market and working conditions for garment employees:

A) The industry faces increased international competition from other Asian garment producers.
B) The Agreement of Textiles and Clothing (ATC) will create a quota free competitive market in Thailand by 2005 i.e. Thai factories will have to compete with most international players.
C) Pressure from international markets, in particular from U.S. customers engaged in contract factories of multinational supply chains imply that labor conditions must improve in factories--yet codes of conduct standards do not guarantee improvement in this area.
D) The rising costs and the increased skill levels of Thai workers without commensurate gains in factory productivity throughout the nineties has minimized the competitiveness of the industry vis a vis cheaper Asian garment producers. Most garments produced in the country are not high value added products, therefore requiring relatively low skill levels.

E) Some Thai manufacturers have been forced to increase operational efficiencies, and to streamline their costs while some factory owners may resort to cost cutting measures which adversely affect working conditions.

Policy and Regulation

The Labor Department was originally part of the Ministry of the Interior and set-up in 1965. In 1992 the Labor Department was divided into two departments – Department of Labor Protection and Welfare and the Department of Skills Development. The Ministry of Labor and Social Welfare is one of the newer ministries in the Royal Thai Government established in 1993.

There are currently seven departments in the Ministry which include the Department of Labor Protection and Welfare (DPLW). The DPLW's main responsibilities are labor protection, safety at work, labor relations, labor development, labor welfare, studies and statistics. Under the division of labor protection, they are responsible for launching labor standards, employment of labor, women and children at work, basic pay, severance pay, homework, labor inspection and violations of the labor law[1].

In theory, the DPLW regulates the private sector through the enforcement of the Labor Protection Act of 1998. Technically, occupational health and safety is handled separately under the National Institute for the Improvement of Working Conditions and the Environment (NICE). There is some overlap of responsibilities between the two departments and there has been discussion of NICE breaking away from the Ministry and receiving support under a workers compensation fund similar to the German model. However, limited resources constrain the ability of both departments to monitor factory compliance to the law.

Recently, the MOLSW decided to address the lack of enforcement and promote compliance to VLS through a program called the *Power of Labor Standards*. Under this initiative, a budget of approximately $5 million was allocated for the training and development of MOLSW staff and Thai industry in order to foster voluntary compliance with voluntary labor standards and corporate codes of conduct. The MOLSW hopes that improved labor standards will protect their market share and boost exports. A portion of this budget is dedicated to assisting factories in pursuing certification in VLS. Implementation and execution of a certification process for factory labor standards, in line with the guidelines set by WRAP, SA8000 and other VLS could definitely improve working conditions in the garment industry. In order to promote widespread compliance, the MOLSW will have to change the current mindset and build their internal capacity greatly. The MOLSW now generally applies SA8000 as an equivalent to VLS and has had difficulty comprehending the difference between international labor standards, voluntary labor standards and corporate codes of conduct. In a series of training programs funded under USAID trainers encountered a great difficulty in explaining the differences between the standards and codes to government and the private sector[1]. Another obstacle to this initiative is a general reluctance by industry to proactively pursue certification to VLS. The majority of certified factories have done so only as a requirement by their buyers. The MOLSW has also introduced a self-assessment process, in an effort to reduce the burden on inspection officers. However, it is questionable whether self-monitoring alleviates or aggravates labor law enforcement, and improves factory working conditions.

Voluntary Standards and Codes of Conduct

Human Rights Issues

Compliance and the Law

Thai labor law and the perception of economic reality by factory management often prevent the implementation/adoption of voluntary labor standards. For instance, the Thai Labor Protection Act of 1998 permits up to 36 hours of overtime per week, while voluntary labor standards advocate 12 hours of overtime. Member factories of the TGMA face the dilemma of short order periods and fluctuating demand for their products. On the other hand the present Thai daily minimum wage does not cover the living expenses of workers. Factory workers sometimes live in substandard conditions in an effort to send a small portion of their earnings home. Thai workers do not support a reduction in working hours, since they supplement their income through overtime pay. Many workers will even protest or change workplaces in an effort to gain overtime pay. Conflicting labor standards, a low minimum daily wage and the dire financial needs of workers often results in adverse working conditions for employees in the garment industry. Voluntary standards such as SA8000 include provisions for a minimum "living" wage, rather than a strict minimum wage. Apparel Avenue in Nakorn Pathom Province is an example of a Thai factory that provides a living wage as a component of SA8000 implementation. Apparel Avenue addressed the living wage element through productivity incentives coupled with a wage increase[2].

Factory owners have a legitimate fear that their cost may rise due to their investment in facility upgrades and other training related to VLS. Thai manufacturers hope to retain buyers through higher quality standards and political stability. As other Asian countries develop skilled garment workers they will have difficulty competing with their neighbors. Thai factories clearly understand the pitfalls of global sourcing and are hesitant to further invest in infrastructure when the brands make no long-term commitment to the cause. TNCs are already moving to Vietnam, China and other low wage countries. Savvy Thai manufacturers are already producing in Laos and using Thailand as a shipping and marketing base. See **Table 2** for comparison of labor costs.

Another major obstacle towards code compliance concerns human resource policies and management's attitude towards the workforce. Most of the voluntary labor standards, corporate codes of conduct and Thai law prohibit the use of monetary fines or penalties as disciplinary measures. Factory management fine workers in many areas, such as late arrival, general disobedience or bringing items deemed inappropriate to production areas[2]. Suspension without pay is another common disciplinary practice. Thailand pays a daily wage not an hourly wage, which means that the minimum wage of 165 baht must be paid regardless of the infraction. Management feels that wage cuts are the only way to provide a disciplined workforce.

Work stoppages and lay-offs are another means by which workers' monthly income is reduced. The Thai Labor Protection Act, Article 75 states " In the case where it is necessary for a boss to stop all or part of the business temporarily for any reason which is not an act of god, the boss shall pay the employee not less than fifty percent of a working day's wage ..." That is factory management can lay-off workers without pay for extended periods under this law. As workers are employed on a daily wage, they have no legal means to contest their treatment under Article 75. The trade unions have unsuccessfully attempted to overturn this law.

The mistreatment of women in factories is a cause for concern. Over 80% of workers in the textile and garment industries are unmarried women. They are preferred over men and older women because they are more willing to work long hours and deemed to have greater manual dexterity. Through our field experience it appears that pregnancy testing is still widespread. Employers want to avoid training new workers and paying maternity leave[3]. Women are frequently asked to give urine samples when applying for jobs so that pregnant applicants can be screened and rejected. Job applicants are still asked if they are married and those who become pregnant during their initial four-month probationary employment period invariably are fired (Yimprasert and Candland). Alternately, factory management does not believe in hiring pregnant workers and often requires a certificate to demonstrate compliance. Although, there does not seem to be wide instances of discrimination in Thailand, pregnancy testing is strictly prohibited by most VLS.

Trade Unions

The following information is a summary of an MOLSW Report on Thai Trade unions:

As of September 30, 2001 there were 1,106 labor unions, which are comprised of 280,404 workers. As for types of industry, 84% of the unions are in the manufacturing industry including machinery, electrical appliances, transportation equipment, garment and knitting. The majority of unions are located in Samutprakan province.

Based on statistics, 47% of established labor unions are officially disbanded. The main reason is that the union fails to operate for more than 2 years. The Thai Labor Relations Law states that the objectives of labor unions are as follows:

- To protect employment benefits

- To promote good relationship between employee and employer and among employees

Managements' attitude towards labor unions is still negative and they believe labor union should be eliminated. Therefore, the founding members of new trade unions are not often subject to harassment. Many of the trade union activities are not supported by management and the strength of the labor union depends on the number of workers in the union. Only 5.6% of unions, approximately 50-60 unions, have more than 800 members. The majority of unions: 22.5%, have less than 50 members. That means most unions lack sufficient income from member fees to support their operations. In addition, few members lead to low bargaining power in the collective bargaining process.

The other obstacle to the Labor Relations' Law concerns the duration that the union committee holds office. A reasonable duration should be 1-3 years to allow members to take turns in managing the union. Most union committees or 72% hold office for 2 years. However, there are 46 unions that have had union committees in office for 4-6 years. The practice is not against the law, but may diminish democracy. Some individuals believe that committees with fewer members may find it more appropriate to have long serving committees. Increasingly, women members have an active role in labor union, mainly because Thai manufacturers prefer to hire women to men. Recent labor initiatives were supported by women members, for example: 90-days maternity leave, demand for unemployment security and demand for health and safety in the workplace.

In general, few workers apply to become committee members. Thai culture leads to elected officials that do not necessarily possess a capacity to run a union, but on popularity or seniority. As a result, very few committee members actually get involved in the daily management of the union. However, some unions have successfully negotiated for union committees to work full-time at the union and be paid as factory workers.

The MOLSW report goes on to make the following recommendations: set up a temporary organization which acts as a mentor to help promote and educate workers on labor union activities, enact laws to promote labor union's strength and have a minimum number of members to maintain union status.

As in most developing economies, the role of unions in the Thai garment industry is subordinate to the priorities of factory owners. While Thailand does not have a history of collaboration between unions and business leaders, unions, fill important roles in advocating for workers rights while trying to meet company goals. Roles and activities of garment labor unions in Thailand are as outlined by *Triumph International of Thailand, Labor Union* are as follows:

1. Receive complaint and/or non-compliance issues from workers e.g. wage adjustment, wage reduction, rules and regulations regarding leave days and conflict between supervisor and worker
2. Ensure worker welfare is in place
3. Educate union members regarding wage, employment contract, collective bargaining procedure, company rules and regulations and social security welfare
4. Give advice to and corporate with other labor unions regarding worker welfare e.g. minimum wage, unemployment fund, health and safety, and ILO convention etc.
5. Build relationship between labor union and factory management by meeting at least once a quarter

Thai businesses are wary of strong unions and have a poor history in developing communication channels. Collective bargaining agreements are nearly non-existent as are formal unions at most factories in the garment sector. The umbrella organizations that oversee the unions are deemed to have a close relationship with the government. As economic recession in Asia has led to high levels of unemployment, workers are happy to have a steady job. Daily wages in Southeast Asia barely cover the costs of basic necessities. Unions have little ability to leverage improvements in the workplace in an uncertain economic climate. The workers need jobs and are hesitant to press for wage increases and other benefits for fear of retribution.

Thailand's government has responded to freedom of association through the legal requirement of a welfare committee. Not surprisingly, the majority of factories support the creation of workers' committees over trade unions. These committees are designed to represent workers and create a form of freedom of association. In most cases, representatives of welfare committees are elected by the workers as stated in the Labor Protection Act of

1998. Some members in the welfare committee traditionally come from the management level. As welfare committees are a requirement of the law, they are present in most Thai garment factories. However, the bargaining power of welfare committees varies greatly and may often deter the formation of trade unions.

In our experience, these committees concentrate mostly on year-end parties, recreational activities and physical improvements to the facility. During our fieldwork, we have yet to encounter a committee that discusses collective bargaining agreements or wages issues.

The official statement is that the economy is depressed and that business owners cannot afford a substantial increase in wages. In truth, Thailand's local garment factories increased revenue through a devaluation of local currency, and a wage increase the equivalent of $0.15 over the last 5 years. Food, gasoline and other costs rise, while the buying power of workers has diminished[1]. The absence of a strong union presence coupled with inadequate government regulation allows factories to perpetuate bad practices as well as to maintain facilities unfit for their labor force. This leads to major occupational health and safety (OSH) problems in the Thai garment and apparel industry

Challenges to OSH Reform

Architecture of Factories

Most Thai factories, especially older factories, have not been designed to comply with safety standards. Rather, the appearance/image of the building, and the area used for business operations and planning were the key factors influencing design. These buildings are still in use. Some have been improved to meet OSH standards under Thai law and others have not due to financial restrictions. Renovating older structures to meet current regulations is a costly and complicated process. Thus, many multiple-floor buildings have OSH problems, such as one fire exit per floor or a lack of ventilation systems.

In comparison to international factories, pure Thai factories (100% Thai owned), especially family owned factories, are substandard in terms of occupational health and safety management. Generally, U.S. and European subsidiaries have superior occupational health and safety management systems and technical knowledge. Typically, Thai factories do not show the same concern for safety, and lack awareness of occupational health and safety management.

Weaknesses of Local OSH Regulation

Normally, Thai occupational health and safety regulations are enacted after the occurrence of a major disaster. In fact, a well known Thai idiomatic expression states, " Cattle owners build cattle pens only after losing cows." Therefore, there was no OSH conceptual framework to provide guidance to those concerned with implementation of health and safety standards in their workplaces. In 1993, a fire in the Kader Toy Factory killed 187 workers, yet fire hazards are one of the main occupational hazards of Thai factories today. There is a high incidence of OSH related accidents in Thai factories which requires a proactive not reactive policy.

Enforcement of OSH regulations is limited by the number of OSH governmental inspectors.

The government evaluates safety conditions at factories by sending out questionnaires. If doubts arise in the review of the returned questionnaire, an inspector will visit the factory. Factory owners have an incentive to distort their responses to questionnaires in order to evade inspection. Since no worker input is incorporated into surveys of factory conditions, questionnaires present a biased view of prevailing work conditions.

At the present, there are too many relevant local regulations issued by various governmental agencies. The regulations on a specific topic may come from two governmental agencies but the details of that law may differ from agency to agency. This ambiguity may confuse factory owners, thereby making it difficult for them to abide by the law(s). The lack of streamlined regulations across agencies leaves the law open to creative interpretation, allowing some owners to abuse workers. In addition, the present local regulations are sometimes too inflexible and unclear, while some laws have still not been updated.

Managerial Misunderstanding of OSH

Factory owners and senior management demonstrate a lack of concern for the benefits of OSH and are not committed to run safety programs in their factories. They consider OSH investments unnecessary and unsound.

Generally, when OSH programs exist there is little if any worker involvement. In most small factories, the workers have never had a chance to propose their ideas to management for OSH improvements in the workplace. Most workers in Thailand have little knowledge about occupational health and safety. They also lack knowledge of which components of their work, or which equipment pose health or safety risks and are rarely educated about these risks.

The absence of qualified OSH personnel is another obstacle for Thai industry. As per Thai law, factories with more than 50 employees must have at least one professional safety officer. Normally, an international factory will provide a safety officer based on the following progressive criteria based on number of employees. The criteria for professional safety officers are as follows:

1) Bachelor's degree in a certified occupation health and safety program
2) Diploma-graduate in any field and an additional 180-hour Accredited Safety training
3) Trained safety officer according to the notification of ministry of interior, Re: Safety at work, issued on May 6, 1995, plus additional safety training defined by the Director General of the Department of Labour Protection and Welfare (DLPW)
4) 5-years experience as a fundamental safety officer, plus performance of 10% accident decreasing rate over 2 years and safety training defined by DLPW.

Recently, most safety officers are certified via route #2 and #3, which are considered inferior to a bachelor's degree in the field. Actually, the development of safety officers under route #2, #3 and #4 were developed in order to respond to the demand for certified safety officers, and to support the old uncertified safety officers. For many years, Mahidol University was the only university that offered a bachelor's degree in occupational health and safety. Only recently have a number of universities open related programs. Thus, the development of safety officers via route #1 has been insufficient to meet market demands.

Cultural Perspectives of OSH: Thai Attitudes and Culture

Most Thai people have <u>no safety awareness</u>, are not safety-minded and safety issues are a last priority. Thai's adhere to the old adage, "Mai Pen Rai," meaning don't worry everything will work out fine. For example, the workers believe that working without Personal Protective Equipment (PPE) will not harm them, as they may have had friends who did not sustain injuries while inadequately equipped.

If workers get sick, experience a deterioration in health or are impaired by a work accident or exposure to toxic chemical due to an unsafe act or to unsafe conditions, they attribute their misfortune to destiny, to the power of spirits or to deeds in a past life. Virtually any condition resulting from poor health and safety standards in the workplace is therefore acceptable, or can be justified in the workplace.

Many Thai people tend to engage in risk related behavior without regard to safety concerns. For example, male teenagers race motorcycles at high speeds without helmets and there is little police enforcement and many fatal accidents. Thais readily forget that there are a lot of man-made and natural disasters in Thailand. Accidents will be the talk of the town for a short period, but are subsequently forgotten. In February 2002, seven workers were crushed to death at Delta Elections by equipment overloaded above a workstation. Delta is one of many industrial accidents, which occurred recently. There are few statistics nor are accidents reviewed continually in order to set a proactive mitigation measure for preventing reoccurrence. Industrial accidents concerning hazardous chemicals, electrical and structural problems require serious review. Conversely, the MOLSW has instituted a policy of passing responsibility on to the factories in the form of a written self-assessment.

Conclusion

The Thai garment industry faces increased competition from other garment producer countries and is struggling to compete in the international marketplace. The current trend of auditing contract factories on their labor standards has put additional pressure on the garment industry. Garment producers are facing rising costs, short delivery expectations and decreased profit margins as the multinationals are now adept at evaluating the cost of the production process. Thai workers have faced increased inflation and wage controls that have made it difficult to earn a living wage. The voluntary labor standards and codes of conduct are imposing a ceiling on overtime hours which further reduces workers' income. Thai manufacturers have been forced to increase operational efficiencies and streamline their costs, which adversely affects working conditions as well as income. In addition, compliance toVLS require an improvement in managerial concerns, disciplinary practices, pregnancy issues, industrial relations and indiscriminant fines.

The other key issue related to VLS is occupational health and safety regulations and policy. As Thai factories are typically renovated shophouses and other structures not designed to the requirements of the garment industry, fires and other industrial accidents present a great risk. There is also a severe lack of trained occupational health and safety professionals.

The conditions brought to light in this report underscore the need for several changes in the industry, which will move Thailand from a second tier to a first tier garment producer. At the least, TGMA members will have to make bolder and more tangible moves to pursue certification under VLS. At the heart of these initiatives, worker inclusion in productivity improvements and safer working conditions could change workplace attitudes and practices which thwart or stifle productivity, thus limiting the garment producers' ability to compete in the global marketplace.

Table 2

Labor Cost Comparison		
Country	Total cost in $U.S.	Ratio to U.S. Cost/ %
U.S.A.	14.24	100
Japan	26.1	183
New Zealand	7.28	51
Taiwan	7.23	51
Hong Kong	6.1	43
South Korea	5.32	37
Thailand	1.18	8
Malaysia	1.13	8
PR of China	0.69	5
India	0.58	4
Sri Lanka	0.46	3
Pakistan	0.37	3
Indonesia	0.32	2

References

[1] Charoensuttipan, Penchan, July 3, 2002, Unions demand change in movement’s leadership, Bangkok Post

[2] *Company Focus: Apparel Avenue Co., Ltd.*, Cut and Sew Magazine, May 2002

[3] Department of Labor Protection and Welfare, Ministry of Labor and Social Welfare: www.labour.go.th

[4] Interview Section, Safety Management Magazine, March - April 2002, The Safety and Health at Work Promotion Association (Thailand)

[5] Warr, P.G., 1998, “Thailand,” in McCleod, R and Garnaut, R. (eds.), East Asia in Crisis; From being a Miracle to needing One? Routledge, London and New York.

[6] Wilson, David Yeardley, Independent Consulting Report for the Thailand Department of Export Promotion.

[7] Yang, Y. and Zhong, C.S., 1999, “China’s Textile and Clothing Exports in a Changing World Economy,” *The Developing Economies, 36 (1), 1998: 3-23.*

[8] Yimprasert, Junya and Christopher Candland. “Can Corporate Codes of Conduct Promote Labor Standards? Evidence from the Thai Footwear and Apparel Industries” The Asia Monitor Resource Center. December, 2000.

End Notes

[1] This information was summarized from the Department of Labor Protection and Welfare website.
[1] Under the USAID sponsored Labor Standards Development Program, KIAsia organized a series of public training programs.
[2] Apparel Avenue’s productivity improvements are documented in *Cut&Sew Magazine*, *Company Focus, May 2002.*

[2] Evidenced from a human resource policy in a factory audited by the Kenan Institute Asia.
[3] Under the Thai Labor Protection Act, mothers who are regular employees are entitled to 90 days of paid leave, shared by the Ministry of Labor and Social Welfare and the employer.
[1] The Kenan Institute Asia facilitated a market basket survey in 2000.

Business Response to the Regional Demands and Opportunity: A Study of Malaysian Automobile Industry

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Abstract

This paper examines the business response taken by both automakers (Proton) and supplier (Ingress) in preparing them to face the regional market liberalization of AFTA. As the key automaker in Malaysia, Proton sale is mainly in domestic market and able to capture 68 percent of the total market because of the highly tariffs and custom tax is imposed on all foreign cars. However, things won't be the same when AFTA is implemented. Both Proton and suppliers should be wise to take measures in to be more competitive among in this auto sector by the year 2005. The key competitiveness lies mainly on technology and market. In order to achieve it, they have to consider their limitations accordingly by put more investment particularly in four main core items namely; technology, own design, cost and quality control, and penetrating into new niche market. New export market and new collaboration with foreign giants and counterpart may workable in both domestic-Malaysian, and regional-ASEAN market.

Introduction

Over the past four decades, the automobile industry has been the subject of long government intervention. The industry has driven industrial development and experienced upgraded domestic technological capabilities (Humphrey, 1999; Abdulsomad, 1999). The automobile industry has also been politicized, and thus was incorporated into national development strategy (MIDA, 1986)[1]. Promoting the automobile industry in developing economies requires protective instruments (tariffs, quantitative restrictions, investment controls, refund schemes, etc.) by national governments to protect local industry. External pressures (Rasiah, 1999) due to the World Trade Organization (WTO), Association of South East Asian Nation (ASEAN) Free Trade Area (AFTA) and Asia-Pacific Economic Cooperation (APEC)–to reduce tariff and other protection have had direct implications for automakers and national governments. With these commitments, the push towards freer markets is putting tremendous pressure on governments and industry players alike to re-position and re-engineer them in the light of a liberal regime.

AFTA was established in fourth ASEAN summit in January 1992 in Singapore. Its objective is to create an integrated domestic market within ASEAN and increase the region's competitive edge as a production base in the world market. A crucial in this direction is the liberalization of trade through the elimination of tariffs and non-tariffs barriers (NTBs)[2] among ASEAN members. This activity has provided the push for greater efficiency in production and long-term competitiveness in the automobile industry. Moreover, the expansion of intra-regional trade will give ASEAN consumer wider choice and better quality products. In principal, AFTA covers all manufactured and agricultural products, although the time table for reducing tariffs and removing qualitative restrictions and other NTBs differ for the two groups of members – the original six (Thailand, Malaysia, Singapore, Indonesia, Philippines) and the newer four countries (Cambodia, Laos, Myanmar and Vietnam). The CEPT[3] scheme, which is instrument to achieve AFTA, requires tariff notes levied on a wide range of products traded within the region to be reduced to 0-5% by 2002[4]. Quantitative restrictions and other NTBs are also to be eliminated accordingly. With AFTA, the national automotive markets in ASEAN – which have been protected by high tariffs – will eventually be opened to foreign competition. (Table 2 Tariff Rates in Malaysia). Although the automotive sector of member countries was until recently in the Temporary Exclusion List (TEL)[5] of the CEPT, it should have been phased into the Inclusion List (IL)[6] by the year 2000. Tariff reductions on items in the IL are targeted at stimulating economic growth and enhancing trade in the region.

Theoretically, the transition to a free trade will allow economies of scale in the production of vehicles and auto component parts in the ASEAN region. It will also enable firms to undertake greater specialized production runs and reduce the unit cost of production, thereby making suppliers more efficient in pricing and quality. Competitive producers can in turn export their productions throughout the region at almost duty-free prices. For the automotive industry, the bottom line attraction is lower production costs, lower prices and a bigger market. AFTA could well translate into price cuts of about 20-50% on vehicles in several ASEAN countries, where high tariffs and inefficient domestic industries been resulted in consumer welfare losses. However, in practice, differing objectives and political considerations of member countries suggest that a consensus may be difficult, though not impossible to achieve.

Getting automotive industries off the ground was no easy task for countries in ASEAN region because at the time they had weak, primary-industries-led economic bases. But for all that they had in common, each ASEAN country had its own approach to the automotive industry depending on how it viewed the effects of competition and how nationalistic it felt-whether it thought "we can increase our competitiveness as a country by letting the foreign manufacturers we have attracted compete freely in our markets" (liberals), or "we will become more competitive by giving monopolistic protection to specific automakers, preferably our own" (protectionists). Malaysia was originally the only protectionist; the other three adapted liberal policies (Thailand, Philippines and Indonesia. Still both approaches have their strengths and weaknesses (Table 1), though the weaknesses tended to be more visible, first because demand, while growing, was still small in absolute terms and second because industrial base in the region were rather too frail to push ahead with domestic production. "National car" program resulted so far indicate that by doing so will enable the country to (1) have more control in what happens, and (2) enable support industries to grow (to achieve higher local content). Some of the merits and demerits of liberal and protectionist approaches adopted by the ASEAN-4 are highlighted in Table 1.

Table 1: MERITS AND DEMERITS OF LIBERAL AND PROTECTIONIST APPROACHES

Approach	Merits	Demerits
Liberal	• Small burden as the government •Smooth response to market expansion	•Leadership in the hands of foreign capital •Difficult for large production lots to come about •Difficult for support industries to follow up
Protectionist	•Large production lots possible •Relatively easy for support industries to grow up •Leadership by host country	•Large burden as the government •Over protection inhibits business diversification causing delayed responses to liberalization

Source: Adopted from Bank of Tokyo-Mitsubishi Review, Vol. 1. No.4. September 1996.

Automotive development and the local content policy became prominent following the launch of Proton, Malaysia's first national car project (NCP) in 1983. There were several reasons for the government's shift in policy in the automotive industry. Among them were the limited success of the initiatives in the 1960s and 1970s, and the desire to promote local Bumiputera participation in the industry (Abdulsomad, 1998). A joint venture between Mitsubishi Motor Corporation (MMC), Mitsubishi Corporation (MC)[7], and the Heavy Industries Corporation of Malaysia (HICOM), Proton rolled out its first cars in 1985. The national car project was aimed at rationalizing the automotive industry, promoting related industries (parts, components and supporting industries), enhancing greater utilization of locally made components, encouraging the upgrading of technology, engineering and technical skills, and increasing the participation of local suppliers in the industry which was then dominated by foreign and local-Chinese capitalists.

The rapid growth of Proton can be attributed to the strong government support, protection and preferential treatment measures (Table 2). Apart from the preferential import duties and sales taxes accorded to Proton, the government provided technical, financial and other assistance through a special vendor development program to develop the entrepreneurship of the local suppliers. Local sales were also boosted by government procurement orders for the national car. In addition, civil servants were given low interest rate loans to purchase Proton cars.

Table 2: AUTOMOTIVE TARIFFS RATES IN MALAYSIA

CBU	Prohibited in principle unless an approval permit is obtained Passenger car: Less then 1800 cc: 140% More than 1800 cc: 170% More than 2500 cc: 300% Commercial vehicles: Vans: 35-50% 4WD vehicles: 50% Trucks & buses: 35%
CKD	Passenger car: National cars: Proton-113%, Kancil-0% (for limited period) Non-national cars: 42% Commercial vehicles: Vans – 5%; 4WD-5%, Truck & buses-0%

Source: Adopted from Philippine Automotive Federation, Inc., 1999.

This study focuses on the Malaysian automobile industry and the possible disadvantages and advantages that may be caused by the introduction of the AFTA. The disadvantages can include loses incurred by the alleviation of protectionist measures, reduction in the overall import, and can have a negative affect on marketing position. On the other hand, it may open greater opportunities for the automotive industry through the regional cooperation and allow the industry to penetrate both regional and global markets. In order to do this, the goals of automobile industry are as how to become cost competitive, improve quality, maintain dominance on the domestic market and became competitive in the international market.

The purpose of this paper is to examine business strategies taken by both automaker and supplier in Malaysia facing the implementation of AFTA after 2005. It argues that regional market liberalization, in the form of AFTA affected their strategies shaped towards preparing themselves to be more competitive. This paper is divided into three parts. The first part gives background overview of the automobile industry in ASEAN and Malaysia's current position. Part two examines the strategies implemented by both automaker-Proton and a supplier (Ingress) company in facing the AFTA challenges and finally, a conclusion is offered in the final part.

Literature Review

One of the classical strategy recommend for industries is the Porter's (1980) generic business strategy. According to him, these are three generic strategies that can be adopted by firms in an industry: cost leadership, differentiation, and focus. The cost leadership strategy can be obtained by having access to cheaper inputs or by being more efficient. This strategy emphasizes on lowering costs as opposed to lowest price as to obtain the greatest profit. The cost strategy includes control of the operating costs, lowest cost of sources of supply, keeps costs under control, and maximizes utilization of resources or capacity. On the other hand, differentiation can be achieved through better quality, unique products or services, product image, lower price, customer sensitive, customer service and reputation. Focus strategy is a "niche" marketing strategy that can be obtained through lower costs or differentiation, addressing at specific target markets.

Dess and Davis (1982) examined the generic strategies of Porter, and found that the lowest cost and differentiation strategy were supported in their findings. The third strategy, focus, was found to be less conclusive; this was due to the differences in opinion of the panel of experts on the interpretation of the "focus" strategy. Bowman (1992) explored the manager's perceptions of the generic business strategies in the United Kingdom. By using factor analysis, he found that the generic strategies were grouped into four factors: competing on price, offering unique products/services, cost control, and product/service development. The result implies that the two factors were associated with competitive behavior; while the second two factors were associated with internal competencies which may or may not lead through to changes in the offerings of the firm (Bowman, 1992). As such Bowman believed that the results shared that the business strategies were related to the internal activities and the external competitive market positioning.

Md. Zabid (2000) found that the competitive strategies pursued in the electronics industry were cost, differentiation, cost price, and marketing niche strategies. There also a positive relationship between the competitive advantage positions and the generic strategies pursued. Competitive advantage can be defined as a unique position a firm develops vis-à-vis its competitors (Bamberger, 1989). A firm can create and sustain its competitive positions by developing distinctive competencies with its available skills and resources. Bamberger also identified general factors contributing to competitive advantage positions like product quality, quality of management, good image and personal contact, reliability of delivery, reputation, low costs positions, market share, financial capability, pricing policy and modern production techniques. Bamberger also found that the critical factors important for competitive advantage might not be similar in different industrial situations like the electronics, clothes and food. In the electronics industry Md. Zabid (2000) found that the seven competitive advantage factors were marketing capabilities, organizational capabilities, product/service quality, image and financial integrity, technological competence, sales management and network, and socio-financial capabilities.

Methodology

This study relies mainly on primary information. The author conducted two field surveys, from April to May 2001 and from March to April 2002. After objectives were set to tracing the trends of automaker and suppliers' relationship particularly between Proton and its vendors[8], the first step of this research entailed visiting Proton and selected 12 vendors and interviews have been conducted with their staffs. The author was able to interview Proton's manager of Supplier Sourcing and Technology (SST) department and its executives and selected 12 suppliers. Additional to this, structured questionnaires were sent through mail to 78 Proton's suppliers categorized under Small and Medium Industries (SMIs)[9] with 30 or 40.5 per cent response rate. This study also applies case study approach particularly on Proton (only one automaker is selected. Malaysia has two automakers namely Proton and Perodua) and Ingress represented the suppliers. The case study is the preferred strategy for this study for two main reasons. The first is closely related to the objective of the study, that is, to discover to what extent both automaker and suppliers have arranged their response to the current challenge of regional changes particularly AFTA. Secondly, it involves the question of what type of business response that has been arranged, and how far the responses have been taken place. Ingress is being selected because it involved in strategic alliance to acquire technologies from foreign Multi-National Corporations (MNCs)-Katayama through a "hands-on" learning process (Ali, 1992; Hensley and White, 1993). The same also applied for Proton as it acquires technology learning from MMC.

AFTA and Its Implications for Malaysian Automobile Industry

For automobile industry, all the components and parts that are needed to the car industry will be affected. From tires till the engines are included in the CEPT. Malaysia has used high import duty and local content policies to protect national cars, domestic assemblers and component part makers. (Refer to Table 2). With the introduction of AFTA, all trade barriers will be removed and this is turn can have the negative implications for Malaysian automobile industry. Domestically, Proton has the advantage in terms of dominant market share and a well-established distribution and service network. Mentioned situation will remain for the next three years at least, following Malaysia's deferment to 2005 of market opening measures for the auto sector under the AFTA agreement and Malaysia's commitment to WTO. But the situation concerning the Proton's dominance in the local market after the 2005 can be threatened. Removal of all the trade barriers can result the following: (1) Foreign competition, which can pose serious threat to the future development of the local automobile industry, (2) Outside pressure on the local market from other manufacturers in both component and finished products, and (3) Collapse of the inefficient and weak firms at the expense of stronger ones. The issue is what can be the way? Do Proton and its suppliers ready for this? This paper attempts to discuss alternative measures taken by them to face the challenges.

However, AFTA, for auto, in a positive perspective would drive the regional manufacturing integration and cost competitiveness among ASEAN countries rather being a threat to them. It is expected will be more technology transfer to this region and more opportunity to the labor. ASEAN is a key strategic automotive market for many reasons: ASEAN population is 510 million. Currently the car sales have been increasing. In 1998, it was 500,000, in 2000, 1 million and projected to be 1.5 million in the year 2003. The leading supplier for the whole ASEAN region is Proton with 22 per cent of the market due to its monopoly in the Malaysia market. Toyota is the second in the list with

20 per cent share[10].

Another reason is the growing economic growth of the ASEAN countries. Despite of the effected GDP in 1998 due to economic turmoil, its growth average in selected ASEAN countries (Indonesia, Malaysia, Philippines, Thailand, and Vietnam) is averaged at 8 percent and projected growth rate for the year 2000-2004 will be the same average at 8-10 per cent. Since the market is very attractive, many foreign giants from Japan and the US have already invested in this region. From 1995-1999, US giants like Ford, General Motors (GM)[11], Daimler, Chrysler, have invested in Thailand.

Malaysia has delayed the inclusion of 218 tariff lines (products) on Completely Built-in (CBU) and Completely Knocked-down (CKD) automotive products until 2005. The delay was due to providing domestic automotive industry more times to recover from the impact of the regional financial crisis of 1997. The delay also to allow domestic industry to undertake necessary restructuring exercise and prepare for market opening under AFTA, without disrupting long-term development of the industry.

Proton business response to AFTA

Proton has to response accordingly and has to take into account its vision, position, challenges ahead and to prepare the strategy[12]. Currently, Proton cars[13]conquered 64 per cent of domestic sales since 1987. From that year their market share was always above 60 per cent and has been improving the sales every year until 1997 before dropping because of the economic downturn. Proton also gains its mileage as one of the top three players in the domestic market share: (1988-73%; 1991-64 %; 1994-71 %; 1997-64%; and 1998-63%) (Proton, 2000).

The challenges for Proton facing AFTA including (1) Low exports volumes[14], (2) Proton doesn't own its products. Proton models line up includes Saga, Iswara, Wira, and Satria (including Satria Gti). Tiara, Putra and Waja, which comes on various body sizes, were ranging from 1.1, 1.3, 1.5, 1.6, 1.8 and the 2.0 litter engines. Models Wira and Perdana, which are largely Mitsubishi designs[15], Tiara, which is Citroen design, and Satria and Putra which are Malaysian redesigned variants of Wira. Except for Waja, other products are not owned by Proton per se including engine. In addition to that, all those key models (except Waja) are aging. (3) Although Proton already penetrated the export market since 1986 but it's seemed that Proton acquired low brand power outside Malaysia[16]. As a result, Proton received weak customer loyalty and retention rate besides perceived quality of Proton is not encouraging. (4) Competition from MNCs in ASEAN. US giants like Ford, General Motors (GM), Daimler, Chrysler, already has invested in Thailand. Proton should successfully place itself to be domestic or regional player or prepare it response to these challenges. In order to achieve this, a few strategies should be carefully selected and implemented accordingly. Given promising position in the auto market of ASEAN, Proton has potential to gain success.

Proton's strategies lie on focusing on these few viable measures that it has capability to do it: (1) Proton has to look on new product development to improve the capability of the existing models; (2) Venture to new market, (3) Flexibility in manufacturing; and (4) Building network of alliance. (5) Improve customer care and brand image, and (6) Building world-class vendor.

Attaining Cost Leadership and differentiation: Product development investment and product image

Proton needs to take measures like developing domestic technology, and rapidly launch new product and attaining cost leadership. In order to come up with new products, that achieve the target of development in speed, cost effective, product appeal, and better ride and handling, Proton moves to produce its own-design car and has invested a lot in R&D capabilities to create its own product brand- the Waja (GX) model. This strategy is to produce models that will compete in the same space as imports that qualify for tariff reduction under AFTA. As a result, Proton eschewed the use of existing Mitsubishi or Citroen chassis to design its own platform. With the exception of engines and transmissions, it is local in term of design engineering, and manufacturing. Waja makes its debut in September 2000 after 1.7 million man-hours of R&D effort over three years and investment of close to RM1 billion. A hefty RM600 million alone was spent to develop the platform for the Waja. It was the First Proton Model to be largely designed and engineered in-house. The Waja's high local content is perceived able to greatly reduce the company's foreign exchange outflows and royalty payments. Approximately RM400 million (US$105 million) would be saved on foreign exchange outflows by minimizing the import content for the car and a further RM500 million on royalty payments over the lifespan of the product. In addition, Proton could earn as much as RM450 million in foreign exchange inflows through exports. The car meets Euro III emission levels and new EU impact regulations (40% offset deformable barrier crash and 50km/h-side impact). Consistent with the introduction of Waja version 1.6, Proton is planning the production of the next models begin with extended version of Waja, GXM scheduled to be produced in the mid 2003, the next models line up including SCM24 in the third quarter of 2003 and SCM 44 in the first quarter of 2004.

Although, it is not yet clearly decided, Proton should think to replace its Wira range of passenger cars. Proton still may retaining the Wira brand name but only following a substantial increase in import of Malaysia engineering expertise involving the use of Proton's own camshaft profile (campro engines). The move will be a departure from Proton's practice of producing and branding variants of the Mitsubishi Lancer for Malaysian market. By using the Malaysian engine (Campro) can help bring down the costs by between 20 percent and 30 percent. The current Wira models consist of about 60 percent imported components, including gear and engine parts.

In order to enhance its brand image, coincides with the Waja's arrival, Proton introduces new marquee identity of gold tiger stripes[17] instead of crescent logo placed in the previous models. This is a part of a broader effort to strengthen the brand locally and abroad.

Complementary to this, Proton also moves a step further to produce its own new engine and EMS[18]. The EMS 400[19] has been produced in mid 2001, while both EMS700[20] and CAMPRO[21] scheduled to be produced on first quarter 2003. CAMPRO engines took just nine months from the drawing board to the first working prototype, against a typical industry period of 12 months, with collaboration between Proton and Lotus engineers. Proton also doing R&D collaborating[22] with Petronas Sauber Formula1 teams to come up with its own engines and car. Proton also has a network of alliance with Renault to produce GX 1.8 model engine and transmission. Network strategies alliance is very important to acquire new technology, marketing and resources acquirement and improvement. Proton made a major step in upgrading its engineering capabilities with the acquisition of Lotus Group International Limited[23], a British automotive engineering company and manufacture of luxury sports car in October 1996. With this acquisition, Proton gains a great engineering expertise, which will enhance them to improvise and come up with new models that are globally competitive and innovative.

Improving Research and Development (R&D)

Some US$23 million was invested in Computer Aided Design (CAD) and Computer Aided Engineering /Manufacturing (CAE/M) software before the US$255 million development program got underway for the company's fifth major model line after the Saga, Wira, Tiara and Perdana. The GX (Waja) platform enables can house various power trains and will spawn several models. It was developed on a modular blueprint (the finished car has more than a dozen modules including fuel tank, suspension, steering and doors) in 30 months with design-in help from 20 First Tier local suppliers. This current Waja model contains a local content ratio of about 80-90% in the first cars to roll off the assembly line with 1.6-liter Mitsubishi mated to either an automatic or manual transmission powers the launch model. The next version of 1.8 liter powered by a Renault engine, will be available both for domestic and export markets, in mid 2003[24]. In the second phase Proton will install its own engine into the car, making good on the Waja's description as the first true Malaysian car. Handling and suspension was engineered by Lotus, Proton's British subsidiary. Although facing the aging of the existing key products (LM, M-Car, and PF 41 models), the Wira model at present is seemed will be continued.

To enhance their design capability, Proton now have invested in a much faster and cost-effective alternative with the advent of Rapid Prototyping (RP), a relatively new class of computerized technology used for building physical prototype parts and tools. RP enables Proton to build prototype parts and tools directly from 3D CAD[25]data utilizing state-of-the-art Stereo lithography and Laminated Object Manufacturing machines. This is an important step in the process, simply because a rendering of a solid model communicates information 10 times more easily than engineering drawings. In a short period of time and with excellent detail, finish and accuracy, RP prototype is able to provide solution for new design concept. Proton invested more than US$100 million in a modern R&D facility, featuring the most advanced rapid prototype center in South East Asia, the only climatic chamber test lab in ASEAN and the only passenger safety sled in Asia outside Japan and Korea. Proton can also handle short-run productions of plastic and metal prototype parts with the modern technology such as the Homologation and Testing Department ensures domestically manufactured cars meet international standards before they are exported and sold[26].

RP sees to it that the product that gets manufactured eventually fits all engineering requirements. Here, the engineers will be able to measure cost savings and quality, and consequently make improvements to a product before it goes into mass production. This is obviously a highly specialized facility. In Proton, RP serves both internal and external customers. RP is also able to produce a prototype within an hour to two days, depending on the parts involved when it would take a traditional machinist or craftsman at least two weeks. Due to its ability to build prototypes in a very short timeframe, RP actually empowers the R&D Division to be more creative and be able to embark on varying degrees of experimentation in terms of product design and engineering. To improve its production capacity, Proton is planning to build its second plant in Tanjong Malim in the state of Perak and expected to be established in the first quarter of 2003.

Focus: Markets and distribution

Domestically, Proton already acquired about 65 per cent of the market share with the acquisition of USPD[27] and transformed it into Proton Edar in order to position itself closer to customers as its marketing strategy. Thus, domestic distribution and sales is being channeled through both Edaran Otomobil National (EON) and USPD, effectively turning them into competitors. Previously, these two sales operations sold different models. Through this new acquisition of sales and distributor company, Proton is directly accessible to enhance customer care. As for export markets, UK and Australia remains major export market[28]. Consistent to the existing exports market, Proton is developing the markets in the Middle East and other Muslim countries as well as in the ASEAN countries. Currently, Proton has CKD assembly plants in Iran (from August 2002) and China, India (with Hindustan Motors), and a joint venture set up between Proton Edar and PT Ningz Multiusaha in to assemble and distribute Proton vehicle in Indonesia is the first effort to penetrate the regional market.

Building World-Class Vendor-Procurement practices of Proton

Local component parts vendors also have important role to play. If Proton were to graduate into a global player, so too must its vendors. The tiering of vendors under modular approach adopted for the Waja is a step in the right direction. For the first time, 20 tier-one vendors designed and made components in collaboration with Proton engineers. By working closely with Proton and taking on more R&D, design and engineering responsibility themselves, these vendors can hasten the manufacturing process and improve on product quality whilst allowing the national car to better utilize its resources. In order to be competitive particularly consistent to AFTA challenges, vendors have to ensure every part or component supplied to Proton is consistently good[29] and reliable in use. Two main challenges to vendors are cost reduction and continuous improvement. Proton encourages and liaises with third party vendors, and in doing so, achieves two objectives. Firstly, encourages vendors to be more involved in the development stage of the process. Vendors are invited to work together with engineers on the design of new models. This saves time and ensures that market feedback is taken into account when new models are introduced. Secondly, this is a good opportunity for Proton to educate vendors. In this instance, design intricacies and development processes are explained, so vendors appreciation and learn about them. This leads to better cooperation among all parties concerned, and at the end of the day; engineering design objectives are achieved in a shorter timeframe. However, in order for vendors to be a partner in product development (design-in), vendors should achieve a certain level of capability.

Generally Proton could acquire the necessary inputs through three different activities, which are import, to manufacture in-house, and outsourcing from local suppliers. However, there are two major choices of procurement activities in which Proton could select either to import or to procure domestically. The decision is not only based on commercial considerations but technically competence to be sufficiently competitive. The further discussion only will examine the practices of procurement activities through local channels. Commercially, Proton would procure inputs from the cheapest and most reliable source. In other words, the alternative that provides the lowest price plus transaction costs to Proton will be selected. In regards to procuring parts domestically, Proton also find itself faced with the decision of whether to undertake a particular activity in-house or to outsource from its local vendors.

Procurement activity also could affect the benefits on local vendors. The decision to produce in-house or outsource will depend on comparative costs and benefits of the alternatives. Proton outsourced most of non-body and engine and transmission parts domestically from its vendors. Table 3, shows the 3 major items from each group outsourced by Proton domestically.

Table 3: THREE MAJOR PARTS PROCURED DOMESTICALLY BY PROTON

Type	Parts and Components
1. Engine	Flywheel, Engine Brake, Water pump
2. Power Transmission	Transmission casing
3. Electric & Electronic	Starter motor, Alternator, Wire harness
4. Brake	Disc brake, Booster, EHCU
5. Suspension & Steering	Steering column, Rack & pinion, Steering wheel
6. Wheels	Tire, Steel Wheel, Alloy Rim
7. Body	Door sash, Fuel Filler Door, Door Hinges
8. Direct Consumable	Sealant, Paint, Grease
9. Accessory	Air Conditioner, Radio, Reverse Sensor

Note: Proton only requested to list up to three items from each group, which it procured domestically.
Source: Field Survey 2002.

In order to be sufficiently competitive, Proton is very careful in its procurement practices. From the interview conducted with the Suppliers Sourcing and Technology (SST) department of Proton, this paper could concludes that Proton is very careful to place its investment if the local suppliers could supply the required quality and price accordingly. Fig. 1 provides the reasons of domestic procurement of Proton that gives very high ranking

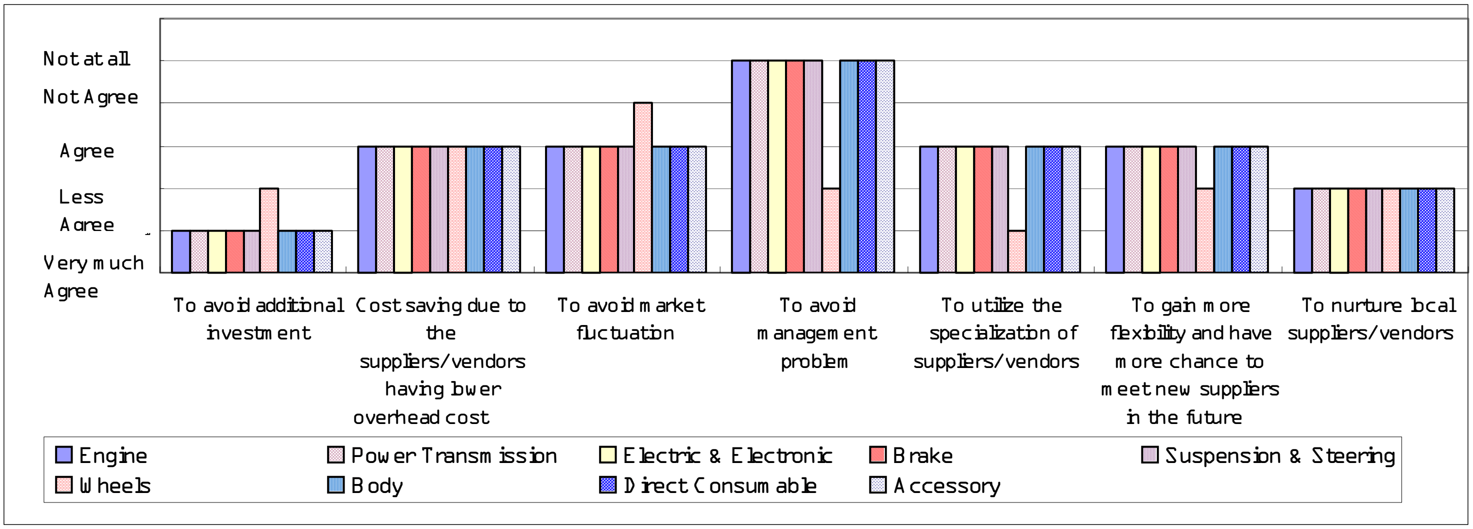

Fig.1: REASONS OF DOMESTIC PROCUREMENT THROUGH LOCAL OUTSOURCING

of additional investment in almost all categories of parts it outsourced except for wheels. This is very important as additional investment could lead to the increment of its parts and components overhead costs. Most of the automobile parts and components are very customizes items in its nature according to the models. Proton car's production also very limited about 25,000 cars for all models (Proton's Vendors Briefing, April 2002). Thus, this additional investment cost will bear by vendors, as they already possessed lower overhead costs and their own expertise. In other words Proton could help in nurturing the local vendors and helps them to increase their organization learning.

In case of domestic procurement, Proton is also very careful in vendor's selection. Generally, Proton must control the quality of their products in order to maintain high quality parts and components. This study uses an open-ended questionnaire to proton to enable it identify how they screen and select the vendors. Vendors undergo a very high-scrutinized process before them being appointed as suppliers. The result shows two of the major channels preferred and practiced by Proton in vendor's selections: (1) Searching through its own procedure and (2) vendors approached Proton directly. Although the role of the Vendors Development department of the Ministry of Entrepreneurs Development and introduced by Proton Vendors Association (PVA), but it were less preferable. Thus, vendors have to aware and familiar with all the requirements needed by Proton before they are appointed. Vendor's selection and developments taking time almost thirteen months before they could start the first trial production and followed by mass production. Typical lead-time for pre-selection of vendor to mass production stage is between 15 to 27 months.

Proton gets to know the suppliers by searching itself and from the introduction of suppliers themselves. Therefore suppliers have to present themselves and their products, which might not necessarily match the parts, required by Proton. The suppliers usually have good performance records, sufficient machinery, and experience in that particular production, good financial status and technologically competence. In order to examine how Proton scrutinizes its potential suppliers and also its existing suppliers, this research find that Proton prefers to use standard criteria commonly used as devices in the selection of vendors. Proton listed the criteria according to degree of preference as below:

Table 4: CRITERIA COMMONLY USED IN THE SELECTION OF SUPPLIERS

1. Technology (including tooling, design and development planning, and technology support;
2. QCD (Quality, Cost, Delivery);
3. Suppliers reputation (including mass production capability, ISO standards possessed, financial and management (strength);
4. Degree to build-team relationship and
5. Overall value improvement (including R&D capability, and VA/VE practices).

Source: Field Survey 2001, 2002

Criteria number 1, 2 and 3 were given top priority as usually practiced meant that 51-90 per cent of the time. While factors number 4 and 5 were occasionally practiced this meant that 21-50 percent of the time. Proton from the beginning gives much attention on QCD matters. The author asked Proton on what factor ii gives most attention among QCD, trust and technology, QCD has been opted as the most priority taken when it makes deal with suppliers. This priority was interpreted in its Supplier Chain Strategy Policy of Proton as: 1) Intense Competition – 4 Suppliers per Part Group; 2) Encourage New Capable Players; 3) Export 20-30% of Production; 4) 3 Years Contract with Minimum 3% per annum Cost Down (currently practiced by Proton) year on year; 5) R&D Center; 6) Innovation that gives Competitive Edge-Rewarded.

The result of the field survey also attest on the practice of long-term relationship between Proton and its suppliers to the fact that on-going or long-term relationships could reduce transaction costs, which are the cost of registration about the price and the cost of controlling the suppliers' quality and delivery. Moreover Proton still states that long-term relationships and regular orders make them more flexible than trying to specify a complicated contract. Proton is very sure that through this kind of relationship it could save cost and time to investigate and screen the new supplier candidate. It also could reduce the costs in controlling the suppliers in term of QCD. Through these relationships Proton is familiar with the supplier and dare to provide assistance in order to improve quality, reducing cost, efficient in delivery and assisting their development technically.

The interesting point is that the long-term relationship makes Proton more willing to provide some assistance to its suppliers in order to improve quality of parts and to reduce the costs of production. Due to the harsh competition in the final market particularly facing the market liberalization and tax deduction of AFTA, Proton has to reduce cost of production by improving their productivity as well as requesting their suppliers to reduce price in order to increase, or at least maintain their competitiveness. This research finds that Proton requested cost reduction, usually about 3 to 5 per cent, annually and the present practices recorded that Proton is cut the price 3 to 5 per cent per year automatically. Table 5 shows the request about Proton agreement in each aspect derived from long-term relationship.

Table 5: SOURCES OF PROTON'S AGREEMENT IN EACH ASPECT DERIVED FROM LONG-TERM RELATIONSHIP ACCORDING TO PRIORITY PREFERENCE

1.	Can save time and cost to investigate and screen the new supplier candidate
2.	Contributes to reduce the costs in controlling the suppliers in terms of quality, price and delivery (QCD)
3.	Makes Proton familiar with the supplier and dare to provide assistance in order to improve quality, reducing cost, efficient in delivery & assisting their development in technology capability
4.	Make it possible to establish more flexible purchasing system than specifies a complicated contract
5.	Can save time and cost to find new supplier
6.	Can make the solving problems become easier when supplier cannot satisfy the requirement

Source: Field Study 2000, 2001

Ingress[30] Business Response to AFTA

With the liberalization of domestic markets arising from Malaysia's commitments to AFTA and WTO, the local vendors too will face increased competition and hence will have to turn to foreign markets for their long-term survival. Liberalization of automotive trade may see Ingress's orders from its Malaysia buyer's decline slightly, but its orders from buyers in Thailand would increase their production. The region vehicle production would be consolidated, boosting production volumes and making more projects economically viable for Ingress.

Ingress is principally an investment holding company whilst its subsidiary and associated companies are principally involved in automotive component manufacturing, engineering services, power and electrical services and railway electrification. The range of automotive manufacturing and services offered are as follows: (1) Co-extruded Moldings[31] (Belt-line Molding, Quarter Moldings, Door Sash and Related Components, Rain Rails, Glass Guides, Bellows[32], EGR Pipe[33]) Weather-strips, Roof Drip Moldings, Windshield Moldings; and (2) Complete Door-in-White[34], and Apron. As at 15 January 2001, the Ingress Group has a total of 827 employees[35]. To date Ingress has 5 associate companies namely IESB, IPSB, IRSB, IAV, ITSB.[36] If ASEAN automobile trade is liberalized, how will Ingress be affected? The answer is complex, as it will simultaneously assist and disadvantage the company in different ways.[37]. In line with these risks, Ingress has given priority to put challenges in term of QCDE I[38] - (Quality, Delivery, Cost, Environment, and Innovation) by looking inward, including maintaining its competitiveness technologically, in terms of cost efficiency, products and services quality and reliability of the company by utilizing all expertise possessed by Ingress. Looking forwards, including maintaining the relationship with its customers domestically, and diversifying its customer base especially through joint venture and searching for niche market domestically and regionally.

Facing the Challenges

Ingress should response carefully and appropriately particularly related to the new trends brought by new approach of what so called world car projects. As parts and components supplier, Ingress should able to read and define these challenges and transform it into strategies. World car projects are a new trend that is related to parts and procurements concepts summarized as follows: (1) Common design for all cars to be manufactured, (2) "Design-in" supplier will jointly design the parts. QCD and VAVE issue will be taken-up in the design stage, (3) Consolidate effort in the development-able to reduce the development period from 3 years to less than 1 year, (4) Nominated supplier must have affiliate companies in the production location for parts production, and (5) Utilization of local inputs: materials and tooling.

QCD matters are very important issue to look upon and highly emphasized by Proton and other Ingress's buyers. QCD challenges faced by Ingress could be summarized as follows:

(1) Quality: Comply to the world standard e.g. for the rejection, it is 40 PPM (Toyota target is 10 PPM); compliance to the world quality system e.g. ISO 9000, QS 900 and ISO 14000; additional compliance to specific quality standard awarded by the buyers; and continuous improvement on quality level including Value added/value engineering (VAVE) activities.
(2) Cost: Including incorporating local value added; comply with the basic costing requirement "standard costing"; and including future cost reduction in costing proposal.
(3) Delivery: 100 percent achievement to "on-tine" delivery; availability of a comprehensive material ordering; production planning; and delivery tracking and stock control system; and complying ability to the electronic ordering and invoicing system e.g. EDI and able to meet the sudden increase in volume.

This is supported by the research result provided. 28 suppliers or 36% out of 78 respondents (100%) agreed that price and quality are very important and highly emphasized by Proton. 17 of them or 22% agreed that prompt delivery is the third criteria that paid high attention by Proton. On the other hand, three most important aspects considered by Proton that being the primary and major priority are QCD, Uninterrupted Supply and Technology; while Proximity is given secondary (less important but not trivial) priority.

Reputation and Capability Building.

In order to accelerate its reputation among the customers, Ingress is working hard to achieve certain standard in its products. Some of the main achievements are tabled in Table 6.

Table 6: MAIN CERTIFICATION ACHIEVEMENT OF INGRESS

M.S. ISO 9002 Certifications
• Ingress Engineering Sdn. Bhd. & Ingress Precision Sdn. Bhd. • 1994 Quality Systems – Models for Quality Assurance in Production Installation and Servicing awarded by SIRIM QAF in 1997 for the manufacture of moldings and weather-strips
QS 9000 Certification to IAV
•Awarded the QS9000 in 1998 and ISO 9002 by 1994 certification respectively by TUV Anlagentechnik GmbH, a certification body in Germany since 1999 – for manufacturing of molding parts and door sash.

Source: Field Survey 2002

Maintaining Major Buyers/Searching Potential Future Buyers and Niche Market

The major customers of Ingress together with the number of years of relationship and the contribution of each customer to the company's turnover for the financial year ended 31 January 2000 are as shown in Table 7. Although it's seemed that Ingress is dependent on four major buyers, Ingress has tendencies to maintain its favorable position in the domestic market, whilst diversifying its customers especially in the fast growing ASEAN market. Additionally through IRSB and TSSB two of the Ingress's subsidiaries, Ingress are actively participated in providing engineering services to the sub-sector of industrial automation, computer aided design and manufacture (CAD/CAM) of jigs, tools and dies. Given this scenario, Ingress is successfully maintaining its favorable condition in domestic market and penetrating ASEAN markets through long-term relationship with the current customers.

Table 7: MAJOR AUTOMOTIVE BUYERS as for JANUARY 2000

Customers/Buyers	Length of relationship	Contribution to Ingress's Turnover (%)
Proton	8	26.8%

Perodua	5	11.9%
AAT,	3	2.8%
Thailand	3	3.1%
MSC		
Thailand		

Source: Field Survey 2001 and 2002

Maintaining Advantages vis-a-via the Competitors

Ingress uses steel roll-forming and large steel pressing technologies to produce the parts: co-extruded moldings, door sash, bellows, and door-in-white assembly. At present level, Ingress is achieving some advantages particularly on market and technological levels in order to position itself as one of the regional in its product specialization (Table 8). Currently, Ingress is capable to maintain its position in its main products competitively. This position has been enhanced by a few strategies taken in the domestic and regional markets. Table 5 (p9) shows how Ingress has maintained its domestic and regional buyers through a long-term relationship. As a result of new collaboration with its technical provider cum its joint venture partner, (Katayama), Ingress has achieved some new development in penetrating the regional market. Ingress presently supplies door sash for the Ranger/Fighter pick-up truck produced by Auto Alliance Thailand (AAT) Thailand since its launch joint venture with Katayama that already a Mazda's supplier for the parts in Japan. Regarding co-extruded moldings, Ingress is a potential supplier candidate for AAT in near future, as AAT currently does not apply bellows on either its petrol or diesel pick-ups. In the long term, its seem that Ingress remain a candidate to supply new programs which emerge from AAT based on the current development and good relationship with. General Motors (GM) also has awarded the roof ditch moldings contract to Ingress for the new-aborted Astra passenger car. Katayama supplies bellows to GM in the US. Isuzu currently is emerging as a key buyer for Ingress in Thailand. Ingress and Katayama have won a contract to supply co-extruded moldings for the 1190/GM355 worldwide model. Katayama is the worldwide development source for bellows for the model, and Ingress is supplying the Thailand volume. These two contracts will cause Ingress to double its investment in Thailand. Ingress also supplies co-extruded moldings for the L200 (TOACS also supplies Mitsubishi with co-extruded moldings). Mitsubishi sources the door sash for the L200 model from SAB, the two companies have also relations and SAB is likely to supply door sashes for the future models. Mitsubishi granted Ingress a mandate to supply bellows for its L200 model. Ingress from the beginning has had a relation with Nissan in Thailand. Nissan is started opening to new suppliers, including Ingress, for the future contracts for these parts. In addition to these automakers, Toyota Thailand is expected to remains its traditional suppliers in Thailand for the next few years at least, and the chance of Ingress supplying Toyota soon is small. At present Toyota Thailand sources co-extruded moldings from TOACS, door sash and bellows are imported from Japan.

Table 8: INGRESS'S POSITION AMONG ITS COMPETITORS

Competitors	Remarks
1. Automotive Industries Sdn. Bhd. ASB is a producer of exhaust systems in Malaysia, supplying Proton and Perodua.	
2. ASAB Thailand SAB produces varieties of stead auto parts in Thailand, including door sashes for Mitsubishi and Nissan.	Ingress's roll-forming line comprises of 43 stages, where as SAB's only 18 stages. This allows Ingress to produce more complex door sash designs for use in a wide variety of vehicles; SAB is limited to supplier designs as used on pick-up trucks.
3. TOACS Thailand Co-extruded company in Thailand	Besides Ingress TOAC is the only other company in ASEAN producing steel/PVC co-extruded moldings.

4. Calsonic, Japan Produces exhaust system in Thailand	
5. Hashimoto, Japan Japan's leading producer of door sashes.	Not indicated it intends to establish operation in ASEAN.
6. OM cooperation, Japan Suppliers door sashes to several automakers in Japan	Not indicated it intends to establish operation in ASEAN.
7. Nishikawa Rubber, Japan and Thailand Japan NR produces both steel/rubber and steel/PVC co-extruded moldings, but in Thailand just steel/rubber moldings.	Presently (2002 no indication to expand its Thailand operation to produce steel/PVC moldings.
8. Shiroki, Japan A components maker produces door sash and co-extruded moldings. Operated also in Vietnam – Vina Shiroki	Has no operations or partners in Thailand or Malaysia and gave no indication that they will be established.

Source: Field Survey 2001 and 2002

Domestically, Ingress has supplied Perodua the second Malaysian automaker since 1996. It presently supplies co-extruded moldings, door sash and door-in-white assembly for the Kancil model. The two companies have close relationship: Ingress Technologies was established for the purpose of producing door-in-white assemblies for Perodua, and it's 30 percent owned by the automaker.

Table 9: CURRENT MARKETING POSITION OF INGRESS

Automaker/Buyer at domestic level	**Parts supplied**
Proton	Co-extruded moldings for Perdana, co-extruded moldings and door sashes for Wira.
Perodua	Co-extruded moldings, door sashes and door-in-white assembly for Kancil, and fenders, door-in-white, tailgate and hood for Kenari model.
Automaker/Buyer at regional level	
AAT, Thailand	Door sash for Ranger/Fighter pick-ups
GM, Thailand	Roof ditch molding for Astra model
Isuzu, Thailand	Co-extruded moldings for 1190/GM355 model
Mitsubishi, Thailand	Co-extruded moldings for L200 model
Nissan, Thailand	Potential supplier for co-extruded moldings
Toyota, Thailand	Potential for door sash and co-extruded moldings

Source: Field Survey 2001 and 2002

It secured contracts to supply fenders for Kancil model, and door-in-white assembly, tailgate and hood for the second car model. As for Proton, Ingress currently supplies co-extruded moldings and door sash for the Waja model. Table 9 providing the summary of the current position of Ingress in the domestic and regional market. This result shows that, the strategy to venture to a new niche regional market in Thailand with Ingress's technical provider-Katayama was fruitful particularly to establish its production and market base in Thailand as a hub of ASEAN automotive industry.

Technological Internalization

Ingress places much emphasis on quality, both in its products and services. This is reflected in a number of accreditation and rewards achieved/obtained to-date such as the ISO 9002 and QS 9000 in 1977 and 1998 respectively. (Table 6 p10). All standards procedures are guided by the principles of Total Quality Management (TQM) in accordance to the requirements of ISO 9002 and QS 9000. R&D is well emphasized by Proton in particular, on its suppliers and the same concern is applied in Ingress. These certificates cover the area of manufacturing of moldings and weather-strip as well as door sash. Undertaking the important of R&D, Ingress has established a wholly owned subsidiary namely IRSB in 1996, to undertake all the R&D jobs. Ingress has invested RM 4.3 million including in providing the CAD and CAE/M between the years 1997-2000. On-going technical assistance with Katayama Kogyo of Japan and presently Ingress has on-line data transfer and consultancy that would pave the way for joint development and work sharing. IRSB or presently known as ITC possesses mechanization including semi and fully automation besides fully robotic mechanization[39]. In addition to this, ITC is going to have its own fabrication not only in Malaysia but also within ASEAN region including fitting and assembly at customers' site. In term of quality, Ingress should strengthen competitiveness by setting high quality standards and competitive cost. In particular, Ingress has successfully achieved parts quality level to comply with the world standards- e.g. 40-PPM[40]. Through various internal engineering, Ingress has achieved compliance the world quality system- various ISO standards as well as accredited with various Protons' award[41].

Marketing and Building Network of Technical Alliance

Ingress possesses technologies that scarce in ASEAN. Steel roll forming is applied in both its co-extruded moldings and door sash operations. Co-extrusion, flocking and stretch bending technologies are employed in the manufacture of moldings; sash operation requires various welding technologies including seam and plasma welding, as well as a rotary-bending process. Strategically, the focus on specialization for rolls forming, extrusion/stamping, and to build own and internal expertise in product development and product extension for these related specialization seems reasonable. In order to acquire adequate forces to build its own internal stabilization, the collaboration with existing technology provider-Katayama Kogyo of Japan[42], has been enhanced. As a result of this long-standing and stable relationship, Katayama advanced its commitment from being merely the technology provider for Ingress, by being the partner of the company by acquire 10 percent share in Ingress Precision. On a long-term basis, both companies endeavor an international operation for the Southeast Asian market with the establishment of Ingress Autoventures (IAV)[43] with Katayama provides 23 percent of share to tap into domestic and export markets in Thailand. As a parts and components supplier, Ingress's localization in Thailand would reduce cost and limits exposure to currency fluctuation- one of the challenges that vulnerable to Ingress. Currently, Ingress is the suppliers for Mitsubishi Sittipol Corporation (MSC), Isuzu Manufacturing Corporation Thailand (IMCT), and Honda Automobile Thailand Company (HATC)[44]. Thailand market is very important to Ingress as the gate to penetrate ASEAN's market.

Technologically, through partnership, Katayama developed the manufacturing processes used by Ingress. The automated facility installed in its manufacturing plants ensures consistency in product quality whilst minimizing rejects. With the assistance of Katayama, Ingress has modeled its productivity and quality standards after those of Katayama. Regular technical audit were held jointly in Malaysia to establish Ingress's capabilities and measures were taken under the supervision of Katayama so that improvement targets are met. This systematic approach in transfer-of-technology has been instrumental in the rapid progress of Ingress. In summary, the key benefits of Ingress relationship with Katayama are: (1) Up-to date technology; (2) Access to global contracts; and (3) Acquire broad customer base.

Conclusion

Business collaboration in the auto sector is also extending beyond partners to include competitors. However, Proton may not yet reach this point at the moment. The same also applied to vendors. They may collaborate with their technical provider into strategic alliance and explore the new niche market and new product development. Even if both Malaysian automaker and vendors are not willing to trade its equity for technological or market gains, they should expedite the search for compatible global partners that have strategic and synergistic fits with its aspirations. Domestically, Proton has the advantage in terms of dominant market share and well-established distribution and service network. This status quo will remain for the next three years at least, following Malaysia's deferment to 2005 of market opening measures for the auto sector under AFTA. But there is no guarantee that Proton car's dominance in local scene will not be threatened beyond that date. It is becoming increasingly clear that trade and market liberalization will have significant implications on how business is done in a globalize market and the automotive sector is no exception. Liberalization will cause some firms- especially the inefficient and weaker ones-to collapse at the expense of stronger ones. To meet the challenges of liberalization, it is imperative that Proton and vendors link up with the best players in the automotive business. A strengthened Proton and vendors both financially and technologically-will definitely be better positioned to reap the benefits of trade and market liberalization.

The additional timeframe, which Malaysia's has gained from a delayed entry into AFTA, should also put to good use. Getting into and nurturing any sort of alliance and technological internalization takes times as it involves building trust into relationship and internal capabilities building. Both Proton and vendors should move fast to identifying the right partners for collaboration and the right technical expertise to acquire, in order for both strategies to capitalize effectively on the breathing space they have been given to prepare for open competition in the future. Thriving under a protected regime in the long term is not the answer and unless efforts through alliance and upgrading the technology while venturing to new niche market are created, it is unlikely Proton and its vendors will continue to enjoy the dominance it presently hold in the domestic market. As for both Proton and suppliers, the ultimate test will come when protectionist measures are removed. The latest spate of achievements has undoubtedly placed the national automobile industry in a much better position to compete with its established contenders. Yet, the risks associated with doing it alone can be significantly lowered if the players were to enter into strategic and technologically tie-up for win-win situation. To be cost-competitive and efficient in facing the challenges of liberalization, both Proton and vendors may have to collaborate at various fronts. Some examples as already discussed including joint R&D, product development, venturing into the use of more common parts and components, combined purchasing strategies and complementation through specialization in production and supply as well as accurately venturing into the new niche markets beyond domestic level.

This study found that among Proton's strategies are (1) Attaining cost leadership and differentiation strategies by improving the R&D sector and accelerating investment in product development, (2) Exploring new niche market and alliance in order to expand the distribution channels, (3) providing new brand images to accelerate public confidence and brand loyalty in the domestic and international market, and (4) Diversifying parts and component sources and selecting reputable suppliers would help in achieving cost reduction effort of the company, and creating strategic alliance to improve technical capability as well as to penetrating new market and acquiring faster transfer of technology and technical-know-how. Local vendors also have to follow the steps taken and advised by Proton as they also depend the market on Proton cars at least until they also could graduate to be regional players. Tiering of vendors for components parts supply is already the norm among global auto markets. And unless Proton has a core group of reliable vendors that can supply it with high quality components parts at competitive costs on a timely basis, Proton may be forced to look elsewhere to fulfill its dream of becoming a truly world-class player. As for Ingress, these main strategies perceived workable: (1) To establish itself as an ASEAN based regional player by winning more customers with regional reach, (2) To rationalizing its operations particularly technological internalization efforts and embark on continuous improvement programs in Malaysia and Thailand to increase its competitiveness, (3) To look at the possibility penetrating of direct exports to other assemblers outside and within ASEAN, such as Japan (possibly through strategic alliance with Katayama), and the growing markets such as in India and Turkey; and (4) To participate actively in global bidding of projects in partnership with Katayama. In general, local suppliers are suggest to have two major choices to enhancing its technological capability: (1) To work with their technical counterpart (through new collaboration in order to tap both technical expertise and market opportunities at regional level, and, (2) To speed up technology learning and release their dependence on technical provider by enhancing their in-house R&D capability. By this way, they could gradually implant the technology learning and decreasing royalty payment as well. The problem is, establishing in-house R&D is not an easy job and needs high capital and time consuming. However, they could position themselves to be second tier suppliers for the time being and gradually increase their organizational learning to speed up their capability to be the first tier supplier. They should learn carefully from the buyer's development planning on supplier development and outsourcing trend to accurately position them in this industry.

The results of this study is supporting Porter's generic strategies which found that cost leadership through enhancing R&D, outsourcing practices to access cheaper inputs, and product development, would be the choices for business strategies to be practiced by both automaker and suppliers. The third strategy, focus, was found supporting the former strategies through exploring niche market; increase public confidence and venturing with new partner in marketing. For the same purpose, differentiation strategy supported by organizational learning on technological improvement and R&D would help them to come up with new brand image and new product development. This study suggests that both cost leadership and focus in niche market be highly supported by differentiation practices in order to make the main strategies more workable. The results also suggest that, the sources of competitive advantages are many, and firms need to find that fits with its business strategy. Base on the firm’s own resources and capabilities, it could provide a basis for their business strategies.

References

[1] Abdullah, Rashid. (2002). Automaker-supplier relationship: Intra-firm and inter-firm technological linkage in the Malaysian automobile industry. In Abu Bakar, Engku Muhammad Nazri. (Ed.), Proceeding of National Seminar in Decision Science. School of Quantitative Science, Sintok: Universiti Utara Malaysia. pp. 64-73.

[2] Abdulsomad, Kamaruding. (1999). Promoting industrial and technology development under contrasting industrial policies. In Jomo, K.S. , Felker, Greg. , & Rasiah, Rajah. (Eds.), Industrial Technology Development in Malaysia. London: Routledge.

[3] Ali, A. (1992). Malaysia's Industrialization: The Quest for Technology. Singapore: Oxford University Press.

[4] Bamberger, L. (1989). Developing competitive advantage in small and medium-size firms. Long Range Planning. Vol 22 (5), pp. 80-88.

[5] Bowman, C. (1992). Interpretive competitive strategy. In Faulkner, D. , & .Johnson, G. The Challenge of Strategic Management. (Eds.), London: Routledge.

[6] Dess, G.G. , & Davis, P.S. (1982). An empirical examination of Porter's (1980) generic strategies. Academy of Management Proceedings, pp. 7-11.

[7] Hensley, M.L. , & White, E.P. (1993). The privatization experience in Malaysia: Integrating build-operate-own and build-operate-transfer techniques within the national privatization strategy. The Columbia Journal of World Business. pp. 69-82.

[8] Humphrey, John. (1999). Globalization and supply chain networks: the auto industry in Brazil and India. In Gereffi, G. (Ed.), Global Production and Local Jobs. Geneva: International Institute for Labour Studies.

[9] Malaysia Industrial Development (MIDA). (1986). Various Publications. Kuala Lumpur.

[10] Md.Zabid, M.A. Rashid. (2000). Business strategies and competitive advantage factors in the electronics industry. Journal Pengurusan. Vol.19. pp. 27-39.

[11] Porter, M. (1980). Competitive Strategy. New York/London: Macmillan Press.

[12] Proton Corporate Information. (2000). Shah Alam: Proton.

[13] Rasiah, R. (1998). Regulation and market structure of South East Asia's car industry. Kuala Lumpur: Institute of Malaysia and International Studies. (IKMAS), University Kebangsaan Malaysia.

[14] Rasiah, Rajah. (1999). Liberalization and the car industry in South East Asia. Occasional Paper #99, Department of Intercultural Communication and Management, Copenhagen: Copenhagen Business School.

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End Notes

[1] Malaysia, for example, 'initiated' a national car project in the early 1980s.

[2] Article 5 of the CEPT agreement makes it mandatory for countries to remove any qualitative restrictions and other NTBs for products already included in the CEPT scheme for AFTA. Among the NTBs faced by the private sectors are: discretionary import licenses; custom uplifts; delay in clearance of goods at custom check points; the need to comply with differing national products standards and rules and regulations. All Quantitative Restrictions (QRs) such as quotas, licenses also will be eliminated.

[3] CEPT (http://www.asean.or.id/economic/afta/afta_ag2.html) scheme for AFTA list. Retrieved on 1st August, 2002.

[4] As per status of the tariff reduction as of January 1, 2002, 98.4 per cent of the total tariff lines (products) for the original six member countries are already in the Inclusion List of the CEPT Scheme for tariff concessions. Of this 96.2 per cent have duties between 0-5 percent. Individually, the percentage of products at 0-5 per cent is as follows: Brunei-99.8 per cent, indonesia-99.1 per cent, Malaysia- 90.8 per cent, Philippines- 96.3 per cent, Singapore- 100 per cent, and Thailand- 94.8 per cent.

[5] Products in the TEL can be shielded from trade liberalization for a temporary period only. These products will have to be transferred into the IL and be subjected to tariff reductions until tariff reach 0.5%.

[6] Products in the IL are those that have to undergo immediate liberalization through reduction in CEPT tariff rates, removal of quantitative restrictions and other NTBs. Tariffs on these products should have been down to a maximum of 20% by 1998 and to 0-5% by 2000.

[7] Mitsubishi Motor Corporation (MMC) 15%, Mitsubishi Corporation 15%, HICOM 70%.

[8] Vendor is Malaysian term of supplier.

[9] The new definition for the small companies are companies who have 50 workers and less; and annual sales of not more than 10 million. While the medium companies are companies that have less than 150 workers and annual sales of not more than RM25 million (Berita Harian, 1998).

[10] The integrated sales of this region would be the fifth in the world by the year 2005-ARA.

[11] GM has invested 750 million in Thailand to open up a base. Volvo has already negotiating with local Thailand companies to open a base. Comparatively, their investment in other ASEAN countries rather low due to the flexibility and trade regulation that is not so tight in Thailand compared to others in ASEAN.

[12] Proton's vision is to become a successful Malaysian automotive engineering and manufacturing company globally by being customer oriented and producing competitively priced and innovative products.

[13] Proton models line up includes Saga, Iswara, Wira, Satria (including Satria Gti), Perdana V6, Tiara, Putra, and Waja, which comes on various body sizes ranging from 1.1, 1.3, 1.5, 1.6, 1.8 and the 2.0 liter engines. Models Wira and Perdana which are largely Mitsubishi designs, Tiara which is Citroen design, and Satria and Putra which are Malaysian redesign variants of Wira, and the latest Waja is purely Malaysian engineering and design. Proton has also acquired Lotus Engineering of Britain, and has since manufactured the Elise model (sport classic model) in its Shah Alam plant).

[14] Less than 10 per cent of its total sales: Proton Corporate Information, 2000.

[15] As far as product development is concerned, Mitsubishi plays a very important role in engines and transmissions as well as body structure design. Meanwhile, Lotus, a subsidiary of Proton, is contributing its expertise to Proton's existing model line, especially in area of ride, handling and noise vibration.

[16] According to a survey conducted by JD Power and Associates of United Kingdom on Cars Customer Satisfaction Index Study in 2000, in term of vehicle quality and reliability, Proton should give priority to these items accordingly: power window and locking system; no.2. Seats; no.3. Rear parcel shelf; no.4. Rust/corrosion; no.5. Heater, air con. & Ventilation; no.6. Sunroof; no.7. Mirrors; no.8. Water leak; no.9. Carpet; no.10. Fuel gauge; and no. 11. Wipers for almost all of its models sold in the UK.

[17] Previously three different logos were used in the domestic, European and general exports markets. The new logo- the "Proton's Mark of Pride" will singularly represent the Proton brand in all domestic and international markets. A shield shaped badge featuring the Proton brand name and a tiger head, to portray the power of a single idea: "The Spirit of Achievement." The symbol can be interpreted through a number of levels, all pointing to the ideas of pride, leadership and performance. The diamond shape, derived from Proton's very first top mark, and the color scheme maintain a sense of continuity with the past and are symbolic of the Proton's pride in its achievements. The tiger head is a reference to the two tigers displayed on Malaysia's coat of arms and conveys national heritage. It is a reference to Malaysia's origins and clearly communicates Proton as a national project.

[18] EMS stands for Engine Management System i.e. the electronic control unit of the engine to determine engine tuning for fuel, air mixture, etc.

[19] EMS 400- electronic control unit for current Wira engine coded as 4G1 developed with Siemen VDO.

[20] EMS 700- electronic control unit for CAMPRO engine developed with Siemen VDO.

[21] CAMPRO is Proton's newly developed engine with LOTUS, ranging from 900cc to 2.2 liters V6.

[22] Proton also working with SIRIM to develop high-tech, low-cost engine components, as well as with PORIM to developing alternative fuel using palm oil. The agreement for this has been signed on 24 August 1999. In addition, Proton also works for hybrid technology to effectively reduce engine emissions.

[23] Proton purchased 80 per cent of lotus from URL http://www.britain.org.my/trade/sector-summary/automotive.htm

[24] GXM model –an extended model of the currant GX.

[25] CAD (IBM's CATIA) and computer system also ensures effective data transfer and communication between Proton and its vendors and other related companies.

[26] For instance, if a Proton car were to be sold in Europe, the model would have to be homologated to comply with European design and engineering specifications, as well as legislative requirements, before the car was allowed to go on the road. Development testing spans the full spectrum – static, running, turning, braking and all other aspects of drive ability – to ensure that in-house requirements are met. Other tests include emissions, noise, engine power, safety and strength, which forms part of the more comprehensive crash test. All aspects of testing are simultaneously taken into account during product development. In most cases, development testing is more stringent and severe than homologation testing.

[27] Proton owned 100 per cent equity; business activity is sales of motor vehicles and related spare parts and accessories.

[28] As at September 2000, total export to UK was 124,380 cars and Australia are 14,814 cars. International Business Division, -Proton Corporate Information, 2000.

[29] "Good" according to Proton's standard means not only meeting the specifications, but surpass them.

[30] Business vision of Ingress is "To be a leading ASEAN-based automotive components manufacturer by winning more customers with global reach utilizing and optimizing state-of-the-art technology. It was founded in May 1991 and incorporated in Malaysia under the Companies Act, 1965, on 9 August 1999 as Ingress Corporation Sdn. Bhd.

[31] IESB-Co-extruded moldings are parts made from extruded polyvinyl chloride ("PVC") over a roll-formed steel core. The moldings are generally used to seal around windows, doors and other gaps or joints in the vehicle's exterior.

[32] IAV-Bellows- (also known as flex joint) is a component of the vehicle exhaust system which, being flexible, absorbs engine vibration. The bellows comprise a roll-formed steel tube surrounded by braided steel. Production of bellows shall commence in 2001 for supplying MSC pick-up trucks and GM/Isuzu models in the following year. Its technology source and partner, Katayama, presently manufactures bellows in Japan. Bellows are supplied either directly to the automaker or to the automaker's exhaust system supplier, depending on the automaker's preference. Bellows tend to be employed only when vibration suppression is of great importance, such as on medium/upper-level passenger cars, and commercial vehicles (including pick-ups) with diesel engines.

[33] EGR Pipe-Exhaust Gas Recirculator Valve (EGR) pipe is another new product of Ingress. It is a metal pipe with a "bellows" feature at its center used for recirculating the exhaust gas from an engine to the intake side in order to achieve a reduction in emission level of nitrous oxide (a harmful component in the engine exhaust) to the environment.

[34] IRSB-Complete Door Assemblies (Door-In-White)-At present Ingress uses its press line and hemming machinery to produce the door-in-white, a complete door assembly consisting of outer and inner door panels and door sash. It has the ability to produce a variety of other large steel parts that its customers may wish to outsource in the future. These are all high-value parts, and are used on every vehicle.

[35] Management 75, Executive 100, Clerical jobs 63, General workers 589.

[36] IESB-Ingress Engineering, IPSB-Ingress Precision, IRSB-Ingress Research, IAV-Ingress Automotive Venture (Thailand), ITSB-Ingress Technology. (Ingress Prospectus dated 22 January 2001).

[37] The risks include constraints in labor supply, the possible increase in the operating and capital costs due to increase in labor supply, changes in economic and business conditions, foreign exchange rate fluctuations, increase in the prices of the imported and local components, unfavorable changes in government and international policies, the introduction of new and superior technology or products and services by competitors.

[38] Quality including targeted reject part e.g. PPM-parts per million, warranty and market recall, reputation, etc; Delivery means has to be near to customer, to be global suppliers and put the company's product presence everywhere in the industry; Cost including yearly reduction, penetration pricing, cost saving program, etc.; environment- recycleability and deletion of PVC, towards pollution free products, etc.; and for Innovation including to follow the innovative trend in the industry for example all-aluminum construction, etc.

[39] ITC own product are robotic, plasma welding, MS cutting, dust collector, anti rust spray and turkey molding line. With all this, ITC is adequately provides the service to Ingress.

[40] PPM denotes that rejected parts per million; Toyota target is 10 PPM. This data is acquired from the author's recent case study at Ingress- April-May, 2002.

[41] Accredited various automaker's awards-Most Improved Vendor in 1996; Most successful customer award 1997, Product Development awards 1996, etc.

[42] Katayama is a shareholder of Ingress (IAV Thailand-23 percent and IPSB (Malaysia) -10 percent) and Ingress's main source of technology and one of Japan's largest producers of roll-formed automotive components, including co-extruded molding, door sash and bellows.

[43] IAV operated since 1998, manufactures and supplies roll-formed plastic moldings and weather-strips as well as roll-formed metal automotive door sash and related components in Thailand.

[44] Sash COMP, R/L FR DR UP; sash R/L FR DR, and CTR LWR.

Changes and Challenges in the Airline Industry in China

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Abstract

When the People's Republic was founded in 1949, the aviation sector was barely able to raise a blip on the radar screen. Only 36 airports existed and facilities were so crude even an aircraft as small as a DC-4 could land only in Shanghai, Nanjing or Guangzhou. Today, aviation is one of the largest growth industries in the country. During 2000, a total of 133 million passengers flowed through Chinese airports -- 119 million local, 14 million international -- for an increase of 11% over the previous year. Recently, CAAC (Civil Aviation Administration of China) declared and is actively promoting a consolidation/restructuring among the Chinese airline companies, combining and reorganizing 10 airline companies under three major airline groups headed by Air China, China Eastern and China Southern. All these and other similar efforts are parts of the transition of the China airline industry, as China becomes a member of WTO.

Introduction

Airline industry in China developed very rapidly over the last 50 years, as domestic routes increased from 12 to 1,115 and international routes increased from nine cities in five countries to 64 cities in 34 countries. [http://www.cs-air.com and http://www.caac.gov.cn] Until 1979, air travel was still quite rare. There was only one airline, and the airports and airspace were controlled by the military. Flight control equipment such as radar was primitive and bad weather grounded many flights. The late Deng Xiaoping gave the all clear for the civilian arm of government to take over air travel, enabling the Civil Aviation Administration of China (CAAC) to oversee the creation of numerous competing airlines and triggering a rush by cities to build airports. During the last two decades, more than 40 new airports were built and more than 60 were upgraded and expanded. During the last five years alone, 17 more new airports were built and 33 existing ones were upgraded.

In 1978, China ranked 32nd among ICAO-covenant countries in passenger volume and ranks 6th today. In overall volume, it ranked 37th in 1978, and ranked 10th in year 2000. [http://www.uniworld.com, March 30, 2001; *Reuters News Service*, November 2000] In 1999, there were 1,115 routes, out of which 987 were domestic (22 were Hong Kong and Macao routes) and 128 were international and, during the first half of the year, the passenger traffic increased 5.9%, over the previous year, to 60,940,000 passengers, with 54,630,000 via domestic routes (3,760,000 via Hong Kong and Macao routes), and 6,310,000 via international routes. The increases in each of the routes respectively were 4.5%, 22.3%, and 20%. During 2000, a total of 133 million passengers flowed through Chinese airports -- 119 million local, 14 million international -- for an increase of 11% over 1999. [http://www.caac.gov.ch/tjxx/99-6.htm; http://www.caac.gov.ch/tjxx/99-5.htm; Asian Economic News, 2001] According to a recent analysis and findings of a report published by the China Aviation Industry [*Zhongguo Jingji Shibaao*, November 7, 2000], it is estimated that the passenger volume of China's air transportation will grow at an average annual rate of 8.5% between 2000 and 2019, reaching the annual volume of 438.7 billion kilometers, at a higher rate than the projected growth rate of the global air transportation industry during the same period.

The typical evolution of the airline industry involves an initial development of trunk routes to economically advanced large population areas followed by development of "Regional Aviation" in lesser-developed regions, once the trunk route traffic has reached a certain volume. This is no different for the China Airline Industry. However, until recently, factors as geography and distance, and economic disparity among regions (especially coast regions vs. western areas of the country) limited the ability of Chinese carriers to establish efficient hub-and-spoke systems-based on essential scope and scale efficiencies-that have been so effective in the United States and in Europe. In 1999, there were only 160 (about 17% of China's total number) air routes between cities less than 350 miles apart, and currently, Yunnan and Xinjiang Provinces are the only ones that have "Regional Aviation" systems. Only 62 aircraft (with 70-seats or less) is used in the “Regional Aviation”, representing approximately 12% of nations civil transport aircraft. However, latest CAAC figures show the total number of presently planned purchases of regional aircraft by China’s airlines to be 200, which signal the emergence of a fierce contest for the China’s domestic regional aviation market, and for over 1000 new affluent population centers that are expected to emerge within the next 15 years. This upsurge in regional aviation further demonstrates the continuing development of China’s civil aviation market and signals that such development has stepped onto a new stage.

One of the major limitations to the airline industry’s growth is the lack of availability of airports and the related infrastructure that is required for the airlines to provide the air transportation services. During the latter part of 2000, there were approximately 700 large-to-middle size cities in China, with less than one-fourth of which had an airport. A survey of 40 countries showed that, on the average, there are 2.08 airports per 10,000 km^2 in these countries, as compared to China’s 0.127 airports. Over the past 20 years, China built or expanded over 70 airports in order to create an international and domestic network of airports and now has 142 civil airports, with 31 open for traffic from outside China. [Zhou, 2001] Never the less, there are still significant limitations of scale: for instance, the number of China's civil airports is only one-twentieth that of U.S. Chinese government, to overcome these infrastructure limitations, continues to make investments to extend and complete the trunk airport system, and to speed up construction of regional airports. The objective is to have 170 national civil transport airports by 2005 (an increase of 28 airports), with three large-scale hub airports, six medium-sized hub airports and the remaining as trunk and regional airports. Since 1987, Chinese government spent RMB 39.2billion (US$ 4.72billion) in constructing air infrastructure. [*Reuters News Service*, November 14, 2000]

Airline industry (airline companies and airports) has also been instituting significant changes to improve the infrastructure, especially to help customers acquire tickets and make informed decisions. During May 2001, five Automatic Ticket Machines (ATMs) were placed in Shanghai for customers to buy tickets, using a “Peony Card”, without going to the airport or to a travel agent. These machines print out “proof of purchase” that may be exchanged for a real ticket at two of the airports (Hongqiao and Pudong) near Shanghai. In June 2001, a “Civil Aviation Supermarket” was established in Ji’nan. The airlines that send representatives and participate provide potential passengers a “supermarket” type of service, which presents choices on price, flight times, and types of service. This supermarket is intended to provide the customers a comparative environment and bring a much-needed rationality to ticket pricing and cut down on irregular deals. The supermarket is temporarily named “China Civil Aviation Ji’nan Ticket Center”, and hopes to attract significant number of participants, both the airline companies and the potential customers.

China's airlines, as all other airlines of the world, are also subject to a variety of bilateral civil air transport agreements that provide for the exchange of air traffic rights between China and various other countries. In addition, China is a contracting nation, as well as a permanent member of the International Civil Aviation Organization (ICAO), an agency of the United Nations established in 1947 to assist in the planning and development of international air transport, and is a party to many other intentional aviation conventions. Fifty-seven air companies from 43 countries operate air services in 13 Chinese cities.

Governmental Actions Impacting Airline Industry

In 1995, Chinese government created comprehensive regulations and policies, covering all aspects of airline operations, including the approval of domestic, regional (Hong Kong) and international route allocation, and the Civil Aviation Law became effective in March 1996. Furthermore, the government set policies and provided guidelines for published fares, aircraft acquisition and standards for aircraft maintenance, jet fuel prices, and airport operations and air traffic control. The Civil Aviation Administration of China (CAAC) strictly supervises and regulates the domestic airline companies, and until recently also owned some of the country’s largest airlines. However, China's airline companies have been increasingly accorded significant degree of operational autonomy over time, including application for domestic, Hong Kong regional and international routes, the allocation of aircraft among routes, the purchase of flight equipment, pricing of Hong Kong regional and international air fares within a certain range, the training and supervision of personnel and their day-to-day business operations.

Chinese Government is currently debating additional changes, among which are policies related to ownership structure of the airline companies and the airports in China. CAAC is reportedly drafting regulations that will enable the under funded airline companies and civil airports to accept foreign investment, which may account up to 49 percent of the shares in the sector, as compared with only 25 percent in the United States. By late 2000, there were 25 aviation joint ventures approved by the CAAC in supportive areas such as catering and aircraft maintenance. However, there were no foreign investment joint ventures with any of China's 34 airlines or 144 civil airports. [*Zhonghua Gongshang Shibao*, October 24, 2000]

Competitive Characteristics of Airline Industry

Prior to 2001, China had 31 international, regional, and domestic carriers, most of which were small and inefficient. These carriers belonged to two primary groups: Ten CAAC Airlines (with approximately 80.5% of the passenger market share and 84.7% share of the cargo share) and twenty-one Provincial Airlines (with 19.5% of passenger market share and 15.3% of cargo share during 2000). CAAC had an average of 85% ownership in its airlines (they also regulated the industry), including the "big three" and five "second-tier" carriers. The "big three", China Southern, China Eastern, and Air China commanded 23.8%, 13.6%, and 12.1% of the passenger market shares, and 22.2%, 18.0%, and 20.6% of cargo share respectively. The two largest of the Provincial Airlines, Hainan Airlines and Shanghai Airlines, had 4.9% and 4.3% of the passenger, and 2.9% and 5.2% of the cargo markets, respectively. [*Center for Asia Pacific Aviation*, 2002]

Table 1: PROFITABILITY IN AIRLINE INDUSTRY

Net Margin	1997	1998	1999	2000*	2001*
China Eastern	-1.50%	-5.90%	7.40%	10.09%	6.79%
China Southern	0.60%	-4.30%	8.90%		
American	5.25%	6.73%	4.38%	4.15%	
Delta	6.68%	7.40%	8.50%	7.90%	
Southwest	8.28%	10.30%	9.98%	10.40%	9.90%
United	5.33%	4.50%	6.75%	4.50%	

* First six months. Source: Calculated from company reports.

Until recently, the goal of China's airlines has mainly been to build market share, often at the expense of profits and, the information on the losses (or possible profits) of China's airlines is patchy and sometimes contradictory. In the first half of 2001, industry losses were calculated to top RMB 2billion (USD 242million) and only the largest airline, China Southern, was said to be profitable. In January 2002, the State Economic and Trade Commission (SETC) issued a report claiming the three big airlines had combined losses of RMB 80million (USD 9.7million) for year 2001. A month later, in February, official media quoted Liu Jianfeng, the head of the CAAC, as saying that all three big carriers were profitable during 2001, though no figures were given. However, it is clear that the vast majority of China's airlines are carrying massive debts. By 1998, CAAC airlines had accumulated debts of RMB 112.6billion (USD 13.6billion). According to Hu Angang, director of the Centre for China Study under the Chinese Academy of Sciences, "debt ratios of above 80% are common for the China airlines." [http://www.ebusinessforum.com, 2002] In comparison, for the past four years, U.S. airlines' debt ratios have ranged from 47% in 1997 to 58% in 2001, with highest ever being in 1993 with 68%. It exceeded 60% only for 8 of the past 20 years. [Heimlich, 2002]

The last two years of significant increase in fuel costs which, impacted airline companies all over the world, compounded the cost revenue balance of the Chinese airline companies' even further, taking a big bite out of the company profits and leaving deep marks on these airline companies that operated at a much higher cost scale and had restricted pricing schemes. Helan Aviation Industry Bank of Netherlands estimates that, under normal conditions, aviation oil amounts to 12%-26% of the total operating expenses for the Asian aviation companies. During the first half of 2000, the entire aviation industry's cost expenditures increased by RMB 1.27billion (approximately USD154million) due to soaring oil prices and oil costs took up a greater share (increasing from 22% to 31% of the total operating costs) of the airline companies' business costs. [http://english.peopledaily.com.cn, August 2000] To help offset the increased fuel expenditure, starting November 1, 2000, Chinese government allowed domestic carriers to raise fares up to 20% and further allowed the 3% ticket price increase when international oil prices rise more than 10%. However, Johnny Chan, a Hong Kong-based analyst with Chase JF, predicted that a price hike of 20% will result in a drop of 10% in demand for 2001, decreasing the overall growth in demand to 0.2% for the year, and did not anticipate significant price increases. [Webb, November 2000; Webb, December 2000]

Table 2: COMPARATIVE OPERATING COSTS

	Fuel	Labor	Food	Fleet(1)	Other(2)
CAAC Airlines Average (2000)	24.2%	19.4%	6.5%	32.8%	17.2%
China Eastern Airline (2000)	18.5%	24.7%	5.1%	33.3%	18.4%
U.S. Airlines (2000)	12.8%	36.8%	3.2%	11.3%	35.9%
U.S. Airlines (2001 Q3)	13.1%	37%	2.6%	12.7%	34.6%

(1) Includes Depreciation and Maintenance

(2) Includes Advertising, Communication, Commissions, Landing fees, Insurance, Profits/Losses, etc.

Sources: carnoc.com, 2000; Heimlich 2002.

Profitability in this industry is significantly affected by economies of scale and is primarily realized through medium and long-distance flights. Because of the size of their operations, Chinese airline companies operated at a higher cost level and were not able to take advantage of the industry characteristics. Until 2001, the largest four carriers (China Southern, Eastern, Northern, and Air China) operated half the domestic fleet and, the remaining over two dozen smaller airlines sharing the rest of 500 plus total aircraft. More than half of the carriers owned and operated less than 10 aircraft each. In comparison, TWA, the smallest of the three largest aviation companies in U.S. before being acquired, had 577 aircraft.

China airline companies also have had low load factors, which further impacted their operational costs. They operate at about 65% passenger loads, compared with 70%-75% international average. 1999 through 2001, the passenger load factors for China Airline industry were between 58%-61%, and the two largest airline companies, China Southern (58.9% and 60.7% for 2000 and 2001 respectively) and China Eastern (59.82% and 60.2% for 2000 and 2001 respectively) has had load factors below 61% (calculated from company reports). In comparison, U.S. airline industry passenger load factor has averaged 71.45% for 1998 through 2001 and is projected to be 72.3% for 2002. The U.S. airline company Southwest Airlines presents a case in point for efficient and profitable operations. Southwest averages 67%-72% load factors, depending on the economic conditions, and, because of its operational efficiencies, can break even with 50% passenger loads. Southwest also carries a much lower debt burden with a 30% debt to equity ratio. [Webb, November 2000; Pender, 2001; Heimlich, 2002]

Table 3: UNIT COST (USD) PER SEAT MILES

China Southern	China Eastern	US Airways	Continental	United	Delta	Southwest
0.072	0.138	0.089	0.079	0.082	0.088	0.065

Source: *Business Week*, February 1999; China figures calculated from company reports.

The 1997 downturn of the Asian economies did have significant consequences for the Chinese domestic airlines, where capacity far exceeded the demand. As a result, the already existing competitive pressures, in price, quality of service provided and the quality of its management personnel were significantly amplified. These new dynamics not only created a competitive threat but also, an opportunity for reengineering and further development of the industry. Furthermore, China's attempts to become a part of WTO, opened opportunities for the foreign competitors to increase their attempts to enter this developing market, forcing the domestic competitors to change their operational characteristics and increase their size and efficiencies. As a result, in July 2000, CAAC called for the consolidation of the top 10 state-owned carriers into three groups, headed by Air China, China Eastern and China Southern. In November 2000, the State Council of China sent out an obligatory directive for the merger of airlines to be finished before the 3rd quarter of 2001 and further decreed that, as part of the industry restructuring, the Civil Aviation Administration of China (CAAC) will relinquish management control and focus instead on safety and regulatory issues, putting the industry on a more commercial basis. In addition to consolidation of the airline industry, the plan will separate the CAAC, the government regulator, from the airline enterprises. CAAC will offload the assets it currently holds in many of the state-owned airlines and divest itself of its interests in more than 120 airports around China (except Beijing Capital Airport), selling its stake to regional governments and foreign investors. The CAAC will no longer be both regulator and player. The first phase of industry mergers and consolidation was completed in June 2001.

Table 4: CHINESE AIRLINE GROUPINGS AFTER CONSOLIDATION

CHINA SOUTHERN GROUP **(Market Shares: Passenger = 35.3% and Freight = 29.9%, 186 aircraft)**					
Airline	**Founded**	**International Flights**	**Domestic**	**HQ**	**Employees**
Zhongyuan	May 15, 1986			Henan	400
China Southern	February 1, 1991	58 to 85 cities in 10 countries	313	Guangdong	13,000
China Northern	June 1990	21 to 12 cities in 5 countries	124	Liaoning	7,900
China Xinjiang	January 1, 1985	8	48	Jinjiang	4,800
Xiamen	July 25, 1984		80	Fujian	4,180
CHINA EASTERN GROUP **(Market Shares: Passenger = 24.6% and Freight = 26.8%, 140 aircraft)**					
Airline	**Founded**	**International Flights**	**Domestic**	**HQ**	**Employees**
China Eastern	June 25, 1988	45 to 22 cities in 11 countries	158	Shanghai	13,900
China Northwest	December 6, 1989	9 to 6 cities in 3 countries	82	Shaanxi	5,000
Yunnan Airlines	July 28, 1992	8 to 5 cities in 5 countries	78	Yunnan	4,500
Air Great Wall	June 26, 1992		30	Zhejiang	350
AIR CHINA GROUP **(Market Shares: Passenger = 20.6% and Freight = 28.0%, 117 aircraft)**					
Airline	**Founded**	**International Flights**	**Domestic**	**HQ**	**Employees**
Air China	July 1, 1988	51 to 95 cities in 21 countries	113	Beijing	11,000
China Southwest	October 15, 1987	10 to 6 cities in 6 countries	165	Sichuan	8,000
Shenzhen	Sept. 23, 1985		30	Shenzhen	1,200
CNAC Zhejiang	July 4, 1986		30	Zhejiang	600

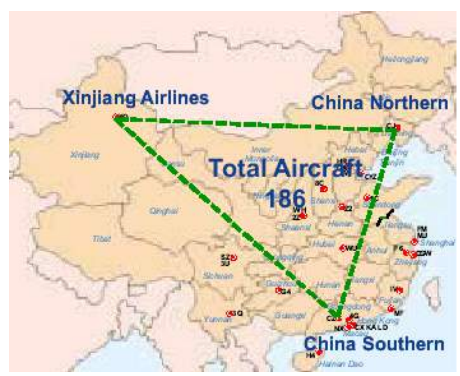
To bring some stability to the domestic markets and stem the tide of staggering losses, some of the airlines established a "Policy of Income Sharing". As a result, during the four months from November 2000 to February 2001, the income distributed to the 15 airlines operating under this policy totaled RMB 7 billion (approximately $900 million), while the 9 airlines that did not participate collectively earned an income of RMB 60million (approximately $7.5million). This process of operational and income sharing is credited as being the main reason for these routes' going from a deficit to profit during year 2000. To reinforce the achievements of the joint-operation of routes, 24 domestic airlines assembled in Wuhan City on March 30, 2001 and signed an agreement to continue jointly operating these domestic air routes.

Major Competitors in China Airline Industry

Since mid-2001, the three newly formed groups (China Southern, China Eastern, and Air China) have become the dominant players and collectively command 80.5% of the passenger and 84.7% of the freight markets. (In comparison, 2000 market shares of the three largest U.S. passenger airlines, United, American, and Delta were 18.3%, 16.8%, and 15.6%, respectively, for a total of 50.7 %.) Two of these airline group companies (China Southern and China Eastern) are publicly held and are listed in New York and Hong Kong stock exchanges since 1997 and the third (Air China) have been pursuing the same goal since then. However, Air China's losses and outmoded management system, which was set up during the planned economy era, has held back the company from reaching the same status as the other two. Never the less, it continues its efforts to be a listed and publicly traded company, and plans to go public and seek listing in various exchanges during 2003.

These three major competitors have also developed brand loyalty and are selected as the preferred carriers by the Chinese traveling public. A 1998 survey done by the Chinese Civil Airline magazine showed that, the travelers selected Air China, China Southern and China Eastern primarily based on "image" and "schedule". The respective respondent percentages were 32.8% and 36.61% for Air China, 22.06% and 41.81% for China Southern, and 20.86% and 50.36% for China Eastern. In addition to the "schedule" characteristic, China Eastern was also rated highest for "service" with 11.51%, as compared to 9.42% for China Southern and 8.48% for Air China. As one would expect, price was also selected as a preference among respondents. 5.76% of the respondents indicated that they selected China Eastern based on prices, as compared to 7.37% for Air China and 9.03% for China Southern. [*Chinese Civil Aviation*, 1999]

China Southern



As a result of consolidation, China Southern Group has total assets of $6.1 billion with a 186 aircraft fleet. Because of the diversity of the companies in the group, it faces the greatest challenge of resolving the fleet incompatibility, training, parts and maintenance costs in merging disparate fleets. Most of China Southern's fleet consists of Boeing aircraft; where as China Northern operates mostly MD aircraft and Xinjiang Airlines' fleet includes mainly Russian made aircraft. It also faces major changes in consolidating and rationalizing its new routes, with all three carriers in the group operating services on the Shenzhen-Changsha, Kunming-Chengdu and Haikou-Shenzhen routes. Two of the three airlines in the group compete on 38 of 290 total routes. Operational efficiency might require elimination of some duplicative flights routes and older aircraft.

For the past 20 years, China Southern Airlines has been ranked number one in passengers carried in China. Sytrax Research (http://www.AirlineQuality.com), after 9-month polling, identified China Southern Airlines as the best airline in China, citing its good service. It was also awarded the coveted "Branded Market Services Innovation Award" by the Civil Aviation Administration of China (CAAC), the only airline that is honored as such, and is considered to have the most marketing savvy aviation team of any Asian-based airline. [http://www.uniworldusa.com, May 31, 2001; china_sthrn.htm, 2002]

Table 5: CHINA SOUTHERN AIRLINES OPERATIONS

Load Factor (%)	**2001**	**2000**	**1999**	**1998**	**1997**
Overall Load Factor	57.40	52.10	53.20	53.50	n/a
Passenger Load Factor	60.70	58.90	58.70	60.60	n/a
Break-even Load Factor (based on Available Ton-Kilometers)	54.60	48.10	46.40		n/a
Yield and Costs (RMB)					
Passenger yield (passenger revenues/passenger-kilometers)	0.60	0.61	n/a	0.58	0.64
Cargo yield (cargo revenues/cargo ton-kilometers)	1.84	1.67	1.68	n/a	n/a
Average yield (passenger and cargo revenues/ton-kilometers)	5.73	6.14	6.40	6.04	n/a
Unit cost (operating expenses/Available Seat-Kilometers)	0.38	0.37	0.36	0.37	n/a
Unit cost (operating expenses/ATK)	2.96	2.96	3.03	3.14	n/a

China Southern Airlines is China's largest airline, is in a good position to benefit from the pending deregulation of China's aviation industry, and continues to develop creative tools to gain market share and solidify its market position. Towards this end, China Southern Airlines began use of E-tickets for individual passengers in March 2000 and, in April 2001, started promoting group E-tickets for round trip flights from Guangzhou to Beijing as well as one-way travel from Guangzhou to more than 60 large- and medium-size cities all over China. Clients, such as travel agencies, need only open a "Personal Bank Professional Edition" account with China Merchants Bank, register the account number with China Southern Airlines, and then obtain E-tickets from the website http://eticketgroup.cs-air.com.

China Southern flies to more than 80 cities around the globe and has a code-sharing alliance with Delta Air Lines. It also connects some of the most popular domestic destinations, such as Beijing, Chengdu, Guangzhou, Guilin, Hong Kong, Kunming, Shanghai, Shenzhen and Wuhan.. In addition to its flight operations, it also is involved in airline catering, aircraft maintenance and forwarding, cargo and mail, hotels, restaurants, duty-free shops, and related businesses.

China Eastern

As a result of consolidation, China Eastern has total assets of $5.7 billion with a 140 aircraft fleet. It also faces significant challenges in merging the newly acquired companies into a uniform and efficient operation, with major challenges in training, taming parts and maintenance costs in merging disparate fleets, as well as rationalizing market coverage. China Eastern Group has 17 types of aircraft in its fleet, including Airbus, Boeing, McDonnell Douglas, and Russian made aircraft. Route duplication is not as much a problem for China Eastern, as its partners compete on just 10 of 165 total sectors, including Beijing Nanjing-Beijing-Hangzhou and Wenzhou-Shanghai, served by China Eastern and China Northwest. China Eastern and Yunnan Airlines both operate Kunming-Chengdu and Kunming-Changsha.

China Eastern Airlines is China's second largest carrier and provides direct flights from Los Angeles and San Francisco to Beijing and from Anchorage to Shanghai. It flies passengers and cargo to 60 destinations in China (domestic flights account for more than 35% of revenues). China Eastern has code-sharing agreements with Air

France, All Nippon Airways, American Airlines and Japan Airlines. Since May 2001, it is has been a member of "Asia Miles", one of the largest frequent flyer programs in the world. Mileage points accumulated under the program can be redeemed for cabin upgrades, free air tickets, hotel accommodations, telecommunication prizes, and financial options. 850 cities worldwide are linked into program, which was begun by Cathay Pacific Airways, Ltd. China Eastern established a cooperative relationship with Cathay Pacific, the first between HK and Mainland China's airlines. It is poised to take advantage of the pending deregulation and the relaxation of current government restrictions imposed upon the airline industry.

Table 6: CHINA EASTERN AIRLINES OPERATIONS

Load Factor (%)	**2001**	**2000**	**1999**	**1998**	**1997**
Overall Load Factor	55.04	57.23	n/a	n/a	n/a
Passenger Load Factor	60.20	59.82	n/a	n/a	n/a
Break-even Load Factor (based on Available Ton-Kilometers)	53.65	53.60	n/a	n/a	n/a
Yield and Costs (RMB)					
Passenger yield (passenger revenues/passenger-kilometers)	0.62	0.62	0.61	0.60	0.69
Cargo yield (cargo revenues/cargo ton-kilometers)	2.09	2.48	n/a	n/a	n/a
Average yield (passenger and cargo revenues/ton-kilometers)	4.95	5.17	n/a	n/a	n/a
Unit cost (operating expenses/Available Seat-Kilometers)	0.44	0.43	n/a	n/a	n/a
Unit cost (operating expenses/ATK)	2.65	2.77	n/a	n/a	n/a

Air China

Air China Group is the third largest carrier group in China with a 117 aircraft fleet and USD 6.7billion assets. The group commands 21% and 28% of the passenger and freight markets respectively. The merging of the newly acquired airline companies, their assets and operations, do not pose as much of a problem as the other two groups. Air China and China Southwest operate mainly Boeing aircraft, while CNAC Zhejiang Airlines has A320 and DHC-8 equipment in its fleet. Air China, CNAC Zhejiang and China Southwest compete on only 14 of 193 sectors operated by all three carriers. Air China and China Southwest operate 42 weekly Beijing-Chengdu sectors; while Air China and CNAC Zhejiang operate "competing" Beijing-Hangzhou and Beijing-Shenyang services. After the complete merger of operations, the duplicative routes can be eliminated and greater operational efficiencies can be achieved. This group, because of their past operations and the management, is the group that needs and can benefit most from increased efficiencies and decreased number of competitors. Air China's ability in absorbing the assets, management, and operations of the newly acquired competitors will be the great test of its long lasting objective and efforts to become a listed public company. However, because of its current corporate structure and ownership (government owned), detailed information on its operations is unavailable at this time.

To extend its operations and reach further, in addition to merging with some of its competitors, Air China also signed agreements cooperate with some of the remaining competitors. Beginning June 2001, Air China and Shanghai Airlines (representing the China Sky Aviation Enterprises Group that also includes 5 additional local airlines) signed a code-share agreement to Code-Share on 11 of their air routes originating in Beijing and in Shanghai, and then gradually extended Code-Share to all of their domestic flights. Furthermore, to complement the Code-Share, the airlines also signed an agreement of Frequent Passenger Cooperation so that their frequent passengers may accumulate mileage on each other's routes that have implemented code-share. Nearly 0.4 million frequent passengers of the two airlines will have more chances to accumulate mileage.

Conclusion

The last 20 years have seen a major transformation of China, its governmental policies, its social characteristics, and its economy. Various domestic industries have gone through major transformation and continue to change in profound ways. One such industry was the Airline Industry in China. The significant changes in social attitudes, economic resurgence and development, increased wealth of the general populace, and governmental policies have impacted this industry in a profound way and will continue to do so in the future.

The changing economic capabilities of the public, coupled with governmental actions (increased holidays) and changing life styles (acceptance of travel and domestic tourism, and increased expenditures) create tremendous opportunities for the airline industry. The territories and provinces of western China make up about 60 percent of its land mass and nearly 25% of its population, and this part of the country is the main backdrop in Chinese films and literature. The tourism in the region, for the most part, is underdeveloped and presents great potential for development and growth. These developments in the western regions of China will be a boon for the airline industry, especially if the regional air transportation is developed and utilized as it has been in other parts of the world. However, the current transportation infrastructure, especially in the western parts of the country and away from the major metropolitan areas, poses significant challenges, even for the domestic travelers, and requires great investment and attention from the Chinese government. However, Chinese government and the members of the airline industry have already started to take the necessary steps and continue to make investments in infrastructure to promote and accommodate increasing domestic, including to underdeveloped western regions of the country, and international air travel.

The airline industry also continues their attempts to overcome long established and preferable modes of domestic travel in China, incurring significant costs along the way. Since the train has long been the travel vehicle of choice in China, airline companies, to combat this long lasting traditional means of travel, have resorted to extreme price reductions to woo travelers, especially among eastern cities. At times an air ticket was cheaper than a train ticket between the same two cities. For example, during July 2001, an air ticket from Beijing to Ji'nan was priced as RMB 180 (USD 22) while the train ticket cost RMB 200 (USD 24). There is also over scheduling to woo the customers that might use other modes of travel or other companies. The currently scheduled flights between Beijing and Shanghai are so numerous that there are "rush hours" on the routes between these two cities. Unfortunately, these pricing schemes and, predatory and irrational scheduling of flights do not take into account the cost structure and operational considerations, and have held back the airline industry's profitability, creating the conditions that gave way for the Chinese government's demands for consolidation and orderly growth of the industry.

China's entry into WTO and the country's continuing march towards a market economy create significant challenges to the airline industry. Foreign airlines, while they pursue joint ventures with the domestic companies, continue to assault the marketplace by establishing new international flight routes in and out of China. During May 2001, United Airlines (U.S. carrier) formally opened a new international route (non-stop) between Beijing and Chicago, in addition to its existing routes between Beijing and Honolulu, Los Angeles, New York, San Francisco, and Seattle. In total, United Airlines has 21 flights (more than any other North American airline) daily between China and U.S., including one between Shanghai and San Francisco. A similar state of dominance, by Lufthansa (a German carrier), exits between China and Europe, with 24 non-stop daily flights. To continue this dominance and expand their service, during May 2001 Lufthansa added a first daily non-stop flight (only one by a European carrier) between Shanghai and Frankfurt. By October 2000, Air France had increased the frequency of its flights to Beijing to daily service, significantly more than the four flights a week it had in 1997. To further limit the domestic airlines and to directly challenge their routes, these three foreign airlines started a price war by providing significant discounts for Chinese passengers who want to fly Northwest Airlines, United Airlines, or Air France. This might help the Chinese international flyers; however, it creates further problems for the domestic airlines competing for the same lucrative international routes and takes away their advantage as a domestic airline.

Finally, recent terrorist events in U.S. also have impacted the airline industries in all countries and will continue to have significant implications on the international flights of China airline companies. These impacts and implications are already apparent on such airline companies as British Airways, Europe's largest carrier, (slashed 7,000 jobs on October 8, 2001 and said it will not pay a shareholder dividend for the third quarter), Lufthansa German Airlines (indicated that it will cut back some of its daily flights to U.S.), Air Canada (slashed 9,000 jobs and trimmed its capacity by 20%), Swissair, the flag carrier in Switzerland, (went into bankruptcy and grounded all its worldwide flights), and Singapore Air (started offering 150 percent frequent-flier mileage on their as well as on Delta Air Lines, also offering a one night stopover in Singapore, with hotel accommodations and airport transfer for passengers proceeding to other Asian destinations). U.S. airline industry is expected to lose USD 7billion during 2001 and around USD 4billion in 2002. Even though, the current exact impact of these recent events on China airline companies is not clear, these examples provide an ominous prospect and a very bleak future for the China airline companies in their most profitable international routes. However, the terrible events of September 2001 and their aftermath impacts may also provide the necessary impetus for the China airline companies to accelerate their domestic infrastructure and regional development of air travel, and focus on developing domestic customers and markets. In spite of current shortcomings and limitations that exist, the changing dynamics and characteristics of the Chinese nation point to a very bright future for the Airline Industry in China.

References

[1] 1999 Airport Ranking. *China Civil Aviation Report*, Volume 2 Number 6: Retrieved June 30, 2000 from the World Wide Web: http://www.uniworld.com

[2] A General Survey of China's Airlines. *China Civil Aviation Report*, Volume 3 Number 7: Retrieved July 31, 2001 from the World Wide Web: http://www.uniworldusa.com

[3] Air tickets not to be discounted. *China Civil Aviation Report*, Volume 3 Number 5: Retrieved May 31, 2001 from the World Wide Web: http://www.uniworldusa.com

[4] Airfare Warfare: Airline Competition creates fallout of cheap tickets. (2000, October 23). Beijing Wanbao (Beijing Evening News).

[5] ATM (Automatic Ticket Machine). *China Civil Aviation Report*, Volume 3 Number 5: Retrieved May 31, 2001 from the World Wide Web: http://www.uniworld.com

[6] Buying Binge: An M&A wave breaks over China. (2001, January 29). Business Week, 48-49.

[7] CAAC Sets Goals for the Next Five Years. *China Civil Aviation Report*, Volume 3 Number 8: Retrieved August 31, 2001 from the World Wide Web: http://www.uniworldusa.com

[8] China Civil Aviation agrees to framework for organization. *China Civil Aviation Report*, Volume 3 Number 6: Retrieved June 30, 2001 from the World Wide Web: http://www.uniworld.com

[9] China Eastern joins "Asia Miles". *China Civil Aviation Report*, Volume 3 Number 5: Retrieved May 31, 2001 from the World Wide Web: http://www.uniworldusa.com

[10] China Reports Progress in Civil Aviation Industry. (2000, November 14). Reuters News Service.

[11] China Southern Airlines Promotes E-Tickets. *China Civil Aviation Report*, Volume 3 Number 4: Retrieved April 30, 2001 from the World Wide Web: http://www.uniworldusa.com

[12] China Southern Wins CAAC Award. Retrieved March 6, 2002 from the World Wide Web: http://www.airlinequality.com/news/china_sthrn.htm

[13] China State Council Favors Three Groups for 34 Carriers. (2000, August 2). Aviation Daily, 5.

[14] *China: Airline industry latest target of government restructuring*. Retrieved March 20, 2002 from the World Wide Web: http://www.ebusinessforum.com

[15] China: Aviation Services Industry Overview. (1997). Washington D.C.: U.S. & FOREIGN COMMERCIAL SERVICE AND U.S. DEPARTMENT OF STATE.

[16] China's air industry coming to land. *Asian Economic News*. Retrieved June 18, 2001 from the World Wide Web: http://www.findarticles.com

[17] China's State Council tells airlines to speed up mergers. *China Civil Aviation Report*, Volume 3 Number 1: Retrieved January 31, 2001 from the World Wide Web: http://www.uniworld.com

[18] Civil Aviation faces a strategic restructuring. (2000, December 25). Reuters News Service.

[19] Code-Share between Air China and Shanghai Airlines. *China Civil Aviation Report*, Volume 3 Number 6: Retrieved June 30, 2001 from the World Wide Web: http://www.uniworldusa.com

[20] Domestic air-travel market on the up and up. *Zhongguo Jingji Shibaao* (China Economic Times). Retrieved November 7, 2000 from the World Wide Web: http://www.chinaonline.com

[21] Foreign Aviation Joint Ventures Stay on the Ground. *Zhonghua Gongshang Shibao* (China Business Times). Retrieved October 24, 2000 from the World Wide Web: http://www.chinaonline/com

[22] Fuel Price Hurts China's Airlines. *China Civil Aviation Report*, Volume 3 Number 8: Retrieved August 31, 2001 from the World Wide Web: http://uniworldusa.com

[23] Heimlich, J. (2002). Economic Trends and Challenges for the U.S. Airline Industry. Air Transport Association.

[24] http://www.caac.gov.cn/tjxx/1950-1999.htm and http://www.caac.gov.ch/tjxx/99-6.htm accessed on February 25, 2001

[25] http://www.caac.gov.cn/tjxx/99-1.htm and http://www.caac.gov.ch/tjxx/99-5.htm accessed on February 25, 2001

[26] Income shared on 108 of China's air routes – with more to come. *China Civil Aviation Report*, Volume 3 Number 5: Retrieved May 31, 2001 from the World Wide Web: http://www.uniworldusa.com

[27] Investigation of China Aviation Bureau in 1999. (1999). Beijing, China: Chinese Civil Aviation.

[28] Kazmin, Amy Louise, Jonathan Moore, and Irene M. Kunii. (1999). Stormy Passage for Asian Airlines. Business Week Online, May 10, 1999.

[29] Living Standards Improving in China. Retrieved September 25, 2000 from the World Wide Web: http://www.asiagateway.com

[30] News. *Civil Aviation Resource Net of China*. Retrieved July 24, 2000 from the World Wide Web: http://www.carnoc.com

[31] Pender, Kathleen. (2001, October 4). Southwest sets standard for success in depressed airline industry. San Francisco Chronicle, E1.

[32] Qiu, Huaiyou. (2001). A Review of China's Regional Aviation Market. China Civil Aviation Report. Retrieved February 28, 2001 from the World Wide Web: http://www.uniworldusa.com

[33] *Reuters News Service*. China's 10 airlines involved in merger. December 10, 2000.

[34] Rising Oil Prices Effect on China's Economy. Retrieved August 10, 2000 from the World Wide Web: http://www.english.peopledaily.com.cn/

[35] Roberts, D. and A. Webb. (2001, January 29), Buying Binge: An M&A wave breaks over China. Business Week, 48-49.

[36] Skytrax says China Southern is best. *China Civil Aviation Report*, Volume 3 Number 5: Retrieved May 31, 2001 from the World Wide Web: http://www.uniworldusa.com

[37] Some Numbers. *China Civil Aviation Report*, Volume 3 Number 3: Retrieved March 30, 2001 from the World Wide Web: http://www.uniworld.com

[38] Southwest's new direction. (1999, February 8). Business Week, 58.

[39] The Essential China Book: Airports, Airlines & Tourism 2001. (2002). Beijing: Center for Asia Pacific Aviation.

[40] United Airlines Chicago-Beijing nonstop; Lufthansa non-stop Shanghai-Frankfort. *China Civil Aviation Report*, Volume 3 Number 5: Retrieved May 31, 2001 from the World Wide Web: http://www.uniworldusa.com

[41] Webb, Alysha. (2000). China Eastern Set to Take Flight. Retrieved December, 26, 2000 from the World Wide Web: http://www.worldlyinvestor.com

[42] Webb, Alysha. (2000). China Southern Could See Boost From Fare Hike. Retrieved November 6, 2000 from the World Wide Web: http://www.worldlyinvestor.com

[43] Why China's Highflying Air Industry Hit Turbulence. (May 24, 1999). *Fortune*, 228.

[44] Zhi, Wang and Wanming Liu. (2001). A new stage in the development of China's Regional Aviation. China Civil Aviation Report, (Special Paris Air Show Edition).

[45] Zhou, Yin. (2001). Reorganization of China's Airports Necessary for Survival? China Civil Aviation Report, Volume 3 Number 3: Retrieved March 20, 2001 from the World Wide Web: http://www.uniworldusa.com

Determinants of Location Choices of The Finnish Firms in Asian Countries – Empirical Evidence

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Abstract

The purpose of this paper is to empirically investigate how the ownership, location internalization and strategic advantages have influenced the location choices of FDIs by Finnish firms in ten Asian countries. Very few studies have been undertaken so far to empirically analyze the influential ownership, location and internalization variables together with the strategic motives in order analyze the FDI choices of the foreign investors. The research results indicate that large size of the parent firm, large international experience, large market size in the target country, low cultural distance and low wage rates increases the probability of undertaking *market-seeking and efficiency-seeking FDIs*. Secondly, it has been found that low levels of inflation, low levels of risks and high level of exchange rate fluctuations in the target country increase the probability of undertaking *risk-reduction FDIs*. Finally, results show that high R&D intensity of the parent firm increases the probability of undertaking *knowledge-seeking FDIs*.

Introduction

Theoretical evidence points to several reasons why firms invest abroad [22,28]. Firms invest in foreign countries to acquire inputs, gain access to new markets and diversify investment risks [29,42]. Firms also accumulate firm-specific capabilities in the form of process technologies and market intelligence from various host countries [14,72]. In general, firms are attracted to economically and politically stable destinations because FDI entails a long-term commitment of financial and non-financial resources [8]. Host governments on the other hand want FDI to create economic opportunities in their respective countries. In addition, foreign multinational corporations transfer technologies and know-how through linkages [10]. Given the importance of FDI to firms and policy makers, the present paper investigates the factors and motivations that determine the flow of Finnish firms in the manufacturing sector.

The purpose of this paper is to empirically investigate the different ownership-specific, location-specific internalization and strategic advantages that have influenced the location strategies of Finnish firms in ten South and Southeast Asian countries from 1980 to 2000. Dunning identifies four main strategic motives of FDIs: *market-seeking* (MS), *efficiency-seeking* (ES), *knowledge-seeking* (KS) and *risk-reduction seeking* (RRS) [26]. Despite the increased interest in FDI, very few studies [19, 78] have been undertaken so far to empirically analyze the influential ownership, location and internalization (OLI) variables together with the *strategic motives* in order analyze the FDI choices of foreign investors. These *strategic motives* have remained primarily anecdotal. Empirical analysis of *strategic motives* along with the influencing ownership, location and internalization (OLI) variables can add to our understanding of the eclectic paradigm and also enriches our knowledge of FDI in general.

This study contributes to the literature of international business by focusing on firms based in Finland, a small industrialized country, where the domestic market conditions are very different from those of the multinationals from the USA or Japan that have dominated past research attention. Moreover, studies on the determinants of FDI rarely combine ownership, location, and internalization advantages with strategic motivations of firms in Asian markets. The present study combines ownership, location internalization and *strategic advantages* of manufacturing FDI under one analytic framework. It therefore presents new data and new empirical insights into the determinants as well as the strategic advantages of Finnish manufacturing firms that engage in FDI ventures in Asia.

In the next section general aspects of foreign direct investment theories will be discussed. The theoretical and empirical literature on the location strategies and a discussion of the crucial ownership, location, internalization and strategic advantages of the investing firm will be presented. In section three, the methodology and the data will be discussed. Section four will discuss the empirical results of the study. Finally in section five a summary and the main conclusions of this study will be presented.

Literature review and development of hypotheses

One stream of literature within the theory of FDI suggests that ownership-specific advantages (O) may be shaped by the location-specific (L) characteristics of the home country [24,32]. Another school suggests that these advantages may be contingent upon the host country's competitive characteristics [13,16]. The host country characteristics become particularly important when different configurations of the host country factor endowments, demand conditions and competition can strengthen a firm's advantages [27,45]. The main difference between the ownership and location advantage is that in contrast to ownership advantages, location or country-specific advantages are spatially embedded. Aside from this difference, the relationship between ownership and location variables becomes complicated [27]. After a firm goes through the process of capitalizing on a location-specific advantage abroad, it can conceivably develop the ability to internalize the same location advantage abroad, it can conceivably develop the ability to internalize the same location advantages as ownership advantage in other locations [23]. Location-specific advantage that can internalize and exploit as firm specific in another location may come from patents, trademarks, factor inputs and distribution outlets.

The Dunning's eclectic model is criticized for not sufficiently theorizing the relations between the ownership, location and internalization (OLI) advantages, particularly for not making a clear distinction between the internalization and ownership-specific advantages. However, the eclectic paradigm remains the most comprehensive explanation of international production. This theory not only provides a rich and rebut framework for analyzing and explaining the determinants of international production and how it varies between firms, industries and countries over time; but the theory helps our understanding of a wide variety of other firm-related issues. Thus, the eclectic theory is strongest in those new items in the "ownership advantage," the "location advantage," or the "internalization advantage" substitutes old ones they become old-fashioned without altering the eclectic framework itself. It is not a theory but a paradigm or, more precisely, the taxonomy of various determinants of FDI. Theorists, empiricists and historians can freely invent new determinants to describe a particular case of FDI as long as they fall under one of the three headings. Thus, the eclectic approach has been selected as the framework in this study because of the above-referred integrative nature of the approach.

Ownership variables

Ownership variables are unique internal factors that generate the firm's competitive advantage in the marketplace. A number of these ownership specific variables are expected to have impact upon a firm's choice of location strategies.

Research & Development Intensity

FDI is seen as a vehicle by firms to accumulate new technologies when old technologies become obsolete [73]. As the pace of technology increases, acquiring new capabilities become important to technology-intensive firms. Such a situation may lead to an eventual demise of the firm unless it actively seeks to acquire new technologies and capabilities by investing in companies and countries that possess such capabilities [4,14,73]. In investigating a longitudinal analysis of the relationship between technology and FDI, Cantwell finds that German and US firms are attracted to locations that are important sites for innovations within a specific industry [14]. Likewise Cantwell confirms that firms are increasingly interested in developing new technologies in countries that are among the leaders in product and process innovation [15]. Belderbos and Sleuwaegen also confirm the assertion that the desire to exploit an existing ownership or firm-specific intangible assets, mainly R&D intensity and technology are the main determinant of Japanese investment in North America and Europe [9]. Dunning also argues that firms undertake FDI in manufacturing R&D to exploit their existing advantages and firms invest in international R&D locations to improve the process of producing existing products to market in a cost-efficient manner [25]. Based on previous studies we therefore expect that R&D intensive Finnish firms will undertake knowledge seeking FDIs in a target Asian country in order to enhance their technological competitiveness. Thus,

H 1 The higher the R&D intensity of the investing Finnish firm, the greater the probability that it will undertake the KS FDIs in a target Asian country.

Firm's size

Foreign direct investment ventures unlike exporting require substantial financial as well managerial resources. Large firms, due to their large resource base, are often considered in a better position than smaller firms to make such commitments. The impact of the firm's size has been investigated in several studies. In most of the previous studies it has been emphasized that large firms are more willing to undertake the risk and costs associated with FDI projects in the distant and unfamiliar markets due to their large resource base [58, 51, 60]. Owen and Wolf also demonstrated a positive relationship between US firm size and FDI[58,81]. Juhl's analysis of German manufacturing FDI in less developed countries found firm size to be a positive and significant determinant for FDI [46]. Similarly, Lall and Mohammad also concluded that FDI in India is positively related to the size of the investing firm [50]. Traditionally it has been argued that production units are thought to be located where the marginal cost of production is lowest. It is considered much easier for a large business to organize their production structure in such a way that they can exploit benefits of economies of scale in production. It could then lead to higher efficiency gains, a lower marginal cost of production and a larger market share. We, therefore expect that large Finnish firms will undertake market and efficiency seeking FDIs in a target Asian country. Hence,

H 2 The larger the size of the Finnish investing firm, the greater the probability that it will undertake the MS and / or ES FDI in a target Asian country.

Firm's international experience

A firm's international experience can be considered an important source of ownership-specific advantages. Buckely and Casson argue that experience reduces the cost and uncertainty of serving a market [13]. Similarly, Agarwal and Ramaswami concluded that the firms without foreign market experience are likely to have more problems in managing foreign operations [2]. The firm's knowledge base will increase with repeated experiences and be embodied in personal and organizational memory [61]. For instance prior experience with a similar type of environment in a foreign country will allow the firm to "learn" from its past experience, and the learning will become very valuable when dealing with similar circumstances. Consequently the firm will prefer to use the same strategies, because these enhance the firm's value by reducing implementation costs in another foreign country, since the existing routines can be used. Furthermore, highly experienced firms will also be motivated to undertake market-seeking FDIs by the advantages associated with staying close to their customers and thus protecting their ownership-specific advantages from deteriorating. We, therefore expect that internationally experienced Finnish firms will undertake market as well as efficiency seeking FDIs in a target Asian country. Thus,

H 3 The greater the international experience of the Finnish investing firm, the greater the probability that it will undertake the MS and / or ES FDI in a target Asian country.

Location-specific variables

FDI theories suggest that investing firms will prefer those countries that provide greater location-specific advantages. Though it has been known that both firm and location-specific advantages separately and jointly influence the MNC for the choice of target country for its FDI venture.

Cultural distance

Culture can be described as "the collective programming of mind that differentiate the motives and behavior of one social group to those of another" [41]. Investment decisions are partially influenced by culture. In investigating FDI flows to Central and Eastern Europe, Mikalak suggests that inherent variations in language and culture dissuade potential investors, except in countries that have traditional ties with Central and Eastern Europe [55]. Grosse and Trevino conclude that those countries culturally dissimilar to the US and / or farther away tended to have less FDI into the US [36]. Likewise Dividson finds that US firms have usually made their first foreign investments in countries like Canada and the UK [21]. Root argues that uncertainty due to cultural distance also may cause executives to undervalue foreign investments [64]. Furthermore, the cultural familiarity of the host country offer a whole range of efficiency enhancing measures including the procurement of inputs, marketing and distribution of outputs. The potential rents realized from investment are generally higher in culturally familiar countries than in unfamiliar countries. We therefore expect that Finnish firms would undertake market as well as efficiency seeking FDIs in a culturally close target Asian country. Hence,

H 4 The larger the cultural distance between the host and home country of Finnish investing firm, the lower the probability that it will undertake the MS and / or ES FDI in that Asian country.

Market potential

Market size and the domestic competitive environment are considered to be important determinants of FDI [24,63,77]. Firms usually invest in large markets to capitalize on firm-specific assets by entering the market first, or by following leading firms in the new markets [48]. A number of empirical studies on FDI have confirmed that the market potential of host countries has a significant and positive effect on attracting FDI [20,24,59,69,75]. Lunn found the market size of the EEC to be a significant variable for US direct investment in Europe [54]. For developing countries previous studies found market size to be a significant predictor of FDI [62,65,70,76,80]. In either case, future share of new markets is the driving force behind expansion in foreign markets. Furthermore it has been argued that firms expect to experience greater long-term profits through economies of scale and lower marginal cost of production in countries with larger market potential [67]. We, therefore expect that Finnish firms will undertake market as well as efficiency seeking FDIs in a target Asian country with a huge market potential. Thus,

H 5 The larger the market size of the target Asian country, the greater the probability that Finnish investing firm will undertake the MS and / or ES FDI in that Asian country.

Wage rate

According to the neoclassical theories, labor costs differential are considered an important determinant of FDI. The new international division of labor (NIDL) theories also focuses on the cost minimization strategies of firms [33]. It can be argued that locational advantage induced by the low wages increases the prospects of low production costs and could also stimulate the firms to establish themselves in new products and in new markets as well. Schoenberger also argued that US investment in Puerto Rico and Japanese investment in Ireland were mainly made on cost-minimization and tariff-free market access [71]. The research on the determinants of FDI in developing countries also indicates that labor costs differential was a significant determinant of FDI in the 1970s and 1980s [70,74,80]. London and Ross conclude that foreign investors from developed countries seek labor which is "more domicile and less costly than that in the older industrial regions [53]." Austin noted that wage cost advantages is a primary reason for businesses to integrate developing countries into their global production strategy [5]. Likewise Rolfe and White found this to be the most important variable in their judgement modeling study of Caribbean investors [66]. It can be argued here that low wage rates may create an opportunity to achieve plant-level scale and scope economies, higher production efficiency and a larger market share. We, therefore expect that Finnish firms would undertake market as well as efficiency seeking FDIs in a target Asian country with relatively low wage rates. Hence,

H 6 The higher the wage levels in the target Asian country, the lower the probability that Finnish investing firm will undertake the MS and / or ES FDI in that target Asian country.

Corporate tax rates

The locational choice of the investing firms can also be influenced by another market imperfection – the income tax rate. Theoretically, it can be argued that higher corporate tax rates reduce the net profit and consequently discourage FDI [37]. Thus, the need to locate manufacturing facilities in countries with relatively low tax rates serves the purpose of market as well as efficiency seeking FDIs. Pioneering work by Hartman finds evidence that taxes and FDI are inversely related [37,38]. Boskin and Gale reestimate Hartman's equations, using updated series for the tax rate and the rate of return [11,38]. Their qualitative results are consistent with those of Hartman [38], even though the estimated elasticity of FDI to the rate of return is somewhat lower. Other studies indicate that the corporate tax rates are an important determinant of FDI [12,17,47,52,79]. In a comparative study of FDI location in the US, Hines finds that state tax rates had a substantial impact on location of inward FDI [40]. Gerlowski, Fung and Ford found that foreign investors from Canada, the United Kingdom and Japan all have strong motives to avoid states with high tax rates [35]. Yamada and Yamada suggest that tax related incentive policies such as lower corporate taxes on earnings are important determinants of FDI by Japanese firms in the European Union [83]. Ermisch and Huff conclude that lower taxes on foreign corporate investments are a beneficial strategy in attracting FDI for less developed countries like Singapore [31]. We, therefore expect that Finnish firms would undertake market as well as efficiency seeking FDIs in a target Asian country with a relatively low corporate tax rates. Hence,

H 7 The higher the level of corporate taxes in the target Asian country, the lower the probability that the Finnish investing firm will undertake the MS and / or ES FDI in that target Asian country.

Inflation

Inflation is also considered a proxy for the quality of macroeconomic management. Foreign capital is known to detract from countries such as Russia, Yugoslavia and Thailand during the periods of high inflation. Scheider and Frey find that rate of inflation in host countries is a negative and significant determinant of FDI in developing countries [70]. Hyun and Whitmore find that high inflation rates in Latin America, Asia and Africa detracts investments by Japanese firms [43]. Similar findings have been reported by Sayek for FDI from the US. Sayek reports that a 3% increase in Canadian inflation reduces US investment in Canada by 2%[68]. Similarly she also found that a 7% increase in Turkish inflation reduced US investment in Turkey by 1.9%. Finally, Bajo-Rubia and Sosvilla-Rivero and Schneider and Frey find that inflation and FDI are negatively related, thus creating an uncertain environment for foreign and domestic investors alike [6,70]. It can be argued that if foreign investors are risk averse (or even risk neutral), high inflation rate uncertainty may lead to a reduction in FDIs, because investors do not want to risk their expected profits from investment. As long as there is uncertainty, foreign investors will demand a higher price to cover their exposure of inflation risks, and this, in turn, will decrease the volume of investment. Thus, to encourage investment, the stability of the inflation rate might be important. We, therefore expect that Finnish firms in Asian will undertake risk-reduction seeking FDIs in a target Asian country with a relatively low inflation rate. Thus,

H 8 The higher the level of inflation in a target Asian country, the lower the probability that the Finnish investing firm will undertake the RRS FDI in that Asian country.

Internalization variables

Finally, firms that possess similar firm-specific advantages and are faced with broadly comparable location advantages of countries may still have different impacts on their operations because they organize and control these variables differently.

Country risks

In many studies, country risk has been categorized as a location-specific variable [see 39]. However we decided to apply it as an internalization variable, as it was mentioned in Chandprapalert and also in Dunning [19,26]. Risks in foreign markets are frequently cited as a deterrent to inward FDI. Dunning identify political instability as “the risk that a sovereign host-government will unexpectedly change the rules under which businesses operate [27].” As the economic structures of advanced industrial nations have increasingly become integrated, and as more national governments have adopted market-oriented policies, the importance of political risk as a determinant of FDI has declined. However, studies on the determinants of FDI flow into developing countries reach opposite conclusions [30,52,74]. Edwards suggest that variables such as political instability and political polarization play a significant role in determining the flow of FDI in developing countries [30]. Agarwal also finds a negative correlation between political instability and FDI [1]. In a study of the post-independence economic transition in the Ukraine, Ishaq concludes that FDI flows to the Ukraine were relatively small in relation to the country’s GDP, mainly due to the country’s unstable and uncertain political climate [44]. Lizondo’s review of the literature on the determinants of FDI generally supported the negative relationship between political risk and FDI [52]. Summary and Summary find that the foreign registrant variable or the number of foreign agents registered with the US Justice department showed that political variable is the significant political determinant of FDI in developing countries [74]. Likewise Nigh uses regression analysis to show that political conflict is a strong deterrent of FDI in the developing host countries of Asia and Africa [57]. Traditionally, it has been argued that risks increase uncertainty, thereby discouraging inward FDIs. Based on previous studies we recognize that firms may take FDIs designed to reduce the corporate risks associated with the changes and moves of national and regional governments of the host country [26]. We, therefore expect that Finnish firms will undertake risk-reduction seeking FDIs in a target Asian country with relatively low levels of risk. Thus,

H 9 The lower the risks in the target Asian country, the greater the probability that the Finnish investing firm will undertake the RRS FDI in that Asian country.

Exchange rate fluctuations

Caution must be exercised when examining currency fluctuations between host and home countries because the importance of changes in exchange rate to firms can vary based on firm-specific objectives and strategies [8]. It is commonly held that exchange rates fluctuations increase the risks and uncertainty, thereby affecting incentives to attract investments. This problem is typically analyzed in a microeconomic framework in terms of the theory of the firm under uncertainty. Kwon and Konopa argued that an unfavorable shift in foreign exchange rates also poses danger to foreign investors [49]. Likewise Baldwin and Krugman and Dixit focused on real exchange rate uncertainty [7,23]. They showed that the sunk cost of entry may encourage firms to move into export activities that would appear profitable in the light of current real exchange rate levels. Mody and Srinivasan find a negative correlation between exchange rate fluctuations and FDI in some industrial sectors [56]. In a study of currency movement and its effect on the location of FDIs, Caves and Froot and Stein show that a negative relationship existed between FDI inflows into the US [18,34]. Overall, the exchange rate fluctuations show a significant and negative impact on FDI in developing countries [74]. We, therefore expect that Finnish firms prefer to undertake risk-reduction seeking FDIs in a target Asian country with relatively low levels of exchange rate fluctuations. Hence,

H 10 The higher the levels of exchange rate fluctuations in a target Asian country, the lower the probability that the Finnish investing firm will undertake the RRS FDI in that Asian country.

Methodology and the sample of the present study

Because of the nature of the dependent and independent variables, the binomial logit model is used in the analysis. In the binomial logistic model the probability of certain types of location choices and types of strategic motives are explained by the reviewed variables. The regression coefficient estimates the impact of independent variables on the probability that the foreign investment is market, efficiency, knowledge seeking and / or risk-reduction seeking. A positive sign for the coefficient means that the variable increases the probability of undertaking an investment. The model can be expressed as

$$P(y_i = 1) = 1 / (1 + \exp(-a - X_i B)) \qquad \text{Equation [1]}$$

Where *yi* is the dependent variable, *Xi* is vector of independent variable for the *i*th observation, *a* is the intercept parameter and *B* is the vector of regression parameters.

The empirical part of this study is based on data from 135 manufacturing FDIs made by Finnish firms in various Asian countries in 1980-2000. . These 135 FDIs includes 77 MS, 78 ES, 44 KS and 32 RRS FDIs. However, these figures of MS, ES, KS and RRS make a total of 231, as approximately three-fourths of the investments are included in more than one type of FDI. The sample is based on information drawn from company annual reports, information taken from business journals, survey information and other information received through direct contact by one of the authors from Finnish companies. The most common target country for investments was clearly China – 45 (33%) investments. The other most common target countries were Malaysia (25 FDIs, 18.4%) and Singapore (20 FDIs, 14.7%). On average, the same firm had two investments in the sample. Most well known Finnish firm Nokia made 10 investments, which was the highest number by a single company in whole sample. In all the cases the investing firms had experience already FDIs, and in most of the cases firms had made at least five foreign direct investments before the reviewed FDI. Approximately three-fourths of the cases of investing firms did not have previous manufacturing experience from the target country, whereas one-fourth of the cases had at least one, in some cases already three or four previous units in the target countries. The investments were made in 13 Asian countries, mainly Southeast Asian countries. Measured with the cultural distance, the distance to the closest target country was 1.52 (Thailand) and to the most distance target country was 5.01 (Japan).

The highest correlations were found between SIZE and EXP (0.459), CRISK and WAGRAT (0.431), INFLA and EXC (0.418), MSIZE and WAGRAT (0.417) and CRISK and CULTDIS (0.337). Those correlations are highest in all the four types of FDIs samples. The other correlations were clearly lower. Thus the problem of multicollinearity should be rather low in this study.

The empirical results

The results of the binomial logistic regression in the basic model are presented in Table 2. The estimated coefficients represent the probability of undertaking a market, efficiency, knowledge and / or risk-reduction seeking FDI: a positive coefficient means that a certain type of investment is undertaken and negative coefficient signifies the opposite. The model has a satisfactory overall explanatory power with chi-squares of 108.671 with 6 DF (p=0.000) for MS and ES FDIs, 3.475 with 1 DF (p=0.062) for KS FDIs and 51.994 with 3 DF for RRS FDIs. Another way of measuring how well a maximum likelihood model fits the data is to use the model to classify observations. The ability to classify can be judged against the classification rate that would have been obtained by change. The rate is equal to $a^2 + (1 - a)^2$, where *a* is the proportion of MS, ES, KS and RRS in the sample. In the present case the baseline rate for MS, ES, KS and RRS are 52.3%, 52.6%, 55.6% and 63.8% respectively. Similarly, the results show that 93 %, 93 %, 65.2% and 85.9% of the observations are correctly classified for MS, ES, KS and RRS respectively.

First, in the case of MS and ES FDIs, it has been found that large ***SIZE, EXP***, and ***MSIZE*** increases the probability of Finnish firms to undertake MS and ES FDIs. Likewise low ***CULTDIS*** and ***WAGRAT*** also encourage Finnish firms to undertake MS and ES FDIs. ***SIZE*** has a positive sign and is significant at 0.05 levels both for MS and ES types of FDIs. Here it can be argued that large firms are often considered it easier to be able to exploit the plant scale economies effectively and efficiently by allocating their large production resources in fewer locations, this in turn can stimulate the investing firms to undertake MS and ES FDIs in a target country. The results in the previous studies have also indicated that large firms often have a large resource base and therefore have better possibilities to undertake FDIs [46,51].

EXP has a positive sign and is significant at 0.05 levels both for MS and ES types of FDIs. Thus, large international experience has increased the probability that Finnish firms undertake MS and ES FDIs in target Asian countries. It can be argued here that the firm's past experiences manifest themselves in organizational routines that form the blueprint for the firm's future actions, and reducing the implementation costs of the investing firm, and thus encouraging the investing firm to undertake MS and ES FDI in a target Asian country. The previous studies also indicated that internationally experienced firms faced fewer risks and disadvantages in unfamiliar foreign countries [2,13].

MSIZE also has a positive sign and is statistically significant at the 0.000 levels both for MS and ES types of FDIs. Thus a large market size in the target country has increased the probability that Finnish firms undertake MS and ES FDIs in target Asian countries. It can be argued that firms expect to experience greater long-term profits through economies of scale and lower marginal cost of production in target countries with larger market size. Thus, investing firms can be better stimulated to undertake MS and ES FDIs in a target country with a huge market potential. The results are in line with the previous studies indicating that large market size of host countries has a significant and positive effect on attracting FDIs [59,67,80].

CULTDIS has a negative sign and it is statistically significant at the 0.001 levels both for the MS and ES types of FDIs. This indicates that the high cultural distance between the home and target countries have decreased the probability of Finnish firms to undertake MS and ES FDIs in a target Asian country. It can be concluded that in culturally similar countries, the demand structures are usually more alike than in culturally more distant countries. Furthermore, marketing, management and production strategies are more easily and less costly transferable to culturally close countries and thus can encourage the investing firms to undertake MS and ES FDIs in a culturally close target country. The results coincide with the findings of the previous studies indicating that investing firms prefer to undertake FDIs in culturally similar countries [36,55].

WAGRAT has a negative sign and it is significant at 0.000 levels both for the MS and ES types of FDIs. Therefore, it can be concluded that the high wage levels in the host country reduces the probability of Finnish firms to undertake MS and ES FDIs in a target Asian country. It can be argued here that with the increase in market share, it also becomes relatively more profitable to increase the degree of product specialization and to operate within specific product niches. As a result of the reduction in labor costs and further market growth are reasoned to open up new investment opportunities for firms to undertake MS and ES FDIs in a target country with relatively low wage rates. In the previous studies, it has also been argued that low wage rates may create an opportunity to achieve plant-level economies of scale; higher production efficiency and lower marginal costs of production, which in turn could lead to large market shares [53,66].

TAX does not appeared to be a significant variable, indicating that higher or lower tax do not increase or decrease the probability that Finnish firms undertake MS and / or ES FDIs in target Asian countries. These findings are in line with the results of the earlier studies focusing on the preferential taxation and / or tax incentives to attract manufacturing FDIs [56,65]. The World Bank Report also argued that pro investment policies are often unnecessary and sometimes even detrimental to inward FDIs [81].

Table 2. PARAMETER ESTIMATES FOR THE BINOMIAL LOGIT MODELS

	Expected sign	**MS**	**ES**	**KS**	**RRS**
CONSTANT		4.675 0.000	4.675 0.000	-0.725 0.000	-13.456 0.000
R&D	+	NR	NR	0.007 **0.074***	NR
SIZE	+	0.000 **0.059***	0.000 **0.059***	NR	NR
EXP	+	0.054 **0.084***	0.054 **0.084***	NR	NR
CULTDIS	-	-1.192 **0.001*****	-1.192 **0.001*****	NR	NR
MSIZE	+	0.004 **0.000******	0.004 **0.000*******	NR	NR

WAGRAT	-	-0.001 **0.000******	-0.001 **0.000******	NR	NR
TAX	-	0.011 0.653	0.011 0.653	NR	NR
INFLA	-	NR	NR	NR	-0.332 **0.001*****
CRISK	+	NR	NR	NR	0.168 **0.000******
EXC	-	NR	NR	NR	0.088 **0.007*****
SAMPLE SIZE		77	78	44	32
% correct observati		93%	93%	65.2%	85.9%

NR = Not Related

**** $p < 0.001$, *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

In the case of KS FDIs, ***R&D*** has a positive sign and is significant at 0.074 levels. It can be concluded here that the higher R&D intensity of the Finnish firms increases the probability that they will undertake a KS type of FDI. It can be argued that the globalization of manufacturing R&D is becoming a popular strategy for firms to exploit and accumulate technological capabilities. These results correspond with the previous studies concluding that R&D intensive firms acquire new technologies by investing in locations that possess such capabilities [4,14,73].

Finally, in the case of RRS FDIs, low levels of **CRISK**, **INFLA** and high levels of **EXC** increases the probability of undertaking RRS FDIs. ***CRISK*** has a positive sign and is significant at 0.000 levels, which indicates that the lower risks in the target country increases the probability that Finnish firms to undertake RRS FDI in that Asian country. The results coincide with the results of the previous studies indicating that most of the firms often prefer to undertake investment in a country with relatively low levels of risk [30,52].

INFLA has a negative sign and is significant at 0.001 levels, indicating that a high level of inflation decreases the probability of Finnish firms to undertake RRS FDIs in a target Asian country. The results are in line with the previous studies where it was found that inflation and FDI are negatively correlated. It can be argued that inflation rate indicates the macroeconomic stability of the target country and it also captures uncertainties in the economy as well and therefore high inflation rates can detract inward FDIs [43,68,70].

Against expectation ***EXC*** has a positive sign and is significant at 0.007 levels, indicating that an increase in exchange rate fluctuations would increase the probability of undertaking RRS FDIs. It can be argued here that a firm that seeks resources or efficiency for their operations, and those making initial investment outlays, would benefit from weak currencies of the host country. Thus, the depreciation of the local currency may enhance the competitiveness of the host country as well. Further, this reasoning would also support the widely held view that countries can attract FDIs by devaluating their currency [7].

Conclusion

The main goal of this paper was to empirically investigate the role of ownership-specific, location-specific, internalization and strategic variables in the OLI paradigm in order to further understand the location choices of Finnish manufacturing firms in Asian countries. Dunning [26] (1993) identifies four main strategic motives of FDIs: market-seeking (MS), efficiency-seeking (ES), knowledge-seeking (KS) and risk-reduction seeking (RRS). So far surprisingly very few studies [19, 78] have been undertaken to empirically analyze the OLI variables along with the strategic motives in order to explain FDI choices [19,78]. Furthermore, there is also very little research done on the FDI behavior of non-Asian firms in Asian countries. Most previous studies focusing on the FDI behavior have analyzed the situation in USA or in OECD countries. Limited information to confirm whether the same variables and motives as in the USA and in the other OECD countries have also been the key influencing variables and motives in the Asian countries is extremely limited.

Based on the literature review it was expected that large size of the firm, greater international experience, large size of the target market, low cultural distance, low wage rate and low taxes increase the probability to undertake MS and ES FDIs. Secondly, high R&D intensity increases the probability to undertake KS FDIs. Finally, low inflation rates, low exchange rate fluctuations and low levels of risks in the target country increases the probability to undertake RRS FDIs.

The empirical part of the study was based on 135 manufacturing FDIs made by Finnish firms in various Asian countries between 1980-2000. The sample is based on information drawn from company reports of the firms, business journals, survey information and other information received by the author through direct contacts with the Finnish companies. A binomial logistic model was used in the analysis of the impact of different ownership, location and internalization variables on the MS, ES, KS and RRS FDI decisions.

The results indicated that nine variables were statistically significant in the total sample. As was expected, large firm size, greater international experience, large size of the target market, low cultural distance and low wage rate had increased the probability of undertaking MS and ES FDIs. Secondly, high R&D intensity of the investing firm has increased the probability of undertaking KS FDIs. Finally, low inflation rate, a low level of risks and a high level of exchange rate fluctuations in the target country have increased the probability of undertaking RRS FDIs.

Further, with reference to the eclectic approach, in the whole sample ownership-specific variables (O), location-specific variables (L) internalization variables (I) and strategic motivations have influenced the location strategies of Finnish firms in Asian markets. The individual strategic motivations listed above should not be seen as mutually exclusive. FDI projects may be driven by several ownership, location and internalization (OLI) variables and strategic objectives simultaneously and in various combinations. Conceptually, however, distinguishing between different types of strategic motivations facilitates a better understanding of the strategic motives underlying different FDI decisions and key ownership, location and internationalization (OLI) variables influencing the different types of FDI projects.

This study has some limitations. First, the R&D –intensity industry level figures had to be used. Company level R&D figures could better explain the real influence of R&D –intensity. Second, the sample size of the study was small, a bigger sample could reveal more interesting results. Third, lack of information about absolute and relative size of FDIs, transportation costs, labor unionization in the target country, free trade zones and competition related information could not be included. To add to those variables would be interesting for future research. Fourth, future research could also analyze the FDIs of specific industries and regions, which could be compared and contrasted with the firms in other industries as well. Such research could assist managers as well as governments in the important and difficult task of prioritizing relevant variables affecting the FDI choices by firms, and could therefore better focus their time and resources – which are often limited – on those variables most likely to affect success in a given situation. Finally it is hoped that the present study will help to bring the variables and motivations of location choices of firms into the mainstream work on international business so that we do not need to question whether location has become the neglected factor in research multinational enterprises.

References

[1] Agarwal, J. (1980). Determinants of foreign direct investment: a survey. Weltwirtshaftliches Archiv. 116:739-73.

[2] Agarwal, J. & S. Ramaswami (1992). Choice of foreign market entry mode: Impact of ownership, location and internalization factors. The Journal of International Business Studies, 23:1, 1-27.

[3] Amemiya, T. (1981). Qualitative response models: A survey. Journal of Economic Literature, 19:4, 1483-1536.

[4] Anand, J & B. Kogut (1997). Technological capabilities of countries, firm rivalry and foreign direct investment. Journal of International Business Studies, 28:3, 445-465.

[5] Austin, J. (1990). Managing in Developing Countries : Strategic Analysis and Operating Techniques. The Free Press, New York.

[6] Bajo-Rubia, S. & S. Sosvilla-Rivero (1994). An economic analysis of foreign direct investment in Spain. Southern Economic Journal, 61:1, 104-117.

[7] Baldwin, R. & P. Krugman (1989). Persistent trade effects of large exchange rate shocks. The Quarterly Journal of Economics, 104:4, 635-655.

[8] Beamish P., A. Morrison, P. Rosenzweig and A. Inkpen (2000). International Management: Taxes and Cases. Boston: Irwin McGraw-Hill.

[9] Belderbos, R. & L. Sleuwaegen (1996). Japanese firms and decision to invest abroad: business groups and regional core network. Review of economics and statistics, 78:2, 214-21.

[10] Borensztein, E., J.Gregorio and J. Lee (1995). How does foreign direct investment affect economic growth? National Burea of Economic Research. Working paper series No 5057, Cambridge, MA 02138.

[11] Boskin, M. & W. Gale (1986). New results on the effects of tax policy on the international location of investment. Working paper no. 1862. Cambridge: National Bureau of Economic Research.

[12] Brewer, T. (1991). Foreign direct investment in developing countries: patterns, policies and prospects. Washington DC: World Bank PRE Working Paper No. 712, Jun.

[13] Buckley, P. & M. Casson (1976). The Future of the Multinational Enterprises. London: Macmillan.

[14] Cantwell, J. (1989). Technological innovations and the multinational corporations, London: Basil, Blackwell.

[15] Cantwell, J. (1995). The globalization of technology: what remains of the product cycle model? Cambridge Journal of Economics, 19: 155-74.

[16] Casson, M. (1987). The firm and the market. Oxford: Basil Blackwell.

[17] Cassou, S. (1997). The link between tax rates and foreign direct investment. Applied Economics, 29:10, 1295-1302.

[18] Caves, R. (1989). Exchange rate movement and foreign direct investment in the United States, in D.B. Audretsch and M.P. Claudon (eds.). The internationalization of US markets. New York: New York University Press.

[19] Chandprapalert, A. (2000). The determinant of US direct investment in Thailand: A survey on managerial perspectives. Multinational Business Review, 8:2, 82-88.

[20] Cunningham, W. (1975). Localization of industry. Economic Journal, 12, 501- 6.

[21] Davidson, W. (1980). The location of foreign investment activity. Journal of International Business Studies, Fall, 9-23.

[22] Dicken, P. (1998). Global Shift: The Internationalization of Economic Activity. (3rd ed.) New York: Guilford Publications.

[23] Dixit, A. (1989). Entry and exit decisions under uncertainty. The Journal of Political Economy, 97:3, 620-639.

[24] Dunning, J. (1980). Towards an eclectic theory of international production: some empirical tests. Journal of International Business Studies, 26:3, 461- 491.

[25] Dunning, J. (1992). Multinational enterprises and the globalization of innovatory capacity. In Granstand, O. et al. (eds.). Technology management and international business: internationalization of R&D and technology. Chichester:Wiley.

[26] Dunning, J. (1993). Multinational Enterprises and the Global Economy. Addison–Welsey Publishing Company.

[27] Dunning, J. (1996). Explaining foreign direct investment in Japan: some theoretical insights. In M. Yoshitomo and E. Graham (eds.) Foreign Direct Investment in Japan. 8 – 63. Cheltenham, UK: Edward Elgar.

[28] Dunning, J. (1997). The European internal market programme and inbound foreign direct investment. Journal of Common Market Studies, 35:1, 1-30.

[29] Dunning, J. (1998). Location and the Multinational Enterprise: A Neglected Factor? Journal of International Business Studies, 29 :1: 45 – 66.

[30] Edwards, S. (1990). Capital flows, foreign direct investment, and debt-equity swaps in developing countries. NBER Working Paper No 3497. National Bureau of Economic Research, Cambridge, MA.

[31] Ermisch, J. & W. Huff (1999). Hypergrowth in an East Asian NIC: public policy and capital accumulation in Singapore. World Development. 27:1, 21.

[32] Erramilli, M., S. Agarwal & S. Kim (1997). Are firm-specific advantages location specific too. Journal of International Business Studies, 28:4,735-757.

[33] Frobel, F., J. Heinrichs & O. Kreye (1980). The new international division of labor. Cambridge: Cambridge University Press.

[34] Froot, K. & J. Stein (1991). Exchange rates and foreign direct investments: an imperfect capital market approach. Quarterly Journal of Economics, 106, 191 – 217.

[35] Gerlowski, D., H. Fung, & D.Ford (1994). The location of foreign direct investment for the US real estate. Land Economics, 70:3, 286-294.

[36] Grosse, R. & L. Trevino (1996). Foreign Direct Investment in the United States: An analysis by country of origin. Journal of International Business Studies, 27:1, 139-155.

[37] Hartman, D. (1981). Tax policy and foreign direct investment, NBER working paper no. 689.

[38] Hartman, D. (1984). Tax policy and foreign direct investment in the United States. National Tax Journal, 37, 475-88.

[39] Hill C., P. Hwang, & C. Kim (1990). An Eclectic Theory of the Choice of International Entry Mode. Strategic Management Journal, 11, 117-128.

[40] Hines, J. (1996). Altered states: taxes and the location of foreign direct investment in America. American Economic Review, 86:5, 1076 – 95.

[41] Hofstede, G. (1980). Culture's consequences: International differences in work-related values. Saga Publications, Beverly Hills.

[42] Hymer, S. (1960). The international operations of national firms: A study of direct foreign investment. Cambridge, Massachusetts: MIT Press, originally Ph.D. dissertation, Massachusetts Institute of Technology.

[43] Hyun J. & K. Whitemore (1989). Japanese direct foreign investment: pattern and implications for developing countries. Working Paper Industry Series 1. Washington: Industry and Energy Dept.

[44] Ishaq, M. (1999). Foreign direct investment in Ukraine since transition. Communist and Post-Communist Studies, 32:1, 91-104.

[45] Itaki, M. (1991). A critical assessment of the eclectic theory of multinational enterprises. Journal of International Business Studies, 22:3, 446-460.

[46] Juhl, P. (1979). On the sectoral patterns of West German manufacturing investment in less developed countries: the impact of firm size, factor intensities and protection. Weltwirtschaftliches Archiv, 115,3.

[47] Jun, J. (1989). Tax policy and international direct investment. National Bureau of Economic Research. NBER Working Paper Series No. 3048.

[48] Knickerbocker, F. (1973). Oligopolistic reaction and the multinational enterprise. Cambridge, Harvard University Press.

[49] Kwon, Y. & L. Konopa (1993). Impact of host country market characteristics on the choice. International Marketing Review, 10:2, 60-74.

[50] Lall, S. & S. Mohammad (1983).Multinationals in Indian big business: Industrial characteristics of foreign investments in heavily regulated economy. Journal of Development Economics, 92, 668-83.

[51] Li, J. & S. Guisinger (1992). The globalization of service multinationals in the "triad" regions: Japan, Western Europe and North America. Journal of International Business Studies, 23:4, 675-696.

[52] Lizonda, S. (1990). Foreign direct investment. IMF. Working Paper, Washington DC: IMF Japan.

[53] London, B. & R. Ross (1995). The political sociology of foreign direct investment: global capitalism and capital mobility, 1965 – 1980. International Journal of Comparative Sociology, 36 (3-4): 98-119.

[54] Lunn, J. (1980). Determinants of US direct investment in the EEC: Further evidence. European Economic Review, 13, 93 – 101.

[55] Mikalak, W. (1992). Foreign direct investment and joint ventures in East-Central Europe: a geographical perspective. Environment and Planning, 25 :11, 1573-82.

[56] Mody, A. & T. Srinivasan (1991). Trends and determinants of foreign direct investment: analysis of US investment abroad, Washington DC: The World Bank, Industrial Development Division.

[57] Nigh, D. (1985). The effect of political events on U.S direct foreign investment: A pooled time series cross-sectional analysis. Journal of International Business Studies, 16:1, 1-18.

[58] Owen, R. (1982). Inter - industry determinants of foreign direct investment. In New Theories of Multinational Enterprise (Rugman A., ed.) London: Croom Helm.

[59] Papanastassiou, M. & R. Pearce (1990). Host-country characteristics and sourcing behavior of UK manufacturing industry. University of Reading, Department of Economics, Paper Series B, 7: 140.

[60] Pearce, R. (1989). The internationalization of sales by leading enterprises: some firms, industry and country determinants. University of Reading Discussion papers in International Investment and Business Studies, Series B, No. 135.

[61] Penrose, E. (1959). The theory of the growth of the firm. Basil Blackwell, Oxford

[62] Petrochilas G. (1989). Foreign direct investment and the development process. Aldershot: Avebury.

[63] Porter, M. (1990). The competitive advantages of nations. New York: Free Press.

[64] Root, F. (1990). International trade and investment. Sixth edition. Chicago: South Western Publishing.

[65] Root, F. & A. Ahmed (1979). Empirical determinants of manufacturing foreign direct investment in developing countries. Economic Development and Cultural Change, 27:4,751-67.

[66] Rolfe, R. & R. White (1992). The influence of tax incentives in determining the location of foreign direct investment in developing countries. Journal of the American Taxation Association, 13:2, 39-57.

[67] Sabi, M. (1988). An application of the theory of foreign direct investment to multinational banking in LDCs. Journal of International Business Studies, 19, 433-48.

[68] Sayak, S. (2000). Inflation and foreign direct investment: Theory and evidence. Paper presented at Royal Economic Society's 2000 Annual Conference at the University of St. Andrews, United Kingdom.

[69] Scaperlanda, A. & R. Balough (1983). Determinants of US direct investment in the EEC Revisisted. American Economic Review, 21, 381-90.

[70] Schneider, F. & B. Frey (1985). Economic and political determinants of foreign direct investment. World Development, 13:161-75.

[71] Schoenberger, E. (1988). The ambiguous future of professional and technical workers in manufacturing: some hypotheses. Acta Sociologica, 31:3, 241 – 248.

[72] Serapio, M. (1997). Internationalization of industrial R&D: theoretical perspectives and empirical evidences. Unpublished paper.

[73] Shan, W. & J. Song (1997). Foreign direct investment and the sourcing of technological advantage: evidence from the biotech industry. Journal of International Business Studies, 28:2, 267-284.

[74] Summary, R. & L. Summary (1995). The political economy of United States foreign direct investment in developing countries: an empirical analysis. Quarterly Journal of Business and Economics, 34:3, 80 – 93.

[75] Swendengorg, B. (1979). The multinational operations of Swedish firms: An analysis of determinants and effects. *Stockholm:Industriens* Utredningsinstitut.

[76] Torrisi, C. (1985). The determinants of direct foreign investment in a small LDC. Journal of Economic Development, July, 1-6.

[77] Vernon, R. (1966). International investment and international trade in the product cycle. Quarterly Journal of Economics, 80, 190-207.

[78] Vyas, B. (2000). Foreign direct investment from developing economies in the United States - Magnitudes, characteristics, motives and location choices of manufacturing plants. Doctoral dissertation. The State University of New Jersey.

[79] Wei, I. (2000). USDIA and foreign debt corruption act. Quarterly Journal of Economics, 27:41-50.

[80] Wheeler, D. & A. Moody (1992). International investment location decisions. The case of US firms. Journal of International Economic, 33: 57-76.

[81] World Bank (1995). World Development Report. Oxford University Press.

[82] Wolf, B. (1977). Industrial diversification and internationalization: some empirical evidence. Journal of Industrial Economics, 26, 177-91.

[83] Yamada, T. & T. Yamada (1996). Country integration and Japanese foreign direct investment in the EC. Contemporary Economics Policy, 14:1, 48-58.

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Effecting Science Park Management for Economic Development: Tracing the 20-Year History of the Singapore Science Park for Experience and Lesson

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Abstract

A science park has been increasingly used as a mechanism to stimulate knowledge-intensive activities for economic development. The Singapore Science Park, one of the earliest parks founded in economies at the developing stage, is highly ranked in the Asia Pacific region. Through tracing its 2-decade history, the present study identified factors critical to its performance. They suggest that both government with the macro environment it creates and park management with the micro strategies it formulates are decisive for a science park. This provides insight for the operation of other parks, particularly late comers.

Introduction

A science park is defined in this paper as a property-based initiative with an organizational entity, which is established to assist the growth of knowledge-based firms normally resident on site and knowledge-intensive activities. The establishment of science parks has been one of the features of national and/or regional strategies for promoting science and technology through the late twentieth century. The major objective has been to stimulate innovation and generate economic benefits via assisting knowledge-based firms and knowledge-intensive activities. Although this phenomenon first appeared and spread in developed countries, an increasing number of governments of developing countries have been following suit. The Singapore Science Park (SSP) is one of the earliest such type of schemes established in economies at the developing stage (See Zhang, 2002). It was proposed at the end of the 1970s to support the government initiative of gearing the economic development towards the exploitation of new technologies. The national scenario for this initiative is that the country's initial labour-intensive industrialization had achieved full employment; manufacturing was emerging as the largest sector; and research and development (R&D) activities began to be emphasized as the key to the country's economic future (see Zhang, 2000).

The SSP was designed to cover 112 hectares to be developed in four phases. Construction started on 19 April 1982 (ST, 1982a; Tan, 1993). The Park was officially opened on 17 January 1984 (BT, 1984a). Phase I, 30 hectares, was completed at the end of 1995 (ST, 1994 & 1996a). It has 20 buildings with a built-up area of 245,000 square meters. 13 of them are multi-tenanted buildings. Six are land lessees' buildings and one, amenity building. Of the 13 multi-tenanted buildings, three contain units customized for IT companies. The rest house R&D companies in other fields. Phase II covers 20 hectares (SSP, 2002). Construction was started in April 1993 (Teng, 1993). With five multi-tenanted buildings and two land lessees on site, it is 90 percent developed now. Specialized facilities that it has include an incubator management company, which advises and nurtures fledging high-tech start-up tenant companies, and the TeleTech Park, which claims to be Asia's first telecommunications R&D dedicated facility. Phase III has a land area of 15 hectares to be developed over 12 years. It targets the life science industry. The first building will be ready by the end of 2002 (SSP, 2002). No planning about Phase IV has been released.

The SSP, from its inception, has been encouraging all industrial and scientific R&D activities to be located inside with the exception of those that are land-intensive or those that may pollute the environment (BT, 1982a; Asian Finance, 1988). Criteria screening applications include (1) R&D budget as a proportion of the total operating budget and the actual amount of R&D work; (2) the ratio of non-degree holders to degree holders and the number of Masters and Ph.D. holders; and (3) the capital intensity and technology content of a project (Asian Finance, 1988).

Available information indicates that the SSP has reached an outstanding status. It has over 300 tenant companies with more than 7,000 research engineers, scientists and supporting staff. 52 percent of them have a basic degree. 16 percent have a Master degree, and 12 percent are Ph.D. holders (SSP, 2002). The Park was ranked the second most popular science park in the Asia Pacific region by Corporate Location's 1997 survey (Corporate Location, 1997). Such information motivated the present study to probe the 20-year development history of the SSP for experience and lesson. They are expected to provide insights for the operation and management of other science parks, particularly those late comers. This is especially important while taking into the consideration the high failure rates of this type of schemes as reflected in some other studies (see Zhang, 2002). As very limited in-depth studies about the SSP have been found, the present study was conducted through analyzing the information from the 2-decade local news papers, the SSP's documents, related journal articles, the Internet, and the author's observation and interview.

Critical Factors For The Ssp

Similar to other science parks, the SSP is characterized with easy access to universities and the quality of life. It is next to the National University of Singapore, near other technical institutes such as the Nanyang Technological Institute and the Singapore Polytechnic (ST, 1982a & b; Asian Finance, 1988), and surrounded with good housing, schools, sports facilities, a hospital and a commercial center (ST, 1991a). The Park's S$2 million fitness club is Singapore's first mega-size fitness center spreading out over 11,580 square meters. It comprises a swimming pool, tennis courts, a squash court, an aerobics studio, a fitness gymnasium, steam baths, jacuzzi, a billiard room, a deli-bar, two restaurants, and an all-in-one convenience store offering travel, postal, photocopying, stationery, laundry as well as floral services (SSP, 2002; Foo, 1995). These are important in attracting knowledge workers. However, there are far more significant factors contributing to the Park's present status. Those key ones that the current paper proposes include (1) a national environment encouraging R&D endeavor, (2) strong direct support from the government, (3) a committed management team, (4) competitive rentals, and (5) familiarity with the market.

Factor 1: A national environment encouraging R&D endeavor. The growth of the SSP, particularly the growth of the number of its tenant companies, presents a positive relationship with the national efforts in stimulating and encouraging knowledge-based industries and technological entrepreneurs. When opened in early 1984, the SSP could boast six tenants although only one moved in, which was Det Norske Veritas Marine Technology Center, a Norwegian service organization for shipping and off-shore industry. The other five were the Singapore Institute of Standards and Industrial Research, the National Computer Board and three confirmed tenants in starter units. The government had some stake in three of them. Such a market response was regarded as being non-overwhelming, and the progress of tenant intake was slow (see Tsang, 1984; Chew, 1984; BT, 1984a & b; ST, 1984a & b &1988). What behind such a beginning was actually the country's weak R&D background.

Singapore's initial industrialization in the 1960s was labour-intensive oriented because creating jobs was a major objective. R&D activities had been very limited by the end of the 1970s (BT, 1989). GERD (gross expenditure on R&D) was 0.2 percent in 1978, when the country had 8,000 scientists and engineers, of whom only 2.5 percent were engaged in R&D, mostly in universities (ST, 1979). The government launched the "Second Industrial Revolution" in 1980, aiming at gearing the manufacturing sector to productivity-driven growth and higher value-added activities (Yeo, 1998; Grunsven & Egeraat, 1999; SEDB, 2000). The thrust was towards the exploitation of new technologies, for which R&D incentive schemes were enhanced by being injected more funds and added new features (see Zhang, 2000). However, in the mid-1980s, coincident with a worldwide economic

Table 1. INTAKES OF THE SSP'S TENANTS

Year	No. of tenants	New tenants		Year	No. of tenants	New tenants	
		No.	Average			No.	Average
				1991	75	8	16
1982	1		2	1992	95	20	
1983	2	1		1993	102	7	

1984	7	5		1994	117	15	
1985	9	2		1995	148	31	
1986	12	3	10	1996	166	18	32
1987	25	3		1997	226	60	
1988	40	15		1998	215	- 11	
1989	46	6		1999	276	60	
1990	67	21		2000	307	31	

Source: The number of tenants each year is from SSP (2002).

slowdown, Singapore was in a severe economic recession partly due to overshot wages and higher business costs (SEBD, 2000). The demand for the SSP's R&D facilities could hardly be strong. The Park had nine tenant companies by 1985 (see Table 1).

1987 saw the number of the SSP's tenants started swelling. It reached 40 by the end of 1988, and the demand for admission to the Park appeared picking up (see Table 1). This has been found closely related with the country's new development policy. Confronted with the economic recession in the mid 1980s, the government set up new directions: establishing the country as a Total Business Center for high value-added manufacturing, services (i.e. financial and business services) and non-production activities (i.e. R&D, logistics and management). Low value-added and labour-intensive activities were guided out of the country (Grunsven & Egeraat, 1999). The government spelt out three goals: to get all industries to exploit and apply new technologies; to build up competence in targeted new fields; and to move into selected high-tech manufacturing (Chng, 1987). As a result, investment in manufacturing after the mid-1980s moved towards the high-end of activities in existing industries and initiatives in new-technologically advanced industries (Grunsven & Egeraat, 1999). The number of firms undertaking R&D grew from 63 in 1978 to 264 in 1990. GERD increased to 0.9 percent. 62 percent of it was from the private sector (ST, 1991b). The number of research scientists and engineers per 10,000 workers increased from 0.84 in 1978 to 28.6 in 1990 (see Zhang, 2000). Such an enlarged base of knowledge creation and application explains the stronger demand for the SSP's facilities. The Park had 67 tenants in 1990 and an annual 10-tenant intake on average during the second half of the 1980s (Table 1).

The growth of the SSP's number of tenants was even faster in the 1990s, at a rate of 16 average annul intake in the first half of the decade and 32 in the second half. There were 307 tenants in 2000, which doubles the number of 1995 (148) (Table 1). These in no way can be separated from the S$2 billion first five-year National Technology Plan (NTP) (1991-1995) and the S$4 billion second one (1996-2000). The first NTP aimed at developing the country into a center of excellence in selected fields of science and technology so as to enhance national competitiveness and propel the country from a newly industrializing economy into the league of world-class innovation-driven economies (ST, 1991c & d). Human resources development, incentive schemes and technology programs, and physical infrastructure development composed its focus (BT, 1991) (Table 2). It set the direction of R&D towards boosting industries. Government support and funding would be given primarily to projects that had industrial applications (ST, 1992a). By the fifth year mark of the Plan, 13 research institutes and centers, 67 co-operate R&D centers and 20 spin-off companies had been set up

Table 2: BUDGET FOR THE FIRST NTP

Program	Five-Year 1991-1995 (S$ Million)
1. Technology Programs	806
2. Key strategic thrusts in technology; Ad-hoc projects in other areas	556
3. Research and Development Assistance Scheme	80
4. Manpower Development	158
5. Technology Infrastructure	45

6. Science Park Development	335
Total	2,000

Source: ST (1991b).

(ST, 1996b). The number of research scientists and engineers per 10,000 workers increased from 28.6 in 1990 to 47.7 in 1995. GERD reached S$1.37 billion in 1995, over two times of that in 1990 (Nirmala, 1996). 64.5 percent of it was from the private sector (Chellam, 1996). Such increasing enthusiasm in R&D led to the increasing demand for the SSP's facilities. The number of the SSP's tenants grew from 67 in 1990 to 148 in 1995, a 120 percent increase (Table 1). Due to the surge in demand, the SSP embarked upon its Phase II development in 1993, when Phase I housed about 100 tenant companies (BT, 1993; Tan, 1993).

Singapore's second NTP was for the country to build a world-class science and technology base in the following 10 to 15 years in the fields of her strengths (ST, 1996c). It targeted at (1) building indigenous technological capability by investing more resources in universities and research institutes for them to support and seed industrial projects; (2) supporting private sector R&D with sufficient funds to co-share their risks through existing incentive schemes; and (3) developing manpower by encouraging more students to enroll in science and engineering courses and to do postgraduate work (Blond & Mathi, 1996). 70 percent of the S$4-billion budget would be used to improve the existing and next generation of products and services (ST, 1996c). Although the Asian financial crisis occurred ten months after the NTP was launched, Singapore's investment in R&D did not slacken. It grew from over S$1.37 billion in 1995 to S$2.8 billion in 1999; GERD, from 1.13 percent to 1.94 percent; patent applications, from 242 to 701; and the number of research scientists and engineers per 10,000 workers, from 47.7 to 68.8 (NSTB, 2000). The number of the SSP's tenants achieved its highest growth rate in these five years. Although 11 tenants left in 1998 during the crisis, 60 companies entered in 1999. Following the double-budgeted second NTP, the SSP's total number of tenants and the average annual intake doubled those under the first NTP (see Table 1).

Factor 2: Strong direct support from the government. Singapore's government has been providing strong support to the SSP. This contributes to and even makes up part of the SSP's glorious present. For the strategic location of the SSP, the government allocated the Park the possession of the six-hectare Singapore Armed Forces' Transport Base headquarters at Ayer Rajah Road for its Phase I development (ST, 1985), gazetted 9.2 hectares of private land in Pasir Panjang and committed 12 hectares of state land for its Phase II development (BT, 1982b). Park development was incorporated into the national technology plan (see Table 2). Besides, some of the key government organizations have been constantly relocated into or established in the Park. These include the Science Council of Singapore, the Singapore Institute of Standards and Industrial Research, the National Science and Technology Board, the Institute of Microelectronics and the Information Technology Institute.

- The Science Council of Singapore used to play an advising role for the government. At the end of the 1970s, its role was expanded from a science advisor to a science promoter, which allowed it to promote R&D activities in the production sectors (ST, 1977, 1978). In April 1984, the Council assumed three tasks: (1) administrating the SSP, (2) running the Research and Development Assistance Scheme, and (3) building up a scientific culture in Singapore and a network of expert advisers outside the country (Lee, 1984). It was relocated into the SSP in late 1984 (Loh, 1984).
- The Singapore Institute of Standards and Industrial Research initially was a government testing center for industrial products. It then took on the added task of providing R&D support for local firms. It has a design and development center for new product development, a food technology center for the development and packaging of new food products, a material technology center for the selection and evaluation of industrial materials, and a metrology center (Asian Finance, 1988). Opened in 1986, its premises in the SSP spread across 3.25 hectares of land housing workshops, laboratories, research centers and administrative staff (Loh, 1984).
- The National Computer Board officially opened its building in the SSP on 1 September 1988. It was constructed on a 4,000-square-meter area with a 15,317-square-meter built-in area spreading over a four-story main block and two split-level basement car parks. There are two annex blocks of two storeys each linked to the main block. Housed within the main block is a multi-purpose hall with a 200-seating capacity, a staff canteen and recreational facilities. In addition to housing all the headquarters staff of the Board, the offices of

the Singapore Federation of the Computer Industries and the Singapore Computer Society, the building is used by IT companies for seminars, exhibitions and product announcements (ST, 1988).

- The National Science and Technology Board, a statutory board established at the end of the 1980s, is the expanded and upgraded Science Council of Singapore. It served as a coordinating mechanism to draw up and implement the first National Technology Plan (1991-1995) (ST, 1990a & b; Rajendran, 1991). It is also a one-stop advice center on grants and other assistance schemes, business counselling, patent assistance, matchmaking with researchers and venture capitalists (ST, 1991a).
- The Institute of Microelectronics and the Information Technology Institute are among the nine biggest research institutes funded by the National Science and Technology Board to support industry-driven research (ST, 1993). They provide their knowledge infrastructure and research facilities for companies following them. Their joint three-storey building in the SSP, officially opened on 26 September 1995, covers a gross floor area of 12,800 square meters (ST, 1993; Tan, 1994; Toh, 1995).
- Having these organizations located in the SSP creates the effect of killing two birds with one stone. First, it enables the SSP's tenant companies to get easy access to various types of assistance that these organizations provide, and therefore makes the SSP more attractive. Second, these organizations not only are the SSP's anchor tenants, but also compose part of the SSP's facilities, and therefore enhanced the Park's development and competitiveness.

Factor 3: A committed management team. The management of the SSP during the past two decades had been within the responsibilities of three major government organizations before it was privatized in 1990. The first organization was the Jurong Town Corporation, a statutory board created in 1968 to oversee the industrial premises in the country (JTC, 1999). It had been in charge of the Park's physical development and management until the Park was officially opened in early 1984 (ST, 1982a; Chew, 1984; BT, 1984b). Tenant selection during this period was conducted by an admissions committee composed of representatives from the National University of Singapore, the Economic Development Board, the Jurong Town Corporation, the Singapore Institute of Standards and Industrial Research, and the Science Council. The Economic Development Board served as the secretariat of the committee, and was also responsible for park promotion (Keng, 1982).

When officially opened on 17 January 1984, the SSP came under the wing of the Economic Development Board, which assumed the overall responsibility for the planning, promotion and administration of the Park. It was envisaged that the Board's network of international offices with its international contacts was well placed to handle overseas promotions. Dr. Vincent Yip, head of Advanced Technology and R&D of the Board, was the administrator of the Park. He worked within the Board, but was also in liaison with the Jurong Town Corporation and other relevant authorities in the running of the Park (Chew, 1984; BT, 1984b).

Three months later, in April 1984, the Science Council took over the responsibility of managing the Park. The Science Park unit, one of its three units, was responsible for attracting suitable tenants, park administration, the establishment of common facilities and services for tenants. It also acted as the secretariat to the admissions committee (Lee, 1984; Loh, 1984). The committee at this moment was composed of the CEOs of the Science Council, the Economic Development Board, and the Singapore Institute of Standards and Industrial Research (Asian Finance, 1988).

At the end of the 1980s, when the National Science and Technology Board was gazetted to replace the Science Council, the management of the SSP was privatized in order to make it more responsive to market conditions and the needs of R&D companies (SSP, 2002). Technology Parks Pte Ltd, a private subsidiary of the Jurong Town Corporation, was formed to manage the SSP (BT, 1994). Since then, the privatized management company has been keeping on the administration of the SSP. It has experienced expansions, restructures and different names. "Arcasia Land Pte Ltd" replaced "Technology Parks Pte Ltd" in April 1997 to underpin its ongoing growth. Arcasia is a synthesis of the words "Arcadia" and "Asia". "Arcadia" means an ideal place, which refers to the total environment it creates for its customers. Asia is the focus of its operations. Arcasia has been actively expanding its presence as a regional property developer (Arcasia, 2000). In 2001, "Ascendas Pte Ltd" replaced "Arcasia Land Pte Ltd" as a result of a merger between Arcasia and JTC International, which used to be the international arm of the Jurong Town Corporation (Ascendas, 2002; SSP, 2002). Such institutional evolution of the management of the SSP during these two decades – from part of a government organization to an independent management company – reflects the requirement of the park operation. The SSP's fast development during the 1990s could hardly be separated from the committed team of the management company.

Factor 4: Competitive rentals. The SSP's rentals and land leases are quite competitive by the country's standard (ST, 1992b). This played an important role in the performance of the SSP, and was among the main reasons for the full occupancy of the 30-ha Phase I (see Wong, 1991). In early 1984, the rental of the SSP's starter units was comparable with those of flatted factory space of S$17.10 per square meter per month. The rental of leased land was S$11.60 per square meter per annum compared with the commercial rate of S$38.70 in the same area (Chew, 1984). In the early 1990s, office rentals of the SSP were between S$21.5 and S$54 per square meter (S$2 and S$5 per square foot) and the 30-year land lease rate was S$30 per square meter a year (Wong, 1991). Rentals of the office spaces in the Innovation Center, which was opened at the end of 1996, were S$20 per square meter per month for the first year (50 percent off average market rate of S$40 a month) and S$28 per square meter a month for the second year (a 30 percent discount). Tenants are expected to move to their own premises elsewhere in the Park after two-year working in the Center. Lease extensions and rentals could be discussed on a case-by-case basis (BT, 1996). Charging lower rentals is in accordance with the objective of science parks as they are established to assist the growth of knowledge-based firms and technological entrepreneurs. Higher rentals could in no way be helpful in encouraging entrepreneurship, therefore would not be helpful for parks to achieve their macro objective – promoting the development and application of science and technology for economic competitiveness.

Factor 5: Familiarity with the market. Being able to meet the need of the market or not influences the performance of any business as long as it has a product or service to sell. The experience of the SSP suggests that this is the same for a science park. The SSP had three buildings when it was officially opened. One was Det Norske Veritas Marine Technology Center. The other two were constructed by the Park. Each housed 12 starter units for companies that were too small to build their own laboratories-cum-offices. Each unit was 600 square meters and cost S$10,200 in monthly rentals. This size proved too large, and therefore imposed an unnecessary financial burden on park tenants. The SSP had to reduce the units' size (see Chew, 1984; BT, 1984a & b; ST, 1984a & b & 1988). These 12 starter units were eventually changed into 16 units. All were rent out in mid 1986 (Tsang, 1986; ST, 1986). With this lesson, the second generation of starter units, another two blocks constructed in 1986, was designed to have more flexible unit sizes in 100 square meter multiples, from 100 square meters to 800 square meters (Tsang, 1986). The Park's Innovation Center, which was opened 10 years later, provides even smaller and various-sized fully equipped units ranging from 20 to 100 square meters (BT, 1996). The SSP appears to have experienced, to a certain extent, a "learning-by-doing" way of physical development. Had the Park known the property requirements of its potential tenants, it would not have had to restructure its first generation of starter units after they had been completed. This reflects the importance of a strong market sense for the management of a science park and the importance of flexible working spaces in order to meet various needs of the market. In terms of the general physical development, the SSP has been progressing well as it has been unfolded according to the market situation. After opened with its first two starter blocks, the Park decided to have a further flexible development plan based on demand (Chew, 1984). When Phase I achieved full occupancy, and there was continuing demand, Phase II was launched on 14 October 1993 (ST, 1993).

Conclusion

The above critical factors reflected by the experience of the SSP suggests that both government with the macro environment it creates and park management team with the micro strategies it formulates play an important role in the development and performance of a science park. Without a pool of knowledge-based firms, which can be enlarged through policies encouraging and assisting R&D and technological entrepreneurship, a science park could hardly recruit sufficient knowledge-based firms and knowledge-workers. However, if without a professional and committed management team catering the segment of knowledge-based firms and knowledge-workers, a science park could hardly get sufficient tenants either even if there were lots of R&D activities and strong entrepreneurship in an economy. The synergetic cooperation of government and park management is the basis for a science park to develop well and to achieve its objective of accelerating economic development through enhancing knowledge-intensive activities.

References

[1] Arcasia (2000) Arcasia Land Pte Ltd. <http://www.Arcasia.com.sg>.

[2] Ascendas (2002) Ascendas. <http://www.ascendas.com/Who-we-are_01.cfm?lang=eng>.

[3] Asian Finance (1988) Singapore finds an answer to Silicon Valley. *Asian Finance*, 15 April.

[4] Blond & Mathi (1996) $4b plan to boost Republic's science, technology capabilities. *Straits Times*, 4 September.

[5] BT (Business Times) (1982a) What JTC envisions for Science Park. 11 February.

[6] --- (1982b) Private land gazetted for Science Park. 13 August.

[7] --- (1984a) Mushrooms, robots sprout. 17 January.

[8] --- (1984b) EDB assumes full responsibility for Science Park. 17 January.

[9] --- (1989) R&D - the human element. 1 September.

[10] --- (1991) R&D that can enhance competitiveness gets top priority. 10 September.

[11] --- (1993) Dhana on need for 'soft' infrastructure. 15 September.

[12] --- (1994) Techparks makes its mark in building high-tech facilities. 29 March.

[13] --- (1996) Center for firms starting in R&D opens in Science Park II. 3 December.

[14] Chellam, R. (1996) Expenditure on R&D up 16.3%. *Business Times*, 17 December.

[15] Chew, L. (1984) Science Park opening today, EDB takes over its planning, promotion and admin. *Straits Times*, 17, January.

[16] Chng, G. (1987) The Singapore way: acquiring technology through MNCs. *Straits Times*, 3 October.

[17] Corporate Location (1997) Aussie rules. *Corporate Location,* July/August, P. 45.

[18] Foo, J. (1995) Science Park fitness center built country club style. *Straits Times*, 30 July.

[19] Grunsven & Egeraat (1999) *Achievements of the industrial 'high-road' and clustering strategies in Singapore and their relevance to European peripheral economics.* Abingdon, April.

[20] JTC (1999) Jurong Town Corporation. <http://www.jtc.gov.sg>.

[21] Keng, S.T. (1982) Science Park to open its door in second quarter of next year. *Business Times*, 4 March.

[22] Lee, H.S. (1984) Science Council to Spearhead Thrust into High-tech Business. *Business Times*, 29 November.

[23] Loh, H.Y. (1984) Three-pronged plan to boost R&D activities. *Business Times*, 4 December.

[24] Nirmala, M. (1996) Spending on R&D more than doubled from 1990 to 1995. *Straits Times*, 18 December.

[25] Rajendran, J. (1991) Government to pump in $2b to boost R&D. *Business Times*, 10 Sept.

[26] SEDB (2000) Singapore Economic Development Board. <http://www.sedb.com/index1.html>, May.

[27] SSP (2002) Singapore Science Park. <http://www.sciencepark.com.sg>.

[28] ST (Straits Times) (1977) Science Council steps up role. 19 December.

[29] --- (1978) Council plan to expand research. 19 December.

[30] --- (1979) Science Center Directory: only 2.5 pc in R and D. 7 June.

[31] --- (1982a) Building of Science Park begins on April 19. 8 April.

[32] --- (1982b) the Science Park off to fine start. 4 March.

[33] --- (1984a) Prince Harald to attend center's opening. 17 January.

[34] --- (1984b) Bubbly flow as Science Park opens. 18 January.

[35] --- (1985) JTC takes over site of army base for Science Park. 21 January.

[36] --- (1986) First 16 starter units in Science Park taken up. 11 June.

[37] --- (1988) Dr Tay to open IT hub in Science Park. 1 September.

[38] --- (1990a) Science Council to be upgraded to state board. 3 August.

[39] --- (1990b) R&D boost from science and technology board. 11 November.

[40] --- (1991a) Enter the Technology Corridor. 10 September.

[41] --- (1991b) Government spending on R&D will match private firms. 10 September.

[42] --- (1991c) Five-year R&D blueprint aims to propel republic into the big league. 10 Sept.

[43] --- (1991d) Spinning the R&D web. 17 September.

[44] --- (1992a) Tech Month'92, a special feature on the national technology event of the year. 1 September.

[45] --- (1992b) Johor tech park should focus on area not emphasized in S'pore. 9 November.

[46] --- (1993) Republic takes big step towards becoming a 'technology city'. 15 October.

[47] --- (1994) JTC unit launches Science Park facility. 5 October.

[48] --- (1996a) Tech Parks buys stake in Science park's Phase II. 22 October.

[49] --- (1996b) The roots are in place, now they must deepen. 13 September.

[50] --- (1996c) World-class target for science, technology. 13 September.

[51] Tan, S. (1993) Govt to embark on phase two development of Singapore Science Park. *Straits Times*, 7 April.

[52] Tan, C. (1994) Most challenging' R&D center coming up at Science Park II. *Straits Times*, 5 December.

[53] Teng, K.C. (1993) Science Park Phase II to be completed by 2001. *Business Times*, 7 April.

[54] Toh, H.S. (1995) Government to give local R&D $300m boost. *Business Times*, 27 Sept.

[55] Tsang, J. (1984) High-tech moves into top gear. *Business Times*, 28 December.

[56] Tsang, J. (1986) Science Park starter units fully occupied. *Business Times*, 11 June.

[57] Wong, L.M. (1991) Science Park enjoys full occupancy in first phase. *Straits Times*, 2 Aug.

[58] Yeo, G. (1998) Launched: Plan to make S'pore an innovation hub. *Straits Times*, 8 January.

[59] Zhang, Y. (2000) Strategies of national technology management in building up a knowledge-based economy – The case of Singapore. In *Proceedings of the 2000 conference of transcending boundaries: integrating people, processes and systems:* 386-394. Brisbane, Australia.

[60] Zhang, Y. (2002) *A developing economy oriented model for science park management.* Unpublished doctoral dissertation, University of Wollongong, Australia.

Entrepreneurial Leadership and Thriving Innovation Activity

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Abstract

Innovation has become the key to firm success, and entrepreneurial leadership displayed by the Top Management Team fundamentally drives innovation in firms. This paper discusses findings from an empirical study of factors influencing success of firms operating in developing economies in an industry where science drives pace of change. We find that success of firms in such industries depends on Thriving Innovation Activity that in turn is primarily driven by Effective Entrepreneurial Leadership of the Top Management Team. The paper presents the dimensions of entrepreneurial leadership and its linkage to innovation and firm success in the form of testable propositions. Finally, a preliminary theory of firm success in industries where science drives pace of change is also inducted from this empirical study and presented.

Introduction

Technology and innovation, in industries where science drives pace of change, have played a crucial role in the economic development of a number of countries like Japan and South Korea that are classified as "developed" today thereby providing empirical proof for this Schumpeterian theory of economic development [39]. This has led to considerable attention being paid to the role of science as a pacemaker of economic change and the crucial role of innovation in the process.

While a number of elements drive economic growth in general [35], when science drives pace of economic change, the growth of a region is more immediately affected by its propensity to invent and innovate than the propensity to develop pure science [23]. The significant feature of an invention is that it discloses an operational method of creating something new. When an invention is introduced commercially as a new or improved product or process, it becomes an innovation. The economic success achieved by Japan and South Korea (called Newly Industrialised Countries or NICs hereafter) was indeed based on borrowing path-breaking scientific concepts from developed countries and inventing and innovating around them.

The economic growth of these NICs was driven by the success of their firms in global markets in sectors/industries like electronics, automobiles and semiconductors. These sectors were the ones where they could be relatively competitive and their resources too effectively utilised [14]. Science drives the pace of change in these sectors. Such sectors/industries are characterised by rapid and discontinuous changes in demand, technology and/or regulation.

Different researchers have analysed the reasons for such success from the limited perspective of their academic affiliations. However, no effort has been made to synthesise such work and induct a testable and empirically valid theory of firm success in industries where science drives pace of change, which is applicable to developing economies. Our research objective is to develop such a theory.

Research Methodology

We organised our research around three questions. First, why are some firms based in developing economies in industries where science drives pace of change more successful than others? Second, what are the factors influencing success of these firms? Third, how do those factors affect firm success?

The research is set in India, thereby establishing a developing economy context. India expects knowledge-intensive industries like information technology and pharmaceuticals, to drive its growth. Science drives pace of change in these industries and they exhibit the characteristics of rapid and discontinuous changes in demand, technology and/or regulation. It is relatively competitive in these industries and its vast technical and managerial resources can also be effectively utilised. We chose one such potential growth driver, the pharmaceutical industry, to study firm success in their natural setting.

As new questions are being researched, the case study research method is an appropriate one to use to build theory [11]. We have adopted an "embedded multiple cases" design [50]. Embedded design denotes several units of analysis. In this study we investigate both the firm and its top management team. Multiple case designs allow "replication" logic [50], with each case study confirming or disconfirming inferences from previous ones thereby permitting induction of more reliable models. We have developed certain a priori constructs regarding firm success in such industries. Relevant data was collected for each construct using both questionnaires and structured interviews with multiple investigators involved in the data collection process. Data collection and analysis overlapped and analysis involved a search for patterns across cases. Data collection is kept flexible and opportunistic to take advantage of unique case features and to make adjustments to data collection instruments, if required.

Developing a Priori Constructs

A priori specification of constructs helps shape the initial design of theory building research and is valuable because it permits researchers to measure constructs more accurately [11]. Drawing on our analysis of various streams of literature, in the first stage, we identified factors and their determinants influencing firm success in industries where science drives pace of change. We also analysed the Indian pharmaceutical industry against these factors. In the second stage, we identified antecedents to those determinants that are firm specific. In identifying these factors, we drew on work by researchers from different academic disciplines on identifying reasons for success of firms from NICs in such industries and also on work relating to identifying determinants of innovation, and firm performance and growth. This will be supplemented later by insights gained during the course of the research.

Factors Influencing Firm Success

As in the case of economies, success of firms in industries where science drives pace of change would be fundamentally determined by the propensity to invent and the successful conversion of such inventions to innovations, which we have termed Thriving Innovation Activity or TIA. In situations involving rapid advances in technology, it is evident that technological innovation is indeed the factor determining life of the firm [22] and its survival and growth [45].

Factors Influencing TIA

We identified determinants of TIA and hence firm success in industries where science drives pace of change. We found that the factors critically influencing TIA in such industries are the Effective Entrepreneurial Leadership of the top management team, which is a firm specific factor, and the protection of Intellectual Property Rights (IPR) through the grant of patent protection to inventors, which is a matter of government policy.

Leadership represented by top management plays a very critical role in driving innovation in firms and in mastering its dynamics ([18], [19], [37], [46], and [47]). Given that major advances are occurring in the sciences underlying the industry, and given that the economic organisation of the industry is conducive to innovation, and capital is freely available for radical new developments, the key factor determining successful technological innovation under these circumstances is Effective Entrepreneurial Leadership of the top management [22].

Protection of IPR is likely to encourage innovation in such industries. R&D, leading to inventions, is expenditure intensive. This has led to concentration of inventions in firms [40] and has made firms the vital force of innovation. When firms invest in R&D under technological and market uncertainty, socially optimal long-run equilibrium is attained in the presence of finite patent life [20]. Patents allow recouping profitably of development costs associated with innovation activity and hence, is an incentive to allocation of resources to these ends [5].

Some studies have focused attention on the role of Government Policy [17] and the use of policy instruments like direct subsidies to research and development (R&D) and special deduction for R&D costs [31] in promoting specific sectors. These studies also confirm that such policies have had their desired impact. An industry identified as a potential driver of growth is likely to have a favourable policy environment. We, therefore, would not be focusing on such factors. Our concentration is on firm-specific factors and their antecedents that influence TIA and in turn success of firms.

Analysis of Indian Pharmaceutical Industry

The Indian pharmaceutical industry has been analysed against key factors identified above as crucial to TIA.

Effective Entrepreneurial Leadership

Major advances are occurring in the sciences underlying this industry. Advances in biology and the discovery of hybrid technologies through the integration of biology, chemistry and computation have created new principles for drug discovery [13], calling for multi-disciplinary skills. Economists have found that there exists a degree of concentration in an industry between pure monopoly and perfect competition that is best for R&D performance and is socially optimal ([9], [10]). The industry exhibits such a degree of concentration with major players (the top 30 firms) controlling about 60% of the Indian pharmaceutical market [25]. The industry will also have finite patent life protection that is both best in terms of R&D performance and socially optimal. There is also evidence to suggest that players with potential to succeed in this industry can raise capital with proof being the recent fund raising by a leading Indian firm, Dr. Reddy's Laboratories Limited in the global markets. Therefore, a key determinant of TIA under such circumstances would be the effectiveness of entrepreneurial leadership of the top management team.

Protection of Intellectual Property Rights

Patents and trademarks play a critical role in the pharmaceutical industry [41] and if patent protection were not available, the risk of adverse incentive effects with respect to R&D investments by the pharmaceutical industry is unusually high [36]. The government of India is putting in place a stringent regulatory regime where protection of IPRs is emphasised, which should encourage innovation in the pharmaceutical industry.

Factors Influencing Entrepreneurial Leadership

We identified antecedents to those determinants that are firm specific and influence TIA in industries where science drives pace of change. The firm specific factor we have identified as influencing TIA is Effective Entrepreneurial Leadership of the Top Management Team. Prior research helped us understand the notion of entrepreneurial leadership in this context. Two key roles performed by managers are that of an entrepreneur and a leader [30]. One of the key tasks an entrepreneurial manager performs is to look for opportunities. He also fulfils the role of recognising the value and opportunities presented by specialised knowledge and integrating it to create rents [2]. As a leader, the manager motivates his subordinates and develops the milieu in which they work. In turbulent science driven environments, research performance is positively associated with the ability to span the boundaries of the firm [1]. The role of the top management in these circumstances is to nurture gatekeepers who bridge the gap between the firm and the environment and build an organisational setting that stimulates exchange of information between individuals and a culture that encourages innovation. We have once again drawn on our analysis of different streams of literature to identify antecedents of entrepreneurial leadership based on this understanding, classified them as shown below and discussed each antecedent in detail. We have also identified / developed methodologies to assess their extent and presence in firms.

Strategic Factors

a) Developing a Research conception
b) Using an Appropriate Innovation Strategy
c) Acquiring and constantly upgrading technical resource stocks

Behavioural Factors

a) Building an Entrepreneurial Organisation
b) Deftness in the Top Management Team
c) Creating a Shared Passion for Innovation

Developing a Research Conception

An industry has a Research Conception if leading firms establish separate research departments that play an important role and are responsible for creating new products or processes [24]. We have extended this to say that where top management does the same in a firm; it is a manifestation of Effective Entrepreneurial Leadership. Leading firms in the Indian pharmaceutical industry have realised the importance of having a research conception and there is evidence that they are setting up separate R&D centres [6].

Using an Appropriate Innovation Strategy

It is evident that long-term prosperity can be achieved under circumstances where both technology and markets are dynamic and uncertain by managing the invention to innovation process. To innovate with a greater probability of success, an appropriate innovation strategy must be adopted. Firms can use various innovation strategies depending on the situation [21]. Where both technological and market uncertainty are high as in the case of the pharmaceutical industry, a learning based innovation strategy is appropriate. Adopting this strategy would be a manifestation of Effective Entrepreneurial Leadership. An Innovation Question Guide [21] is used to assess innovation strategies adopted by firms in our study.

Acquiring and constantly upgrading technical resource stocks

Sustained competitive advantage is derived from resources like in-house knowledge of technology that are valuable, rare, imperfectly imitable, and not substitutable [8, 48]. Resources form the basis of unique value-creating strategies that address specific markets and customers in distinctive ways [32]. In addition, the firm must have capabilities through embedded processes or routines to deploy these resources to achieve a desired end [3] and to enhance existing resource configurations and build new resource configurations [12]. Routines that create knowledge are crucial in industries like the pharmaceutical industry [16]. The availability of resource stocks and the capability to transform them into valuable attributes are important for firm success in the pharmaceutical industry [49]. Such technical resource stocks could be specific to certain scientific disciplines underlying discovery of drugs or to certain therapeutic areas.

Building an Entrepreneurial Organisation

The essence of entrepreneurship lies in the perception and exploitation of opportunities [38]. This perception and exploitation of opportunities goes beyond the efforts of one key manager [29] and top management now shares this function with a diverse set of people [15] and entire organisations now perform this role. Building such an organisation that finds new opportunities, and identifies critical competitive insights as a matter of course, is the most important job of Entrepreneurial Leadership [27].

Thus, for firms to survive and grow in industries where science drives pace of change, it is necessary to create an organisation with an integrated approach to innovation [26]. This organisation will identify and exploit opportunities through synthesis of information into ideas and solutions [45]. Such an organisation is an entrepreneurial organisation and building it is a manifestation of Effective Entrepreneurial Leadership.

Researchers have identified a number of practices that ensure that an organisation is entrepreneurial using perspectives ranging from strategy to structure to resource acquisition and control to identify them.

An entrepreneurial organisation would pursue opportunities independent of resources it currently controls. It would put individuals in a position to detect opportunities, train them to do so, reward them and lessen consequences of failure [43]. Commitment of resources would be made in many stages with minimal exposure at each stage and it would prefer episodic use or rent to ownership of resources and would exploit any resource pool [42]. An explicit and well-articulated strategy helps managers of such firms have an integrated vision of where to go, thereby facilitating harmonious collaboration among members on entrepreneurial endeavours. Further, an organic as opposed to mechanistic structure works better for such firms [29].

There are three broad sets of practices that go into creating an organisation focused on identifying and exploiting opportunities [27]. Practices that set the right tone for innovation are climate-setting practices like disproportionate allocation of attention, resources and talent to this activity. Next, there are practices that orchestrate the processes of seeking and realising opportunities to grow the business that include defining the ballpark of innovation activities the firm would undertake and instilling the discipline of parsimony so that investments and costs are minimised until an upside potential is demonstrated. Finally, there are hands-on practices that involve instituting analytical processes to identify opportunities that the firm is uniquely positioned to exploit. A process of managing failures involves conducting constructive post-mortems and recouping benefits from failed projects for use elsewhere.

We have synthesised all these findings and slotted them into these practice categories. We then developed an instrument based on such synthesis, to assess the degree to which these practices are present in firms. This enables us to draw conclusions regarding the extent to which the organisation can be deemed entrepreneurial.

Deftness in the Top Management Team

Where multiple sciences that are advancing rapidly influence pace of change in an industry as it does in the case of the pharmaceutical industry, firms need to have a top management team with multi-disciplinary skills to identify and exploit opportunities. Success comes through the collective leadership of such teams [33] with skills complementing each other [44]. Under such circumstances, certain aspects of task execution by teams at the top become crucial. The team must function in such a way that it solves problems, particularly in relation to identification and exploitation of opportunities, in a well-honed, effortless and effective manner so that innovation activity thrives in the firm. Deftness is a quality in a group, which permits such functioning. Effective Entrepreneurial Leadership will ensure that clear and shared goals and roles exist, communication is accurate, sharing of information is rapid, constructive confrontation is encouraged, belief and trust in each other and in the team is built so that the top management team functions with Deftness. We have used an instrument drawn from literature [28] to measure Deftness in top management teams of firms studied by us.

Creating a Shared Passion for Innovation

There is recognition that innovation requires a special kind of supportive leadership that builds commitment and enthusiasm by creating a shared sense a purpose and meaning in the organisation [34]. This ensures that all the firm's technical and business skills are brought to bear to achieve this purpose [4]. Organisational culture can be a source of sustained competitive advantage [7] and in the context of industries where TIA determines firm success; Effective Entrepreneurial Leadership will build a culture that encourages creativity and creates a passion for innovation in the organisation.

Analysis of Empirical Data

We found firms of different sizes operating in the Indian pharmaceutical industry and classified them into three broad categories – Large Firms (Turnover: > US$ 50 million), mid-sized firms (Turnover: US$ 10 - 50 million) and small firms (Turnover: up to US$ 10 million). There were five broad lines of activity undertaken by these firms, namely, Active Pharmaceutical Ingredient (API) R&D and Manufacture, Contract Research and Custom Manufacture of API, Generics R&D and Manufacture, Formulation R&D and Manufacture and New Chemical Entity (NCE) or Molecule R&D. We observed that as size increased, the scope of activities also increased.

We are in the process of collecting data pertaining to all factors mentioned above apart from data regarding their innovation activity and performance from firms in all these categories operating in this industry in India. Our analysis will lead to the formulation of propositions that are testable.

Case Studies

We have completed data collection from one small and one mid-sized firm so far. While the small-sized firm had a turnover of about US $ 8 million in the Financial Year 2001-02, the mid-sized firm's turnover for the same period was about US $ 44 million. While the small firm is a focused Contract Research and Custom Manufacturer of API, the mid-sized firm operates both as an API Manufacturer and a Contract Research and Custom Manufacturer of API. Contract research or invention activity has thrived in the small firm as evident from the deals it has struck with some established suppliers of API and a few multinational drug firms to develop processes for 180 API in the last seven years. About 95% of the drugs in which these API are incorporated fail at the clinical trial stage. The firm is offered long-term contracts for supply of API developed by them for those drugs that are successfully commercialised and has received contracts for five such API. As the firm's standing as a reliable inventor of processes for API manufacture improves further, it expects to receive more research contracts from multinational drug firms directly. This is likely to lead to an increase in the number of API process inventions that are commercialised and hence more successful innovation activity in the firm. That it is currently successful in its chosen area of specialisation and is viewed as having significant potential for success in the future too is evident from its attracting equity funding of US $ 2 million at a significant premium to its then market price in February 2001.

We found strong presence of strategic factors. The firm has a research conception and uses a learning-based approach to innovation. There is evidence of efforts to acquire and upgrade technical resource stocks given the increase in the number of chemical processes over which the company has attained mastery over the years. Although the presence of behavioural factors is minimal, it has not impacted innovation activity too adversely. Top management is aware that behaviour factors have to be strengthened if the size and scope of its activities are to increase in future. It has already established practices that would enable an entrepreneurial organisation to emerge. Key executives realise that innovation activity would be crucial to their survival and display a distinct passion for innovation which they expect to be more widely shared in future. The firm is also aware that as the scope of its research expands, it will have to expand the top management team and is conscious that such teams must operate with Deftness to be effective.

That innovation activity has thrived in the mid-sized firm also is evident from the 200 products developed by it over the years out of which 50 have been successfully commercialised. Innovation activity appears to be relatively more successful in the case of this firm. This firm too is viewed as being currently successful and a potential winner in the long-term and is in the midst of a US $ 20 million expansion programme.

There was strong presence of strategic factors in this case too. It has a research conception and uses a learning-based approach to innovation. This firm too has been successful in constantly upgrading its technical resource stocks. An analysis of data collected from the firm regarding its practices related to opportunity identification and exploitation indicates that the firm has succeeded in creating a more entrepreneurial organisation. A vision of being the best enterprise for outsourcing synthetic organic chemistry has been conveyed throughout the firm creating a widely shared passion for innovation in this area. The firm has entrusted the responsibility of guiding innovation activity to a 7-member team that operates with considerable Deftness. Top management has therefore ensured the presence and fairly wide sharing of behavioural factors within the firm.

Testable Propositions

Based on the above, we have formulated the following testable propositions:
Proposition 1: Small firms in the industry will be relatively less successful in innovation activity than larger firms.
Proposition 2: Independent of size, successful firms will adopt a strategy reflecting a strong research conception and a learning-based approach to innovation.
Proposition 3: Independent of size, successful firms will adopt a strategy reflecting an approach of acquiring and constantly upgrading technical resource stocks.
Proposition 4: Absence of behavioural factors will not impact innovation activity in small firms too adversely.
Proposition 5: Top management of small firms will recognise that behavioural factors will have to be strengthened if the size and scope of its activities are to increase in future.
Proposition 6: Successful mid-sized firms will ensure the presence and fairly wide sharing of behavioural factors within the firm.

Conclusion

This is a major research project undertaken by us and we have presented our preliminary findings here. We expected the extent to which various elements identified above are present in firms to vary with the success of its innovation activity and this is evident from the initial case studies. When replicated across other case studies, we would be establishing that the factors and their antecedents identified in this paper do influence TIA and hence success of firms in industries where science drives pace of change.

There are certain aspects that stand out from our research so far. Independent of size, it appears crucial for firms to have a research conception and follow a learning-based innovation strategy to be successful. It is also crucial to acquire and constantly upgrade technical resource stocks to increase scope of operations that in turn may positively impact size.

Advances in the sciences underlying the industry have created a vast body of knowledge. TIA requires the ability to access new knowledge from outside the boundaries of the firm and to integrate knowledge flexibly across disciplinary and therapeutic boundaries within the firm. Problem solving strategies and a passion for innovation become important under such circumstances. Our research seems to suggest that when the size and scope of operations start increasing, behavioural factors become critical if innovation activity is to thrive.

On the basis of our preliminary empirical findings, we have inducted a theory of firm success in industries where science drives pace of change that is pictorially presented in figure 1 below. We would be extending the empirical work to different categories of companies and different activity lines. We expect these further case studies to replicate our preliminary findings and confirm the propositions derived by us.

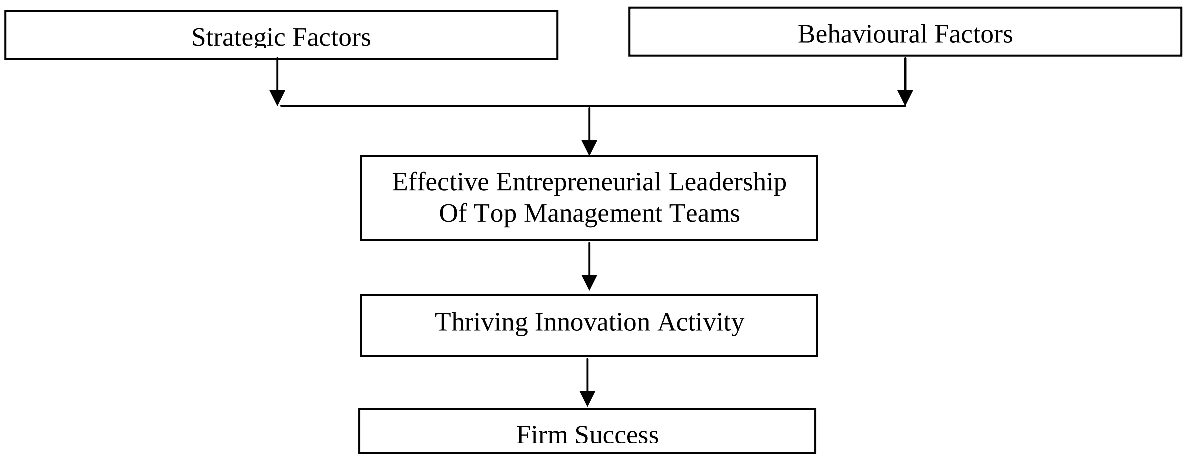

FIGURE 1. ENTREPRENEURIAL LEADERSHIP AND FIRM SUCCESS

References

[1] Allen, T. J. (1977). Managing the Flow of Technology: Technology Transfer and the Dissemination of Technological Information with the R&D Organisation. Cambridge, Massachusetts: MIT Press.

[2] Alvarez, S. and Busenitz, L. (2001). The entrepreneurship of resource-based theory. Journal of Management, 27(6), 755-775.

[3] Amit, R. and Schoemaker, P.J.H. (1993). Strategic Assets and Organisational Rent. Strategic Management Journal, 14(1), 33-46.

[4] Anderson, Kye (1992). The Purpose at the Heart of Management. Harvard Business Review, 70(3), 52-62.

[5] Arrow, Kenneth J. (1962). Economic Welfare and the Allocation of Resources for Invention. In R. Nelson, (Ed.), The Rate and Direction of Inventive Activity Princeton, NJ: Princeton University Press.

[6] Baburajan, K. (2002, July 10). Pharmaceutical firms scout for R&D professionals. Business Standard, 11.

[7] Barney, Jay B. (1986). Organisational Culture: Can It Be A Source Of Sustained Competitive Advantage? Academy of Management Review, 11(3), 656-665.

[8] Barney, J.B. (1991). Firm Resources and Sustained Competitive Advantage. Journal of Management, 17(1), 99-120.

[9] Barzel, Y. (1968). Optimal Timing of Innovations. The Review of Economics and Statistics, 50(3), 348-355.

[10] Dasgupta, P., Gilbert, Richard J., Stiglitz, Joseph E. (1982). Invention and Innovation Under Alternative Market Structures: The Case of Natural Resources. The Review of Economic Studies, 49(4), 567-582.

[11] Eisenhardt, Kathleen. M. (1989). Building Theories from Case Study Research. Academy of Management Review, 14(4), 532-550

[12] Eisenhardt, K.M. & Martin, J.A. (2000). Dynamic Capabilities: What are they? Strategic Management Journal, 21(10-11), 105-1121.

[13] Emerging Opportunities. (2002, March). The ISB *Mentor* 1(2), 5.

[14] Hamel, Gary and Prahalad, C.K. (1989). Strategic Intent. Harvard Business Review, 67(3), 63-84.

[15] Hartmann, H. (1959). Managers and Entrepreneurs: A Useful Distinction? Administrative Science Quarterly, 3(4), 429-451.

[16] Henderson, Rebecca and Cockburn, Iain. (1994). Measuring Competence? Exploring Firm Effects in Pharmaceutical Research. Strategic Management Journal, 15 (Winter 1994), 63-84.

[17] Kim, Linsu. (1998). Crisis Construction and Organisational Learning: Capability Building in Catching-up at Hyundai Motor. Organisational Science, 9(4), 506-521

[18] Kipp, Michael. (2001). Mapping the Business Innovation Process. Strategy & Leadership, 29(4), 37-39.

[19] Kuczmarski, T. (1998). The Ten Traits of an Innovation Mindset. Journal for Quality & Participation, 21(6), 44-46.

[20] Loury, G.C. (1979). Market Structure and Innovation. The Quarterly Journal of Economics, 93(3), 395-410.

[21] Lynn, Gary S., Akgun, Ali E. (1998). Innovation Strategies under Uncertainty: A Contingency approach for New Product Development. Engineering Management Journal, 10(3), 11-17.

[22] Maclaurin, Rupert W. (1950). The Process of Technological Innovation: The Launching of a New Scientific Industry. The American Economic Review, 40(1), 90-112.

[23] Maclaurin, Rupert W. (1953). The Sequence from Invention to Innovation and its Relation to Economic Growth. The Quarterly Journal of Economics, 67(1), 97-111.

[24] Maclaurin, Rupert W. (1954). Technological Progress in Some American Industries. The American Economic Review, 44(2), 178-189.

[25] Major Players. *India Infoline Sector Reports: Pharmaceuticals*. [Public Information]. Retrieved Jul. 22, 2002 from the World Wide Web: http://www.indiainfoline.com/sect/phfo/cu02.html

[26] Marquis, Donald G. (1969). The Anatomy of Successful innovations. Innovation, 1(7).

[27] McGrath, Rita G., Macmillan, Ian C. (2000). The Entrepreneurial Mindset: Strategies for Continuously Creating Opportunity in an Age of Uncertainty. Boston: Harvard Business School Press.

[28] McGrath, Rita G., Macmillan, Ian C., Venkataraman, S. (1995). Defining and Developing Competence: A Strategic Process Paradigm. Strategic Management Journal, 16(4), 251-275.

[29] Miller, D. (1983). The Correlates of Entrepreneurship in Three Types of Firms. Management Science, 29(7), 770-791.

[30] Mintzberg, H. (1971). Managerial Work: Analysis from Observation. Management Science, 18(2), B97-B110.

[31] Noland, Marcus. (1993). The Impact of Industrial Policy on Japan's Trade Specialisation. The Review of Economic and Statistics, 75(2), 241-248

[32] Prahalad, C.K. and Hamel, G. (1990). The Core Competence of the Corporation. Harvard Business Review, 68(3), 79-91.

[33] Reich, R.B. (1987). Entrepreneurship Reconsidered: The Team as Hero. Harvard Business Review, 65(3), 79-91.

[34] Roberts, N. (1984). Transforming Leadership: Sources, Process, Consequences. Presented at Academy of Management conference, Boston.

[35] Rostow, W., W. (1952). The Process of Economic Growth. New York: Norton Publishers.

[36] Scherer, F.M. (1977) The Economic Effects of Compulsory Patent Licensing. New York: New York University, Graduate School of Business Administration.

[37] Schoen, D. R. (1969). Managing Technological Innovation. Harvard Business Review, 47(3), 156-167.

[38] Schumpeter, J. (1934). The Theory of Economic Development. Cambridge: Cambridge University Press.

[39] Schumpeter, J. (1939). Business Cycles. New York: McGraw Hill.

[40] Stafford, Alfred B. (1950). An Appraisal of Patent Statistics. University of Chicago: Unpublished Doctoral Dissertation.

[41] Statman, M. & Tyebjee, Tyzoon T. (1981). Trademarks, Patents, and Innovation in the Ethical Drug Industry. Journal of Marketing, 45 (Summer 1981), 71-81.

[42] Stevenson, H. H, Gumpert, D.E. (1985). The Heart of Entrepreneurship. Harvard Business Review, 63(2), 85-94.

[43] Stevenson, H. H., Jarillo, C.J. (1990). A Paradigm of Entrepreneurship: Entrepreneurial Management. Strategic Management Journal, 11(Summer 1990), 17-27.

[44] Timmons, Jeffry A. (1979). Careful Self-Analysis and Team Assessment Can Aid Entrepreneurs. Harvard Business Review, 57(6), 198-206.

[45] Utterback, James M. (1971). The Process of Technological Innovation within the Firm. The Academy of Management Journal, 14(1), 75-88.

[46] Utterback, J. M. (1994). Mastering the Dynamics of Innovation. Boston: Harvard Business School Press.

[47] Van De Ven, A. H. (1986). Central Problems in the Management of Innovation. Management Science, 32(5), 590-607.

[48] Wernerfelt, B.. (1984). A Resource-Based View of the Firm. Strategic Management Journal, 5(2), 171-180.

[49] Yeoh, P. and Roth, K. (1999). An Empirical Analysis of Sustained Advantage In The US Pharmaceutical Industry: Impact Of Firm Resources And Capabilities. Strategic Management Journal, 20(7), 637-653.

[50] Yin, Robert K. (1994). Case Study Research: Design and Methods. London: Sage Publications.

Exchange Rates and Hysteresis in the American Textile and Apparel Industries: 1974-1987

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Abstract

This paper continues the extensive research conducted on the relation between exchange rates and imports. We test for the presence of hysteresis in the imports of textiles and apparels during the 1970s and 1980s. This period witnessed a significant strengthening of the dollar during the early 1980s and a concomitant increase in the trade deficit. Foreign Textile and apparel imports were particularly affected by the changing dollar values. An empirical question is whether the flood of textile and apparel imports subsequently decreased in line with decrease in the value of the dollar. A line of research suggests these imports might decrease more slowly than the dollar weakens because exporters, having covered the sunk costs related to the distribution and marketing of their goods while the dollar was strong, only need to cover operating costs after it weakens. The implication is strengthening dollar values allow foreign competitors to establish sticky beachheads in domestic markets. The presence of this hysteretic effect could provide a powerful argument for erecting trade barriers during periods when the dollar is strengthening. We test for the presence of hysteresis in the textile and apparel industries Our results show no evidence of a hysteretic effect in the textile and apparel industries.

Introduction

There has been extensive study of the effect of exchange-rate shocks on domestic imports and prices. Of particular interest to researchers is the effect of changes in the exchange rates for the U.S. dollar on imports. Absent any structural changes in the U.S. economy, one could surmise imports would be directly related to the strength of the U.S. dollar.

However, many authors have noted that a hysteretic effect exists between exchange rates and imports. In effect, the change in the value of the dollar relative to other currencies does not immediately "pass-through" to domestic imports and prices. Baldwin (1988), studying patterns of exchange rates and prices existing during the mid 1980s found a reduction in this pass-through effect. The continued presence of foreign competition after the dollar had weakened in the late 1980s was explained using a "sunk cost" hypothesis. Foreign firms found the favorable exchange rates of the mid 1980s permitted them to invest in marketing and distribution channels and still make money. After the dollar weakened, these channels had already been established, allowing the foreign firms to continue in operation as long as they covered their operating costs.

Baldwin and Krugman (1989), assuming a stochastic exchange rate, showed that hysteresis in trade and exchange rates are related. Dixit (1988) viewed the firm's entry and exit choices as options whose value depends on the volatility of exchange rates. Alternate views of the hysteresis hypothesis also exist. Bhagwati (1988) and Branson (1989) suggest that the reduction in the pass-through effect was due to the presence of non-tariff barriers in the U.S. during the early 1980s. The non-tariff barriers allowed foreign firms earn a non-tariff barrier profit margin. As the dollar subsequently weakened, domestic prices rose more slowly than previously because foreign firms initially reduced their non-tariff-induced profit margins.

This article continues the research into trade hysteresis by studying the effect of exchange rates on textile and apparel imports from 1974 to 1987. Chmura (1987) determined that textile and apparel imports do change with exchange rates. However, she did not test for any hysteretic effects. We continue her research by testing whether these effects exist. Imports in these industries rose sharply during the dollar-appreciation in the mid 1980s and appeared to fall less rapidly during the subsequent weakening. If true, this would seem to lend support to the hysteresis hypothesis. Further, we hypothesize any hysteretic effect should be stronger in the apparel industry than in the textile industry due to the labor cost advantages of foreign apparel firms. This would suggest imports from foreign firms with operating cost advantages might magnify the hysteretic effect.

The Textile and Apparel Industries

The 1970s and 1980s were a time of dramatic change for the U.S. textile and apparel industries. During this period, both evolved from highly fragmented, relatively sheltered markets into more concentrated but less protected industries. As a result, they were exposed to increased import-competition from both developed and developing countries (Cline (1990) and Dickerson (1991,1999)).

While the two industries are closely related, they have striking operational differences. Apparel firms have lower barriers to entry, lower operating leverage, and employ a more labor-intensive production process. This type of manufacturing is ideal for wage-competitive developing countries. On the other hand, textile firms have higher operating leverage and technological requirements that might provide more substantial barriers to entry.

We concentrate on the years from 1974 to 1987. This time frame offers a unique opportunity to study the effects of the strength of the currency on imports in these two industries. Before 1973, the international trade in cotton goods, mainly between relatively developed countries, was tightly controlled. During the 1960's, the production of textile and apparel woven from manufactured fibers exploded, particularly in developing countries. These goods generally fell outside the existing international tariff system allowing imports from developing countries to expand. During our study period, there were attempts to halt the flood of imports under a series of Multifiber Arrangements (MFA). However, these agreements were not as effective in stemming the tide of imports as the previous tariff system. Nominal textile imports into the United States doubled and apparel imports tripled during the period.

This time frame also follows the collapse of the Bretton Woods agreement in 1971 allowing exchange rates to float. It is commonly asserted that the rapid rise of the dollar in the early 1980's had a significantly adverse effect on industries exposed to import-competition. Later, the value of the dollar declined significantly during the two years following the Plaza Accord in 1985. The period included in the study, therefore, contains an interesting variety of exchange rate conditions in a floating rate environment. See Yarbrough and Yarbrough (1994) for a detailed discussion.

In this volatile exchange rate environment, the textile and apparel industries would seem to be especially susceptible to hysteretic effects from foreign competitors. Domestic apparel manufactures have a clear cost disadvantage to low-wage foreign competitors who, once entrenched in the domestic market due to a period of the dollar strengthening, might not easily retreat when the currency value declines. These arguments are less likely to hold in the textile industry. However, foreign textile manufacturers would still have to make a significant investment in marketing and distribution channels to establish a presence in the U.S. market. Once this investment has been made and the market established, foreign textile firms might be reluctant to abandon it. In effect, foreign textile firms could be willing to lower margins to keep a U.S. market presence.

Testable Hypotheses

Our test for presence of hysteresis in the textile and apparel industries is based on an empirical model developed by Chamura (1987) to test for the impact of the strength of the dollar on imports in the two industries. Her model is specified as follows:

$$Log\ (Rimports\ _t^X) = \beta_0 + \beta_1 Log\ (RGNP\ _t) + \beta_2 Log\ (CurrInd\ _t^X) + e_t^1 \tag{1}$$

where $Rimports\ _t^X$ is the dollar level of real imports of the commodity (either textile or apparel goods) into the U.S. for year *t* and industry *X*, $RGNP\ _t$ is real domestic Gross National Product for year *t*, $CurrInd\ _t^X$ is an index representing the annual strength of the dollar against currencies of the nations that import this good (*X*) into the U.S., and e_t^1 is an error term with the usual properties. Due to the logarithmic formulation of the model, β_1 is interpreted as the percentage change in real imports for a one-percent change in real GNP, and β_2 is the percentage change in real imports due to a one-percent change in the strength of the currency. Chamura (1987) tested this model using quarterly data for the textile and apparel industries for the years 1977-1986. She found both β_1 and β_2 to be positive. A positive sign on β_2 is the test of her hypothesis that textile and apparel imports should be positively correlated with the strength of the dollar.

We can test for the presence of hysteresis by determining if the relationship between imports and the strength of the dollar differs significantly during periods when the dollar is strengthening than periods when it is weakening. To test this hypothesis we first create a one-zero dummy variable set to one in years when the dollar weakens and set to zero in years when the dollar strengthens. The symbol for this dummy variable is D_t^X, where the superscript X stands for the industry. We then add a third independent variable to equation 1 that is the product of this dummy variable and the index for the strength of the dollar; $D_t^X CurrInd_t$. This revised model is written as:

$$Log\ (Rimports_t^X) = \beta_0 + \beta_1 Log\ (RGNP_t) + \beta_2 Log\ (CurrInd_t^X) + \beta_3 Log\ (D_t^X CurrInd_t^X) + e_t^2. \tag{2}$$

Under this specification, the parameter β_2 is interpreted as the elasticity relationship between imports and strength of the dollar in periods when the currency is strengthening, and β_3 is the *difference* in this elasticity measure in years in periods when the dollar is weakening. Hysteresis is defined as the decline in imports during periods when the dollar is weakening being less than the increase in imports in periods when the dollar is strengthening. Following Chamura (1987), β_2 should be positive. There would be no evidence of hysteresis if $\beta_3 = 0$. This result would imply the percentage change in imports is the same in years with declining values of the dollar as in years with increasing values of the dollar**.** Hysteresis would appear to be present when $\beta_3 < 0$. This result implies that the elasticity relationship between imports and the strength of the dollar is lower in periods when the dollar is declining. For instance, suppose β_2 is +1.00 and β_3 is –0.25. This would imply that in period when the dollar is strengthening a 1% increase in the strength of the currency is associated with a 1% rise in imports. But in a period when the dollar is weakening, a 1% fall in the value of the currency is associated only with a 0.75% ($\beta_2 + \beta_3$) percent decrease in the level of imports. Therefore, the test of the hypothesis that hysteresis occurred in these product markets is that β_3 is negative and significant.

There is also a possibility that factors besides GNP and currency strength drive aggregate national imports and that these same factors affect textile and apparel imports. Examples might be tariff regimes and trade restrictions. To test for this possibility we can estimate Chamura's (1987) general model for aggregate national imports:

$$Log\ (Rimports_t^{Agg}) = \beta_0 + \beta_1 Log\ (RGNP_t) + \beta_2 Log\ (SDR\ /\ \$_t) + e_t^3. \tag{3}$$

Here $Rimports_t^{Agg}$ are annual real aggregate imports into the U.S., and $SDR\ /\ \$_t$ is the annual exchange rate between Special Drawing Rights (SDR) and the U.S. dollar. The SDR to dollar exchange rate is a conventional measure of the strength of the dollar against an aggregated basket of foreign currencies. Clearly, the portion of the percentage change in US imports not caused by either changes in GNP or the strength of the currency is captured in the error term of equation 3, e_t^3.

Therefore, we can add this error term to equation 1 to see if this expression explains something significant about the change in textile or apparel imports that is not captured by the independent variables already incorporated in the model. This specification can be written as:

$$Log\ (Rimports_t^X) = \beta_0 + \beta_1 Log\ (RGNP_t) + \beta_2 Log\ (CurrInd_t^X) + \beta_4 e_t^3 + e_t^4. \tag{4}$$

This will provide evidence of whether the relationship between the strength of the dollar and textile and apparel imports holds even after accounting for these other factors.

It is possible to create a similar specification for our model to test for the presence of hysteresis. First, equation 3 must be revised by adding an independent variable which is the cross-product of a zero-one dummy variable set to one when the dollar is weakening against the SDR and set to zero when the dollar is strengthening:

$$Log\ (Rimports_t^{Agg}) = \beta_0 + \beta_1 Log\ (RGNP_t) + \beta_2 Log\ (SDR\ /\ \$_t) + \beta_3 Log\ (D_t^{SDR} SDR\ /\ \$_t) + e_t^5. \tag{5}$$

As was the case with equation 2, β_2 should be positive, and the sign and magnitude of β_3 should shed light on the presence of hyteresis in the general economy. Then, the error term from equation 5 is added to equation 2 as follows:

$$Log\ (Rimports_t^X) = \beta_0 + \beta_1 Log\ (RGNP_t) + \beta_2 Log\ (CurrInd_t^X) + \beta_3 Log\ (D_t^X CurrInd_t^X) + \beta_5 e_t^5 + e_t^6. \tag{6}$$

This model tests for whether hysteresis holds even after accounting for the other factors that drive aggregate imports have been accounted for.

Data

Annual data on aggregate national imports and special drawing rights data were collected from various issues of the *International Financial Statistics Yearbook* published by the International Monetary Fund. Observations of GNP were collected from various issues of the Federal Reserve Bulletin. These variables are used to estimate equations 3 and 5. Summary statistics for all of these variables are shown in Table 1.

Annual data on aggregate nominal imports of textile and apparel products into the United States during the period 1974 to 1987 are available from the *U.S. Industrial Outlook* published annually by the Department of Commerce. We also estimate annual values for two indices that track the strength of the U.S. dollar against a basket of currencies for major import competitors of American apparel and textile manufacturers respectively. These exchange rates are weighted by the fraction of imports each country contributes to total textile or apparel imports. The methodology is more completely detailed in the appendix. These variables, along with GNP described above, are used to estimate equations 1, 2, 4 and 6. Summary statistics for the variables are shown in Table 2.

TABLE 1

SUMMARY STATISTICS FOR THE UNITED STATES MACROECONOMIC VARIABLES 1974-1987

Variable	Mean	Median	Standard Deviation
Real Imports ($100 Billion)	0.9599	0.9778	0.1605
Real GNP ($100 Billion)	10.9730	10.7629	1.0965
SDR/$ Exchange Rate	0.8567	0.8503	0.0713

TABLE 2

SUMMARY STATISTICS FOR THE REGRESSION EQUATIONS

Variable	Mean	Median	Standard Deviation
Real Textile Imports ($ Billion)	9.5336	8.8403	1.9946
Real Apparel Imports ($ Billion)	33.2194	28.8708	13.7691
Real GNP ($100 Billion)	10.9730	10.7629	1.0965
Currency Index Textiles	103.2436	102.2715	10.2172
Currency Index Apparel	120.4415	117.1270	9.9287

Empirical Results

Estimates for equations 3 and 5, measuring the impact of economic growth and fluctuations in the value of the dollar on imports are shown in Table 3. The equations explain about 89% of the variability in the annual change in exports. As expected the change in exports is positively and significantly related to changes in GNP (growth in the economy). While none of the parameters associated with the SDR/Dollar exchange rate are significant, the signs are opposite of expectations. The negative sign on β_2 implies that as the dollar strengthens, imports *fall*. The positive sign on β_3 suggests this negative relationship is a bit weaker in years when the dollar fell (the *rise* in imports was slightly more muted).

TABLE 3

PARAMETER ESTIMATES FOR THE REGRESSIONS TO EXPLAIN IMPORTS INTO THE UNITED STATES

The dependent variable is the logarithm of real imports into the United States in the years from 1974 through 1987. Log(GNP_t) is the logarithm of real GNP for the same years. Log($SDR/\$_t$) is the logarithm of the annual SDR/$ exchange rate. Dummy*Log($SDR/\$_t$) is the product of the logarithm of the annual SDR/$ exchange rate and a dummy variable set to one in years when the strength of the dollar was declining and set to zero in years when the strength of the dollar was increasing.

T-statistics shown in parentheses below the parameter estimates.

Independent Variables	Intercept	Log(GNP_t)	Log($SDR/\$_t$)	Dummy* Log($SDR/\$_t$)	R^2
Equation 3	-4.1792	1.7020	-0.3509		0.8876
	(-9.3628)**	(9.3084)**	(-1.5825)		
Equation 5	-4.2933	1.7418	-0.6604	0.2473	0.8932
	(-8.8988)**	(8.9441)**	(1.3699)	(0.7273)	

** statistically significant at the 99% confidence level.

Estimates of equations 1, 2, 4 and 6 for textile imports are shown in Table 4. As expected, changes in imports are positively correlated with economic growth. In all of these models the estimates of β_2 have the anticipated positive signs. This implies that as the dollar strengthens, imports rise. However, the sign on β_3 in equations 2 and 6 are also *positive* and are significant. This means that as the dollar weakens, the decline in imports is greater than the corresponding rise that occurred in the periods when the dollar strengthened. The results for equation 6 are particularly robust. In this equation the sign on β_2 is significant, and there is convincing evidence that excluded factors that are impacting aggregate imports are also effecting textile imports.

Table 5 contains corresponding parameter estimates of equations 1, 2, 4 and 6 for apparel imports. Again, the expected positive relationship between GNP and imports is evident in all specifications. The estimates of β_2 are again positive, though they would not pass significance tests at normally acceptable levels. This is weak evidence that imports are related to the strength of the dollar. In equations 2 and 6 β_3 is essentially zero, indicating no evidence of hysteresis in apparel imports. In an earlier study Lord and McIntyre (2003) also found that the effects of changes in currency values were less pronounced in the apparel than the textile industry.

TABLE 4

PARAMETER ESTIMATES FOR THE REGRESSIONS TO EXPLAIN TEXTILE IMPORTS

The dependent variable is the logarithm of real textile imports into the United States in the years from 1974 through 1987. Log($CurrIndexTex_t$) is the logarithm of the value of the currencies of textile importing nations to the US Dollar for each year. Log($CurrIndexTex_t$)*Dummy is the product of the logarithm of the currency index and a dummy variable set to one in years when the strength of the dollar was declining and set to zero in years when the strength of the dollar was increasing. Log(GNP_t) is the annual logarithm of real GNP. The Error–Equation 3 is the error term from the regression of Equation 3 shown in Table II. The Error–Equation 5 is the error term from the regression of Equation 5 shown in Table II.

T-statistics shown in parentheses below the parameter estimates.

Independent Variable	Equation 1	Equation 2	Equation 4	Equation 6
Intercept	-3.1677 (-2.1535)**	-3.1672 (-2.0100)**	-3.9837 (-3.3126)***	-5.0534 (-5.1852)***
Log($CurrIndexTex_t$)	0.4071 (1.0780)	0.4069 (0.9988)	0.5176 (1.7149)	0.7565 (3.1383)***
Log($CurrIndexTex_t$)*Dummy			0.0292 (2.7451)**	0.0468 (4.6854)***
Log(GNP_t)	1.4713 (3.9619)***	1.4714 (3.7457)***	1.5703 (5.2979)***	1.5379 (6.8910)***
Error–Equation 3		-0.0009 (-0.0015)		
Error-Equation 5				1.2094 (2.9461)**
R^2	0.7347	0.7347	0.8487	0.9230

** statistically significant at the 95% confidence level.
*** statistically significant at the 99% confidence level.

Our results for the estimation of equation 1 differ from those of Chamura (1987). She found β_2 to be positive and statistically significant for both industry segments. It should be noted that her sample differed substantially from ours. She employed quarterly data from 1977 through 1986. The use of quarterly data provided her with more observations and possibly a bit more variety. However, the fact that her sample did not contain the years 1974 through 1976 and especially the exclusion of 1987, a year with a steep dive in the strength of the dollar might also account for the discrepancy.

TABLE 5

PARAMETER ESTIMATES FOR THE REGRESSIONS TO EXPLAIN APPAREL IMPORTS

The dependent variable is the logarithm of real apparel imports into the United States in the years from 1974 through 1987. Log($CurrIndexApp_t$) is the logarithm of the value of the currencies of apparel importing nations to the US Dollar for each year. Log($CurrIndexApp_t$)*Dummy is the product of the logarithm of the currency index and a dummy variable set to one in years when the strength of the dollar was declining and set to zero in years when the strength of the dollar was increasing. Log(GNP_t) is the annual logarithm of real GNP. The Error–Equation 3 is the error term from the regression of Equation 3 shown in Table II. The Error–Equation 5 is the error term from the regression of Equation 5 shown in Table II.

T-statistics shown in parentheses below the parameter estimates.

Independent Variable	Equation 1	Equation 2	Equation 4	Equation 6
Intercept	-8.2544 (-6.2034)***	-8.6825 (-5.0254)***	-8.2616 (-5.9293)***	-8.3183 (-4.6545)***
Log($CurrIndexApp_t$)	0.6663 (1.8473)*	0.7915 (1.6423)	0.6587 (1.7357)	0.6745 (1.3766)
Log($CurrIndexApp_t$) *Dummy			0.0018 (0.1972)	0.0020 (0.1955)
Log(GNP_t)	3.5519 (12.0854)***	3.4802 (9.9049)***	3.5680 (11.2092)***	3.5600 (9.7532)***
Error-Equation 3		0.1952 (0.4137)		
Error–Equation 5				0.0284 (0.0556)
R^2	0.9702	0.9707	0.9703	0.9703

* statistically significant at the 90% confidence level.
*** statistically significant at the 99% confidence level.

Conclusion

We find that changes in the level of imports in the textile and apparel industries are strongly correlated with aggregate economic growth. There is also some weaker evidence that changes in imports are positively correlated with changes in the strength of the U.S. dollar in foreign exchange markets. We find no evidence of hysteresis for apparel imports. There is actual evidence that in the textile industry imports declined more rapidly in response to a falling dollar than they rose as the dollar strengthened. Despite the seemingly large influx of imports for these goods into the U.S. economy during the period from 1974 to1986, there is no evidence that the importers had an inordinately strong tendency to remain in the market after the dollar began to decline against foreign currencies.

References

[1] Baldwin, R., (1988). Hysteresis in Import Prices: The Beachhead Effect. American Economic Review, 78(4), 773-785.

[2] Baldwin, R. and Krugman, P., (1989). Persistent Trade Effects of Large Exchange Rate Shocks. Quarterly Journal of Economics, 54 (4), 635-654.

[3] Bhagwati, J., (1988). The Pass-Through Puzzle: The Missing Piece from Hamlet. Mimeo, Columbia University, New York.

[4] Branson, W., (1989). Comments and Discussion. Brookings Papers on Economic Activity. 1, 330-337.

[5] Chmura, C., (1987). The Effect of Exchange Rate Variation on U.S. Textiles and Apparel Imports. EconomicReview, Federal Reserve Bank of Richmond, 73 (3), 17-23.

[6] Cline, W., (1990). The Future of World Trade in Textiles and Apparel. Institute for International Economics.

[7] Dixit, A., (1989). Hysteresis, Import Penetration, and Exchange Rate Pass-Through. Quarterly Journal of Economics, 104 (2), 206-228.

[8] Dickerson, K., (1991). Textiles and Apparel in the International Economy. MacMillan.

[9] Dickerson, K.,(1999). Textiles and Apparel in the Global Economy 3rd ed. Merrill-Prentice Hall.

[10] Lord, R. A., and McIntyre, J.E., (2003). Leverage, Imports, Profitability, Exchange Rates, and Capital-Investment: A Panel Data Study of the Textile and Apparel Industries 1974-1987, International Review of Financial Analysis, 12 (3), forthcoming.

[11] Yarbrough, B., and Yarbrough, R., (1994). The World Economy: Trade and Finance 3rd ed., Dryden Press.

Appendix: REAL EXCHANGE RATE INDEX CALCULATION FOR TEXTILE AND APPAREL IMPORTS

Following Chmura (1987) we calculate a yearly real exchange rate index for both textiles and apparel based on the exchange rates of major exporters in both categories to the United States. We included 42 countries exporting textiles or apparel to the U.S. These countries are South Africa, Morocco, Egypt, Canada, Brazil, Colombia, Ecuador, Mexico, Uruguay, El Salvador, Guatemala, Haiti, Japan, Turkey, Bangladesh, India, Indonesia, Korea, Malaysia, Pakistan, Philippines, Singapore, Thailand, Taiwan, China, Belgium, Denmark, France, Germany, Ireland, Italy, Netherlands, United Kingdom, Austria, Finland, Portugal, Sweden, Switzerland, Spain, Yugoslavia, Australia, and Hong Kong.

The indices are adjusted for relative inflation rates. The weight of each nation's exchange rate is determined by the fraction of that country's textile or apparel exports to the U.S. as a fraction of total U.S. textile or apparel imports for the corresponding SIC category. The formula for computing the real exchange rate index for year t is:

$$I_t = \left[\prod_{i=1}^{42} \left[(E_t^i / E_B^i)(CPI_t^{us} / CPI_t^i) \right]^{W_t^i} \right]$$

Where:

I_t = the import-weighted exchange index for the two-digit SIC in year t (from 1974 to 1987 inclusive).

E_t^i = the number of units of currency i per dollar in year t.

E_B^i = the number of units of currency i per dollar in 1974.

CPI_t^{us} = the consumer price index of the U.S. in year t

CPI_t^i = the consumer price index of country i in year t

$$W_t^i = \frac{M_t^i}{\sum_{i=1}^{42} M_t^i}$$

M_t^i = U.S. imports from country i in year t

Exchange rates and CPIs were obtained from the International Monetary Fund publication *International Financial Statistics* (various years). Import data was obtained from the *World Trade Annual* (various years) prepared by the Statistical Office of the United Nations. Taiwan exchange rates and CPIs were obtained from the 1990 *Taiwan Statistical Data Book*, Council for Economic Planning and Development, Republic of China.

Factors Influencing Economic Value Added in the Selected Sector of the Industry

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Abstract

Economic Value Added (EVA) as an indicator of new created value for the owners of the company is an important success criterion of companies´ activities. The goal of the study is to identify factors influencing the creation of EVA. The sources of the EVA creation will be identified on the basis of comparing companies operating in the plastic processing industry in different geographical regions. Some differences in the EVA of the investigated regions could be correlated to technological level, creativity of management and financial ratios.

Background

One of the tasks of today's economists is to find an indicator that would describe a company's performance in relation to the shareholders. A possible way is to use Economic Value Added (EVA). It is a quantity indicating whether the operating profit is high enough compared to the total costs of capital employed. The idea behind Economic Value Added is that shareholders must earn a return that compensates the risk taken.

The ability of a company to compete can be evaluated by several aspects. Besides the components of the company strategy it is necessary to assess the potential of the enterprise as a sum of its possibilities and abilities. The goal of a company is to satisfy all its stakeholders. The stakeholders, i.e. all who participate in some way in the activities of an enterprise are the suppliers of the capital (owners and creditors), managers, employees, suppliers, customers, the government etc. Each subject that is in some way associated with the given enterprise evaluates its success by the yield of its investment into the enterprise and compares it to alternative investments. The entrepreneur, which has an idea and to realize it, is unique. He uses the resources from the capital market, the work-force market etc. He obtains these resources for a market price. Only after the obligations to other stakeholders are met, there is a residual value belonging to the owners. Thus the owners carry the greatest risk, therefore they also demand a corresponding return. This return should at least equal to the return from an alternative investment with equal risk level. *The ultimate goal of an enterprise is* ***the maximization of the market share value*** (Copeland - Koller - Murrin, 1996, Pertl – Zederbauer, 1997, Neumaierová, 1998) for the owners. Therefore, it is necessary to attain satisfactory capital returns at a permanently favorable liquidity and preservation of a long-term existence (an effort of assuring the long-term expansion of the enterprise). A long-term financial stability of a company is then assured by a correct structure of financial resources (an optimum ratio of the equity and the capital provided by others) and by the selection of the most favorable financial resources as well as by a proper allocation of financial resources, i.e. by the optimum structure of assets.

The expression of the long-term goals of an enterprise is by the concept of the *Economic Value Added – EVA* (Stewart - Bennet, 1993), defined in the following fashion*:*

$$\mathbf{EVA = (ROE - r_e) \cdot E} \tag{1}$$

where: ROE = return-on-equity
r_e = cost of equity
E = equity

When expressing the situation from the aspect of the total capital investment (from all suppliers of capital), the expression becomes:

$$\mathbf{EVA = EBIT\ (1 - T)\ -\ (WACC\ .\ C)} \tag{2}$$

where: EBIT = Net operating profit
T = Tax rate
WACC = Weighted average cost of capital
C = Equity + Interest bearing debt

The essence of the indicator *EVA* is that the amount of the economic profit differs from the amount of profit shown by accounting methods. In the profit obtained by accounting the costs of the capital provided by others are included, but not the costs of the equity. This is not determined by an accurate measure, such as an interest rate, but must be estimated. It is affected by a variety of factors, such as the risk of the given enterprise, bank interest rate, returns of risk-free investments etc.

Since 1997 the Economic Value Added concept has been applied officially in the Czech Republic for financial evaluation analysis of the domestic industry as well.

When analyzing the method of calculation of the Economic Value Added, we can see *factors* that could *positively influence the performance of the enterprise and the growth of its market value.* These are mainly **the amount of the operating profit, the amount and structure of the used assets and capital and the amount of costs of the used capital.**

The amount of operating profit is given by the amount of receipts and operating expenses. The amount of sales is related to the volume of realized production and by the price of that production. The amount of operating expenses depends on the type and level of manufacturing process and on the ability to use the available manufacturing effectively. Companies increase their ability to compete as long as they create a sufficient space between the price of the product and the variable manufacturing costs and in the total of its activities attain profit.

The amount of the used capital corresponds to the total value of the company assets. The ratio of attained sales and the assets available to the enterprise is important. If the assets do not create a sufficient amount of sales, it is not used effectively and this fact can have an unfavorable effect on the amount of operating profit (the value of operating profit is reduced and so is EVA) and at the same time a high amount of capital is required for covering these assets (again negative effect on EVA). The structure and the rate of turnover of the components of the assets, such as fixed assets, inventory, receivables and financial assets are important. Long turnover times generally cause high expenses and lost profits. Because in the formula for the calculation of EVA only interest-bearing capital is used, it is important to analyze its allocation in assets. As long as it is a long-term capital, it should cover the fixed assets and the part of current assets (the part which is permanently located in the company). This creates working capital for the company. Low working capital may cause liquidity problem, a too high coverage of the current assets by the long-term capital may be too expensive.

The amount of capital expenses available to the company relates to the structure of this capital, i.e. to the ratio of the equity and the capital from other sources that carry certain expenses. The amount of capital expenses depends on the possibility of the company to obtain the capital and on the effectiveness and the risk of business activities of individual companies. Companies with high rating usually obtain capital at lower costs or can obtain it easier and at lower cost on international financial markets (it is possible to take advantage of different interest rates and taxation in different countries). A company can enter international financial markets either independently or as a part of existing multinational corporations.

Companies operating in different areas of business have different asset and capital structures that depend on the type of business. Their structures of returns, of costs and profitability are also different. Currently companies carry different degree of risk in ventures and finances and consequently also different opportunity costs, i.e. different costs of equity (r_e). These costs can be expressed (in %) as the sum of the risk-free interest rate of the given capital markets and risk surcharges (for the venture risk, for the reduced liquidity of assets, for financial structure and for financial stability) or can be calculated by the Dividend Model or the Capital Assets Pricing Model.

The next part of this contribution will focus on the companies in the plastic processing industry. The effects on the formation of Economic Value Added discussed above are demonstrated on a sample of companies from different regions. The companies were selected according to the availability of data and according to their importance within a given region.

Characteristics of the Plastic Processing Industry

The plastic processing industry has a wide variety of raw materials, processes and final products. Plastics processing facilities are more or less spread in all regions and have certain elements of regional character. In more developed regions fully automated production facilities are predominant that assure a certain independence on the labor cost. In developing economies lower initial investments in plastics manufacturing facilities with higher proportion of labor are more common. Additional significant differences can be seen in the management methods applied. In the more developed regions the sophistication and effectiveness of management is on a higher level, particularly in the area of financial management, marketing and clearly defined concepts of development. The evaluation of the effectiveness of management can be done only indirectly, usually based on results of subjects operating under equal conditions. Here the EVA concept is eminently suitable for the evaluation of managerial effectiveness.

The Financial Figures of the Plastic Processing Industry in the USA, Scandinavia and the Czech Republic

Table 1 and 2 contain financial ratios from companies in the Czech Republic. At the same time, this table also shows the comparison of effectiveness of the plastics industry to that of the industry overall. Figures 1 and 2 demonstrate the difference between the companies generating Economic Value Added (ROE>r_e) and those that cannot. Companies that cannot create a positive value of EVA can be further divided into those that attain profitability of equity (ROE) lower than the opportunity costs (r_e), but at the same time their ROE is higher than the risk-free interest rate (r_f) of the given capital markets. Companies in regions where this rate is lower do not need to attain such a high profitability. Other group is represented by companies with a ROE that is positive, but lower than risk-free interest rate. The last group includes companies operating with losses.

The plastics industry in the Czech Republic grows faster than the average growth of the Czech industry in general. In spite of the dynamic growth of the main production characteristics it is still lagging behind the state of the art in developed industrial countries. The industry is greatly dependent on the economic cycles of the world commodity markets and mainly on the price of crude oil. The weaknesses of this industry are particularly low proportion of products with a high value added, relatively slow response to market demands and a low degree of specialization.

In the framework of economic research Inka and Ivan Neumaier have developed the INFA model (Neumaierová, 1998). The model enables a breakdown of return on equity and basic factors contributing to its level, including their mutual interdependencies. At the same time the INFA model enables quantification and analysis of Economic Value Added.

Table 1: SELECTED FACTORS AFFECTING THE FORMATION OF EVA. COMPARISON OF VALUES OF THE FACTORS AND EVA IN THE INDUSTRY OVERALL, PLASTICS INDUSTRY AND SELECTED COMPANIES IN THE PLASTICS INDUSTRY IN THE CZECH REPUBLIC IN 1999

	Equity in thous. USD	**No. of Empl.**	**Sales per Empl. th.USD**	**EBIT /Assets %**	**EBIT /Sales %**	**Sales /Assets**	**EAT/ Sales %**	**Current Ratio**	**Quick Assets Ratio**	**Cash Position Ratio**	**Inter. Coverage**
Industry	22,669, 113	*	*	4.23	5.05	0.84	0.5	1.11	0.72	0.15	1.94
Plastic industry	527,975	*	*	12.75	10.67	1.19	5.58	1.16	0.75	0.11	7.63
Granitol	8,784	420	56	3.99	3.11	1.28	1.01	1.29	0.78	0.08	1.80
Strojplast	2,521	330	30	-2.63	-3.27	0.80	0.48	0.78	0.51	0.03	-1.21
TIÚ-Plast	2,796	120	33	0.46	0.48	0.97	0.64	2.08	1.37	0.32	0.39
Gumotex	19,480	1660	32	2.30	1.92	1.20	0.33	0.97	0.59	0.04	0.96

Loffler Kunststoff werk 1)	4,459	243	27	38.23	27.73	1.38	17.60	6.10	4.84	1.73	39.53
EuWeEugen Wexler CR1)	4,813	199	54	17.30	14.31	1.21	8.79	1.54	0.97	0.25	*
Pipelife-Fatra2)	6,131	104	143	8.48	6.81	1.25	5.45	1.18	0.70	0.22	5.27
Dura-line CT3)	3,095	120	144	39.25	16.71	2.35	10.01	2.12	1.71	1.26	55.85

1) 100 % of the base capital belongs to a foreign investor
2) Two thirds of the base capital belongs to a foreign investor
3) 75 % of the base capital belongs to a foreign investor
* Data - not available

Table 1, continued

	Equity /assets %	**Long-term Capital/Fixed Assets**	**Depreciation/ Sales %**	**Material/ Sales %**	**Labour /Sales %**	**Interest /Sales %**	**ROE %**	**r_e %**	**EVA**
Industry	46.86	0.95	6.54	68.12	13.63	2.60	0.97	16	No, r_f>ROE>0
Plastic industry	52.70	1.13	5.96	62.63	13.63	1.40	12.65	14	No, r_e>ROE> r_f
Granitol	46.34	1.25	3.11	86.93	9.72	1.72	2.77	15	No, r_f>ROE>0
Strojplast	21.92	0.73	5.06	93.60	20.24	2.71	1.79	38	No, r_f>ROE>0
TIÚ-Plast	68.13	1.24	7.15	75.86	17.23	1.22	0.91	32	No, r_f>ROE>0
Gumotex	43.95	1.00	4.43	79.00	16.70	2.00	0.91	28	No, r_f>ROE>0
LofflerKunststoffwerk 1)	94.09	1.40	11.67	43.69	20.81	0.70	25.79	12	Yes, ROE>r_e
EuWe Eugen Wexler CR1)	53.84	1.18	4.99	70.03	12.10	*	19.74	12	Yes, ROE>r_e
Pipelife-Fatra	56.31	1.18	4.05	59.45	6.03	1.36	12.0	12	ROE=r_e (EVA=0)
Dura-line CT	42.26	1.61	1.79	82.50	5.12	0.3	55.22	16	Yes, ROE>r_e

Sources of the primary data: Ministry of Industry and Trade, Czech Republic; Albertina data s.r.o.- Firm Monitor 2001; Aspekt kilcullen 2002

Table 2: SELECTED FACTORS AFFECTING THE FORMATION OF EVA. COMPARISON OF VALUES OF THE FACTORS AND EVA IN THE INDUSTRY OVERALL, PLASTICS INDUSTRY AND SELECTED COMPANIES IN THE PLASTICS INDUSTRY IN THE CZECH REPUBLIC IN 2000

	Equity in thous. USD	**No. of Empl.**	**Sales per Empl. thous.USD**	**EBIT /Assets %**	**EBIT /sales %**	**Sales /Assets**	**EAT/ Sales %**	**Current Ratio**	**Quick Assets Ratio**	**Cash Position Ratio**	**Inter.Coverage**
Industry	22,275,368	*	*	6.01	6.54	0.92	2.53	1.08	0.7	0.15	3.28
Plastic industry	560,711	*	*	11.24	8.92	1.26	5.19	1.29	0.84	0.15	7.23
Granitol	8,788	430	63	2.90	1.61	1.81	1.01	1.36	0.94	0.15	1.00

Strojplast	2,403	330	28	1.79	1.93	0.92	0.14	0.65	0.30	0.02	0.43
TIÚ Plast	2,778	110	51	10.55	8.07	1.31	3.64	2.20	1.62	0.23	15.19
Gumotex	18,034	1551	33	4.71	3.73	1.26	0.33	1.22	0.75	0.04	1.60
Loffler Kunststoff Werk [1)]	5,063	285	25	28.49	21.21	1.34	13.20	9.41	6.56	1.29	*
EuWe Eugen Wexler CR[1)]	5,289	*	*	6.91	6.37	1.09	5.70	1.54	0.97	0.25	*

[1)] 100 % of the base capital belongs to a foreign investor

* Data - not available

Table 2, continued

	Equity /assets %	Long-term Capital/Fixed Assets	Depreciation/ Sales %	Material/ Sales %	Labour /Sales %	Interest/ Sales %	ROE %	r_e %	EVA
Industry	46.88	0.97	6.05	69.01	8.94	2.00	4.96	13	No, r_f>ROE>0
Plastic industry	51.88	0.97	5.55	66.52	9.67	1.23	12.61	11	Yes, ROE>r_e
Granitol	59.07	1.30	2.75	84.25	8.74	1.61	3.08	26	No, r_f>ROE>0
Strojplast	23.66	0.74	1.45	82.52	15.75	4.53	0.56	39	No, r_f>ROE>0
TIÚ-Plast	65,26	1.46	5.16	73.04	14.34	0.53	7.28	12	No, r_e>ROE> r_f
Gumotex	44.27	1.37	4.17	75.43	15.97	2.34	0.95	19	No, r_f>ROE>0
Loffler Kunststoff werk [1)]	94.15	1.37	8.53	49.25	21.18	*	18.83	11	Yes, ROE>r_e
EuWe Eugen Wexler CR[1)]	38.21	1.14	5.27	73.92	14.05	*	16.17	13	Yes, ROE>r_e

Sources of the primary data: Ministry of Industry and Trade, Czech Republic; Albertina data s.r.o.-Firm Monitor 2001; Aspekt kilcullen 2002

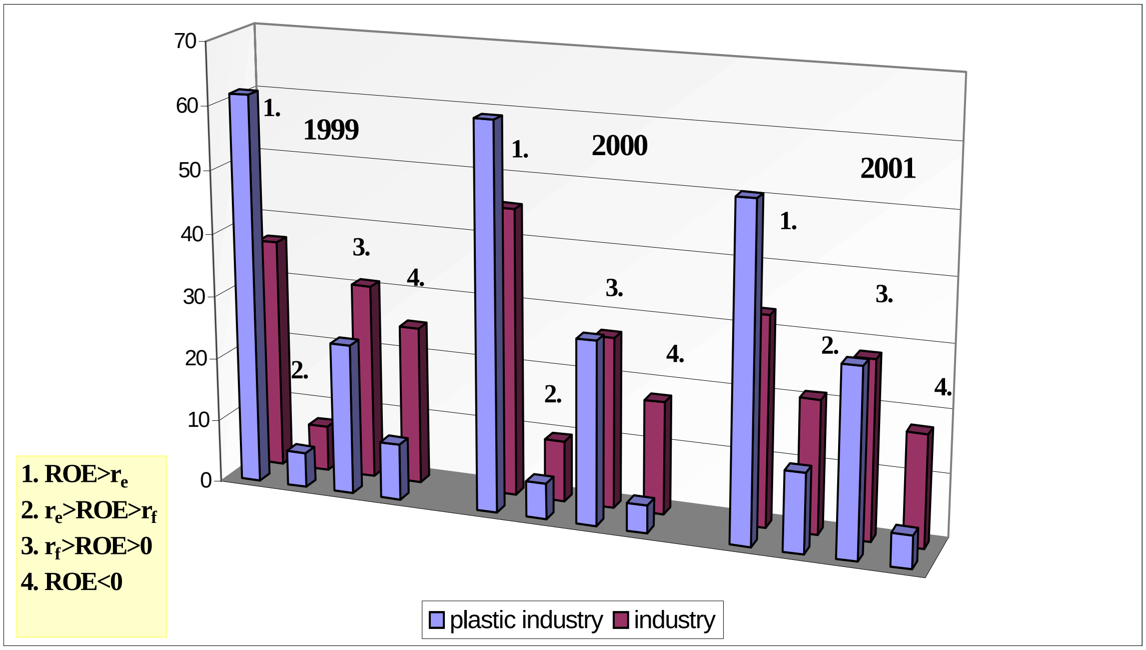

Fig 1: COMPARISON OF COMPANIES IN THE INDUSTRY OVERALL AND PLASTIC INDUSTRY IN THE CZECH REPUBLIC BY THE FORMATION OF EVA IN 1999 - 2001 AND BY SHARE OF TOTAL RETURNS
(Source: Ministry of Industry and Trade, Czech Republic)

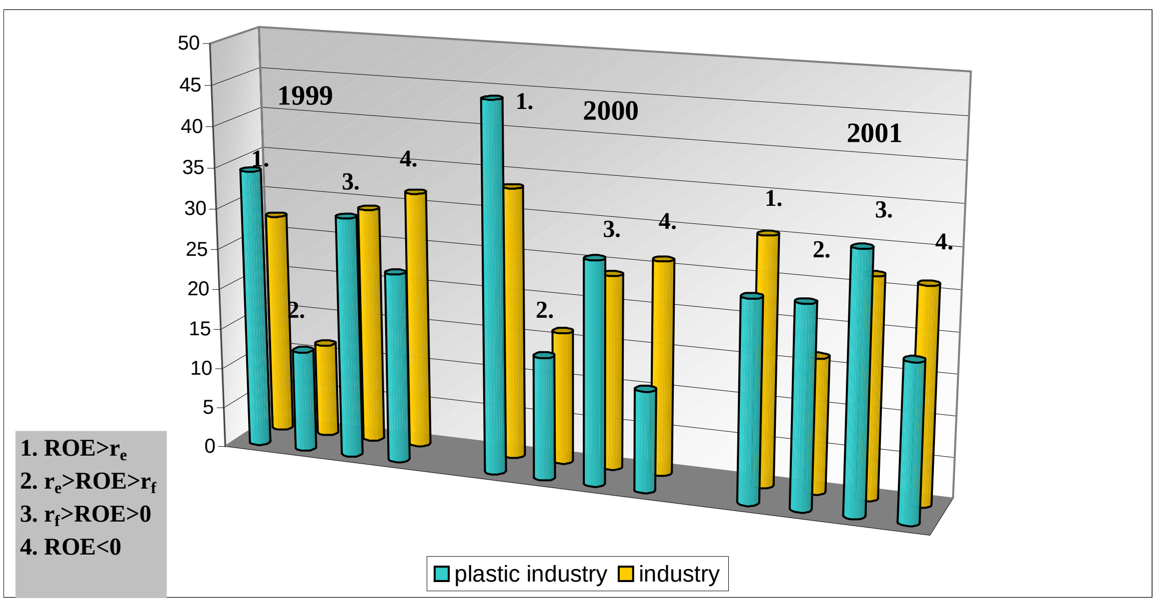

Fig 2: COMPARISON OF COMPANIES IN THE INDUSTRY OVERALL AND PLASTIC INDUSTRY IN THE CZECH REPUBLIC BY THE FORMATION OF EVA IN 1999 - 2001 AND BY SHARE OF TOTAL NUMBER OF COMPANIES
(Source: Ministry of Industry and Trade, Czech Republic)

A breakdown of individual factors influencing year-on-year changes in EVA (1999-2000) for Czech industry and plastic processing industry is presented in the following schematic part.

Industry and plastic industry
Economic value added - breakdown of year-on-year change

EVA	
-121 445	-64 585
-245	45

Indicator	
1999	2000

Indicator
Industry
Plastic industry

ROE - r_e	
-14,89%	-7,63%
-1,29%	0,21%

x

Equity	
815 612	846 464
18996	21307

ROE	
0,97%	4,96%
12,74%	11,24%

-

r_e	
15,86%	12,59%
14,03%	11,03%

$$\text{ROE} = \frac{\text{Net profit}}{\text{Pretax profit}} \times \frac{\text{ROA} - \dfrac{\text{Interest paid}}{\text{Loans} + \text{Debent.}} \times \dfrac{\text{Loans} + \text{Debent.}}{\text{Ext.res.} + \text{Oth.liab.}} \times \left(1 - \dfrac{\text{Equity}}{\text{Assets}}\right)}{\dfrac{\text{Equity}}{\text{Assets}}}$$

ROA	
0,0423	0,0601
0,1275	12,6100

Net profit/Pretax profit	
0,2224	0,5567
0,6019	0,6754

Equity/Assets	
0,4686	0,4688
0,5270	0,5188

Interest paid / (Loans+Debentures)	
10,73%	9,87%
12,79%	8,80%

(Loans+Debentures) / (External resources + Other liabilities)	
38,23	34,97
0,28	0,37

EBIT / Sales	
0,0427	0,0555
0,0875	0,0754

*

Sales / Assets	
0,9910	1,0827
1,4571	1,4909

In 2000 the sharp increase of return on equity and decline of alternative cost of capital were reflected in an improvement of Economic Value Added. The improvement of the financial situation of enterprises was reflected in increased return on equity by 4 points to 5% in total industry. A positive effect was exerted by the following factors:

- growth of net profit to profit before tax as a result of increased number of profitable organisations and of their profit on one side, and of decrease of loss volume and of number of loss making organisation on the other,

- decline of share of resources subject to payment in assets,
- decline of costs of external resources subject to payment.

Results of the financial analysis confirmed an year-on-year improvement of the financial situation, particularly of total industry. Conversely, in plastic industry, return on equity went down 1,5 points to 11,2 %. A negative effect was exerted by the following factors:

- increase of share of resources subject to payment in assets,
- decline of the indicator of EBIT/sales.

The sample of plastic processing companies operating in the Czech Republic consists of both local companies with Czech or foreign owners and of companies, which are part of multinational corporations.

The companies operating in the USA or having at least the headquarters in the USA are shown in Table 3 and 4 and Scandinavian companies in Table 5 and 6 (since Scandinavian companies are privately held ones and these companies´ management have requested no publication of their names, they are represented by numbers).

Table 3: SELECTED FACTORS AFFECTING THE FORMATION OF EVA. COMPARISON OF VALUES OF THE FACTORS AND EVA IN SELECTED COMPANIES IN THE PLASTICS INDUSTRY IN THE USA IN 1999

	Equity in thous.USD	**No. of Empl.**	**Sales per Empl. in thous.USD**	**EBIT /Assets %**	**EBIT /Sales %**	**Sales /Assets**	**EAT/ Sales %**	**Current Ratio**	**Quick Assets Ratio**	**Cash Position Ratio**	**Interest Coverage**
Carlisle	478,133	10,000	189	16.16	10.84	1.49	5.95	4.39	2.36	0.10	9.12
DuPont	13,299,000	94,000	286	5,46	8,27	0,66	28,57	1,64	0,88	0,19	4,16
3M	6,289,000	70,549	223	21.27	18.77	1.13	11.20	2.43	1.62	0.15	27.12
Dana Co.	13,289	84,700	155	9.38	7.93	1.18	3.90	1.60	0.68	0.04	3.74

Table 3, continued

	Equity /assets %	**Long-term Capital/Fixed Assets**	**Depreciation /Sales %**	**Interest expenses/ sales %**	**ROE %**	**r_e %**	**EVA**
Carlisle	44.24	1.46	2.94	1.19	20.04	6	Yes, ROE>r_e
DuPont	31,57	0,69	6,28	1,99	5,97	8	No, r_e>ROE>r_f
3M	45.26	1.24	5.72	0.70	28.03	7	Yes, ROE>r_e
Dana Co.	26.58	1.27	3.94	2.12	17.34	10	Yes, ROE>r_e

Source of the primary data: Companies´ Annual Reports available on the websites

Table 4: SELECTED FACTORS AFFECTING THE FORMATION OF EVA. COMPARISON OF VALUES OF THE FACTORS AND EVA IN SELECTED COMPANIES IN THE PLASTICS INDUSTRY IN THE USA IN 2000

	Equity in thous.USD	**No. of Empl.**	**Sales per Empl. in thous.USD**	**EBIT /Assets %**	**EBIT /Sales %**	**Sales /Assets**	**EAT/ Sales %**	**Current Ratio**	**Quick Assets Ratio**	**Cash Position Ratio**	**Interest Coverage**
Carlisle	547,879	10,000	177	13,70	10,10	1,36	5,43	1,77	0,79	0,03	6,38
DuPont	12,875,000	93,000	304	10.80	15.06	0.72	8.19	1.95	1.02	0.26	5.26
3M	6,631,000	75,026	223	21.06	18.29	1.15	10.66	1.92	1.22	0.09	27.55
Dana Co.	2,628,000	*	*	7.37	6.72	1.10	2.71	1.29	0.51	0.05	2.56
PolyOne	827,600	9,000	210	2.63	3.43	0.77	0.84	1.27	0.69	0.07	1.77

* Data - not available

Table 4, continued

	Equity /assets %	Long-term Capital/Fixed Assets	Depreciation /Sales %	Interest expenses/ sales %	ROE %	r_e %	EVA
Carlisle	41.96	2.25	*	1.58	17.55	6	Yes, ROE>r_e
DuPont	33.73	0.81	6.58	2.87	17.40	8	Yes, ROE>r_e
3M	44.97	0.92	6.13	0.66	27.29	7	Yes, ROE>r_e
Dana Co.	23.39	0.76	4.25	2.62	12.71	10	Yes, ROE>r_e
PolyOne	33.63	0.76	3.04	1.94	1.92	11	No, r_f>ROE>0

Source of the primary data: Companies´ Annual Reports available on the websites

Table 5: SELECTED FACTORS AFFECTING THE FORMATION OF EVA. COMPARISON OF VALUES OF THE FACTORS AND EVA IN SELECTED COMPANIES IN THE PLASTICS INDUSTRY IN SCANDINAVIA IN 1999

	Equity (thous. USD)	No. of Emplo yees	Sales per Empl. thous.USD	EBIT /Assets %	EBIT /Sales %	Sales /Assets	EAT/ Sales %	Current Ratio	Quick Assets Ratio	Cash Position Ratio	Interest Coverage
No.1	2, 750	104	192	5.79	2.79	2.08	1.64	1.56	0.95	0.004	7.49
No.2	12,428	266	211	11.81	7.33	1.61	6.22	0.77	0.57	0.15	8.05
No.3	4, 964	124	112	12.15	10.88	1.12	4.41	1.35	0.84	0.003	49.00
No.4	3,046	302	114	0.86	0.48	1.80	0.02	1.49	0.82	0.001	1.05
No.5	2,339	183	119	1.01	0.71	1.42	0.06	1.67	1.05	0.001	1.29
No.6	617	194	125	-3.06	-2.23	1.33	-4.09	1.08	0.71	0.02	-1.29
No.7	1,697	101	125	9.26	5.31	1.74	4.70	1.13	0.66	0.03	8.67
No.8	5,477	100	158	6.25	4.52	1.38	3.43	1.30	1.06	0.14	5.65
No.9	12,281	376	159	10.66	6.08	1.76	3.21	1.30	0.77	0.06	6.05

Table 5, continued

	Equity /assets %	Long-term Capital/Fixed Assets	Depreciation/ Sales %	Material/ Sales %	Labour / Sales %	Interest expenses/ Sales %	ROE %	r_e %	EVA
No.1	28.59	1.94	3.38	62.27	20.27	0.37	11.88	10	Yes, ROE>r_e
No.2	35.74	0.73	4.67	63.96	19.93	0.91	28.03	10	Yes, ROE>r_e
No.3	39.87	1.12	8.18	39.42	39.34	0.22	12.34	10	Yes, ROE>r_e
No.4	15.96	1.45	4.34	65.06	29.13	0.45	0.26	19	No, r_f>ROE>0
No.5	15.26	1.23	3.03	55.24	34.16	0.55	0.56	17	No, r_f>ROE>0
No.6	3.40	1.09	6.62	51.04	31.33	1.79	-160.5	30	No, ROE<0
No.7	23.52	1.22	3.08	45.56	32.60	0.61	34.84	10	Yes, ROE>r_e
No.8	48.01	1.25	3.88	53.84	22.18	0.80	9.88	10	ROE=$r_{e\ (EVA=0)}$
No.9	36.00	1.34	6.90	40.15	25.26	1.01	15.63	9	Yes, ROE>r_e

Source of the primary data: Companies´ Annual Reports

Table 6: SELECTED FACTORS AFFECTING THE FORMATION OF EVA. COMPARISON OF VALUES OF THE FACTORS AND EVA IN SELECTED COMPANIES IN THE PLASTICS INDUSTRY IN SCANDINAVIA IN 2000

	Equity (thous. USD)	No. of Employees	Sales per Empl. thous.USD	EBIT /Assets %	EBIT /Sales %	Sales /Assets	EAT/ Sales %	Current Ratio	Quick Assets Ratio	Cash Position Ratio	Interest Coverage
No.1	2, 785	106	228	1,81	0,74	2,45	0,15	2,12	1,23	0,004	1,08
No.2	15,186	260	197	11,94	6,67	1,79	5.44	0,87	0,64	0.05	7,11
No.3	6,089	130	133	16,47	12,48	1.32	7,76	1.92	1,37	0,35	632,28
No.4											
No.5	3,427	176	141	7,16	4.49	1,6	4,86	1.39	0,79	0.001	8,71
No.6	608	177	143	-2,44	-1.65	1,47	-4.4	1,93	1,40	0,19	-0,59
No.7	1,697	101	131	5.89	3,31	1,78	2,48	1.68	0,99	0,005	4,01
No.8	5,869	100	172	9,31	6,44	1,45	4,82	1,32	0,90	0,07	11,81
No.9	18,479	390	169	6,38	5,12	1,25	3.15	0,98	0,53	0,03	10,75

Table 6, continued

	Equity /assets %	Long-term Capital/Fixed Assets	Depreciation/ Sales %	Material/ Sales %	Labour /Sales %	Interest expenses/ Sales %	ROE %	r_e %	EVA
No.1	28,28	2,55	2,68	69,56	17,5	0,69	1,26	19	No, r_f>ROE>0
No.2	53,12	0,90	4.31	66,36	19,37	0,94	18,31	10	Yes, ROE>r_e
No.3	46,63	1,26	7,00	46,76	33,35	0,02	21,95	9	Yes, ROE>r_e
No.4									
No.5	22,03	1.22	1,44	58,88	30,85	0,52	35,18	10	Yes, ROE>r_e
No.6	3,53	1.80	0,90	61,16	28,41	2,78	-1,85	30	No, ROE<0
No.7	22,80	1,82	3,58	44,90	34,17	0,82	19,41	10	Yes, ROE>r_e
No.8	49,25	1.25	4,20	51,38	22,17	0,55	14,15	10	Yes, ROE>r_e
No.9	35,00	1.23	6,75	46,79	25,13	0,48	11,21	8	Yes, ROE>r_e

Source of the primary data: Companies´ Annual Reports

By comparing their economic results it is possible to see factors that positively affect the formation of the Economic Value Added. The following relations can be applied:

$$\mathbf{ROE} = \frac{\mathbf{EAT}}{\mathbf{Equity}} = \frac{\mathbf{EAT}}{\mathbf{Sales}} \times \frac{\mathbf{Sales}}{\mathbf{Assets}} \times \frac{\mathbf{Assets}}{\mathbf{Equity}} \tag{3}$$

$$\mathbf{ROA} = \frac{\mathbf{EBIT}}{\mathbf{Assets}} = \frac{\mathbf{EBIT}}{\mathbf{Sales}} \times \frac{\mathbf{Sales}}{\mathbf{Assets}} \tag{4}$$

This means that the profitability of the equity increases as long as the company increases the profit margin, improves utilization of assets and increases debt. However, greater debt contributes to the increase of the return-on-equity only as long as the profitability of the invested capital is higher than the interest rate at which the company borrows money from creditors. On the other hand, as long as a company increases its debt, it can result in reduced liquidity and in an increase in surcharge for the financial structure (low interest coverage in Strojplast, Granitol, Gumotex, TIÚ-Plast - in 1999, No.4, 5 and 6, PolyOne) and financial stability (low liquidity ratios in Strojpast, Gumotex, No. 2). Higher debt brings about higher interest expenses and consequently a reduction of profits after deduction of interest expenses. A high coverage of long-term assets by the long-term capital brings about financial stability but, on the other hand, reduces profitability of the company; long-term capital is usually more expensive than short-term capital (No.1, Carlisle).

In the sample of companies that was analyzed it is evident that in companies that do not generate EVA the main problem is a small profit margin or possibly high costs of capital. These high costs of equity (r_e) are in this sample, mainly in the Czech Republic caused among other things by a higher risk-free interest rate and, in the Czech Republic and Scandinavia smaller company size (higher risk surcharge for the reduced liquidity of assets). In other cases the risk surcharge increases due to a financial instability as was mentioned above. When comparing the structure of expenses, the labour costs in the Czech Republic are clearly lower than in northern Europe, but there is a higher ratio of costs of material, energy and services to sales. At the same time, in the sample from the Czech Republic it can be seen that companies with foreign investors have markedly better economic results. The participation of foreign investors opens the possibility of a better utilization of markets, less expensive and more accessible capital and, what is even more important, the access to know-how and to modern management methods.

The sample of companies operating in the USA represent large multinational corporations (MNC), which carry only a minor risk of nonliquidity of the shares. These companies can also profit from the possibility to diversify the portfolio of their products and territories where they operate. They stand out by a higher productivity (measured by sales per employee) when compared with other companies. All MNCs mentioned here attain, based on the consolidated financial statements, positive values of EVA (except PolyOne due to mainly very low profit margin in 2000.)

Conclusion

The evaluation of selected plastics companies by means of the EVA concept has shown that there are differences between developing regions and regions with developed market economies, but also between individual companies. Technical and technological level of the companies may be comparable, however the conclusion is that a higher managerial creativity, mainly increased ability to accept and apply advanced management method are the main factors for the creation of EVA.

References

[1] Copeland, T., Koller, T., & Murrin, J. (1996). Valutation. Measuring and Managing the Value of Companies. John Wiley&Sons, Inc.

[2] Drobny, J. G., Pavelková, D., Sáha, P., Trnka, F. & Chovancová, M. (2001 May). Business Opportunities in the Czech Republic. SPE-ANTEC, Dallas .

[3] Hull, R. M. (1999). Leverage Ratios, Industry Norms And Stock Price Reaction. An Empirical Investigation Of Stock - For - Debt Transactions. Financial Management, 28, 32 – 45.

[4] Neumaierová, I. (1998). Řízení hodnoty. Praha: VSE (in Czech).

[5] Oxenheim, L., Stonehill, A., Randoy, T., Vikkula, K., Dullum, K.B. & Modén, K. (1998). Corporate Strategies To Internationalise The Cost Of Capital. Copenhagen Business School Press.

[6] Pertl, M. & Zederbauer, A. (1997). Shareholder Value. Finanznachrichten, 74, Heft 25.

[7] Shapiro, A. (1989). Multinational Financial Management, 3rd Edition, Allyn and Bacon, Massachusetts.

[8] Stewart, G. Bennet (1993). "EVA™: Fact and fantasy". Journal of Applied Corporate Finance. 6-19.

[9] Young, D.S. (2001). EVA Value Based Management: A practical guide to implementation. New York.

[10] Walsh, C. (1996). Key Management Ratios. Prentice Hall.

Gearing Towards Globalization: Progress on Sabah Industries

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Abstract

The globalization of the South East Asia trade has been crucial during the past half century. The regional reforms (as with AFTA, G-15, and liberalization of WTO) encourage economies to commit to international investment and trade. This article examines the progress of Sabah's industries (particularly the major ones such as oil palm, chemical and timber), along with the government interventions to face the bountiful opportunities, impacts and to manage it with numerous expected challenges. Some indications about potential changes in common business practices including the recent role-played by the Sabah Business Council and Institute for Development Studies will be addressed. This article also reviews the essential features and measures of the Sabah's industries in order to adjust to the world global business including the 8-Measures addressed by the state government to deal with economic slowdown and to maintain businesses with state's main trading partners (Japan, China, Singapore etc) in the future.

Introduction

In the twenty-first century, one of the most vigorous trends that obviously seen in the world economy is globalization. Globalization is a phenomenon that has remade the economy of virtually every nation, reshaped almost every industry and touched billions of lives, often in surprising and ambiguous ways. Globalization is meant to signify integration and unity.

East Asia is the most recent example. Since the mid-1970, Japan, Korea, Taiwan, China and their neighbors, have lifted 300 million people out of poverty, chiefly through trade [13]. The promotion of economic deregulation, privatization and liberalization trade policies throughout the world signaled the shaping of the latest phase of globalization [10]. Instant communication, high-speed travel, information and communication technology allows the realization of the world-as-a-whole. New information technologies provide cultural continuities and reflexivity [7] in which the "globalization of culture", so often discussed.

Some nations have pursued integration with the rest of the world more aggressively than others. The most globalized countries are small nations for which openness entitles them access to goods, services, and capital that cannot be produced at home. From the perspective of economic globalization, East Asia has seen the emergence of industrialized nations (Japan), newly industrializing countries, including South Korea, Taiwan, Hong Kong, and Singapore; and emerging newly industrializing countries including Thailand, Indonesia, Malaysia, and Philippines [16].

In recent years, indicators of global integration have shown remarkable growth. As a model, China and Vietnam became successful examples of transitional economies that are fast evolving from central planning to market-oriented reforms and perhaps eventually to free market systems. Given the ever-increasing globalization of economies, growing numbers of marketing firms are expecting more of their profits to be derived from international sales. Global competition is ferocious, thus, developing long-term partner relationships often becomes a significant competitive advantage [14]. This has constituted more and more companies moving towards global strategy. Global strategy can be defined as a strategy that involves standardizing product for the whole world, as if it were a single entity [5]. Observes that, until recently, the European car industry has focused its efforts almost entirely within the boundaries of its domestic markets. Since the rise of the Japanese car industry and those of emerging economies such as Malaysia and Korea, the Europeans have found that the levels of competition in the world market have intensified [3].

Globalisation : Harm or Charm?

Sir Leon Brittan, Vice-President of the European Commission referred the term globalization to the "dramatic acceleration and multiplication of economic activity which transcends national and regional markets, leading us towards a single market". The definition is also witnessed in the emergence of phenomena of 'global community'.

The emergence of globalization in economic system has always been associated by eight major developments as followed [6], [11], [12]:

1. *Trade liberalization and the removal of capital controls*, which has led to the large increment in trade and capital flows. Relatively, this has generated a process that enables quick and powerful transmission of technological and economic development across the world.
2. *The collapse of communism as an economic system and the acceptance of capitalism* as replacement for it have opened up the world to the ever-expanding operation of market-based business activities.
3. *The embrace of market-based reforms* by many countries due to pressure from world agencies such as World Trade Organization (WTO), International Monetary Fund (IMF), World Bank, and some big multinational companies (MNCs).
4. *The emergence of new major trading nation* such as China, South-East Asia, and Latin America. Countries that are thought to be developing into full blown advanced industrial economies and already being the major players in international markets.
5. *Regional integration blocs such as North American Free Trade Area (NAFTA), European Union (EU), AFTA,* have made considerable progress in removing the barriers to trade between members and creating a single economic space.
6. *Technological developments* such as the IT revolution has led to the emergence of large MNCs such as Microsoft, that dominate world markets thru crucial products.
7. *New systems of conducting business via internet* has also hold the prospect of expanding the potential business transactions by providing less cost vehicle to connect buyers and sellers.
8. *Developments in government policies* in areas such as privatization of state-owned industries and the encouragement of market provision of many goods and services that used to be supplied by government agencies has further encouraged the growth of market-based activities.

These developments led to mix responses towards globalization. Groups like 'Anti-Globalisation" is trying their best to stop it by reminding the world that globalization is creating more harm than good to the balance of economic of the world. Accordingly, some large MNCs that will benefit from the liberalization of economic system through the implementation of globalization pressured some agencies, world organizations and even some countries that heavily rely on them to make a room expediting the spread of globalization. However, it is no longer a case of preparing for globalization but rather, how best to take advantage of the available opportunities to compete.

As already noted, Malaysia is going forward to global market. Some preparations were underway in Malaysia to maintain the competitiveness of the manufacturing and agri-plantation industries to capitalize on the comparative advantage of each country's contributing region [10]. In this context, Malaysian's strategy of international expansion may be driven by a search for new markets or by the need to respond to existing customers [8] especially to move competitively forward to the ASEAN Free Trade Area, or AFTA. AFTA, which had six members namely, Brunei, Indonesia, Malaysia, Philippines, Singapore, and Thailand laid out a comprehensive program of regional tariff reduction, to be carried out in phases through the year 2008. This includes efforts to eliminate non-tariff barriers and quantitative restrictions, and harmonize customs nomenclature, valuation, and procedures, and develop common product certification standards. This paper highlights Sabah, a state in Malaysia or known as North Borneo, for its arrangements to be included amongst most competitive industries in Malaysia.

Sabah: Facts and Figures

Sabah's industries currently have its' own strength, which came from productive sectors mainly the manufacturing, agriculture and tourism. Continued promotion on manufacturing based industry operation area of Kota Kinabalu

Industrial Park (KKIP) and agro-industries, the Sabah Agro Industrial Precint, has helped to further broaden the manufacturing sector. Not only that, these moves are also intended to rejuvenate Sabah's agricultural sector.

The state's economy is primarily driven by the agricultural sector though manufacturing is gaining more of its market share. The major commodities of Sabah were palm oil (crude & processed), petroleum (crude), plywood, palm kernel oil, sawn timber and prawns (fresh & frozen). The main purchasers of the palm oil (Sabah's leading revenue earner) were inclusive of Republic of China, India, Netherlands and Pakistan. Sabah imported items consists mainly of road vehicles, machinery for particular industries, electrical machinery and appliances, which were supplied from Peninsula Malaysia, United States, Japan and European Union. Since the state's economy is largely dependent on export-oriented and resource-based products, it is less prone to the consequences by current economic turmoil as other States in Malaysia. Nevertheless, the state strength was still accredited to the advantages in managing the balance of trades as shown in Table 1 and Table 2.

Table 1: EXPORTS BY COMMODITY SECTION (RM'000)

Commodity	**2000**		**2001**		**Jan-Apr 2002**	
Crude Materials Inedible	1,597,372	12.1%	1,023,71	8.2%	295,947	6.9%
Manufactured Goods	2,552,762	19.3%	2,228,274	17.8%	744,756	17.3%
Mineral Fuels, lubricants, etc.	3,680,772	27.8%	3,327,302	26.5%	914,327	21.2%
Animal/Vegetable Oils and Fats	3,463,098	26.2%	3,757,209	30.0%	1,498,507	34.8%
Machinery and Transport Equipment	727,985	5.5%	873,302	7.0%	372,276	8.6%
Food	640,985	4.8%	688,777	5.5%	257,296	5.9%
Chemicals	346,183	2.6%	406,139	3.2%	85,642	2.0%
Misc. Manufactured Articles	135,278	1.0%	151,230	1.2%	102,460	2.4%
Misc. transactions & Commodities	26,883	0.2%	34,441	0.3%	15,134	0.4%
Beverages and Tobacco	50,523	0.4%	55,043	0.4%	24,781	0.6%
Total Export	**13,221,112**	**100.0 %**	**12,545,434**	**100.0%**	**4,311,123**	**100.0%**

Source: Monthly Statistical Bulletin Sabah, February 2002

Table 2: IMPORTS BY COMMODITY SECTION (RM'000)

Commodity	**2000**		**2001**		**Jan-Apr 2002**	
Machinery and Transport Equipment	3,419,029	30.3%	3,470,841	30.4%	1,229,444	33.6%
Manufactured Goods	1,524,388	13.5%	1,699,414	14.9%	548,288	15.0%
Food	1,333,863	11.8%	1,376,505	12.0%	428,087	11.7%
Chemicals	1,254,522	11.1%	1,208,375	10.6%	446,810	12.2%
Mineral Fuels, lubricants, etc.	1,811,438	16.1%	1,525,490	13.4%	340,897	9.3%
Misc. Manufactured Articles	896,814	8.0%	976,308	8.6%	345,375	9.4%
Beverages and Tobacco	418,459	3.7%	415,212	3.6%	119,890	3.3%
Crude Materials Inedible	436,836	3.9%	445,992	3.9%	93,701	2.5%
Misc. transactions & Commodities	156,874	1.4%	219,228	1.9%	85,062	2.3%
Animal/Vegetable Oils and Fats	17,171	0.2%	84,672	0.7%	24,819	0.7%
Total Import	**11,269,394**	**100.0%**	**11,422,037**	**100.0%**	**3,662,374**	**100.0%**

Source: Monthly Statistical Bulletin Sabah, February 2002

Manufacturing has been proven to be one of the main growth engines for Sabah's economy. Manufacturing sector has been projected to grow at an average rate of 13.3 percent per annum between 1995 until 2010, and by the end of the period it will account for 33.1 percent of the state's GDP. According to records of the Departmental of Industrial Development and Research (DIDR), as of 2001, the state's manufacturing sector is dominated by wood and wood products, followed by the food manufacturing sub-sector. To face challenges from the 'open market', the number of approved projects has been increasing since the crises in 1997/1998 (Table 3).

Table 3: APPROVED MANUFACTURING PROJECTS IN SABAH

	Approved FML		**Job Opportunities**		**Capital Investment**	
Year	**Number**	**(% change)**	**Number**	**(% change)**	**(RM million)**	**(% change)**
1994	39	500%	11,058	84	690.6	135
1995	54	3	12,956	17	1,862.20	170
1996	30	-44	4,880	-62	611.3	-67
1997	31	3	3,391	-31	1,817.80	197
1998	43	39	5,521	63	926	-49
1999	7	-84	854	-84	27.30	-97
2000	14	100	1,241	45	369.3	1,253
2001	21	50	2,048	65	4,780.40	1,194
2002 (Jan-Feb)	3		214		61	

Note: FML- Federal Manufacturing License
Source: Malaysia Industrial Development Authority (MIDA)

The state's industries have also diversified its business dimension by participating, international investment and trade markets. Catering along for domestic markets, the main lists for the direction of trade came from the Peninsular Malaysia and other Asia countries (Japan, China and Korea). Major trading partners are shown in Table 4.

Table 4: SABAH MAJOR TRADING PARTNERS (EXPORT)
(RM MILLION)

Year	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001p**
P.Malaysia	2,080.9	2,254.5	1,827.9	1,936.0	2,047.1	2,000.6	2,029.8
Japan	2,000.4	2,040.7	1,850.7	1,467.3	1,501.6	1,387.1	1,085.2
China	1,229.0	1,269.1	1,225.7	1,419.7	1,133.1	950.5	1,053.4
Singapore	637.2	475.8	571.2	437.6	277.6	434.4	259.7
Sarawak	685.6	375.3	292.9	659.9	1,446.0	599.6	838.0
Korea	710.8	799.3	928.8	974.7	992.0	1,212.1	1,462.4
USA	150.0	198.0	279.6	263.8	405.0	331.2	523.8
Taiwan	391.7	473.5	519.4	447.4	376.2	367.2	277.8
Thailand	458.3	304.0	197.4	240.6	403.7	959.9	250.2
Netherlands	288.8	490.9	452.2	900.0	785.6	522.1	711.7
Others	2,019.6	1,980.7	3,099.9	5,488.4	4,765.3	4,450.5	4,053.6
Grand Totals	**10,652.3**	**10,661.8**	**11,245.7**	**14,235.4**	**14,133.2**	**13,215.2**	**12,545.6**

Note: p-provisional
Source: Monthly Statistical Bulletin Sabah, March 2002

Along with the resources, which came from the industries capital investments and the revenues obtained from the trading of exports and imports section, the Sabah's industries also have vast supply of employment and yet the number is still increasing. Overall, the distributions of demand for human resources (accounting for about two-third of all demand workers) were mainly concentrated in three sectors; manufacturing, agriculture and forestry and trade; restaurant and hotels sectors (Table 5).

Table 5: ESTIMATES OF EMPLOYMENT BY INDUSTRY
(IN THOUSANDS)

	1996	1997	1998	1999	2000	2001
Agriculture, forestry, livestock & fishing	354.0	325.9	410.4	424.4	496.4	450.7
Mining & quarrying	7.2	9.3	5.3	7.0	2.3	5.5
Manufacturing	171.4	179.9	134.1	156.3	159.2	139.2
Electricity, gas & water	6.1	6.6	7.1	5.9	7.5	8.3
Construction	76.6	81.9	88.7	70.1	91.7	107.5
Wholesale & retail trade, restaurants & hotels	154.3	159.0	163.1	174.6	185.1	293.6
Transport, storage & communication	42.4	43.6	41.5	53.7	48.3	56.5
Finance, insurance, real estate & business services	25.7	26.3	28.1	28.3	28.9	37.2
Others	192.2	202.3	227.0	222.6	246.9	279.8
Total Employment	1,029.9	1,034.8	1,105.3	1,142.9	1,266.3	1,378.3

Source: Yearbook of Statistics Sabah, 2001

Sabah: The opportunities and challenges awaits

> *"Despite the regional economic downturn, the economic outlook for Sabah in the next few years is not as gloomy as it might seem, if those with initiative are willing to seize the opportunity to consolidate their position and to take steps to become more efficient and productive"*
>
> – *Datuk Yong Teck Lee, Sabah Minister in Chief Minister's Department.*

In the Malaysian and Sabah context, the Federal and State government is making full efforts towards educating and increasing awareness among local businesses and industries on the opportunities and challenges that would come with the implementation of globalization. It has resulted in some companies charting strategies and new directions to deal with increased liberalization and competition. Be it concentrating on strengthening home bases, investing in technology, research and development, introducing new products or establishing operation abroad, there is no denying that much more needs to be done. The private sector cannot simply depend on incentives from the government to survive. They must be pro-active and take initiative to put in place, measures to enhance their ability to compete. Detailed challenges and opportunities that awaits to all Sabah's industries will be explained in depth in the next section.

Challenges from Increased Competition

Sabah, with a population, which is merely 3 million, its domestic market is small and does not provide opportunities for economies of scale production. The regional developments such as the AFTA and East ASEAN Growth Area (BIMP-EAGA) would encourage Sabah's industries to look towards regional market. But it is not without its challenges. Tariffs expected to increase and ease trading activity among the regional members. It may also create a loophole for non-member products to enter the competition through their trading partner among the members. This significantly will heighten the level of competition in the market.

To overcome these situations or to create better competitive edges, Sabah industries should be more willingly expand their businesses by establishing more MNCs which operate cross the boarder. Creation of national name and forming join venture or mergers within the members are vital. Not only that but to apply to a greater globalised entry into ASEAN market with the WTO prospects, Sabah's industries should widen their scope of marketing by targeting the region. An aggressive global marketing strategy particularly publicity efforts and also proactive promotion campaigns by relevant central agencies, will need to be pursued. The focus for marketing is needed in brand building and positioning with more professional outlook.

Competitive Edge via Innovation

Sabah's industries should also focus on creating competitive edge through innovation, provided that they have the capacity and ability to innovate. Competitive edge can also be gained through creating or re-engineering the available products and investing on new technology and R&D. Each industry should take the opportunities from the information and communication technology (ICT) development in the country to be e-enabled and knowledge driven. Adoption ICT through knowledge management, supply chain management and many more in the business operation can increase the industry's competitive advantage. This strategy does not abandon the current emphasis on Total Productivity Factor (TPF), which is geared through improving of skills and management capabilities, increasing research and development (R&D) spending and great use of ICT to upgrade the economic efficiency in all economic sectors [4].

Taking advantage of the comparative and competitive advantages of ASEAN countries, it will enable the industries to get greater certainty and confidence through investment facilitation and transparent laws. Accompanying the modernization of operations would be the access to capital, technology, high quality workforce and other resources. Thus, it is imperative for Sabah's industries to grab bigger scale of productions by lowering product costs through outsourcing from lower cost countries.

Development of Small & Medium Enterprises (SMEs)

Currently most Malaysian's SMEs have limitations on financial, physical and human resource. Therefore, in certain cases, they should concentrate and target to compete in specialized market niches. SMEs from all the Sabah's industries should also take regional economic development seriously as a training ground for development of competitive strength that may help the companies' future survival. There will be vast new opportunities in going into agro-based and resource-based, downstream industries with value-added products in the country.

However, such new opportunities can only be identified and grasped by SMEs that have vision, along with courage and perseverance to realize their vision. In assisting SMEs, sufficient funding has been allocated through various sources for the up grading of services and also as a momentum to undertake more overseas investment promotion opportunities. In short, SMEs need to be innovative, efficient and competitive. Table 6 denotes the rates of several funds loan, available to SMEs as being controlled by the country's Central Bank.

Table 6: SPECIAL FUNDS LOAN AND FINANCING RATES

Funds	Maximum Loan Rates (% per year)			Financing Rates (% per year)		
	Old	New	Change	Old	New	Change
*RFSMI**	5.0	4.5	-0.5	1.0	0.5	-0.5
*FSMI 2***	5.5	5.0	-0.5	2.0	1.5	-0.5
*NEF****	5.5	5.0	-0.5	2.0	1.5	-0.5

Note:

* - Rehabilitation Fund for Small and Medium Industries

** - Funds for Small & Medium Industries 2

*** - New Entrepreneur Fund

Source: Bank Negara Malaysia (2001)

Removing Non-Tariff Barriers

This move is expected to harmonize custom control, enhance mutual recognition and the ability of process movement (financially, product etc). Individually, status of tariff reduction (comprised of manufactured and processed products) for original six members of AFTA is as in Table 7.

Table 7: STATUS OF COMMON EFFECTIVE PREFERENTIAL TARIFF IMPLEMENTATION (CEPT)

Country	Products at 0-5 % Tariff
Brunei	97.3%
Indonesia	89.7%
Malaysia	91.7%
Philippines	89.8%
Singapore	100%
Thailand	90%

Source: www.ids.org.my/

As a result of lower or zero tariffs, the action can be seen to increase intra-ASEAN competition by lowering cost to producers and creates larger access into "domestic market". Market player especially those who associate with Sabah's industries will have wider choice of products and companies to do business with.

Becoming Part of the Global Supply Chain

To be part of the global supply chain, all the industries in Sabah must be able to respond and communicate in real-time, supply on global basis, conduct product development and innovation, and REDUCE COST. It will be prudent to seek smart partnerships in Malaysia as well as foreign entrepreneurs overseas. Their market will similarly expand overseas through the Internet. Engaging in vertical integration of production, processing and manufacturing activities may even widen the industries opportunities.

A Glimpse on Roles of Selected Agencies

The future is indeed uncertain and poses many questions for the state. The State authorities can no longer afford to be mere passive bystanders. With careful analyses, better foresight and pro-active actions these challenges can be overcome. With the assistance from the government, the industries in this state will continue to prosper. The reformations of the country's financial system, particularly actions such as consolidation and merges, restructuring and enhancing corporate governance practice, have rather somehow helped the Sabah's economy to become more resilient and stronger. Extra RM4.3 billion stimulus package were also announced in 2001, in which it may have direct or indirect multiplier effect and benefits to the public and businesses. Nevertheless, it is not focused solely on spending per se but on earning it.

The Ministry of International Trade and Industry (MITI), has helped to resolve implementation problems faced by the industries along with undertaking all policy matters with regards to the global evolution. The state Economic Planning Unit and Federal Department of Development including the Institute of Development Studies (IDS), helped to monitor and analyze the implementation of programs so as to increase the industries effectiveness and efficiency.

Sabah proclaimed eight measures to deal with economic slowdown, which were announced by the Sabah Business Council [1]. These include to:

- Promote aggressively the tourism sector targeting at both international as well as domestic visitors;
- Intensify the development of the construction sector;
- Revitalize the development of the agricultural sector by focusing on the food sub-sector and the specialty natural products industry cluster;
- Intensify the development of existing manufacturing industries;
- Create a network of IT literate, adaptable and highly skilled human resources whilst pursuing technological advancement;
- Diversify export markets and investment sources to include economies less affected by the US (e.g., China, India, the Middle East and Europe);
- Seek trading partners to obtain optimum trade balance and
- Enhance administrative efficiencies and reduce wastage, especially duplication of functions.

Conclusion

In some ways, the challenge facing the region is becoming more formidable today. For the Malaysian case, AFTA is the first and most crucial step towards global liberalization and competition. As Malaysia is the second leading beneficiary in the intra-Asean trade (after Singapore), Sabah's industries must grab the opportunities awaits. Industries MUST stay ahead of competition by maintaining efficiency and productivity because its ability to reduce costs, besides enhancing technology and skills. Other than that, industries can establish business alliance, smart partnerships, industrial co-operation and complementation arrangements. Effective restructuring and rationalizing the industries will maintain further high value-added products production.

We do agree that globalization will accelerate winners and losers. The competition is not between the big and the small. It's a function of ***Preparation***, ***Perspiration*** and ***Persistence***. Certainly, there will be three structural areas involved: Government, Business and People. The networkings of horizontally and vertically integrated activities also need to be undertaken by each industry. And that is why structural changes are needed in business. It will not be easy for sure, but continuous improvement in planning and execution of effective strategies by the federal and Sabah's state government, along the major industries and its market player may sustain this state prosperity and adaptation to the so-called borderless world.

References

[1] 8 Measures to Deal with Economic Slowdown. [Public Information]. Retrieved August. 22, 2002 from World Wide Web: http://www.ids.org.my/planpolicy/sabah_8_strategic_thrusts.html.

[2] Bank Negara Malaysia. *Annual Report 2001*. [Public Information]. Retrieved July. 17, 2002 from World Wide Web: http://www.bnm.gov.my/

[3] Donnelly, T., Mellahi, K. & Morris, D. (2002). The European Automobile Industry: Escape from Parochialism. European Business Review. 14(1), pp. 30-39.

[4] Eight Malaysia Plan, 2001-2005. (2001). Kuala Lumpur: Percetakan Nasional Malaysia Bhd.

[5] Ferrell, O. C. & Hirt, G. (2000). Business: A Changing World (3rd Ed). Boston, Massachusetts: Irwin McGraw-Hill.

[6] Giddens, A. (1990). Runaway World: How Globalization is Reshaping our Lives. New York: Routledge.

[7] Little, S., Holmes, L. & Grieco, M. (2001). Calling Up Culture: Information Spaces and Information Flows as the Virtual Dynamics of Inclusion and Extension. Information Technology & People 14(4), pp. 353-367.

[8] Lovelock, C. & Wright, L. (2002). Principles of Service Marketing and Management (2nd Ed). Upper Saddle River, New Jersey: Prentice Hall.

[9] *Monthly Statistical Bulletin*. [Public Information]. Retrieved July. 17, 2002 from World Wide Web: http://www.ids.org.my/publications/facts/

[10] Morshidi, Sirat (2000). Globalising Kuala Lumpur and the Strategic Role of the Producer Services Sector. Urban Study, November. 37(12), pp. 2217-2240.

[11] Ohmae, K. (1990). The Borderless World. New York: Harper Business.

[12] Ohmae, K. (1995). The End of the Nation State: The Rise of Regional Economies. New York: Harper Business.

[13] Rosenberg, T. (2002). Globalization. The New York Times. August 18. Section 6, pp. 28.

[14] Singhapakdi, A. Rawwas, M. Y. A., Marta, J. K. & Ahmed, M. I. (1999). A Cross-Cultural Study of Consumer Perceptions about Marketing Ethics. Journal of Consumer Marketing. 16(3), pp. 257-272.

[15] *Yearbook of Statistic Sabah*. [Public Information]. Retrieved July. 17, 2002 from World Wide Web: http://www.ids.org.my/publications/facts/

[16] Zha, Daojiong (2000, Summer). Introduction: Globalization and Local Governments in East Asia. East Asia: An International Quaterly. 18(2), pp. 6-17.

How do Companies Create Value through Alliance Experience in China? Analysis of the Relationship between Experience and Valuation Effect of Sino-French Joint Ventures

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Abstract

Do joint ventures create value for shareholders? The answer to this question seems to be affirmative and especially obvious in the light of the many growth opportunities offered to partners in a joint venture: economies of scope and scale, access to a new technology or skill, sharing risks and uncertainties, inter-organisational learning or facilitated entry into emerging markets or countries. Setting up business in an emerging country is one of the functions of the (international) joint venture, which is a good reflection of the potential value creation inherent in this structured form of alliance. However, while their shareholder value creation potential seems considerable in theory, empirical studies that focus on analysing the stock market impact of announcements of alliances have obtained inconclusive results. In addition, many studies point out the difficulties faced by joint ventures in their medium and long term value creation process. What organisational factors will enable the joint venture to make the transition from that of a structure with serious value creation potential to that of a value creation structure? This is the central question of this article. It shall be viewed in the more specific context of a form of joint venture (1) whose aim is to enter a very different emerging country - in this particular case, China - and (2) whose structure combines French and Chinese partners. Certain organisational factors specific to the (French) partners of Sino-French joint ventures related to this question shall be analysed with respect to their shareholder value creation (or their stock market impact). These factors are their experience in managing Sino-French joint ventures and their international experience, and more particularly their experience of Asia.

Introduction

Do joint ventures create value for shareholders? The answer to this question seems to be affirmative and especially obvious in the light of the many growth opportunities offered to partners in a joint venture: economies of scope and scale, access to a new technology or skill, sharing risks and uncertainties, inter-organisational learning or facilitated entry into emerging markets or countries. Setting up business in an emerging country is one of the functions of the (international) joint venture, which is a good reflection of the potential value creation inherent in this structured form of alliance. This is found to be the case "*when two or more sponsors* [partners] *bring given assets to an independent legal entity and are paid for some or all of their contribution from the profits earned by this entity*" (Hennart, 1988: 362). The joint venture is particularly seen as an inevitable, effective entry mode to emerging countries whose economic, political, cultural and regulation characteristics are the most differentiated. In such a context, founding a subsidiary out of nothing or acquiring a local company is often a long and difficult process. This is where the joint venture demonstrates its value-creating dimension by accelerating entry, facilitating knowledge of the local environment and reducing the costs of the transaction.

However, while their shareholder value creation potential seems considerable in theory, empirical studies that focus on analysing the stock market impact of announcements of alliances (MacConnell & Nantell, 1985; Finnerty *et al.,* 1986; Lee & Wyatt, 1990; Woolridge & Snow, 1990; Koh & Venkataraman, 1991; Chan *et al.,* 1997; Jacquot & Koehl, 1998; Das *et al.,* 1998; Anand & Khanna, 2000; Hubler & Meschi, 2000) have obtained inconclusive results, even if they seem to find a certain negative trend. In addition, many studies point out the difficulties faced by joint ventures in their medium and long term value creation process. The rate of failure of joint ventures, whether identified by dissolution of the joint venture or by the departure of one of the partners, is still high and varies from at least 30% (Franko, 1971; Killing, 1983; Harrigan, 1988) to 50% (Reynolds, 1984; Beamish, 1988; Bleeke & Ernst, 1992).

What organisational factors will enable the joint venture to make the transition from that of a structure with serious value creation potential to that of a value-creating structure? This is the central question of this article. It shall be viewed in the more specific context of a form of joint venture (1) whose aim is to enter a very different emerging country – in this particular case, China – and (2) whose structure combines French and Chinese partners. Certain organisational factors specific to the (French) partners of Sino-French joint ventures related to this question shall be analysed with respect to their shareholder value creation (or their stock market impact). These factors are their experience in managing Sino-French joint ventures and their international experience, and more particularly their experience of Asia.

Thus, in the first section, this article shall present general theoretical reflections on the relation between the accumulation of two forms of experience (managerial and international) by companies involved in international joint ventures and the shareholder value creation of these companies. In the second section, French Direct Investment in China is analysed to gain a better understanding of the present situation of Sino-French joint ventures. The third section gives details of the event study methodology and the sample used (47 announcements of the formation of Sino-French joint ventures selected from the press during the period 1994-2000). The fourth section presents empirical observations of the stock market reaction to the formation of Sino-French joint ventures. The correlation of certain organisational factors specific to French partners of Sino-French joint ventures (*i.e.*, their experience in managing Sino-French joint ventures and their international experience, particularly their experience in Asia) with the observed stock market variations will allow greater understanding of how the stock market value of the French companies involved is affected by their experience (*i.e.*, their in-house accumulation, codification and sharing of their experience) in management of a specific organisational structure – in this particular case, the Sino-French joint venture – and knowledge of a geographical area – in this particular case, Asia and China.

International Growth Strategy, Accumulation Of Experience And Value Creation

Knowledge of a country, *i.e.*, of its political situation, its regulations and its economic, commercial and financial characteristics, is an organisational resource that can be very useful for the companies engaged in an international growth strategy. In the context of an international growth strategy, knowledge of management of a structural form such as the international joint venture is also a major asset for a company. In addition to knowledge of a country, knowledge of managing international joint ventures is a useful, non-material organisational resource. These resources are both based on individual and organisational information, experience and know-how. They correspond to the repetition, experimentation and accumulation of know-how (relating to a country and to the management of a structural form) and derived from organisational learning. If they are maintained, developed and combined, these resources support and strengthen the international growth strategy of the company that possesses them. Taking the example of China and a possible French investor, the combination of knowledge of this geographical area and of managing Sino-French joint ventures will directly determine the success or failure of the French company's business in China.

These two resources "appear" in the organisation after a period of organisational learning through the accumulation of experience and intelligence in experimentation (Cyert & March, 1962; Argyris & Schon, 1978; Huber, 1991; March, 1991; Koenig, 1996). Learning these resources is a cumulative process. Thus, with time, repeated experience and new experimentation specific to a country and to managing international joint ventures add together and enhance individual and organisational know-how. However, organisational learning of a geographical area and of managing international joint ventures is not an automatic process. It is not necessarily an automatic process for companies because simply accumulating experience in itself is not enough for developing real knowledge of a geographical area or of the management of international joint ventures. If the organisational learning process is to produce results by developing knowledge that is "applicable" by the company, the company must have a real capacity for learning (Milan, 1991) or organisational routines (Nelson & Winter, 1982). These organisational routines are at the core of the learning process. These routines enable an organisation to aggregate a variety of individual experiences relative to a country and to managing international joint ventures, and then to transform them into knowledge that is codified and shared (Boisot, 1994) within the company and, especially, is applicable by the company to pursue its aims of international growth. As shown by Dosi *et al.* (1990: 243), "*although individual skills are essential, their value depends on the way they are used in specific organisational set-ups.*" These "specific organisational set-ups" are organisational routines, and all companies do not have them to the same extent. Some companies have little or none of them, and draw little or no knowledge from their various experiences. Others, which have a real learning capacity, enhance their knowledge portfolio by accumulating their experiences. A company's learning capacity is more a matter of its intentional will to identify and develop the necessary organisational routines, rather than being a given, static stock of organisational routines. In other words, the inter-organisational differences in the number and quality of organisational routines used to accumulate, codify and share knowledge within each company explain the varying degrees of learning capacity within different companies. Furthermore, since the knowledge of a country and of managing international joint ventures are useful resources that are difficult to develop (because they correspond to poorly-defined, tacit and intangible factors), differences arise in companies' capacities to learn this knowledge and to derive value from it (particularly for shareholders). Whether regarding knowledge of a country and the way to set up business in it (Hu *et al.*, 1992; Chang, 1995) or the knowledge of management of joint ventures and alliances (Gulati, 1995; Kale *et al.*, 2000; Anand & Khanna, 2000), empirical studies have shown that (a) "*companies learned to create more value when they accumulated experience* [relative to a country and to management of joint ventures and alliances]" and (b) "*there were major persistent differences between companies in their capacities to create value* [through joint ventures and alliances]" (Anand & Khanna, 2000: 313).

Seen in the specific context of implementation of an international growth strategy by French companies that target the Chinese market, preferring the joint venture entry mode, the above discussion leads us to formulate the following research hypothesis:

"*Companies with considerable experience in China and in management of Sino-French joint ventures create greater value (for shareholders) than those that have little or none of this experience"*

The idea of the heterogeneity of value creation following the formation of Sino-French joint ventures is thus tested and the result – *i.e.*, whether or not this idea is confirmed – will be interpreted as reflecting the differences (or absence of them) in the levels of (international-Asian and managerial) experience of the French companies involved. The confirmation of such a hypothesis would substantiate the existence of differences in value creation following the formation of Sino-French joint ventures and, to a certain extent, would explain these differences in value creation by the differences in (international-Asian and managerial) experience of the French companies involved.

French Direct Investment In China And Sino-French Joint Ventures: The Current State Of Affairs

In 1978, under the impulsion of Deng Xiaoping, China engaged in a policy of economic openness, characterised notably by facilitated access for Foreign Direct Investment in China. Under this "open door" policy, the most favourable signal given to potential foreign investors was the proclamation of the law of July 1st 1979 on companies with mixed Chinese and foreign capital. Otherwise known under the name of the joint ventures law, it opened the door to Foreign Direct Investment, but it was not much ensued in early years. In fact, it was the legislation passed in the mid-1980s and early 1990s that clarified and liberalised the Foreign Direct Investment environment, and led to the creation of a spectacular number of Chinese companies with foreign capital. From the proclamation of this law in 1979 until the end of 1997, the responsible Chinese authorities, in this case, MOFTEC (the Ministry of Foreign Trade and Economic Cooperation), approved the founding of 316,280 Chinese companies with foreign capital. More than thirty million Chinese people are now employed in these companies (*MOFTEC bulletin*, 2000). Investments dropped in 1989-1990 following the events on Tian An Men Square, but they rocketed from 1993 (after Deng Xiaoping's announcement in 1992 of his intention to speed up reforms and deregulation of the Chinese economy). From then onwards, China became the second recipient of foreign investments after the USA: in 1998, China received 45.5 billion US dollars of Foreign Direct Investment (*MOFTEC bulletin*, 2000). Throughout this period of openness, the joint venture was by far the organisational structure preferred by foreign companies investing in China (*China Statistical Yearbook*, 1999). From 1986, the joint venture became the leading form of Foreign Direct Investment in China and it still remains so, both in numbers and in the amounts of contracts (*MOFTEC bulletin*, 2000). In 1998, out of 52.4 billion US dollars, the investments made through joint ventures represented 25.4 billion US dollars (*i.e.*, around 56% of the total amount) and out of 23,600 foreign investment contracts, the number of joint ventures was 13,958 (*i.e.*, around 58% of the total number). Although the ratio of Chinese subsidiaries (or of Chinese companies owned entirely by foreign capital) to all Foreign Direct Investment has increased recently (around 7% by number and 6% by amount in 1988, as opposed to around 45% by number in 31% by amount in 1997), the joint venture still remains the predominant means of entry into China.

In the Chinese context, the respective contributions of each of the foreign and Chinese partners in the joint venture are usually distinct and complementary. It follows that, in the classification of the alliances proposed by Hennart (1988) or by Dussauge & Garette (1995), Sino-foreign joint ventures are all "link joint ventures" or "complementary alliances". Thus, the foreign partner provides technical expertise, technology and some of the finance, while the Chinese partner provides installations, human resources, and contacts with officials of the provincial and central Chinese governments, and access to the local market. Since the capital of the joint venture is divided between its partners in proportion to the "value" of these different contributions, an unfavourable situation for the Chinese partners soon developed. Their tangible resources (*i.e.* installations and human resources) have often been depreciated by the foreign partner because they were unproductive and obsolete. However, the Chinese partner's key, intangible role of "door opener" was undervalued because its value was difficult to determine and depended on subjective judgement. In the end, the Chinese partners most often held a minority share in the capital of the joint ventures. The law on contractual joint ventures dated 13 April 1988, complementing the law dated 1 July 1979, and enabled Chinese partners to make use of a legal framework that was more appropriate for local Chinese constraints. In addition to the "classic" joint ventures (*i.e.*, equity joint ventures), this law provides a formal legal basis for "contractual" joint ventures that are characterised by the dissociation of participation in capital and the division of profits. Thus, a Chinese partner can own only 30% of the joint venture's capital and can gain 50% of the profits. This enables the Chinese partner to be rewarded and remunerated more for the services rendered than for the pooled assets. This principle of the contractual joint venture can be used by a foreign company that needs connections, contacts and a "door opener."

In the light of the analysis of recent information on Sino-French joint ventures (*China Business Review,* 1998, 1999 and 2000 ; *MOFTEC bulletin,* 1998, 1999 and 2000), it is possible to identify certain trends specific to this type of Foreign Direct Investment in China. In 1998, French Direct Investment in China totalled 710 million US dollars and placed France third in the ranks of European Union countries after Great Britain (1.2 billion US dollars) and Germany (740 million US dollars). Recent French investments have improved a relative position that had greatly deteriorated in 1989, 1990 and 1991 due to the massive inflow of investments from Taiwan and Hong Kong (1.6% of Foreign Direct Investment in 1998 as opposed to only 0.2% in 1990 and 0.9% in 1997): French investments in China have increased strongly between 1992 and 1996 (the annual inflow of Direct Investment gained 36% between 1993 and 1994, 48% between 1994 and 1995, and 48% between 1995 and 1996). Year 1997 was characterised by a slow down (only 12%) but the growth of French Direct Investment has recovered in 1998 with an important increase (49%). The census of Sino-French joint ventures gave a total of 341 at the end of 1998. Sino-French joint ventures mainly set up business in Shanghai (which represents 24% of the French Direct Investment in China), Beijing (15%), and the province of Guangdong (14%). French investors are mostly large groups, some of which have been involved in China for a long time (Secrétariat d'Etat français à l'Industrie et Poste d'Expansion Economique Français de Beijing, 2000). This is the case for Aventis (which had fourteen joint ventures in 1999, representing a total commitment of around 400 million US dollars), Air Liquide (which had sixteen joint ventures in 1999, representing a total commitment of around 100 million US dollars) and Alcatel (which had nineteen joint ventures in 1999, of which the largest was Shanghai Bell Co., representing a total commitment of around 600 million US dollars). Other French companies have launched a policy of investment more recently but with strong ambitions. This is the case for the three large subsidiaries of the Elf group (Elf Hydrocarbures, Elf Atochem and Sanofi) which have a strong presence (they had a total of eight joint ventures in 1999); Total, which built the first Sino-foreign refinery in China (with an investment of more than 1 billion US dollars); and Pechiney (which had three joint ventures in 1999, representing a total commitment of around 50 million US dollars).

In conclusion of this current state of affais, we can note that the diagnosis of French Direct Investment in China is globally positive. However, this diagnosis is more mitigated when the question of the "balance sheet" of French Direct Investment is raised. In a recent comment on trade relations between the European Union and China, Gardet (1998: 6) answered this question as follows: "*the balance sheet of Sino-European companies in China is mixed. Some such as Siemens, Alstom or Nestlé have successfully set up business there, others have survived, but with relatively low profits, and others, such as Peugeot, have met with failure.*" In April 1997, Peugeot's management announced its intention to pull out of the GPAC joint venture (Guangzhou Peugeot Automobile Co.). At the time, this announcement had the effect of a thunderbolt in the business world, because this was not the recognised failure of an inexperienced small company with no back-up, but that of Europe's second-ranking automobile manufacturer, an investor with an international reputation and experience, particularly in developing countries. In addition to its symbolic and resounding nature, the announcement of Peugeot's withdrawal was the first in a long series: Levi Strauss in 1997, Kimberly-Clark in 1998, General Electric and Occidental Petroleum in 1999. In 1999, even Volkswagen, which had been a fortunate investor until then with its SVAC joint venture in Shanghai (Shanghai Volkswagen Automotive Co.), encountered certain problems and disagreements with its different Chinese partners, Shanghai Tractor Auto Co., Bank of China and China National Automotive Industry (*Business China* 10 May 1999; Hoon-Halbauer 1999). Peugeot's unfortunate experience in China, but also that of Levi Strauss or of General Electric, and the recent problems encountered by previously prosperous joint ventures would appear to show that the profitability of joint ventures is modest, but particularly fragile. However, Peugeot's withdrawal only gives us a partial idea of the viability of French Direct Investment in China.

Accumulation of Experience and Shareholder Value Creation: The Case of the Formation of Sino-French Joint Ventures

Formation of Sino-French Joint Ventures and Shareholder Value Creation

This article examines the manner in which the stock market value of the French companies involved is affected by their experience (through accumulating, codifying and sharing experience within a company) in managing a specific organisational structure (in this particular case, the Sino-French joint venture) and of knowledge of a geographical area (in this particular case, Asia and China). With respect to this research hypothesis linking the level of two forms of experience (international-Asian and managerial) of French companies with shareholder value creation, it was considered relevant to present the stock exchange variations of the French partners at the time of announcement of the formation of a joint venture in China. The event study methodology used and the sample of 47 announcements of the formation of Sino-French joint ventures are detailed in the appendices.

Table 1: ABNORMAL RETURNS (AAR AND CAAR) AND T-TEST RELATED TO THE FORMATION OF 47 SINO-FRENCH JOINT VENTURES

Day	AAR (%)	CAAR (%) over 21 days	CAAR (%) over 7 days
-10	-0.18743%	-0.18743%	
-9	0.47443%*	0.28701%	
-8	0.27102%	0.55803%	
-7	-0.02565%	0.53238%	
-6	-0.39488%*	0.13749%	
-5	0.27043%	0.40793%	
-4	0.23582%	0.64376%*	
-3	-0.79842%****	-0.15467%	-0.79842%***
-2	-0.21249%	-0.36716%	-1.01092%****
-1	0.25683%	-0.11033%	-0.75409%**
0 (Announcement)	-0.05889%	-0.16922%	-0.81298%***
+1	0.11134%	-0.05787%	-0.70163%**
+2	-0.20572%	-0.26360%	-0.90736%***
+3	-0.13742%	-0.40103%	-1.04478%****
+4	0.14101%	-0.26001%	

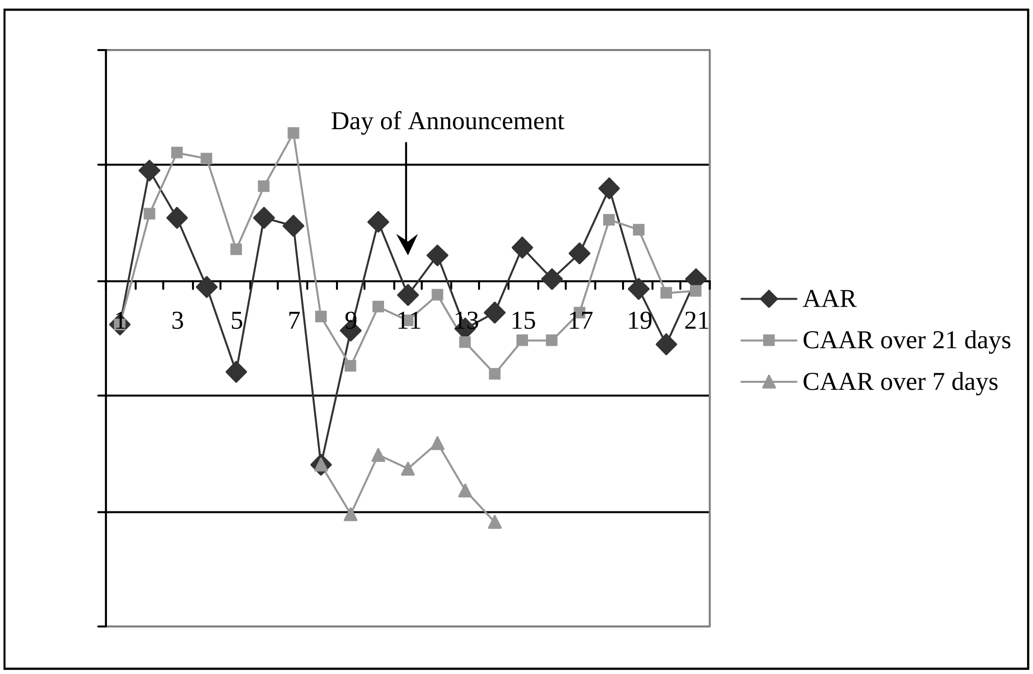
+5	0.00259%	-0.25741%
+6	0.11586%	-0.14154%
+7	0.40419%*	0.26265%
+8	-0.03808%	0.22457%
+9	-0.27545%	-0.05088%
+10	0.00491%	-0.04597%

* p<0.1 ** p<0.05 *** p<0.01 **** p<0.005

For the announcements of the formation of Sino-French joint ventures, a significant negative cumulative impact was shown for the entire reduced event window spanning 7 days (*i.e.*, three days before the announcement, the day of the announcement and three days after the announcement). The variations in these cumulative average abnormal returns shows the event's relatively strong impact, starting after the date of its public announcement and continuing within a range of between -0.7% and -1.04% (see Table 2). The strong negative stock market reaction negative (see AAR) observed on the third day before the announcement (-0.798%) would indicate that the news of these joint ventures gradually reached most of the stock market players before they were announced publicly in the press. This gradual nature of the circulation of information and its reflection in market prices is clearly shown by the fact that no significant average abnormal return is associated with the date of the announcement itself, although some significant average abnormal returns occur on different dates (-9, -6 and +7) during the event window.

These results are distinguished from those obtained regarding announcements of the formation of Sino-American joint ventures. Indeed, certain American studies found positive appreciation related to announcements of the formation of Sino-American joint ventures (Chen *et al.*, 1991; Gupta *et al.*, 1991; Hu *et al.*, 1992; Cheng *et al.*, 1998). Only the study by Lee & Wyatt (1990) finds negative depreciation, but for a limited sample of 11 announcements.

Fig 1: ABNORMAL RETURNS (AAR AND CAAR) AND ANNOUNCEMENTS OF FORMATION OF 47 SINO-FRENCH JOINT VENTURES



The unfavourable stock market variations shown in Table 2 and Figure 1 reflect the French stock market's cautious tendency. The French stock market's reserved reaction is more than just a call for caution: it reveals a certain distrust that it appears to have regarding the experiences of Sino-French joint ventures that are seen as a means of creating profit and riches for shareholders. Considering the leverage effect of announcements of the formation of Sino-American joint ventures on the prices of shares of American companies involved, several theories (which would need to be supported by additional studies) may be put forward to explain these opposite stock market reactions to direct foreign investment in China. First of all, China is a geographical area that is particularly appreciated by American companies (in 1997, American Direct Investment in China reached 3.4 billion dollars, ranking the U.S.A. in second place after Hong Kong). Also, geographical proximity has made China central to American geopolitical interests for a long time. Lastly, the existence of a large Chinese "diaspora" on the West Coast of the United States has enabled American companies to develop their Chinese business with the aid of bicultural "expatriates" who are at ease in the context of Sino-American joint ventures.

Accumulation of Experience and Shareholder Value creation: Test of the Research Hypothesis

The research hypothesis was tested using a multiple regression model. This explanatory model included two independent variables specific to French partners of Sino-French joint ventures (their experience in management of Sino-French joint ventures and their international experience, particularly in Asia) and a dependent variable (the abnormal returns associated with the announcements of the formation of these joint ventures). The first independent variable (*i.e.*, experience in management of Sino-French joint ventures) was measured for all French partners by identifying, year after year throughout the period studied (from 1994 to 2000), the number of Sino-French joint ventures in which they had been previously engaged prior to the date of the announcement of foundation of a new joint venture. To this number was added the formation of an additional joint venture, therefore giving us a minimum experience score of 1. The independent variable of international and Asian experience was devised by using the percentage of annual sales figure per country achieved by French companies in the sample. This indicator was calculated for the "Europe (excluding France)," "International" and "Asian" areas for every year corresponding to the date of announcement of the formation of a new joint venture. Table 2 presents a description of these different measures of experience.

Table 2: DISTRIBUTION OF LEVELS OF THE 2 FORMS OF EXPERIENCE

Experience in Management of Sino-French joint ventures [a]	International and Asian experience [b]
1 joint venture: 26 Companies (55.4% of sample)	Annual Sales Figure (International): 63.2% of Total Annual Sales Figure Standard deviation: 19.3% Minimum: 6% Maximum: 85.2%
2 joint ventures: 12 Companies (25.6% of sample)	Annual Sales Figure (Europe): 32% of Total Annual Sales Figure Standard deviation: 12.7% Minimum: 5% Maximum: 50.9%
3 joint ventures: 6 Companies (12.7% of sample)	Annual Sales Figure (Asia): 7.1% of Total Annual Sales Figure Standard deviation: 5.9% Minimum: 0.3% Maximum: 32.3%
4 joint ventures: 2 Companies (4.2% of sample)	

5 joint ventures: 1 Company (2.1% of sample)	

[a] This variable was measured on the basis of the number of Sino-French joint ventures in which each of the sample's French companies had previously been engaged prior to the date of the announcement of foundation of a new joint venture. To this number was added the formation of an additional joint venture, therefore giving us a minimum experience score of 1.

[b] This variable was measured from the percentage of annual sales figure per country achieved by French companies in the sample. This indicator was calculated for “Europe (excluding France),” “International” and “Asian” areas for every year corresponding to the date of announcement of the formation of a new joint venture.

Experience in management of Sino-French joint ventures remains very limited. It is found that most companies in the sample (more than 80% of companies involved as partners) are entering this type of international alliance for the first or second time (during the period in question). Only rare French companies had experience of several alliances between 1994 and 2000. As regards international and Asian experience, there are notable differences between French companies in the sample. Even if, on average, the French companies studied have a high degree of internationalisation (the average international annual sales figure is around 63%) and Europeanisation (the average annual sales figure in Europe is around 32%), and rather limited experience in Asia (the average annual sales figure in Asia is around 7%). Nevertheless, the large standard deviations and the major variations in minima and maxima levels show a marked lack of uniformity in international and Asian experience of the companies in the sample.

Table 3: MULTIPLE REGRESSION ANALYSIS

AAR (day)	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0
Managerial Experience	0.6 (2.11**)	0.4 (1.4)	0.2 (0.55)	-0.3 (-1.18)	0.3 (0.99)	-0.1 (-0.3)	-0.3 (-1.02)	-0.2 (-0.5)	-0.2 (-0.85)	0.2 (0.57)	0.2 (0.65)
International Experience	-0.001 (-0.51)	-0.0008 (-0.4)	0.004 (2.08**)	0.004 (2.8***)	0.002 (1.05)	0.002 (0.91)	-0.0009 (-0.45)	0.001 (0.43)	0.0013 (0.81)	0.00003 (0.01)	0.0008 (0.43)
European Experience	-0.0008 (-0.33)	-0.001 (-0.53)	-0.0001 (-0.04)	-0.004 (-1.6*)	-0.0017 (-0.52)	-0.001 (-0.35)	0.002 (0.73)	0.001 (0.34)	0.1 (-2.32**)	-0.0032 (-1.1)	0.002 (0.88)
Asian Experience	0.00006 (0.01)	0.1 (1.18)	0.1 (1.51)	-0.003 (-0.78)	-0.1 (-1.04)	-0.004 (-0.81)	0.0025 (0.52)	-0.0015 (-0.26)	-0.003 (-0.69)	-0.0004 (-0.08)	-0.0035 (-0.75)
F value r^2	1.31 0.11	1.12 0.1	1.93 0.15	1.61 0.13	0.77 0.07	0.29 0.03	0.52 0.05	0.24 0.02	3.7*** 0.26	0.6 0.05	0.75 0.07
AAR (day)	1	2	3	4	5	6	7	8	9	10	
Managerial Experience	-0.1 (-0.28)	0.6 (2.2**)	-0.1 (-0.34)	0.6 (2.13**)	-0.3 (-1.34)	0.5 (1.98**)	-0.1 (-0.45)	-0.0013 (-0.05)	-0.2 (-0.69)	0.7 (2.55***)	
International Experience	0.1 (2.62***)	0.00017 (0.08)	0.000006 (0.004)	-0.0007 (-0.36)	0.0026 (1.49)	0.0001 (0.06)	-0.0014 (-0.67)	0.0015 (0.8)	-0.0002 (-0.1)	0.0005 (0.26)	

European Experience	-0.1 (-2.64***)	0.1 (1.89*)	-0.0026 (-1.18)	0.0016 (0.59)	-0.003 (-1.29)	-0.0013 (-0.6)	0.001 (0.36)	-0.0004 (-0.16)	-0.0016 (-0.69)	0.003 (1.07)
Asian Experience	-0.1 (-1.5)	-0.004 (-0.8)	0.1 (1.69*)	0.002 (0.39)	-0.00005 (-0.01)	-0.0004 (-0.11)	0.0007 (0.14)	-0.0003 (-0.08)	-0.003 (-0.69)	-0.1 (-1.6)
F value	2.4**	2.8**	1.1	1.38	0.85	1.23	0.24	0.25	0.75	2.68**
r^2	0.19	0.21	0.09	0.12	0.07	0.11	0.02	0.02	0.07	0.2

* p<0.1 ** p<0.05 *** p<0.01

N. B. : Values of t are presented between parentheses (t)

Table 3 summarises statistics concerning the test of the explanatory model and presents variations in shareholder value creation (abnormal returns) according to the different levels of the two forms of experience. The overall statistical validity of this explanatory model was demonstrated on the second day before the announcement (p<0.05), the following day (p<0.05), and on the second day (p<0.05) and tenth day after the announcement (p<0.05). A considerable stock market impact of the two forms of experience is thus found for a short period from a few days before to a few days after the date of the announcement. As regards experience of the geographical area, the detailed analysis of multiple regression results shows that the level of European experience has a significant negative impact on abnormal returns (this impact was observed for days –7, -2, +1 and +2). For a French company involved in the process of forming a joint venture in China, a high level of European experience does not seem to be seen favourably by a stock market that apparently values international experience much more. As a result, French companies marked by major or even exclusive involvement in Europe are considered not very capable, or even incapable, of successfully forming and managing alliances in areas that are different and distant from their habitual geographical area. While the negative stock market impact of French companies European experience appears surprising, the stock market's relative indifference to their level of Asian experience is much more surprising. The only positive stock market impact of Asian experience is observed on the third day after the announcement (and, even then, with a level of statistical significance of only 10%). For the rest of the event window, note that the French companies with major Asian experience do not create value (for shareholders) greater than those that have little or no such experience. The research hypothesis is thus shown to be invalid as regards the supposed impact of Asian experience on value creation. As regards the absence of impact of Asian experience and the negative impact of European experience, the significant positive results (of days –8, -7 and +1) associated with international experience stand out singularly and require some comment. The stock market appears to attribute a premium to French companies that have not been heavily involved in a specific area (Europe or Asia) but that have developed “multi-region” experience. Most of these companies can be considered to be multinationals (see Danone, Air Liquide, Totalfina-Elf, Aventis, Michelin or Alcatel), and it is possible that the stock market appreciation observed in the case of major international experience is the consequence of a premium attributed to the “multi-national” knowledge and also the size of French companies involved in alliances in China.

As regards experience in management of Sino-French joint ventures, a significant positive impact on abnormal returns was observed on the tenth day before the announcement (p<0.05), the second day (p<0.05), the fourth day (p<0.05), the sixth day (p<0.05) and the tenth day after the announcement (p<0.01). Even if this impact is not significant for the entire event window, Table 3 shows that the frequency (particularly for +2, +4 and +6), the degree of significance (5% and 1%) and the identical (positive) directions of results are all statistical elements that substantiate the idea of stock market appreciation of the most experienced companies. Even if is anecdotal, the analysis of the Danone Group’s alliances in China (see box below) is quite consistent with this phenomenon of the stock market’s appreciation of experience. Thus one may consider that the research hypothesis is confirmed regarding the impact of experience in management of Sino-French joint ventures on value creation. Companies with major experience of managing alliances in China create greater value than those with little or no such experience. Considering the results of Table 3 (see values of multiple regression analysis coefficients), each additional experience (*i.e.,* each new announcement of the formation of a joint venture in China) is reflected in an additional stock market appreciation of 0.5% to 0.7%, depending on the days considered (-10, +2, +4, +6 and +10).

For these five dates (-10, +2, +4, +6 and +10), Table 4 details variations in abnormal returns by classes of experience (this explanatory variable was recoded as a qualitative variable). Four classes were differentiated in the sample. The first (class 1) is comprised of companies with no prior experience in setting up and managing Sino-French joint ventures (this class corresponds to companies with degree of experience 1 in Table 2. The second (class 2) is comprised of companies with experience of only one joint venture (this class corresponds to companies with degree of experience 2 in Table 2). The third (class 3) is comprised of companies with experience of two or three joint ventures (this class corresponds to companies with degree of experience 3 and 4 in Table 2). The fourth (class 4) is comprised of companies with experience of more than 4 joint ventures (this class corresponds to the only company – Aventis – with a degree of experience 5 in Table 2).

Table 4: SIMPLE ANALAYSIS OF VARIANCE

AAR (day)		-10	2	4	6	10
Managerial	Class 1	-0.7%	-0.5%(2.1%)	-0.1%	0.5% (1.5%)	-0.3%
Experience [a]	Class 2	(1.6%)	-0.3%	(1.4%)	-0.5% (1%)	(1.7%)
	Class 3	0.4% (1.5%)	(1.8%)	0.4% (1.3%)	0.4% (0.7%)	-0.1%
	Class 4	0.1% (1.9%)	0.4% (1.2%)	-0.4%	4.6%	(2.3%)
		2.9%	4.3%	(0.7%)		1% (1.4%)
				8.5%		3.2%
F value		2.44*	2.41*	14.65****	6.37**	2
Fisher PLSD	Class1/Class2	-1%*	-0.2%	-0.6%	1.1%**	-0.2%
Test	Class1/Class3	-0.8%	-0.9%	0.3%	0.1%	-1.2%*
(Calculation of	Class1/Class4	-3.6%**	-4.8%**	-8.6%****	5.1%****	-3.5%*
Mean	Class2/Class3	3%	-0.7%	0.9%	-1%	-1.1%
Deviation) [b]	Class2/Class4	-2.5%	-4.6%**	-8%****	4.1%***	-3.3%*
	Class3/Class4	-2.8%*	-4%**	-8.9%****	5%****	-2.2%

* p<0.1 ** p<0.05 *** p<0.01 **** p<0.005

N. B.[a] : Values of t are presented between parentheses (t)

N. B.[b] : Total number in the Class 1 (26 companies). In the Class 2 (12). In the Class 3 (8) and in the Class 4 (1 see Aventis)

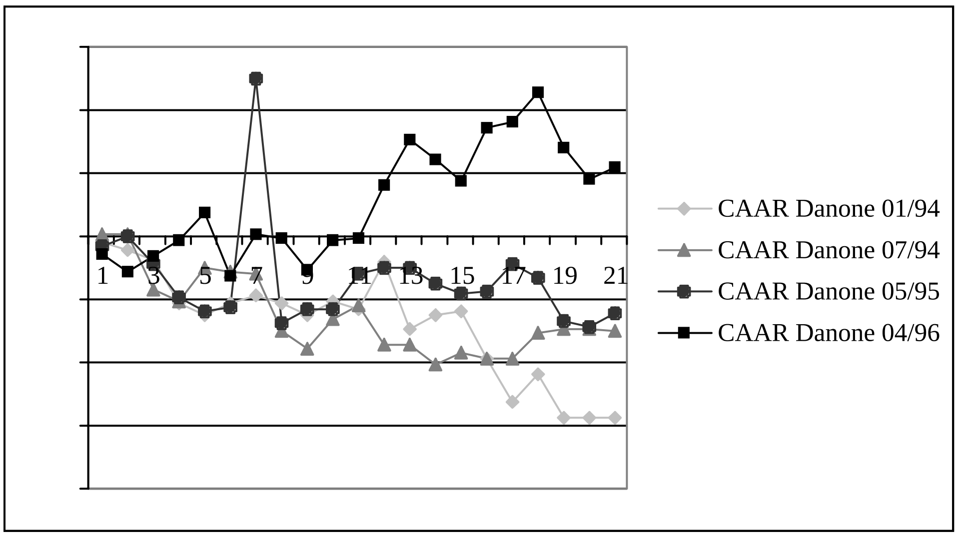
The analyses of variance presented in Table 4 allow us to pursue the study of the relation between experience and value creation. A series of observations on this relation can be made:

- First of all, the value created by the company (see Aventis) that has a unique degree of experience in the sample – with a total of five joint ventures formed during the analysed period – is frequently distinguished (for days –10, +2, +4, +6 and +10) in a clear manner (see Fisher's PLSD levels of significance analysing inter-group differences in pairs) from that created by companies that are generally less experienced.
- There do not appear to be significant differences in stock market appreciation between companies with experience of only one joint venture (class 2) and those with experience of one or two (class 3).
- On the other hand, there is a quite clear distinction between companies with no experience (class 1) and those belonging to classes 2 and 3.
- Finally, the effect of experience appears to start with the second announcement but disappears until the fourth announcement after which there is a phenomenon of major stock market appreciation, which is related to major accumulation of experience.

The development of the Danone food processing Group in China is a good illustration of an organisation's capacity to create value for its shareholders as it gradually builds on experience in setting up and managing Sino-

French joint ventures. In the 1994-2000 period, four joint ventures in which Danone was involved were identified and included in the sample for this study:

- The first was announced on 1 January 1994. This joint venture, named “Shanghai Danone Yogurt” (whose purpose was to produce yoghurt and dairy products), associated Danone (which held 42.2% of the new structure) with a Chinese company, Shanghai Dairy (which held the remainder of the capital).
- The second was announced on 7 July 1994. This joint venture, called “Shanghai Amoy Seagull Foods” (whose purpose was to produce soya sauces), associated Danone (which held 60% of the new structure) with Seagull (which held 40% of the joint venture).
- The third was announced on 12 May 1995. It associated Danone (which held 68% of the new structure) in Jiangmen (which held 32% of the joint venture). This joint venture (based in Guangzhou) for biscuit production was completely bought over in 1998 by Danone's Chinese biscuits subsidiary in Shanghai, “Shanghai Danone Biscuits Foods.”
- The last was announced on 2 April 1996. This joint venture, called “Huangzhou Danone Wahaha Group” (whose purpose was to produce milk drinks), associated Danone (which controlled 38.4% of the new structure) with the Wahaha Group (which held 61.6% of the joint venture).



The analysis of the above Figure representing cumulative average abnormal returns associated with each of these four announcements clearly shows the existence, with regard to Danone, of a “stock market experience effect” in the management of international (particularly Chinese) alliances. Starting from an initial situation of marked stock market depreciation, Danone showed constant progression from these abnormal returns on each new announcement. This progression is constant, but also strong. As regards cumulative average abnormal returns (during the period –10, +10), there is difference of almost 8% between the first announcement and the last. The importance of this experience effect suggest that, above and beyond the value attributed to Danone’s repeated experience of such alliances, the stock market valued what it saw as Danone’s development of a capacity to successfully manage international alliances. The stock market thus considered that Danone’s Chinese alliances had greater chances of success because this group “possessed” an organisational learning capacity – or, in any case, showed signs that it had this capacity – that enabled it to learn the relevant lessons and managerial practices through its many experiences of alliances in China.

Conclusion

In conclusion, the various statistical analyses show that French companies involved in joint ventures in China gain a premium on the stock market if they have solid international managerial experience (experience in setting up and managing Sino-French joint ventures). The existence of this premium had already been foreseen and confirmed by some American studies (Hu *et al.*, 1992; Chang, 1995; Gulati, 1995; Kale *et al.,* 2000; Anand & Khanna, 2000). Apart from the additional statistical validation of such a phenomenon, the present study extends previous studies by placing the analysis in a different, more specific context (from stock market, geographical and methodological viewpoints). However, in the light of the publications that were used in developing the research hypothesis of the present article, one question remains unanswered: In this case, has the stock market appreciated "ordinary" accumulation of experience, or has it appreciated learning capacities that are considered superior? This question would not be necessary if we considered that companies have identical learning capacities. If that were so, the observed stock market differences would be explained by variations in the experience capital of the companies analysed, irrespective of their capacity to acquire geographical and managerial knowledge from this experience and to derive value from it.

However, rapid analysis of the standard deviations of stock marker depreciation within each experience class demonstrates the true relevance of the above question. If we consider only companies belonging to classes 2 and 3, their standard deviation shows substantial variations (from + or -0.7% to + or -2.3%) in the stock market appreciation of "experienced" companies belonging to one or other of these two classes. This intra-class heterogeneity of value creation can be interpreted as reflecting differences in organisational learning capacity. Companies with identical quite considerable experience capital thus have notable differences in stock market appreciation. This heterogeneity would indicate that companies do not learn to create value in the same way and at the same rate when they accumulate experience. This hypothesis would need to be tested by performing in-depth case studies. It stresses and reveals an important underlying phenomenon whereby organisational learning leads to shareholder value creation. This phenomenon could be called "learning of value creation."

Other important questions linking the accumulation of experience with learning of value creation remain unanswered and would need to be investigated in further studies. In the case of their alliances in China, do French companies learn to create value by deriving from their experience an expertise in the choice of the "right" partner, in drawing up contracts, in competence transfer, and in managing interfaces and cultural differences?

References

[1] Anand, B. N., Khanna, T. (2000). « Do firms learn to create value? The case of alliances », *Strategic Management Journal*, 21, Special Issue, 295-315.

[2] Argyris, C., Schon, D. (1978). *On organizational learning: A theory in action perspective*. Addison-Wesley, Reading.

[3] Beamish, P. W. (1988), *Multinational Joint Ventures in Developing Countries*, London: Routledge.

[4] Bleeke, J., Ernst, D. (1992). « The way to win in cross-border alliances », *MacKinsey Quarterly*, 1, 113-133.

[5] Chan, S., Kensinger, J., Kown, A., Martin, J. (1997). « Do strategic alliances create value? », *Journal of Financial Economics*, 46, 199-221.

[6] Chen, H., Hu, M. Y., Shieh, J. C. P. (1991). « The wealth effect of international joint ventures: The case of U.S. investment in China », *Financial Management*, 20(4), 31-41.

[7] Cheng, L. T. W., Fung, J. K. W., Lam, K. (1998). « An examination of the determinants of stock price effects of US-Chinese joint venture announcements », *International Business Review*, 7(2), 151-161.

[8] Cyert, R. M., March, J. G. 1963. *A behavioral theory of the firm*. New York: Prentice-Hall.

[9] Das, S. Sen, P. K., Sengupta, S. (1998). « Impact of strategic alliances on firm valuation », *Academy of Management Journal*, 41(1), 27-41.

[10] Dosi, G., Teece, D. J., Winter, S. G. (1990). « Les frontières des entreprises », *Revue d'Economie Industrielle*, 1er Trimestre, 101-124.

[11] Dussauge, P., Garrette, B. (1995), *Les Stratégies d'Alliance*, Paris: Editions d'Organisation.

[12] Fama, E. F., Fisher, L., Jensen, M. C., Roll, R. (1969). « The adjustment of stock prices to new information », *International Economic Review*, 10(1), 1-21.

[13] Finnerty, J. E., Owers, J. E., Rogers, R. C. (1986). « The valuation impact of joint ventures », *Management International Review*, 26(2), 14-26.

[14] Franko, G. (1971), *Joint Venture Survival in Multinational Corporations*, New York: Praeger.

[15] Gardet, C. (1998). « Vers un partenariat global avec l'Union Européenne », *Le Courrier des Pays de l'Est*, 435, 3-17.

[16] Gulati, R. (1995). « Does familiarity breed trust? The implications of repeated ties for contractual choice in alliances », *Academy of Management Journal*, 38(1), 85-112.

[17] Gupta, A., Mac Gowan, C. B., Misra, L., Missirian, A. (1991). « Gains from corporate multinationalism: Evidence from the China experience », *The Financial Review*, 26(3), 387-407.

[18] Harrigan, K. R. (1988). « Joint venture and competitive strategy », *Strategic Management Journal*, 9, 141-158.

[19] Hennart, J.-F. (1988). « A transaction costs theory of equity joint ventures », *Strategic Management Journal*, 9, 361-374.

[20] Hu, M. Y., Chen, H., Shieh, J. C. (1992). « Impact of U.S.-China joint ventures on stockholders' wealth by degree of international involvement », *Management International Review*, 32(2),) 135-148.

[21] Huber, G. P. (1991). « Organizational learning: The contributing processes and literatures », *Organization Science*, 2, Special Issue, 88-115.

[22] Hubler, J., Meschi, P.-X. (2000). « Alliances, acquisitions et valorisation boursière », Revue Française de Gestion, 131, 85-97.

[23] Jacquot, T. & Koehl, J. (1998). « Les stratégies de coopération : Aspects idéo-logiques et conséquences sur la valeur actionnariale », *in* Bardelli, P., Froehlicher, T., Vendemini, S. (éditeurs). *Connivences d'Acteurs, Contrats, Coopérations et Métamorphose des Organisations*, Presses Universitaires de Nancy.

[24] Kale, P., Singh, H., Perlmutter, H. (2000). « Learning and protection of proprietary assets in strategic alliances: Building relational capital », *Strategic Management Journal*, 21, Special Issue, 217-237.

[25] Killing, J. P. (1983). *Strategies for Joint Venture Success*, New York: Praeger.

[26] Koenig, G. (1996). *Management Stratégique : Paradoxes, Interactions et Apprentissages*, Paris: Nathan.

[27] Koh, J., Venkataraman, N. (1991). « Joint venture formations and sock market reactions: An assessment in the information technology sector », *Academy of Management Journal*, 34(4), 869-892.

[28] Lee, I., Wyatt, S. (1990). « The effects of international joint ventures on shareholder wealth », *The Financial Review*, 25(4), 641-649.

[29] MacConnell, J., Nantell, T. (1985). « Corporate combinations and common stocks return: The case of joint venture », *Journal of Finance*, 56, 519-536.

[30] Nelson, R. R., Winter, S. G. (1982). *An Evolutionary Theory of Economic Change*, Cambridge: Harvard Universiy Press.

[31] Reynolds, J. I. (1984). « The pinched-shoe effect of international joint venture », *Columbia Journal of World Business*, Summer, 9-23.

[32] Secrétariat d'Etat Français à l'Industrie (1999). « L'accueil des investissements étrangers en Chine », *Gérer & Comprendre*, 55, 16-28.

[33] Walsh, J. P. (1995). « Managerial and organizational cognition: Notes from a trip down memory lane », *Organization Science*, 6(3), 280-321.

[34] Woolridge, J. R., Snow C. C. (1990). « Stock market reaction to strategic investment decisions », *Strategic Management Journal*, 11, 353-363.

[35] Yadong, L. (1998). « Joint venture success in China: How should we select a good partner? », *Journal of World Business*, 33(2), 145-161.

Appendix - Research Methodology

Event Study Methodology

The event study methodology was used to assess the short term effects of announcements of the formation of Sino-French joint ventures on the stock market value of French companies involved in these alliances. Taking inspiration from the initial experimentation by Fama *et al.* (1969), this methodology is based on the idea that the stock market reacts immediately to announcements that are supposed to affect the future performance of the quoted company. This idea according to which the stock market takes all information into account (particularly information from the quoted companies) was spread through chartist or technical analysis. The announcements made by these companies are thus heard by the stock market players. Their reactions to the purchase or sale of shares constitute the stock market interpretation. The use of this methodology makes it easy to highlight the studied announcement's impact on the price of a share during a given period, by comparing its real observed return during this period with the return that it would have had during this period if the announcement had not been made (see normal return). To calculate this normal return, a market model (see linear regression) was firstly estimated for each security of the sample. This estimation was made during the 200 stock market days preceding the start of the chosen event window, *i.e.*, between day -210 and day -11 inclusive, in relation to the date of the event. The index chosen for evaluation of market returns is the CAC40 index. A series of tests were then carried out to judge the statistical significance of these estimations: the tests carried out were Fisher-Snedecor's F test to judge the model's overall significance, then the Student t tests of the two regression coefficients. All securities for which the results of the F test or the t test were not significant (with a 5% threshold) were then withdrawn from the sample. Note that the results of these two tests were practically always identical. In almost all cases, the securities withdrawn (4 in all) from the sample were withdrawn because of their simultaneous lack of significance in these two tests. Finally, the estimated models were used to evaluate normal returns of shares during the event window. The difference found (between the observed return and the normal return estimated for each day of the event window), called the abnormal return, is then interpreted as the measure of the announcement's impact on the price of the share during this period. The abnormal returns of the different shares, aggregated in the form of average abnormal returns – which correspond to a precise date and are totalled over the entire supposed period of impact of the announcement on share prices – were subjected to statistical tests (Student t test) designed to judge the relevance of the relation between the announcements of formation of Sino-French joint ventures and the stock market value of the French companies analysed. Two periods of analysis of the impact of the announcement were used: a quite wide period of amplitude of 21 days (with 10 days preceding and 10 days following the date of the announcement) which is used to identify any anticipations and corrections by the stock market, and a shorter period (covering 7 days) just before and just after the date of the announcement.

The Research Sample

A research sample was constituted on the basis of published information concerning announcements of the formation of a Sino-French joint ventures in the French newspapers *Les Echos* and *La Tribune*, between 1994 and 2000. It is important to stress that the announcements chosen in the sample corresponded exclusively to the formation of joint ventures. Announcements concerning R&D, franchises, licence agreements, etc…, were ignored. Then announcements were left out that concerned French companies whose shares are not quoted in one of the "French shares" sections of the French Stock Market. In the end, the working sample consisted of 47 announcements for which the relevant abnormal returns were evaluated. The detailed description of the sample shows that it is characterised by particular trends representative of the current orientation of direct French investment in China. These trends of the sample can be summarised as follows:

1) Most Sino-French joint ventures were formed between 1994 and 1996. The Asian economic crisis in 1997 can partly explain the decrease in number of alliances after that date, but factors can be put forward (increase in the size of investments in joint ventures, recourse to other modes of investment, etc…).

2) Most of these joint ventures' capital is nearly always held by the French partner (38 announcements out of 47).

3) Most French investment in the framework of joint ventures is in coastal industrial provinces of China (39 announcements out of 47, the rest of the announcements concerning non-coastal regions), which are the most economically developed (particularly Guangdong province and Shanghai municipality, which ranks as a province). This third specific feature of this sample is similar to that observed for all Sino-French joint ventures by the French Economic Expansion Unit in China.

4) French companies in the sample are recurrent investors in Sino-French joint ventures. Several announcements of the formation of a Sino-French joint venture concerning the same French company were recorded, including Aventis (5 announcements), Danone (4 announcements), Air Liquide (3 announcements), Saint-Gobain (3 announcements), Valeo (3 announcements) and TotalFina-Elf (3 announcements).

How Entrepreneurs Exploit Global Opportunities

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Abstract

Risk taking is crucial for long-term growth of any firm and constant innovation in the form of new products and services is the key to success. However, failure rates of new products have been extraordinarily high. We contend that success rates can be improved if a more systematic analysis of opportunities is carried out so that potential winners can be spotted. We introduce three key concepts, criticality of a problem, customer discontentment and Customer Dissatisfaction Elimination Chain. Using these concepts, we have developed a framework called the Opportunity Identification Matrix for systematically analysing an opportunity so that its potential for success can be judged. This paper discusses findings from an empirical validation of the framework. We find that the Matrix is indeed an effective tool and its application allows a comprehensive assessment of opportunities and guides the formulation of suitable strategies to exploit them.

Introduction

The failure rates of new products have ranged between 80 and 95% depending on the definition of success. That means managers face the chilling reality of rejection even as they are constantly reminded that they must "innovate or dissipate" [2]. This has fostered significant research interest in the topic with a stream of literature devoted to apportionment of blame for failures. From a long-term growth perspective, risk taking should be encouraged and management should tolerate failures as long as controllable factors like understanding customer needs, positioning and marketing effort are well-managed, and best predictions of uncontrollable factors are taken into account [30]. We contend that success rates can be improved if a more systematic analysis of opportunities is carried out so that potential winners can be spotted. Our endeavour is therefore to develop a framework that managers can use to systematically analyse opportunities so that those with greater potential for success can be identified and exploited.

Framework Development

Fabrications unconnected to what somehow people want or wish, cannot succeed. Success requires fathoming what these wants and wishes really are [18]. These wants and wishes are problems that customers seek solutions for. Products and services that firms offer are solutions to these problems. Some products and services may not solve their problems completely leaving the customer dissatisfied. When problems are not solved, in part or in full, by products or services a customer segment presently considers as solutions, such products/services will not be successful. This will leave customers dissatisfied, creating an entrepreneurial opportunity for introducing a new solution to the segment.

Most of the work on identifying new venture opportunities in entrepreneurship literature still revolves around the entrepreneurs' resource set, and their applications to create demand. This includes exploration of opportunities based on technological innovations [3, 5] and the entrepreneurs' previous work experience and area of expertise [11, 12, 16, 19]. The emphasis is on the process of opportunity identification and not so much on what makes a superior opportunity. The study by Christenson and Peterson [4] is probably one of the few to point out that an entrepreneurial opportunity exists in solving customer problems. They conclude that specific problems and social encounters experienced / observed by entrepreneurs are sources of venture ideas.

A review of relevant marketing literature reveals that the role of satisfying the needs and desires of consumers has been long emphasised [15]. Indeed, the role of customer desires in achieving customer satisfaction has been acknowledged in prior satisfaction research too [8, 21, 27, 28, 29, 31]. Customer need has been identified as a factor determining customer expectations and resultant satisfaction in service organizations too [24]. A few studies [6, 10, 17] on industrial products too mention that solving customer problems is a factor contributing to new product success.

This confirms our assertion that if customer problems are not reduced or eliminated by solutions presently considered by a segment, they would not succeed in the market. Customer dissatisfaction in the segment will be high thereby creating an entrepreneurial opportunity of introducing a new solution to the segment.

The next stage in framework development involved identifying what causes dissatisfaction with products/services. Prior research [13] has found that a relationship does exist between customer expectations and dissatisfaction. Customers with broadly similar characteristics and expectations constitute a segment. Customers with different characteristics have systematically different thresholds and response biases [20]. Based on this finding, we postulate that customers in a segment are likely to consider some problems more important or critical than others.

The existence of a problem creates a state of felt deprivation in the customer leaving him unhappy and looking for a solution. The more critical the problem is to the target segment, the more its willingness to consider new solutions that solve the problem in a cheaper/better way. Thus, the threshold level at which dissatisfaction with existing solutions is triggered is much lower for more critical problems. Hence, dissatisfaction is a function of criticality of the problem. It is therefore important that firms assess the criticality of the specific problem, for which their product/service is a solution, to the target segment. The criticality of any problem changes with time and can be viewed as a continuum ranging from Low Criticality at one end to High Criticality at the other [26].

Marketing literature is rich in studies on customer satisfaction/dissatisfaction. Literature in this category can be grouped into two: one, examining the sources of dissatisfaction and two, analysing customer response to dissatisfaction. Customer satisfaction is a function of product performance relative to expectations [1, 22, 23]. Customer discontentment can occur if such expectations are not met. However, it is important not to get fixated with product performance alone and neglect other aspects of the customer’s total experience with it. A customer goes through a number of stages starting from identifying a product as a solution to his problem, purchasing it, using it and finally disposing it. For a particular target segment, some stages may be more important than others. While it is important to deliver value at each stage that the customer goes through in experiencing the product, we postulate that it is crucial to deliver desired value at each of those important stages, in order to succeed in that segment. According to Michael Porter [25], value is created in a product through a series of activities in the organisation involving all resources in different degrees. Each activity is seen as a link in a chain called the value chain creating economic value for the firm. We extend this analogy to a value delivery situation and call those stages, which are crucial to customers in a particular segment wherein value desired by them has to be delivered, as links in a chain called the Customer Dissatisfaction Elimination Chain (CDEC) [26]. Customer discontentment can also occur if desired value is not delivered along these links.

Firms can increase new product success by understanding these stages better and delivering value desired by the customer at each stage [2]. There is a finding in research that customer discontentment with peripheral factors (such as help on product use) might make them more dissatisfied with the overall performance of the product [9]. The basic argument of literature on marketing of services [14, 24] too is that customers are increasingly valuing these services, particularly when products are more or less standardized. As these have emerged as the sources of differentiation for many products, it becomes important to avoid discontentment along these links in the chain to succeed.

Thus, discontentment can occur because product/service features of current solutions considered by the segment do not meet their expectations and also because firms are not delivering desired value along the CDEC. Thus, dissatisfaction is also a function of discontentment, which in turn is a composite measure - covering discontentment with both product/service features and along the CDEC. Discontentment also changes with time, and like criticality, discontentment too is a continuum ranging from low discontentment at one end and high discontentment at the other [26].

The discussion above forms the conceptual basis for the development of our framework for identifying opportunities with potential for success in a market segment and is the source of the following key propositions on which it is based:

a) Customers face a whole host of problems for which they seek solutions. At any point in time, different problems have different levels of importance or criticality.
b) Solutions to these problems are sought in the form of products and services.
c) Customers go through a number of stages in purchasing and consuming these products or services. Each stage is viewed as a link in a chain of activities. Beginning with gathering information, the customer progresses through stages like ordering, purchase and delivery through to the stage of disposal after use.
d) For any particular segment, some links in the chain are more important than others. Apart from ensuring that the customer gets a product or service with features he desires, solution providers must ensure customer satisfaction at each of these critical links. These critical links together form the Customer Dissatisfaction Elimination Chain or CDEC. Our assertion is that a unique CDEC exists for each segment and also for each sub-segment within a broad segment in the market.
e) Customer discontentment can arise both with the features of the product or service and also when expectations are not met at each link in the CDEC.
f) Both criticality and discontentment change with time.

The fundamental argument advanced by us is that customer dissatisfaction with products or services currently considered as solutions to their problems is a source of entrepreneurial opportunity of introducing a new solution to the segment. We contend that this customer dissatisfaction is a function of both the criticality of the problem and the level of customer discontentment. Based on this contention, we have derived the Opportunity Identification Matrix (Matrix hereafter), a framework that enables entrepreneurs to assess the potential for success in a segment (Figure 1). According to this Matrix, the greater the criticality of the problem for which a solution is sought and the higher the discontentment with the present set of solutions, the higher the potential for success in that market.

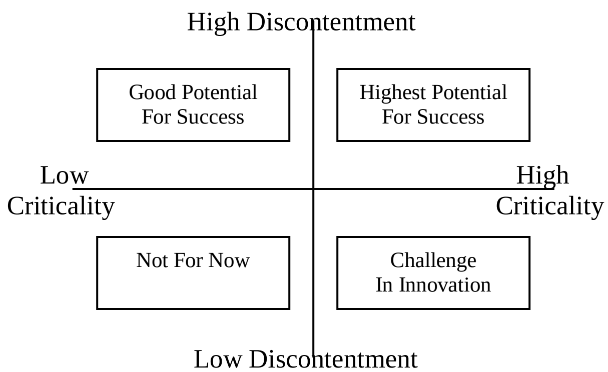


Fig 1: OPPORTUNITY IDENTIFCATION MATRIX

We have developed an instrument to collect requisite information to apply the Matrix and a methodology to systematically analyse the opportunity presented by a target segment. This enables us to assess both the criticality of the problem to the target segment and its discontentment with existing alternative solutions to this problem. For each solution, discontentment is assessed, both with regard to product/service features and also with each element of the CDEC, in order to obtain an overall estimate of discontentment with that solution. Using this information generated, entrepreneurs can map the current solutions on the Matrix and estimate the potential for success in that segment. Opportunity arises not only when the level of discontentment with current solutions is high but also if the entrepreneur is in a position to eliminate discontentment with specific product /service features or along any link of the CDEC wherein discontentment is high.

The information on key product/service features desired by the segment and its CDEC would guide the strategy for acquisition of resources and the development of capabilities needed to succeed in that segment. The expectation of the segment with regard to product/service features and along various links of the CDEC would determine the benchmark for deliverables against these factors. The discontentment of the segment with present solutions on these factors would guide formulation of a suitable marketing and communication strategy.

Research Objective And Methodology

The significant contribution of the Matrix to the process of opportunity identification is the concept of CDEC and the proposition that it is important to ensure customer satisfaction not only with the product/service but also along key links of the CDEC to succeed in a market segment. Our research objective is to empirically establish the presence of a CDEC for each segment and to establish the efficacy of the Matrix in guiding entrepreneurs in identification of opportunities with potential for success. To do this, we sought answers to two questions. First, does a separate CDEC exist for each segment/sub-segment in the market? Second, does the Matrix effectively predict potential for success in a target segment?

As a new concept was being researched, we considered use of the case study method appropriate [7]. We have used an "embedded multiple case" design [32]. Embedded design denotes several units of analysis. We investigated both customers and firms offering solutions to them. Multiple case designs allow "replication" logic [32], with each case study confirming or disconfirming inferences from previous ones, permitting induction of more reliable models. Data collection and analysis overlapped and analysis involved search for patterns across cases.

Respondents provide information on their products/services, the competition and the target segment. Drawing on their understanding of the customer and the competition, respondents assign weights to each product/service related factor against which the segment evaluates service providers and to each CDEC link. Weights are also assigned to indicate the relative importance attached to product/service features and the links of the CDEC by the customer. The respondent also assigns a rating using a 5-point scale about how the market perceives the performance of the firm and its competitors on these factors and links. We use these weights and ratings to arrive at an Overall Discontentment Index (ODI) with regard to the firm and its competitors. The ODI and criticality are then mapped on the Matrix and potential for success of a new entrant gauged. Information is also sought on the characteristics of the market and the factors that influence success in it permitting verification of results obtained by applying the Matrix.

It is obvious that the CDEC for a consumer product will be different from that of an industrial product. While the consumer product is likely to have creating awareness and wide distribution as crucial links, the industrial product is likely to have support provided for maintaining the product and training provided for using it as crucial links. To empirically establish our assertion that a unique CDEC exists for each segment and also for each sub-segment within a broad segment in the market, we decided to obtain data from different segments/sub-segments within an industry. This helped us in verifying if subtle differences across segments and sub-segments are captured in the form of a different CDEC for each of them. We thought it would be interesting to empirically test our concept with data from an industry where markets were global. We, therefore, focused our study on firms targeting different segments in the Information Technology (IT) industry. Customers in these segments are spread across the globe. As the home of a vibrant IT industry, India was considered an appropriate setting from where respondents could be chosen.

Business opportunities in such growth industries attract large number of small and mid-sized firms. We have termed firms with turnovers less than $ 2 million as small firms and those with turnover between $ 2 and 10 million as mid-sized firms. These firms have limited access to resources and would greatly benefit from using the Matrix to identify opportunities with greater potential for success so that resources can be better utilised. Hence, the Matrix is being tested with data obtained from small and mid-sized firms operating in this industry from India.

Data Collection

Data collection is underway and we have obtained data from 12 firms so far. Respondents were asked to provide this information with specific reference to one particular product or service. We found that firms operating in segments with limited number of players vying for the business were able to provide information on their closest competitors.

Where a wide variety of players competed for business in a segment, firms found it difficult to zone in on specific firms as closest competitors and hence provided information on their products only.

Data Analysis And Findings

Firms of various sizes in terms of turnover operate in the IT industry with the largest Indian firm rapidly approaching a turnover of $ 1 billion. Growth opportunities in this industry have attracted a lot of players who have enjoyed varying degrees of success. Competition in this sector is intense with firms of various sizes competing for the same business. The focus of our study is on firms with turnovers of $ 10 million or less. We classified respondents according to the segments in which they operated. The broad segments in which they operated are Software Development and Support Services (SDSS), IT Enabled Services (ITES) and Development of Software Products (DSP). Respondents were further classified according to the sub-segments in which they operated. The description of each segment and sub-segment in which respondents operated is given below.

Development of Software Products: Customers in this segment seek off-the-shelf software products as solutions to their problems. These service providers develop such products and offer them for sale. The sub-segments in this segment in which respondents operated are:

> **Software Products for Business**: These products are targeted at the business customer.
>
> **Software Products for Developers**: These products are targeted at software developers.

IT Enabled Services: Customers in this segment outsource specific business processes for execution by service providers and IT enables the provision of such services. The sub-segments in which respondents operated are:

> **Services With Daily Output Requirement**: Service providers to whom these processes are outsourced are expected to deliver output practically daily.
>
> **Services Sought On A Project Basis**: Customers in this segment outsource processes on a project basis and service providers deliver output at the end of a project, which could take up to a few months to complete.

Software Development and Support Services: Customers in this segment seek customised development of software solutions to their problems or the customisation and integration of various readymade solutions purchased by them to suit their specific needs. In addition, they may require support services to maintain various software applications in the organisation. Respondents operated in various sub-segments within this broad segment as indicated below.

> **Application Development Services**: Customers in this segment seek customised development of software to meet their specific needs.
>
> **High Tech Application Development Services**: Customers in this segment seek customised development of software with a high technology component to meet their specific needs**.**
>
> **Application Development and Maintenance Outsourcing (ADMO) Services**: Customers in this segment seek customised development of software to meet their specific needs and also outsource maintenance of various software applications operating in the firm to third party service providers.
>
> **Integration and Development Services (IDS)**: Customers in this segment purchase enterprise application software products to meet specific requirements. They seek the services of software firms to implement these packages, integrate it with other enterprise application software that could be located elsewhere in the firm and customise the use of these packages through specific software developed for them.

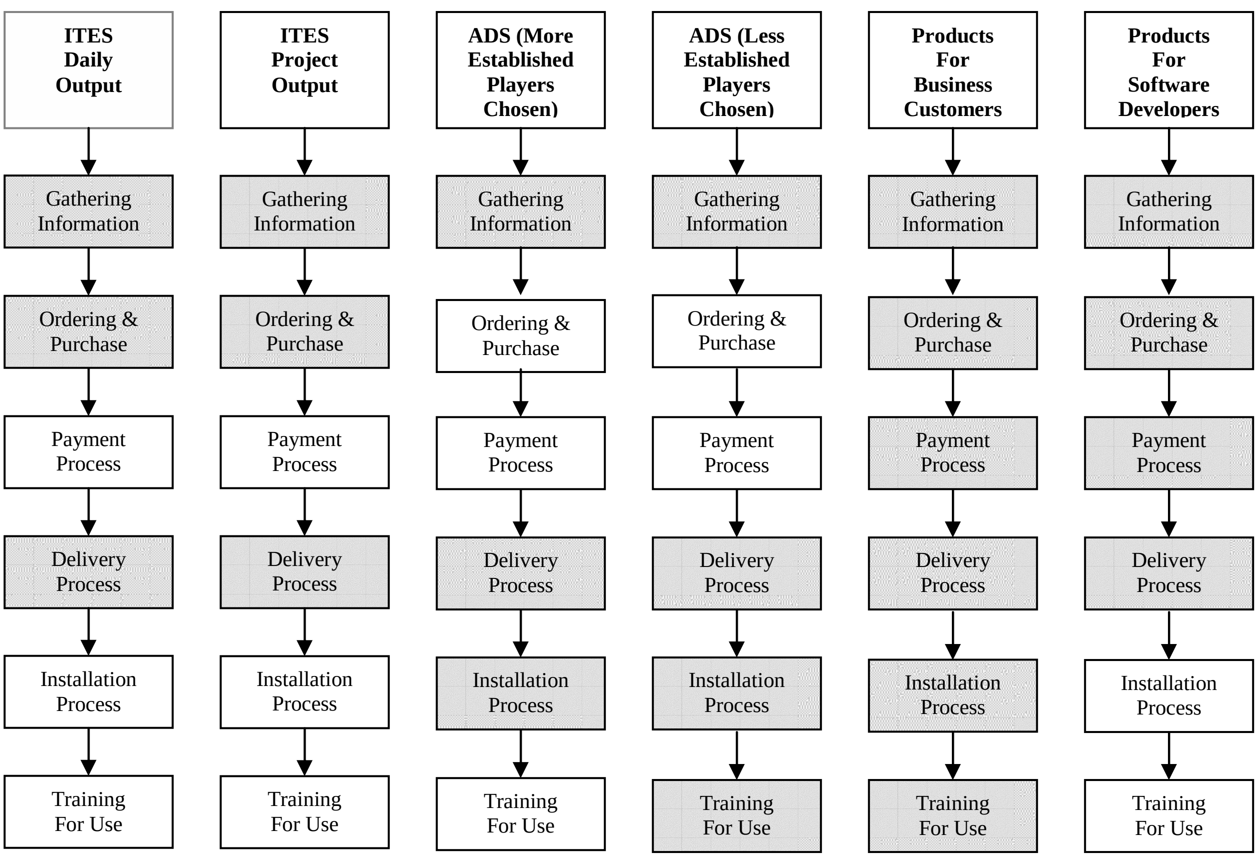
Findings: Data collected from respondents have been analysed with respect to the questions being researched. Our findings, illustrated with examples drawn from the case studies, are presented below.

Identifying CDEC For Different Segments: From our study, we have drawn up a comprehensive list of links, with each link reflecting the activities the customers in this sector go through in purchasing and using the services of solution providers. In addition, what they seem to do at each link is also mentioned (See Table 1).

Table 1: SOFTWARE SECTOR – LINKS IN THE ACTIVITY CHAIN

Link	Range of Actions
Process of gathering information	Through references, direct approach by a sales team, web search, through product suppliers in the case of IDS service providers, trade shows, seminars and conferences
Process of ordering and purchase	Direct orders, limited tendering and open tendering
Payment process	Against milestones for services. For products, as license fee
Delivery process	Through file transfer protocols; also involves some onsite support.
Installation process	Installed using instruction manuals. Onsite help provided, if required
Understanding instructions for use	Through user manuals and training for both administrators and users
Seeking maintenance support for ongoing use	Through an Annual Maintenance Contract or AMC
Seeking support for debugging	Provided free during the warranty period when bugs are cleared
Seeking support through upgrades	Primarily for software products. In the case of software services such requests are treated as separate software development projects

Our study confirms that each segment/sub-segment considers some of these links more important than others. These stages together form the CDEC and our instrument is effective in identifying subtle differences across segments. Figure 2 pictorially illustrates the CDEC for some of the segments/sub-segments studied by us with the shaded links together forming the CDEC. Entrepreneurs would do well to appreciate that besides tailoring their offerings to the specific requirement of the target segment, they must also identify and ensure satisfaction along the CDEC for that segment to succeed.



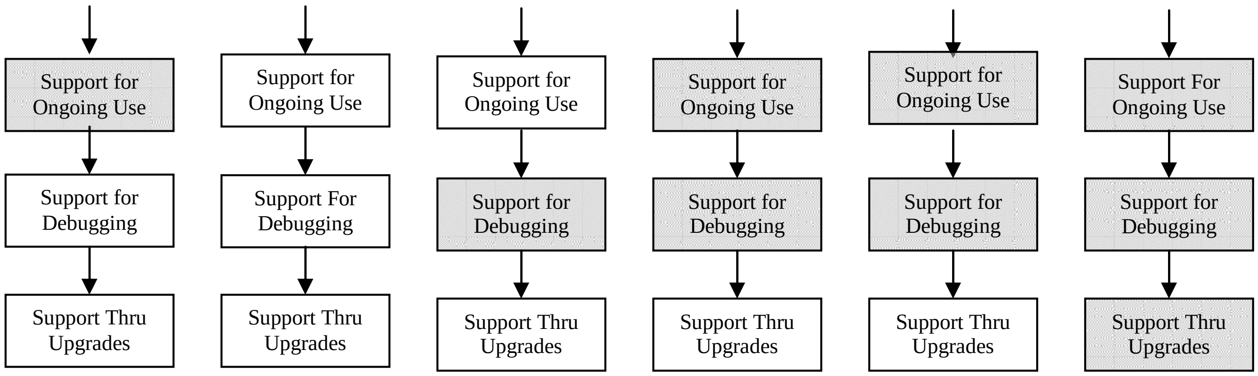


Fig 2: CDEC FOR DIFFERENT SEGMENTS/SUB-SEGMENTS

Some interesting findings from our study with regard to the CDEC are given below:

- The links in the CDEC that are common to almost all segments are the Gathering Information and Support for Ongoing Use links.
- The Integration and Development Services segment is the only segment where the Gathering Information link is not crucial. Service providers to this segment generally enter into formal partnership agreements with product developers whose products they implement and customise, who, in turn, ensure flow of information about them to potential customers making information gathering easy.
- In the case of the ITES segment, if output is to be delivered daily, Support for Ongoing Use gets added as a crucial CDEC link.
- If the target customer for software products is a business, both Installation and Training links becomes crucial. If software developers with considerable technical expertise are targeted, these links are not crucial.
- The software developer segment considers Support through Upgrades more critical than business customers.
- Support provided to customers after the software product is delivered leads to favourable references being given to other potential users.
- If customers in the Application Development Services (ADS) segment consider less established players as solution providers, post-implementation support provided through Training, Debugging and Maintenance Support become important. Such support leads to favourable references being given to prospective customers. However, if well-established players are considered, customers expect excellent execution of projects and place less emphasis on post-implementation support, with the exception of the Support for Debugging link.

Potential Assessment Using The Matrix

The first step in the process of assessing potential of an opportunity is establishing the criticality of the problem for the target segment. Then, key features against which customers in the target segment evaluate service providers and the CDEC are isolated. Finally, discontentment of this segment with respect to service features and the CDEC is calculated for each solution provider currently considered by it. This information is mapped on the Matrix and potential for success of a new entrant to this segment is gauged. Our instrument is effective in garnering this required information as illustrated in the discussion below. The Matrix also appears efficacious in aiding entrepreneurs in identifying opportunities with potential for success. We demonstrate the application of the Matrix using a specific case study.

Criticality Of The Problem

Our instrument is effective in establishing the criticality of the problem for which the customer is seeking a solution. For example, customers seeking IDS services consider such services "good to have" rather than "must have". These services appear to solve only a "fairly critical" problem of the customer. While the product firm building components for developers solves "quite a critical" problem; the firm offering a product for automating and improving efficiency of a key operation contributing most to profits solves a "very critical" problem.

Key Service Features

Our instrument is also effective in isolating key features against which service providers to a segment are evaluated. ITES solution providers are evaluated on quality of output and timely delivery. If they handle confidential documents, then security and secrecy of these documents also becomes a point of evaluation. Product developers are evaluated on features, scalability, their credibility, support for the product read from its history of versions and upgrades and price. If customers in the ADS choose between well-established players, evaluation is based on execution capabilities. If less established players are considered, evaluation focuses on their capability to develop quality software and their ability to provide continued support for the solution developed.

Discontentment Assessment & Application of the Matrix

The respondent firm provides IT Enabled Services for automated mapping of survey data. The process outsourced to this firm is the major task in every project undertaken by the principal and constitutes 85% of the work involved, which it executes as an agent. A labour intensive process, outsourcing it leads to significant cost savings for the principal. However, even a minor mistake in execution can cost the principal millions of dollars. This service is therefore a solution to a "very critical" problem of the customer. Customers evaluate potential service providers based on the quality of output generated and on time delivery. The key links in the CDEC are the processes of gathering information, ordering & purchase, and delivery with gathering information being the most crucial. The ODI for the respondent firm is 0.12 and that of its competitor 1.77 on a scale of 5 indicating low discontentment with the present solution providers. Applying the Matrix, we find that success for a new entrant in this segment would be a challenge in innovation. The challenge is to ensure that information about their services is widely available so that business can be outsourced to them and to provide comparable or higher value on important service features sought.

This is borne out by the information obtained by us on this segment. We find that these services have a limited market worldwide. Therefore, the key to success in this segment is ability to source business. The high initial investments required and the need to sustain operations till business builds up has also deterred new entrants. The competitor firm is a recent entrant to the market whose agency relationship with a leading player helped it source business. It also had the ability to make the required investments and sustain operations till business built up.

Conclusion

Based on our preliminary findings, we conclude that a separate CDEC exists for each segment/sub-segment and entrepreneurs must pay specific attention to identifying the CDEC and ensuring satisfaction on each crucial link. The Matrix also appears to be an effective tool to guide entrepreneurs in evaluating the potential for success in a target segment. Once opportunities with potential for success are identified, entrepreneurs must assess their ability to support profitable operations and choose opportunities accordingly. The application of the Matrix allows a comprehensive assessment of opportunities and guides the formulation of suitable resource acquisition strategies and marketing and communication strategies to exploit them. A firm can enhance its competitiveness and create entry barriers if it meets the expectation of the segment with regard to key product/service features identified and along various links of the CDEC. We had postulated both criticality and discontentment as dynamic concepts. Therefore, to ensure growth, firms must achieve overlap to the extent possible between its offering and the expectation of the target segment over time.

In our study, we had assessed criticality of a problem and discontentment with existing solutions at a point in time. It is likely that a number of factors affect criticality and discontentment. As our study reveals, Gathering Information is one of the most crucial links in the CDEC. As competition increases, it becomes more and more important to provide information about services to potential customers to garner business. Thus, general economic trends like increasing competition in all industries seem to have caused a change in the criticality of a problem. Similarly, internal communication has always been a very critical problem of business. As newer forms of communication emerged, it created discontentment with the existing solutions to this communication problem. An internal e-mail system has now replaced the Inter-Office Memo in many firms. Here, general economic trends seem to have created discontentment with the existing solutions to a problem. This calls for further research to identify factors influencing criticality and discontentment and also to assess the dynamism or stability of criticality both criticality of a problem and discontentment with existing solutions.

The study has its limitations too. The Matrix has been tested with information obtained from solution providers. We need to verify the efficacy of the Matrix with information from the customers' side too to further establish its robustness. We also need to verify whether differences in ODI manifest itself in the form of differences in performance of firms competing in these segments.

References

[1] Bearden, W. O., & Teel, J. E. (1983). Selected Determinants of Consumer satisfaction and Complaint Reports. Journal of Marketing Research, 20(1), 21-28.

[2] Berggren E., & Nacher, T. (2000). Why Good Ideas Go Bust. Management Review, 89(2), 32-36.

[3] Choi, Y., & Shepherd, D. A. (2000). Investigating Exploration and Exploitation in Entrepreneurial Process: A System Dynamic Approach. In Reynolds, P. D., Autio, E., Brush, C. G., Bygrave, W. D., Manigart, S., Sapienza, H. J., & Shaver, K. G. (Ed.), Frontiers of Entrepreneurship Research (197). Babson Park, Massachusetts: Center for Entrepreneurial Studies, Babson College.

[4] Christensen, P. S., & Peterson, R. (1990). Opportunity Identification: Mapping the Sources of New Ideas. In Churchill, N. C., Bygrave, W. D., Hornaday, J. A., Muzyka, D. F., Vesper, K. H., & Wetzel Jr., W. E. (Ed.), Frontiers of Entrepreneurship Research (567-581). Babson Park, Massachusetts: Center for Entrepreneurial Studies, Babson College.

[5] O' Connor, G. C., & Rice, M. P. (2001). Opportunity Recognition and Breakthrough Innovation in Large Establsihed Firms. California Management Review, 43(2), 95-116.

[6] Cooper, A. C. (1979). Strategic Management: New Ventures and Small Business. In Schendel, D. E., & Hofer, C. W. (Ed.), Strategic Management. Boston, Massachusetts: Little Brown.

[7] Eisenhardt, K. M. (1989). Building Theories from Case Study Research. Academy of Management Review, 14(4), 532-550.

[8] Gardial, S. F., Clemons, S., Woodruff, R. B., Schumann, D. W., & Burns, M. J. (1994). Comparing Consumers' Recall of Pre-purchase and Post-purchase Product Evaluation experiences. The Journal of Consumer Research, 20(4), 548-560.

[9] Goodman, P. S., Fichman, M., Lerch, F. J., & Snyder, P. R. (1995). Customer-Firm Relationships, Involvement and Customer Satisfaction. The Academy of Management Journal, 38(5), 1310-1324.

[10] Henard, D. H., & Szymanski, D. M. (2001). Why Some New Products Are More Successful Than Others. Journal of Marketing Research, 38(3), 362-375.

[11] Hench, T. J., & Sandberg, W. R. (2000). "As The Fog Cleared, Something Changed": Opportunity Recognition As A Dynamic, Self-Organizing Process. In Reynolds, P. D., Autio, E., Brush, C. G., Bygrave, W. D., Manigart, S., Sapienza, H. J., & Shaver, K. G. (Ed.), Frontiers of Entrepreneurship Research (199). Babson Park, Massachusetts: Center for Entrepreneurial Studies, Babson College.

[12] Hills, G. E., & Shrader, R. C. (1998). Successful Entrepreneurs' Insights into Opportunity Recognition. In Reynolds, P. D., Bygrave, W. D., Carter, N. M., Manigart, S., Mason, C. M., Meyer, G. D., & Shaver, K. G. (Ed.), Frontiers of Entrepreneurship Research (30-43). Babson Park, Massachusetts: Center for Entrepreneurial Studies, Babson College.

[13] Holmes, M. (2000). Managing Customer Expectations. Information Systems Management, 17(2), 92-95.

[14] Kasper, H., Helsdingen, P. V., & De Vries Jr., W. (1999). Services Marketing Management – An International Perspective. Sussex, England: John Wiley & Sons.

[15] Keith, R. J. (1960). The Marketing Revolution. Journal of Marketing, 24(3), 35-38.

[16] Kirzner, I. M. (1997). Entrepreneurial Discovery and the Competitive Market Process: An Austrian Approach. Journal of Economic Literature, 35(1), 60-85.

[17] Kleinschmidt, E. J. (1987). New Products: What Separates Winners From Losers? Journal of Product Innovation Management, 4(3), 169-185.

[18] Levitt, T. (1993). Advertising: 'The Poetry Of Becoming'. Harvard Business Review, 71(2), 134-137.

[19] McGrath, R. G., Macmillan, I. C. (2000). The Entrepreneurial Mindset: Strategies for Continuously Creating Opportunity in an Age of Uncertainty. Boston, Massachusetts: Harvard Business School Press.

[20] Mittal, V., & Kamakura, W. A. (2001). Satisfaction, Repurchase Intent, and Repurchase Behaviour: Investigating for Moderating Effect of Customer Characteristics. Journal of Marketing Research, 38(1), 131-142.

[21] Myers, J. H. (1991). Measuring Customer Satisfaction: Is Meeting Expectations Enough? Marketing Research, 2 (December), 35-43.

[22] Oliver, R. L. (1980). A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions. Journal of Marketing Research, 17(4), 460-469.

[23] Olshavsky, R. W., & Miller, J. A. (1972). Consumer Expectations, Product Performance, and Perceived Product Quality. Journal of Marketing Research, 9(1), 19-21.

[24] Parasuraman, A., Ziethaml, V. A., & Berry, L. L. (1985). A Conceptual Model of Service Quality and Its Implications for Future Research. Journal of Marketing 49(4),

[31] Woodruff, R. B., Cadotte, E. R., & Jenkins, R. L. (1983). Modeling Consumer Satisfaction Processes Using Experience-Based Norms. Journal of Marketing Research, 20(3), 296-304.

[32] Yin, Robert K. (1994). Case Study Research: Design and Methods. London: Sage Publications.

Market Values of Japanese Affiliates in India: An Industry-specific Analysis

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Abstract

The aim of the paper is to examine our hypothesis that, from the industry-specific point of view, valuations of foreign firms depends on the nationalities to which they belong. In the Indian context, the preliminary results from our empirical investigation indicate that the nationality is one of the important determinants of a foreign firm's market values. While Japanese and European affiliates gain relatively high market values in auto-related industry, American affiliates generate values in chemicals and pharmaceuticals. Given the fact that Japanese auto-related affiliates are keen to import technology rather than conventions on labor contracts and corporate governance, it is plausible to assume that their market values are attributed not to their partners' monitoring efficiency but to expected technology transfer from Japan.

Introduction

Some recent papers claim that foreign ownership of firms creates market values in developing countries.[1] The aim of the paper is, however, to examine our hypothesis that that the nationality of foreign ownership is one of the important determinants of a firm's market values in the industry-specific analysis. Specifically, we try to look at the impact of Japanese ownership and isolate it from other countries'.

The hypothesis is investigated by simple empirical models in the paper using the data source of foreign affiliates in India.[2] The preliminary results from our investigation indicate that the nationality of foreign ownership is one of the important determinants of a firm's market values in the industry-specific analysis in India. Especially, while Japanese and European affiliates gain relatively high market values in auto-related industry, American affiliates generate values in chemical and pharmaceutical industries. In addition, given the fact that Japanese auto-related affiliates are keen to import technology rather than conventions on labor contracts and corporate governance, it is plausible to assume that their market values are attributed not to their partners' monitoring efficiency but to expected technology transfer from Japan.

We develop our argument in stages as follows. Section 2 summarizes the characteristics of Japanese affiliates in India to check whether they are pursuing famous Japanese firms' attributes. Section 3 is an empirical part; it describes the data source, sample selection and definition of variables and contains some empirical findings. Section 4 concludes the paper and shows some directions for further research.

Some Characteristics of Japanese Affiliates in India: An Overview

To put the matter simply, a foreign affiliate's stock can be valued in the market either because its foreign partner(s) is expected to be a good monitor concerning the governance of the firm (as implicitly assumed by Sarkar and Sarkar (2000)), or because the foreign partner's valuable assets, like technology, brand names and goodwill, are supposed to be transferred to the firm (Pandit and Siddharthan (1999)), or both. Now we shall focus on the cases of Japanese affiliates in India. Two questions needed to be made here are (i) what kind of Japanese management style they are bringing into India, and (ii) in which industries such changes are about to happen. We shall examine these points based on some statistical facts and our interviews to executives of Japanese affiliates in India.[3]

Statistical Facts

We use the data from a publicly available database *CAPITALINE 2000* provided by Capital Market, an Indian database company. We define all firms with direct foreign equity participation as foreign affiliates (in other words, we exclude the cases of foreign institutional investments and technical cooperation). As of 1999, the sample size of all foreign affiliates is 335. It contains 54 Japanese, 74 American and 85 European affiliates.[4]

Table 1 proves clearly that about 65 per cent of Japanese affiliates are concentrating only in the auto-related, electrical and electronics goods industries. On the other hand, American and European affiliates are fairly diversified and the share of chemical, pharmaceutical and engineering industries are relatively high.

Table 1: INDUSTRIAL DISTRIBUTION OF JAPANESE, AMERICAN AND EUROPEAN AFFILIATES IN INDIA

	Japanese		American		European	
Industries	Number	Share (%)	Number	Share (%)	Number	Share (%)
Auto Related	23	42.59	12	16.22	12	14.12
Electrical and Electronics Goods	12	22.22	13	17.57	12	14.12
Chemical	5	9.26	10	13.51	18	21.18

Pharmaceutical	1	1.85	7	9.46	7	8.24
Engineering	2	3.70	4	5.41	8	9.41
Personal Care	0	0.00	4	5.41	0	0.00
Food Processing	0	0.00	1	1.35	2	2.35
Textile	2	3.70	0	0.00	7	8.24
Telecommunication Equipment	1	1.85	3	4.05	2	2.35
Packaging	1	1.85	3	4.05	1	1.18
Others	7	12.96	17	22.97	16	18.82
TOTAL	54	100.00	74	100.00	85	100.00

Source: Data obtained from *CAPITALINE 2000*.

Table 2 summarizes the basic statistics of Japanese, American and European affiliates as of 1999. It compares Japanese affiliates to American and European ones in terms of the shareholding pattern of foreign partners, age, sales turnover, export intensity (earnings in foreign currencies (EFC) divided by sales), advertisement intensity, royalty payments intensity, debt-equity ratio, profitability (adjusted net profit margin) and market value indicators (market to book value ratio (MBVR) and proxy Tobin's q (PTQ)).[5] As the table indicates, Japanese affiliates are, relatively speaking, owned in small proportion by foreign partners, young, export-oriented, paying more royalty to their foreign partners, and relying on debt finance.

More noteworthy are the differentials in their market values based on nationality-specific and industry-specific classifications. The differentials are summarized in Table 3. First, at the all-industries level, the average values of Japanese firms are markedly lower than the ones of American and European firms. The differentials of averages in MBVR and PTQ between (i) Japanese and American firms and (ii) Japanese and European firms are all statistically significant at 1 per cent level. Second, the differentials are widened in chemical and pharmaceutical industries and the fact implies the comparative advantage of American and European firms in these sectors. Finally, the values of Japanese firms in auto-related industry are, broadly speaking, at the same level as the ones of American and European firms, in spite of the fact that they are by no means comparable to other countries' in the other sectors. These findings seem to be supporting our industry-specific and nationality-specific approach. We shall more carefully look into these points in the next section using regression models.

Table 2: SUMMARY STATISTICS OF JAPANESE, AMERICAN AND EUROPEAN AFFILIATES IN INDIA

	Foreign Share(%)	Age	Sales(Rs 10 mil)	EFC/Sal (%)	Adv/Sal (%)	Roy/Sal (%)	Deb-Eq Ratio	Net Prof Mar (%)	MBVR	PTQ
All MNEs										
Mean	35.62	26.77	243.41	14.15	0.98	0.47	1.68	-17.11	12.44	1.48
Median	34.07	18.00	72.36	3.50	0.07	0.00	0.65	2.81	3.50	0.86
S.D.	22.24	19.31	770.36	24.76	2.24	1.48	5.45	104.21	20.80	2.00
Japanese										
Mean	24.38	17.74	168.84	18.69	0.75	0.52	2.75	-5.01	5.51	0.83
Median	24.50	14.00	90.61	2.00	0.12	0.18	0.87	2.05	2.50	0.72
S.D.	16.85	12.47	268.75	30.58	1.30	0.65	8.13	22.26	8.62	0.36
American										
Mean	36.22	28.12	143.45	13.31	1.33	0.43	1.31	-9.60	17.75	1.75
Median	35.21	18.00	66.26	2.00	0.19	0.00	0.58	2.90	4.51	0.94
S.D.	23.37	20.36	202.68	25.39	2.83	0.86	2.43	54.37	29.16	1.98
European										
Mean	41.35	27.41	240.20	12.56	0.64	0.30	1.22	-12.37	14.67	1.51
Median	50.43	24.00	66.52	5.00	0.03	0.00	0.60	3.22	4.10	1.05
S.D.	22.98	18.18	370.01	22.76	1.46	0.76	2.36	49.48	21.66	1.37

Source: Data obtained from *CAPITALINE 2000* for 54 Japanese, 74 American and 85 European affiliates.

Table 3: AVERAGES OF MARKET VALUE INDICATORS: INDUSTRY-SPECIFIC CLASSIFICATIONS

All Industries			Differentials from Japanese	
	MBVR	PTQ	MBVR	PTQ
Japanese	5.51	0.83	-	-
American	17.75	1.75	12.24***	0.92***
European	14.67	1.51	9.16***	0.68***
Auto related Industry			Differentials from Japanese	
	MBVR	PTQ	MBVR	PTQ
Japanese	7.85	0.82	-	-
American	6.20	0.98	-1.65	0.16
European	9.04	0.89	1.19	0.07
Chemical and Pharma Industries			Differentials from Japanese	
	MBVR	PTQ	MBVR	PTQ
Japanese	2.80	0.64	-	-
American	27.81	2.36	25.01**	1.72**
European	25.78	2.19	22.98*	1.55**

Source: CAPITALINE 2000. *Note:* *** Significant at 1 per cent, **Significant at 5 per cent, *Significant at 10 per cent.

Organizational Structure

According to Aoki (1986)(1990), one of the most substantial differences between Japanese and Anglo-Saxon firms is their internal information systems. Japanese organizations tend to attach importance to horizontal information sharing within and between operating divisions, and there is a considerable degree of delegation of decision making to the group of manual workers to deal with the emergent events effectively. Anglo-Saxon type of organizations, on the other hand, consist of independent and specialized divisions and the right of decision making is delegated not to workers but to supervisors, top managements and the like. So far as we have heard from Japanese executives in India (especially in auto-related and electrical goods industries), they have tried to promote Japanese-type horizontal information sharing system in their firms. Some executives in auto-related firms admit that there is steady, if not remarkable, progress in their shops. The complete transition to Japanese system is, however, extremely demanding since there are some Indian specific impediments such as caste and language barriers between workers.

Technology Development

Development of the Japanese systemic technology, like Just-in-time Delivery (JIT) and Quality Circle (QC), closely depends on the information system of the firms. Although some Japanese affiliates in auto-related industry are trying to introduce elementary JIT and QC, the executives concede that there is much to be done.

It is also said that vendor development is a key strategy by which Japanese firms retain cost competitiveness. According to our interviews, many Japanese executives (especially in auto and electric assemblers) recognize that vendor development is, in fact, the key to keep their competitiveness. Table 1 implies an aspect of this attribute. Among Japanese auto-related firms in table 1, 19 out of 23 are auto-vendors and this figure stands out from other countries. In the empirical sphere, there is evidence to support that Japanese firms' strategies for vendor development in India have effectively contributed to the reduction in the imports of components and final goods (Siddarthan (1999)).

Labor Contracts, Financial Structure and Corporate Governance

From the viewpoint of labor contracts, financial structure and corporate governance, there is little evidence to suggest that Japanese firms in India have been pursuing Japanese style. Rather, it may be better to say that they seem to be taking adaptation strategy to Indian indigenous ways. Some Japanese executives agree that long term (or virtually life-time) employment contract, which is common in Japan, is difficult in the Indian context. This is attributable to the fact that skilled labor is quite scarce in India and there is keen competition between firms to win good human resources.[6] Turning to the financial structure and mechanism of corporate governance, we cannot find Japanese attributes, such as main bank relationship and board of directors controlled by insiders, in the Japanese firms in India.

Empirical Findings

It was observed in the previous section that Japanese affiliates are, at least to some extent, bringing Japanese management style into India. Particularly in auto-related sector, the most important task is technology development, including vendor promotion. This drives us to the question whether such Japanese affiliates are valued in the Indian markets. Our hypothesis on this question is as follows: the valuations of Japanese (and other foreign) firms depend on the industries to which they belong. In this section, we explain the data source, sample selection and definition of variables, and then empirically examine our hypothesis in the Indian context.

The Data, Sample Selection and Definition of Variables

We use the data from *CAPITALINE 2000* provided by Capital Market because it is the most tractable one to distinguish the ownership based on country-code. We use the same definition of foreign affiliates as section 3.

In our models, dependent variables are market values of firms or their growth rates. We use both market to book value ratio (MBVR) and a proxy Tobin's q (PTQ). MBVR is calculated as the ratio of the product of the number of equity shares and the closing price of the share of the financial year to the book value of equity and reserves. PTQ is the ratio of market values of equity and book value of debt to the book value of assets. These are commonly used in the previous literature because, in the Indian context, it is extremely difficult to calculate the real Tobin's q.[7]

Independent variables are the determinants of market values of firms. The most crucial ones for our analysis are the country-specific foreign ownership dummy variables, that is, JPN (dummy of Japanese affiliates), USA (dummy of American affiliates), EUR (dummy of European affiliates). In addition, we choose the standard control variables among previous literature, namely, SIZ (logarithm of sales turnover), SHR (percentage of foreign ownership), ADV (advertisement expenditure-sales ratio) and ROY (royalty payments-sales ratio).

Empirical Findings

We run the regressions for the samples belonging to all industries, auto-related industry and chemical and pharmaceutical industries, respectively. Table 4 shows the results of the regressions of market values (MBVR and PTQ) on country dummies and other control variables in 1999. We applied OLS for estimation. As we see in the table, at the all-industries level, USA dummy has the largest positive impact on the market values among three groups. Moreover, the null hypothesis, $\beta_{USA}= \beta_{JPN,}$ is tested and is rejected at 1% significant level for MBVR (t_{333}=3.61) and at 5% for PTQ (t_{333}=2.02). The hypothesis that $\beta_{EUR}= \beta_{JPN}$ is also rejected at 5% level for MBVR (t_{333}=2.36).

On the other hand, we can see somewhat a different tendency at the industry-specific level. So far as auto-related industry is concerned, USA affiliates have lost their obvious comparative advantage that they enjoy to Japanese and European ones at the all-industries level. EUR has the largest impact on MBVR and JPN follows (although these are not statistically significant). In chemical and pharmaceutical industries, the picture is much clearer: USA dummy has the largest positive impact on both MBVR and PTQ among the country groups. These results imply that Japanese and European affiliates obtain relatively high values in auto-related industry, whereas American affiliates generate values in chemicals and pharmaceuticals.

Let us pause here to look briefly at the impacts of control variables as well. SIZ has positive (and mostly significant) effects for all regressions. The impacts of SHR and ADV are generally positive, and some of them are statistically significant. These results are consistent with previous studies. The coefficient of ROY is significant and positive only in PTQ for auto-related industry, and the result implies that the firms which are eager to technology transfer tend to be highly valued in the sector.

The examination above is not enough in the sense that we cannot exclude the possibility that American (Japanese) parent companies bought the firms which were originally high-valued (low-valued). In order to make up for this insufficiency, we now choose annual growth rates for the proxies from 1996 to 1999 as dependent variables. Table 5 summarizes the results. The picture here is, roughly speaking, similar with the one drawn by the previous models. JPN dummy has small impacts on the growth rates of MBVR and PTQ compared with EUR and USA for all industries, and the differentials between JPN and EUR, as well as the ones between JPN and EUR, are statistically significant. For chemical and pharmaceutical industries, USA dummy has the largest impacts on the growth of the market value among the country groups although the differences between the groups are not significant.

We must admit that our results are not robust enough to say that Japanese firms have obvious comparative advantage in auto-related industry and American ones do in chemicals and pharmaceuticals in India. Combining to the findings in section 3, what we can mention here is much weaker; in the industry-specific analysis, the valuations of foreign firms depend, at least to some extent, on the nationalities to which they belong. While we have only limited data available right now, there is room for further rigorous investigation using larger samples in the future.

Table 4: RELATIONSHIP BETWEEN MARKET VALUES AND COUNTRY DUMMIES IN 1999

	All				Auto				Ch & Ph			
	MBVR		PTQ		MBVR		PTQ		MBVR		PTQ	
JPN	-3.720		-0.488		1.022		0.065		4.929		0.019	
	(-1.283)		(-1.578)		(0.316)		(0.384)		(0.459)		(0.025)	
USA	8.165	***	0.221		0.742		0.086		11.996		0.236	
	(3.199)		(0.811)		(0.216)		(0.476)		(1.556)		(0.417)	
EUR	3.764		-0.093		4.159		0.077		7.019		-0.146	
	(1.521)		(-0.352)		(1.185)		(0.420)		(0.997)		(-0.283)	
SIZ	4.464	***	0.079		4.388	***	0.095	*	10.731	***	0.626	***
	(7.066)		(1.179)		(4.745)		(1.959)		(3.829)		(3.044)	
SHR	0.180	***	0.019	***	-0.013		0.008	**	0.152		0.020	
	(3.816)		(3.842)		(-0.222)		(2.495)		(0.913)		(1.610)	
ADV	184.838	***	16.136	***	46.124		0.638		335.615		31.602	*
	(4.099)		(3.353)		(0.416)		(0.110)		(1.506)		(1.932)	
ROY	27.077		-2.156		285.063		25.418	**	125.247		9.058	
	(0.410)		(-0.306)		(1.567)		(2.672)		(0.305)		(0.301)	
Constant	-16.919	***	0.368		-16.718	***	-0.066		-39.833	***	-1.690	*
	(-5.327)		(1.087)		(-2.907)		(-0.220)		(-3.054)		(-1.765)	
# Samples	341		341		55		55		61		61	
R-squared	0.31		0.13		0.38		0.34		0.45		0.44	

Notes: (1) *** significant at 1%, ** significant at 5%, * significant at 10%. (2) t-value in parenthesis.

Table 5: RELATIONSHIP BETWEEN GROWTH RATES OF MARKET VALUES AND COUNTRY DUMMIES, 1996-99

	All		Auto		Ch & Ph	
	MBVR	PTQ	MBVR	PTQ	MBVR	PTQ
JPN	0.015	-0.060	0.068	-0.016	0.071	0.024
	(0.270)	(-1.621)	(0.803)	(-0.262)	(0.383)	(0.216)
USA	0.129 **	0.008	0.050	-0.113 *	0.170	0.121
	(2.507)	(0.228)	(0.557)	(-1.727)	(1.228)	(1.417)
EUR	0.117 **	0.046	0.084	-0.046	0.150	0.097
	(2.300)	(1.378)	(0.853)	(-0.630)	(1.195)	(1.258)
SIZ	0.010	0.005	0.014	-0.001	0.064	0.056 **
	(0.815)	(0.593)	(0.622)	(-0.067)	(1.451)	(2.052)
SHR	0.005 ***	0.001 *	0.004 ***	0.004 ***	0.005 *	0.001
	(4.807)	(1.653)	(2.874)	(3.658)	(1.725)	(0.359)
ADV	3.174 ***	1.430 *	15.801 ***	8.273 **	4.460	3.920
	(2.797)	(1.922)	(3.512)	(2.492)	(0.701)	(1.002)
ROY	-2.709	-3.589 *	-0.772	-2.464	-4.587	-3.591
	(-0.896)	(-1.811)	(-0.196)	(-0.846)	(-0.708)	(-0.902)
Constant	-0.354 ***	-0.062	-0.521 ***	-0.243 **	-0.486 **	-0.240
	(-5.557)	(-1.476)	(-3.607)	(-2.279)	(-2.062)	(-1.654)
# Samples	268	268	48	48	48	48
R-squared	0.18	0.08	0.37	0.39	0.27	0.28

Notes: (1) *** significant at 1%, ** significant at 5%, * significant at 10%. (2) t-value in parenthesis.

Conclusion

Although we should admit that much still remains to be done, the preliminary results from our investigation indicate that the nationality of foreign ownership is one of the important determinants of a firm’s market values in the industry-specific analysis in India. Especially, while Japanese and European affiliates are attached relatively high market values in auto-related industry, American affiliates generate values in chemical and pharmaceutical industries. In addition, given the fact that Japanese auto-related affiliates are keen to import technology rather than conventions on labor contracts and corporate governance, it is plausible to assume that their market values are attributed not to their partners' monitoring efficiency but to expected technology transfer from Japan.

We understand that our investigation in the paper focuses only on the tip of the iceberg of this subject and it seems to be meaningful to suggest some unsettled questions that we leave for further investigation.

The first and foremost, it is necessary to find out the theoretical explanation to endorse our empirical findings in the paper. It may not be reasonable to assume that, like the orthodox agency theory of firms, Japanese owners are good monitors in auto-related industry and bad ones in chemicals. Rather, the results of our investigation imply that we should construct a theory which gives weight to the role of foreign owners as a technology provider and their country-specific and industry-specific differences.[8] Next, in order to confirm the robustness of our hypothesis, it is inevitable to introduce the perspectives of international comparison. Finally, we should point out that our data source misses some Japanese major companies' affiliates (like Honda Siel Cars, Toyota Kirloskar and Sony India). Thus, the study on the nature of Japanese affiliates in India should be supplemented by future case studies.

References

[1] Aoki, Masahiko (1986), "Horizontal vs Vertical Information Structure of the Firm", *American Economic Review*, 76, 971-983.

[2] (1988), *Information, Incentives and Bargaining in the Japanese Economy*. Cambridge: Cambridge University Press.

[3] (1990), “Towards an Economic Model of the Japanese Firm”, *Journal of Economic Literature*, 28, 1-27.

[4] Banga, Rashmi (2001), “Do Productivity Spillover From Japanese and U.S. FDI differ?”, A Paper Presented at the ASARC Conference to Mark Ten Years of Economic Reforms in India, Canberra, November 19-20, 2001.

[5] Khanna, Tarun and Krishna Palepu (1997), “Why Focused Strategies May Be Wrong for Emerging Markets”, *Harvard Business Review*, 75 (July-August), 41-51.

[6] (1999), “Emerging Market Business Groups, Foreign Investors, and Corporate Governance”, in Randall Morck (ed.), *Concentrated Corporate Ownership*. Chicago: University of Chicago Press.

[7] Pandit, B. L. and N. S. Siddharthan (1999), “MNEs and Market Valuation of Firms: A Cross-sectional Study of the Indian Electrical and Electronic Goods Manufacturing Firms”, Discussion Paper Series No.5/99, Delhi: IEG.

[8] Sarkar, Jayati and Subrata Sarkar (2000), “Large Shareholder Activism in Corporate Governance in Developing Countries: Evidence from India”, *International Review of Finance*, 1, 161-194.

[9] Siddharthan, N. S. (1999), “European and Japanese Affiliates in India: Differences in Conduct and Performance”, *Economic and Political Weekly*, 34, M61-65.

End Notes

[1] Let us restrict the field of literature survey to empirical studies in the Indian context. Some scholars in the finance field look into the relationship between the market values and foreign ownership of the firms (Khanna and Palepu (1999), Sarkar and Sarkar (2000), Pandit and Siddharthan (1999)). They all suggest that foreign ownership creates

significant market values in India. The researchers who lay emphasize on the aspect of technology transfer focus on the different features within foreign affiliates based on their nationalities (Siddharthan (1999), Banga (2001)). According to Banga (2001), especially in automobile and electronic industries, while Japanese firms have generated positive productivity spillover effect not only in the firm level but also in the industry level, other foreign ones have not.

[2] There are two fair reasons for which we choose India's case: policies and institutions. Under a comprehensive economic liberalization program initiated in 1991, hundreds of foreign affiliates have been established in India and it is now timely to measure those impacts. Moreover, the market and non-market institutions in India, *vis-a-vis* other developing countries, are rich enough to examine the issues of corporate ownership (Sarkar and Sarkar (2000)).

[3] The interviews have been done to 12 Japanese companies in India in 1999. The distribution of the sample is 3 auto assemblers, 3 auto ancillaries, 3 electrical goods, 1 tire manufacturing, 1 telecommunication and 1 chemical goods.

[4] The European affiliates consist of 40 German, 12 French, 17 Swiss, 14 Dutch and 2 Belgian firms. We do not include British affiliates into European ones because they have long history and distinct characteristics in India.

[5] We shall give precise definition of these market value indicators in the next section.

[6] Khanna and Palepu (1997) assert that Indian business groups have motivation to internalize the function of labor market within the groups due to the scarceness of good human resources and information imperfection in labor market.

[7] The main reason why it is difficult to get the real Tobin's q is that Indian corporate debt is mostly institutional debt which is hardly traded in the debt markets in India. See Sarkar and Sarkar (2000), pp.171-172.

[8] From this point of view, Aoki's seminal work which deals with country-specific differences of information structure of firms may provide a theoretical benchmark toward our question (Aoki (1986)(1988)(1990)).

Public Policy Directions for Activating Wireless Internet Services in Korea: Based on the Analysis of Customer Attributes

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Abstract

In this paper, we suggest a tool for making public policy directions to activate the wireless Internet services and find roles of the government and the industry by analyzing the customer attribute of the service and the actual situation of wireless Internet usage in Korea. Because the wireless Internet services are in their starting stage, it is very important to find the roles of the government and, moreover, to establish proper supporting policies based on the analysis of the customer attributes including customer's actual usage of the services. We assume that the major customer attributes that influence the success of the services are network quality, usage fees, contents, and the terminals. These four factors are divided into two sub-attributes in each category, thus, totally eight sub-attributes. AHP (Analytic Hierarchy Process) is applied to the experts survey to rank the importance ratio of the eight sub-attributes. Using AHP, we have found that usage fees and network quality were the two most important factors among the four attributes. When it comes to the eight sub-attributes, the appropriateness of usage fees and network speed were the most important factors. Further, we performed a customer survey to see the actual situation of wireless Internet usage. The customer survey was analyzed and compared with the result of the experts survey to understand the customers' usage characteristics of wireless Internet. The customer survey result says that customers of wireless Internet want lower usage fees and faster access speed. From these experts and customer survey, we came to an obvious conclusion that the usage fees and network quality are the most important factors for the success of wireless Internet in Korea. Based on these survey results, we suggest the government's policies and strategies for the successful deployment of wireless Internet services in Korea.

Introduction

In this paper, we suggest public policies to activate the wireless Internet services and find roles of the government and the industry by analyzing the customer attribute of the service and the actual situation of wireless Internet usage in Korea. Generally, the analysis of service policy is found by analyzing the relation between technology and policy connected with service market. So the analysis of Wireless Internet Policy can be obtained by analyzing these in Wireless Internet and examining the growth of IT market. The Korea's IT service from 1990's has changed because of the advanced IT, the extension of competition in telecommunication services, and the introduction of various communication services. Moreover, the market focused to the wireless and data services by diffusion of wireless communication service and Internet. Especially, with sudden increase of demand in Wireless Telecommunication, the center of IT market has been shifted from Wire to Wireless. In the case of Korea's IT service, the ratio of mobile phone has gotten over that of telephone from 1999. In the shift of sales, the sales of telephone have decreased from 1996 and those of Wireless have been enlarged from 1999. Also, it is forecasted that the difference between Wire and Wireless will become wider. Moreover, the Korea's data telecommunication market was established in 1995 and the sales of this have increased rapidly. This resulted in the switchover of voice communication to data communication in domestic IT market.

The needs of Wireless Internet are rapidly increasing under the influence of diffusing the Internet and growing up the demand in wireless communication. Because of increase of demand, the number of subscribers in wireless Internet got to 23,197 thousand, 80% of total mobile subscribers. Among those, the number of subscribers in WAP/ME that is possible to web service is 16,970 thousand, 60% of total wireless Internet subscribers. But, the sales of the Wireless Internet service are only 45.65 billion won, 6.2% of total sales of wireless services. This shows that the role of business in wireless Internet market is meager in contrast to the rapid increase of subscribers like Figure 1.

When supplying wireless Internet service compared to existing mobile phone service, it is necessary to guarantee the frequency channel for large capacity, to invest the proper equipments, to develop the related technologies and to ensure the price information for satisfying customers.

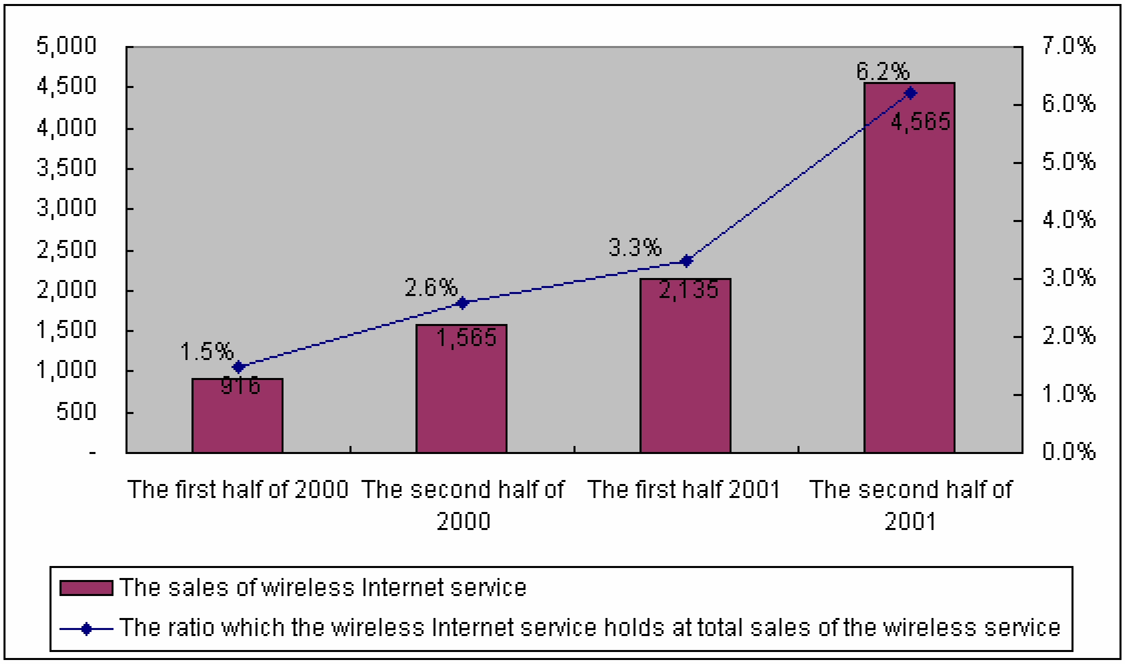

Fig 1: TREND OF KOREA'S WIRELESS INTERNET SALES

However, it is important that the business base of the future wireless Internet service is built for inducing the investment of necessary service provider and the recognition of this service is created through expanding the sales. Especially, there are in state of low usages and sales in the early business step. Therefore, the service provider cannot consider that as a target of investment. In the stage of developing and spreading the new technology, the political considerations and supports are offered to concern the weaker competitive power than existing providers and the given business condition. So, when the new technologies are developed and diffused, it is important to analyze the satisfaction factors and to find the supporting means that gratify customers. The providing wireless Internet service is not in state of spreading enough. Also this leaves much to be desired compared to high respects of provider and customers' needs.

In the case of the wireless Internet service served at the present time, it isn't fully diffused so far. Also, user's needs and carrier's expectations are very high. But, as mentioned above, the current size of sales market doesn't cover the function of the market in itself. Therefore, we need to analyze at first weather we can meet the user's needs with the ways to provide the service presently, comparing the wireless Internet service with user's attributes related to the service utilization. And as a next step, we need to examine political considerations in order to activate the service which can satisfy the user's needs and carrier's expectations. In particular, it is important for

Government to activate the service with the support systems of policy that can be utilized in the earlier stage of the service diffusion. So, in this paper, first we understand the user's characteristics about the wireless Internet service and assess the important ratio on the user's required attributes. And then we suggest the plans to activate the wireless Internet service in future and the way to build a business infrastructure.

This paper consists of 5 chapters. In chapter 2, we look into the customer attributes in wireless Internet service defined in this paper and grasp the user's tendency on current wireless Internet service in chapter 3. Moreover, in chapter 4, we produce the importance ratio by levels though AHP analysis on the customer attributes presented in chapter 2. And finally in chapter 5, we examine the plans to activate the wireless Internet services based customer tendencies and customer attributes.

CA: Customer Attributes in Wireless Internet Service

According to the results discovered in market, the wireless Internet service is still in the state of rudimentary level of market. So it is difficult to succeed in creating only two items of conditions to activate the service market. While, we need to understand what the attributes the user requires are related to service use and what the policy means to satisfy the ones are, and what roles of government and carrier to utilize the means respectively. We can judge that customer attributes are selected by the level of satisfaction of the quality indicators provided to the service user by that indicator and the characteristics customer needs. We can obtain the results through the various methods like surveys and individual interviews in the qualitative way, because these types of information are expressed in the customer's language.

We classify customer attributes linked to the policy to activate the wireless Internet service as follows in the figure 2. Customer attributes can be largely classified into network quality, pricing, contents and terminals required to fulfill the user's needs, and operation systems and methods related to those attributes can be suggested. Developing the means of policy is needed for preparing in the direction to meet the user's service attribute. The brief description of customer attribute covered in level 1 is as follows.

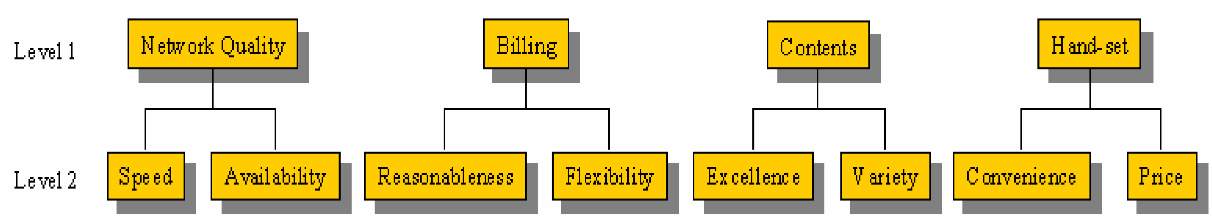

Fig 2: THE CLASSIFICATIONS OF CUSTOMER ATTRIBUTES IN WIRELESS INTERNET SERVICE

Network Quality

We define network quality as technical means to satisfy the user's basic needs. It is described as the quality in network transmission like a transmission speed, success rate in set up, loss rate of transmission, disconnection rate and so forth. The satisfaction to those qualities works as the basic criteria to activate the user's use on the wireless Internet service.

Billing system

Rate is said that it covers the user's basic criterion to select service. Customers may get satisfaction from the service when their expectations to be obtained through the rate level and the service are mutually satisfied. And the rate system is also influenced by which accounting system selected except the rate level(in the case of Internet rate, there are a fixed rate, a fixed quantity and accounting system that counts by used hour like a present one.

Contents

The excellence and diversity user can acquire are based on the continuous use of the wireless Internet service. The continuous endeavor to secure excellent and various contents is a principal element to succeed in the wireless Internet business. The excellent contents can be obtained by fostering Contents Providers (CP) who own various ideas. So, building the system to provide contents that form the relationships between the carriers and the contents providers is the important key to the success of business.

Hand-set

A various and convenient hand-set that can contains the user's contents plays an important role in forming and expanding the market. The contents, which can provide through the wireless Internet service, hold the magnitude of information like news, location information, and various images as well as the existing voice. Also the hand-set is developed to carry these various and mass information and use it conveniently. That is, the convenience, serviceability and security of the hand-set can be a principal standard of judgment.

Level 1 is divided into 8 kinds of Level 2 as showed in Figure 2. Level 2 is defined as blow Table 1. We understand the customer attributes in wireless Internet service by utilizing AHP analysis on the expert surveys of Level 1 and Level 2 in chapter 4.

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Table 1: CLASSIFICATION AND DEFINITION OF CUSTOMER ATTRIBUTES IN WIRELESS INTERNET CUSTOMER

Level 1	Level 2	Definition
Network Quality	Speed	Satisfaction rate when they use the Wireless Internet.
	Confidence (Availability)	Failure of connecting during the use of Wireless Internet, occurrence of delay, Loss of data.
Billing	Reasonableness	Degrees that reflect the optimum in Wireless Internet price.
	Flexibility	Degrees that reflect the varieties in Wireless Internet price.
Contents	Excellency	Excellency of contents used in Wireless Internet.
	Variety	Degrees how many contents used.
Hand-set	Convenience	Convenience of handset in the potable and utility aspect.
	Price	The reasonable price for buying the handset.

The Actual State used in Domestic Wireless Internet Service

We analyze the offer and actual state of wireless Internet comparing with customer attributes We utilize the results from the surveys targeted 500 of wireless Internet users, who live in Seoul, Bun-dang, and Il-san area, and executed by Information Technology Research Group of ETRI in July of 2001[1].

The Present State of Service Offer

The domestic wireless Internet service started to be provided by KTM.com from May in 1999 and all mobile providers provided the service in December in 1999. The used browser utilizes WAP and MS's ME, the data is transmitted at the speed of 64kbps in the circuit line and 144kbps in the packet one. In the point of service rate, the price of the circuit service is much lower, but that of packet is relatively higher than the user's expectation because it costs $8~9 to transmit 2M of data at the speed of 2.5/512 byte. The price of wireless Internet service has little difference between each carrier but generally it maintains about 77%-94% of that of the voice service. In the case of the service contents, it is currently provided free of charge except content that is much used partly. On the other hand, the number of contents imposed by usage is gradually increasing.

The Present State Using Wireless Internet Service

According to a research, the reasons to use wireless Internet service are as follows. The curiosity about the new service occupies 28% and a copy by the use of friends and colleagues covers 8.4%. Consequently, as the rates of innovative users on the new service are recorded highly, this market can be characterized in the earlier step by the impact of the innovative users in the growing process of the industry. So, although they are passive in diffusing the services which will develop rapidly in the future, we need to try to spread imitators, who recognize its efficiency and use it. And 32.4% of respondents answered that they used the wireless Internet service on account of a merit that can be used at any time and anywhere as the highest rate of response. That would be positive users' answer and they are accustomed to the Internet and fully recognize the advantage of the wireless telecommunications. Judging from these respects, we find that the wireless internet market is formed by positive and innovational users.

In the usage by contents, the downloading services of image and bell sound occupy the largest portion of 73.4% and game, E-mail, news/sports, and broadcast/entertainment are followed in order. According to these facts, we realize that wireless service users utilize more content with a small-middle capacity appropriate to the service than one with a large capacity, and particularly they have the preference for content such as an image and a bell sound that represents the merits of the service well. Also, these contents are characterized as the age is lower, so the usage is higher. So we realize that the young take the initiative in using the wireless Internet services. These results are included in a charge, billing system, used time, speed for processing, and used hand-set. However, the high-speed service is not transacted technically yet and the content with a large capacity is imposed by used time. For that reason, it is difficult for the users to use the wireless Internet service as much as they want. Furthermore, as long as the screen of the hand-set is small-sized, using the content with a large capacity is relatively at a disadvantage.

In the frequency aspect, the wireless Internet service is used 1~2 times a week (54.6%) and 3~4 times a week (26.0%). So, the frequency of the usage is very sluggish comparing to the wired one. Also, the used time is focused on using 1~10 minutes at a time and very short comparing to the wired Internet service which is used over 40 minutes at a time. On the contrary, in the case of the wireless voice service, the rate of the call over 10 minutes is somewhat high. In these aspects, domestic wireless Internet service is still in their stating stage and just in curious level and it doesn't come into blossom yet. As a result, we need to find applications for a full-scale use such as a business and try to foster the circumstances to use the services with moderate price in order to activate the wireless Internet services.

When we examine what attribute is preferred in the wireless Internet service comparing with the wired one, the wireless one is inferior to prefer to the wired one in the variety of the content and the satisfaction to the quality of Internet. It means that the satisfaction to the quality of Internet is high, because the wired Internet has come to maturity technologically and used the PC capable of the large volumes of high-speed service as a terminal. On the other hand, as the wireless Internet service utilizes a radio wave by way of transmitting the one it has an advantage of portability, whereas it has a technological shortage in satisfying the level of quality to provide the large capacity of information at a high-speed. Also, it has a critical disadvantage over the wired Internet service, such as much more expensive price (30.8%) of the wireless one.

It is required that the mobile provider should lower price (53.4%) as a requirement to activate the wireless Internet service first of all and followed by high speed for transmission (20.6%), and the improvement of the transmission quality (18.8%). Particularly, this survey indicates that current issues in wireless Internet are on the network quality such as charges, the speed of the service, and the quality in transmission that directly influence on the users. So it is urgent that mobile providers should satisfy their needs about the network quality.

It means that current quality and charge of the service doesn't make the market mature enough. Therefore, it is required that the service providers make an intensive investment in improving the quality of service and encourage users to use the service regularly by reducing charges.

An Analysis on the Customer Attributes by AHP

The importance ratio on the customer attribute is calculated by an interview with an expert group. As shown in figure 2, each importance ratio is calculated about level 1 and level 2 to the subject of customer attribute. We surveyed with experts on telecommunications of 25 to get data for obtaining the importance ratio. As a result, after excluding the parts having low consistency rate from data we estimate the importance ratio on each customer attribute by using AHP about 18 data. We use the 9 Likert for Pairwise Comparison to get these results and also utilize the software of Expert choice 2000[4, 6]. The result of the importance ratio is shown in Table 2.

Table 2: THE IMPORTANCE RATIO ON THE CUSTOMER ATTRIBUTE OBTAINED BY AHP

Level 1	Level 2	Importance Ratio on Level 2
Network quality **(0.246)**	Speed	**0.1543**
	Confidence (Availability)	**0.0917**

Billing **(0.378)**	Reasonableness	**0.2692**
	Flexibility	**0.1095**
Contents **(0.224)**	Excellency	**0.1068**
	Diversity	**0.1174**
Hand-set **(0.152)**	Convenience	**0.0410**
	Price	**0.1110**

In Table 2, we realize that billing and network quality in level 1 are very important criteria for the future wireless Internet service. That is, we can get the conclusion that we need to improve network quality and charge to activate the wireless Internet service staying in the beginning stage. It is linked to the result of chapter 3, which real users selected the charge reduction and the speed of transmission as a first condition to activate the wireless Internet service. Finally, we conclude that the most urgent task is to improve network quality including in the charge and speed of transmission.

While, in examining the importance ratio in level 2, the reasonableness of price has the highest ratio and the speed is followed. From these results, we can conclude that the users avoid using the current wireless Internet service because the price is not reasonable and the speed is slow. Besides, the confidence of network, the flexibility of price, contents and the price of hand-set have the similar level of importance. So when we establish the policy to activate the wireless Internet service, we need to consider the speed of network and the price as the most important element to provide the users with the wireless Internet service properly.

Design of Policy Directions for Activating the Wireless Internet Service

The current policy on the wireless Internet have some problems, for example, a lack of motivation to use the service, and the weakness in the profit of the related players. To solve these kinds of problems, the government is promoting the new policies to improve the network infrastructure, foster the infrastructure for fair competition between players, maintain the variety of the content, and enlarge a class of user, as shown in Table 3.

Table 3: THE DIRECTION OF POLICY TO ACTIVATE THE WIRELESS INTERNET SERVICE

- Improving the Infrastructure	Fostering the infrastructure for fair-competition	Maintaining the variety of the content	Enlarging a class of service user

- Inducing the efficient evolution of the network - Monitoring the network performance	- Opening the network for the wireless Internet - CP protection	- Billing of contents - The fair distribution of profit	- Activation of M-Commerce - Promotion of MPS - Improvement of billing system

Source. ETRI, the direction of policy for the wireless Internet, 2001. 12.

When comparing the policies in Table 3 with the customer attributes mentioned above, we find that the policies in Table 3 are focused on the improvement of the circumstances for service having relatively lower importance ratio. So, these policies don’t suggest appropriate alternative plans in comparison with the level of customer attributes. For example, although plans suggested in Table 3 are currently promoted or under consideration, they don’t sufficiently include the suggestions to improve the speed of network, the reasonableness of the price, the excellence of content, and the convenience of hand-set in level 2 of the customer attributes. According to the importance analysis about the customer attributes, the speed of network and the reasonableness of the price are indicated as the most important items. Consequently, when the government promotes its policy it is short in considering the importance ratio about the customer attributes.

Therefore, as shown in Table 4 in order to activate the wireless Internet, the government needs to try establishing and promoting the alternative plans for the improvement of a speed in network quality, a reasonable price, a excellent content, and a convenient terminal besides the existent policies. However, it is difficult for the government to handle the issues on the speed of network and the price only with the activation policy. Hence, it is required that the effort to develop necessary technologies should be accomplished simultaneously. In this manner, we need to consider the order and timeliness to be executed by the important ratio in promoting the policy for activating the wireless Internet service.

Conclusion

In this paper, we tried to estimate the importance ratio of the government’s alternative policy by the analysis on the customer attributes. To accomplish this purpose, we classify and define the customer attributes in the wireless Internet service and assess their importance ratios by AHP method. After that, we compare the above results with the ones from the research on the actual condition in real wireless Internet market. Furthermore, we make a comparison

Table 4: THE PLAN OF POLICY ON CUSTOMER ATTRIBUTES AND WIRELESS INTERNET

Level 1	Level 2	Plan of policy
Network quality	Speed	- R&D on the wireless Internet telecommunication
	Confidence (Availability)	- Inducement the efficient evolution of network - Monitoring the network performance - Opening the network in the wireless Internet service
Billing	Reasonableness	- R&D for cost-down - Reduction of access fee
	Flexibility	- The fair distribution of profit - Improvement of billing system
Contents	Excellency	- Support for excellent content
	Diversity	- Activation of M commerce - Billing of the contents - Providing MPS(Mobile Public Service) - Protection of CP
Hand-set	Convenience	- Standardization and liberalization of the hand-set
	Price	- Abolition of the subsidy on hand-set

between the results and the current policies for activating the wireless Internet service.

According to the results, it is estimated that the most important elements are the reasonableness of the price and the speed in network quality in the way of the important ratio of the service. Nevertheless, we find that the current services don’t satisfy the customer needs about speed and price sufficiently, and realize that the government’s alternative policy doesn’t reflect these kinds of issues properly.

Although the attributes like speed and price are the most fundamental ones, the current wireless Internet doesn’t meet the customer needs. That’s the reason why the market is still in immature state technologically. So, it is required that the government should consider these points in promoting its policy and establish a desirable policy to satisfy the customer attributes such as a cost-down and a speed-up.

We take two advantages from the analysis on the customer attributes. That is, the analysis helps the government to decide the importance ratio on the customer attributes as well as the timeliness to promote its policy. Consequently, if we perform the analysis on the customer attributes before executing the policy, we can excavate more efficient policy and promote it successfully.

References

[1] Information Technology Management Research Group, “The research on the actual condition of using the service in the domestic wireless Internet market,” ETRI, 2001

[2] Information Technology Management Research Group, “The trend of policy on the wireless Internet Service,” ETRI, 2001

[3] Jak-Uk Youn, “An empirical study on the customer satisfaction of mobile telecommunication services with CVA concept,” IE Interfaces, Vol. 12, No.4, pp. 487-495, December 1999

[4] Thomas L. SATTY, Multicriteria Decision Making: The Analytic hierarchy process, RWS Publications, 1988

[5] http://www.servqual.or.kr

[6] http://www.expertchoice.com

Reforms in Customer Service: An approach
(A case study of Bharat Sanchaar Nigam Limited)

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Abstract

Telecommunication services in India have been going through a phenomenal period of reforms in the last decade. This period brought in tremendous amount of competition in this sector. BSNL (Bharat Sanchaar Nigam Limited) faced tough competition from private players like Bharati telenet and had to think of alternative solutions to face this unstable environment and defecting customers.Rapid reforms in customer service were taken up as the key but to manage escalating customer expectations was a challenge.There were some lingering benefits of being a monopoly for so long. BSNL took up immediate steps to improve upon its customer services but this was not enough.

Until recently telecommunication services were a government monopoly. But opening up to private players has posed a major threat to BSNL (Bharat Sanchaar Nigam Ltd.). In Indore M/s Bharati Telnet Airtel (now Touchtel) commenced its operations on the 4th day of June 1998.Various strategic moves by this competitor supported by a competitive tariff structure had initiated lines of worry on all the foreheads at Indore telecom. Mr. Peeyush Khare was transferred to Indore telecom when it suffered a customer migration rate of 4% per annum. Indore telecom's service package included a host of services apart from basic telecom services. In spite of no infrastructural problems and on the contrary lingering benefits of being a monopoly, customer migration rates for Indore Telecom were continuously escalating at quite a pace. The major problem Indore telecom (BSNL) faced was that of retaining its commercially important customers who were lured by the competitor's attractive tariff structure, warm customer care and prompt services.

The Changing Scenario

There was a very intense competition from these professionally managed consortium of multinationals and business houses. These companies were aggressively pursuing the commercially important customers of BSNL by means of pricing and promotion, which was on their agenda. On the quality front, it was an acknowledged fact that about 90% of the deficiencies were in customer service. And a market research conducted by Indore telecom showed that about 67% of its customers had migrated due to indifferent attitude of the employees and specially due to availability of a better substitute that was willing to care for the customer in order to grab the established customer base of BSNL. The current image of BSNL is certainly poor as far as services are concerned, as the general impression is that the products and services provided by BSNL are inferior to those provided by private companies. Mr. Khare was aware of the reasons for this image In this background it was extremely important for BSNL to change this perception

The telecom commission as an acknowledgement to the heat of the competitor's move as far as discounted tariff structure was concerned decided to delegate powers to the CGMs regarding flexibility in packaging tariffs. This was done primarily to retain commercially important customers and stimulate demand. Competitive tariff for Indore telecom did not mean providing some discounts here and there. A whole lot of philosophy and a culture of joint efforts was needed for an attempt to buy the mindshare and the packaging of competitive tariff needed to be seen as an investment rather than an expenditure or loss. Being one of the major infrastructural industries one of the primary objectives of BSNL was and has been improvement of socio-economic conditions towards better quality of life of the crossection of citizens in India. The objective is that the development is in such a way that there is no gap between the developed and underdeveloped marginalized areas of the country. To meet this challenge deployment of conventional technology proved relatively more expensive. But as the situation existed, considerable and developmental efforts were unavoidable in order to evolve a strategy for retaining customers.

Historical Background and a Peep into the Future

The corporatization of Department of Telecom services from October 1st 2000 gave it a new name BSNL (Bharat Sanchaar Nigam limited). This corporatization had been a long drawn affair. Since independence the telecom sector in India has been a monopoly managed by the Govt. of India (through Ministry of Communications) controlling both domestic and international telecommunications. The last decade has been remarkable in the Indian Telecom history. From a govt. controlled monopoly to opening up of paging, cellular and internet services. External telecommunications were initially entrusted to a Govt. dept. called OCS (Overseas Telecommunication Service) in the mid 80s the demand for telecom services and equipment rose rapidly and the govt. reorganized the sector to facilitate speedy introduction of new infrastructure and technology. In 1985, DOT was formed by separating Dept. of Posts and Telegraph .In 1986 VSNL (for international telephony) and MTNL (for basic telephony for Mumbai and Delhi) was formed. Since the creation of VSNL and MTNL the Indian telecom industry has come a long way.

Table 1: ROAD TO REFORMS

1985 DOT formed with the separation of Dept of Posts and Telegraph	1996 Telecom Regulatory Authority of India formed
1986 MTNL and VSNL formed	1998 Internet policy announced
1991 Equipment liberalization	1999 New telecom Policy announced/Reconstitution of TRAI
1994 Private participation in paging services. Telecom policy announced allowing private participation	2000 Long distance telephony opened up to the private sector/DOT separate into DOT and DTS/ Corporatization of DOT
1995 VSNL launched internet services	2002 An early end to international telephony monopoly of VSNL

The telecom scenario in India is undergoing a major change since deregulation of Internet in 1998 and long distance services and cellular services have been opened up fully. The basic services too have been opened up fully to unlimited number of private players. International services are to be deregulated from April 1st 2002. By year 2005,the Indian telecom scenario is expected to change dramatically. The network which has at present a mere 2.742 crore lines will add another 7.5 crore lines by that time taking the teledensity from a low 3 per hundred to 7 (including mobile teledensity which is around 0.7% now). This will change in 2010 when 10 crore more lines will be added taking the teledensity around 14.3 %. All villages in the country will be covered by the year 2002.In 1999-2000 the target of providing village public telephones (VPTs) was 45136 villages as against 37058 VPTs provided during 1998-99.As on 3rd January 2000 3.53 VPTs have been provided covering around 58% of the total 6.07 lakh villages. In the perspective plan for FY 1997 to 2007 the target for direct exchange lines (DELs) has been set at 470 lakh lines. The growth of 21.30 % was observed in the year 1999.The total number of DELs in rural areas was 36 lakh at the end of March 99 and was expected to touch 45 lakh by the end of 2000

What all this meant is that Indian telecom network in 2005 will be 4 times and in 2010 will be 10 times than what it is today. Even today only 1.64 lines have been contributed by the private sector. Thus the expected boom in the telecom sector opens up huge opportunities for various players. The equipment manufacturers too will be expected to increase their capacities for equipment. Overall the telecom reforms provide existing companies in telecom to leverage their existing voice, image and data networks to capitalize on the telecom boom. Also new companies will get an opportunity to enter the telecom business. Besides it also throws open the sector to foreign multinational companies which can invest in one of the largest telecom networks of the world.

Table 2: PERSPECTIVE PLAN: 1997-2007

Net switching capacity (lakh lines)	585
DELs(lakh lines)	470
VPTs(thousands)	45.5
Optical fibre(route kms.)	222000
Microwave (route kms.)	155000
Total Plan Outlay	Rs. 232900 cr.

TABLE 3: THE INDIAN TELECOM SCENARIO

Basic: Delhi Mumbai: MTNL Rest of India BSNL
National Long Distance Still a DOT monopoly Will be opened up in the near Future
International VSNL's monopoly ended April 2002
Cellular Open to private participation in 1994 At present private companies are providing services in 18 telecom circles and 4 metro cities
Internet VSNL starts services in 1995 Open to private participation in 1998 392 license agreements
VSAT Open to private participation in 1992 9 license agreements for operation on all India basis.
Paging Opened to private participation in 1994 16 license agreements signed for 27 major cities and licenses issued to cover 18 telecom circles

Against this backdrop of happenings and the presence of competition in basic services at Indore it was proposed that a competitive tariff structure be prepared and recommended for consideration and approval. The following propositions were made:

1. **STD/ISD PCOs (Flexibility in Commission):** At present in Indore there are about 2363 STD/ISD PCOs which is only about 16% of total working connections giving an average revenue of 1.9 crores which is about 17% of the monthly revenue of approximately 12 crores. This is a substantial amount and deserves to be protected by all means which customers very small in number are generating. M/s Airtel is also providing STD/ISD PCOs in the city and is by and large concentrating on attracting new locations of the franchisees of Indore telecom. Quite a few franchisees of Indore telecom have opted for STD/ISD PCO connectivity from M/s. Airtel. According to some unconfirmed reports these were around 250 in number. This was due to the fact that the commission offered by them was more attractive as compared to what was offered by Indore telecom.

Table 4

S.No.	SLABS	Discount	Offered
		Indore Telecom	Airtel
1.	Upto Rs. 10000	16%	18%
2.	Rs. 10000 to Rs.20000	15%	19%
3.	Rs. 20000 to Rs.50000	15%	20%
4.	Rs. 50000 and above	12%	20%

Moreover he proposal given by M/s Airtel to their franchisees were highly disguised and it was not possible to get hold of the actual proposals. This aggressive structure for STD /ISD PCO owners was attractive enough for franchisees of Indore telecom to get lured and transfer their connectivity to M/s Airtel.In order to safeguard loss of revenue to Indore telecom and also to avoid various unscrupulous happenings it was proposed to allow a flat commission of Rs. 0.25 which is exactly 20% of Rs. 1.20 per unit call to STD/ISD PCO franchisees of Indore telecom.

Table 5

S.No.	SLAB	DISCOUNT TO BE OFFERED	PERC.
1.	Upto 3000 calls	Rs. 0.20 per call of Rs.1.20 unit call	17%
2.	3001 to 10000 calls	Rs. 0.25 per call of Rs.1.20 unit call	20%
3.	Above 10000 calls	Rs. 0.30 per call of Rs.1.20 unit call	25%

2. **Interest on security Deposits by STD/ISD/PCO owners:** It was proposed that the security deposits obtained may be permitted to be granted interest at the rate of 12% irrespective of duration. This would encourage STD/ISD PCO franchisees to make deposits against securities with Indore telecom, which would further facilitate in having direct control on deposits as against indirect control in case of bank guarantees/FDRs with banks etc. It was also observed that the intentions of the competitor have been to provide connectivity on selective basis only to those customers who are commercially important i.e. falling in the high calling rate slab. There was evidence of usage discount being given very selectively to high revenue customers and corporate clients. There were various tariffs packaged under different titles all conveying "More you use, less you pay". It was also observed that to some of the national and multinational corporate clients the usage benefits were being offered on the basis of aggregate sum of all telephones owned by the client. This was to the extent of 15% on total metered call units and besides these an additional usage benefit to the extent of 15% was granted on calls made within M.P. Due to this aggressive discount structure of the competitor a tariff structure was proposed for individual commercially important clients and corporate clients.

Table 6: FOR INDIVIDUAL COMMERCIALLY IMPORTANT CUSTOMERS

S.No.	Monthly Bill Value	Usage Benefits
A	Upto Rs. 500	Nil
B	Rs.501-1000	As per A & 2.5% of amount exceeding 500
C	Rs.1001 – 3000	As per B & 5% of amount exceeding 1000
D	Rs.3001-7500	As per C & 7.5% of amount exceeding 3000
E	Rs.7501-15000	As per D& 10% of amount exceeding 7500
F	Rs.15001-50000	As per E & 12.5% of amount>1 5000
G	Exceeding Rs.50000	As per F & 15%

Table 7: FOR RETAINING COMMERCIALLY IMPORTANT CORPORATE CLIENTS

Bill Amount	Usage benefit
Exceeding Rs. 100000 upto 200000	10% on usage charges
Exceeding Rs. 200000 upto 500000	Rs.20000 plus 12.5% on usage charge exceeding 200000
Exceeding Rs. 500000	Rs.57500 plus 15% on usage charges exceeding 500000

Phone Plus Services

A proposal regarding provision of services like call waiting, call forwarding unconditional, alarm call, outgoing call outgoing call barring (dynamic lock), three party conferencing services subject to technical feasibility and to commercially important customers was passed. This was a step towards building relationships and establishing rapport on an exclusive basis with these commercially important customers. Customers were divided into segments on the basis of demography and metered call distribution. Employees were subjected to in house training in customer care , marketing, communication skills, objection handling etc. and each based on their capacities and enthusiasm was assigned a set of 20 customers each in order to establish a system of liaison and personal contact between customers and employees.

Bundling of Services

Bundling of services like VCC card free with 500 hrs. of internet or any body taking a Internet usage for 500 hrs. gets a telephone registration for Rs. 500 only.The advertising budget was fixed at Rs. 1 crore per annum extendable to 2% of gross revenue in the years to follow.A provision for corporate gifts for commercially important customers was made for which the budget was Rs. 25 lakh.Officers and employees were permitted to attend national and international workshops and conferences on marketing and management conducted by consultants .Sponsoring popular events was also put on the agenda and a budget of around 50 lakh per annum was proposed for it. Mr. Khare knew that the issue of a customer making a choice for Indore telecom will be the comparison made between BSNL and M/s Airtel on the attributes like customer care, quality of services, promotion, price, advertising, aftersales services, innovation etc. Mr. Khare was also aware of the reason for poor quality of services and the current image .The general impression was that products and services of BSNL were inferior to those delivered by private companies. On the quality front the performance was far from what was expected from customers. In today's buyer's market, where availability of choice is the essence, it was extremely important for BSNL to redefine quality in terms of reliability, responsiveness, tangibility, assurance and empathy. On the quality front, it was an acknowledged fact that about 90% of the deficiencies were from customer service. And a market research conducted by Indore telecom showed that about 67% of the customers had migrated due to indifferent attitude of the employees and specially due to availability of a better substitute that is willing to care for the customer in order to grab the established customer base of BSNL. In this background it was of vital importance to look at quality of services, customer care, logistics, sales promotion tools, pricing, innovations image building and customer relationship management. The mission was now attempting to buy the mindshare, which would without fail get translated into market share.

Mr. Khare knew service quality needed to be redefined and defined from the customer's point of view.and also equally important was the measurement of customer satisfaction. The dimensions of quality on which the thought process of the customer while deciding a brand is normally evaluated on performance, features, reliability, conformance durability and aesthetics. And therefore quality did not merely mean better than competitors. Mr. Khare was now finding ways to improve upon these features. Measuring satisfaction required feedback and and for feedback to be continuous, the procedure had to be made easy, simple and free of cost. As a move towards customer care many activities were scheduled to be carried out at a customer service center. These included new telephone connection applications, obtaining demand notes, making payments, asking for shifting of existing telephone connections, disposal of services, seeking duplicate bills, handling objections and complaints and receipt of value added services like hotline etc. The status of computerization of various activities was inadequate and so as a move towards systematization an exhaustive high end integrated central complete database system comprising of commercial billing, accounting and directory inquiry services, Internet, web applications etc. was implemented. On the logistics front, the moment a customer made a demand it was registered and advice notes were issued and dispatched whenever it was possible to provide quickly it was compiled and whenever there was difficulty likely to cause delays the customers were intimated the same through registered posts detailing particulars of sanctions and reasons with the tentative schedule for providing the services. It was therefore that schemes like Phone on Phone and Booking on Phone were launched for the customers to order on their requirements on their door steps. The concept of Tele shoppe was introduced in Indore whereby customers could buy and order their connectivity instead of subscribing and pleading Here customers could choose telephone numbers models and information brochures were provided. Besides customers were now given a definite schedule of delivery.

Indore telecom aggressively took up advertising. Field units were authorized and allowed to engage professional advertising agencies. The messages regarding vision of BSNL carried out centrally in print and audiovisual media. Indore telecom was now taking advertising as an investment rather than expenditure. Mr. Khare knew innovations did not mean certain cosmetic changes here and there because customers today have a greater education and exposure to information. Thus innovations need to be well meaning and the companies have to very clearly translate value addition and features into tangible benefits specific to each customer segment. For personalized customer care, empowerment of customer contact employees was done to avoid long customer wait times. This also helped to inculcate a feeling of belongingness among employees and they identified with the organization. A workshop named "customer services-a lifestyle" was conducted which emphasized on importance of customer satisfaction, customer orientation and focus understanding customer expectations, strategies for retaining customers complaint handling, CRM employee role etc.

Last but not the least was the establishment of a Call Center. Call Center was a next millenium concept for the service industry towards empowerment of the customer. For an organization of Indore telephones size providing efficient service to a customer is a great challenge. Mr. Khare knew that the potential customers do not like to wait to get access to a product and various services. Visions of serpentine queries at customer service centers, outside offices and collection centers indicated a reality. It was therefore in general companies need to provide a few always and easily available doors for the customers to knock on at their leisure and convenience. In addition to providing a reliable communication medium, Indore telephones needed for information regarding Indore telephone operations and customer service. Then the customer has to dial a wide type of telephone no. to get access to various info and services .The call center concept required dialing only one no. ie 1662 that was decided by dept of telecom services to get access to all types of info and services.The call center provided the ideal solution for an organization like Indore telecom which was expected to handle high volume of telephonic traffic for servicing customers .It dramatically improved customer satisfaction and agent productivity. Unlike conventional PBX based systems of response, call center offered all components of a call handling including automatic call distribution, interactive voice response, predictive dialer, screen pop up capabilities, MIS features and CRM on a single platform minimizing integration issues and dramatically reducing cost of ownership. All BSNL needed was an action plan comprising of all theunderstanding customer services, setting up an organization, education and training, leading and implementation, prioritizing and reviewing progress acknowledging and recognizing good work and performance appraisal.

BSNL has taken steps to improve upon customer services backed by competitive pricing In fact it has taken up rapid reforms in customer services but it still has a long journey ahead for it is competing against a conglomerate of competent and well equipped multinationals. Let's keep our fingers crossed to see who survives the revamp.

References

[1] The author is thankful to Mr.Peeyush Khare (DGM North) Indore Telecom (BSNL) for providing the valuable information utilized for building / preparing this case study.

[2] Coverstory, Capital Market Vol XV/15 October 15th 2000.

Small Enterprises and Medium Enterprises: Which are more Efficient for the Socio-Economic Development in Vietnam?

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Abstract

Small enterprises and medium enterprises: which are more efficient for the socio-economic development in Vietnam? Small and Medium Enterprises (SMEs) in Vietnam have made strong impacts on the social and economic development of the country. This study aims at measuring the development impacts of seven selected Vietnamese enterprises in Hanoi. The study was conducted with an expectation to provide an objective recognition of the contributions of each type of enterprises. This may help the government and development agencies in promoting their support to SME sector.

The findings provide the concrete proof of significant contributions of SMEs to the socio-economic development of the country. The results show Small enterprises are more efficient in employment creation, cost-effective in creating jobs, income generation, and savings for the employees, education, economic linkages, economic efficiency and capital economies. By contrast, medium enterprises have been shown to have strong positive impacts in providing stable jobs, and health care, social welfare and technology diffusion. This study express most important recommendations in terms of finance, technology, information and others to support and to improve the development of SMEs in Vietnam.

The Role And Challenge Of Small And Medium Enterprises In The Socio – Economics Development Of Vietnam

The SMEs sector in Vietnam has been too small and young. Presently, the private sector, mostly SMEs, accounts for 40 percent of GDP in Vietnam and plays a very important role in the development of the national economy. Therefore, SMEs have been attracting the interest of the government and donor agencies. The government of Vietnam had recognized the significant contributions and the roles of SMEs sector in the country development in terms of efficiency and increasing in productivity, creating employment, pressuring in the state-sector for the beneficial competition, and additing to GDP growth. SMEs in Vietnam have had a substantial impact on the minds of the Party and Government leaders in Vietnam in closer touch with the market economy. As remarked by IMF (2002), since early 2000, the government has taken a series of actions aimed at improving investment climate for a more fair business environment. These actions included notably passage of the new Enterprise Law and amended Foreign Investment Law. As a result of these changes 26,000, approximately, SMEs were registered in the period January 2000 through August 2001 employing more than 500,000 workers.

The Role Of SMEs In The Social And Economic Development Of Vietnam

SMEs jobs creation for the large number of unemployment in Vietnam

This is one of the most concerned issues throughout the world, especially for the countries that are less advanced in technology. Promotion of labor-intensive industries is one solution to create more jobs for employment. There is certainly a great potential of jobs created in the small business sector. This requires relatively little amount of capital and low level of technology. Due to their nature, they can be easily formed in the less developed areas and can help in expanding economic activities from urban to rural areas. By this way, SMEs provide a great employment opportunities and reduce the flow of immigration from these rural areas to the over populated cities. The statistical data clearly shows that SMEs have become an important engine for job creation to meet the need for employment throughout the country. It ranges from a high of 67% of all employees employed by all enterprises in the North Central Coast to a low of 44% in the Southeast Area (MPI report, 1999).

Significant SMEs' s GDP contribution in the economy

The total industrial output produced by SMEs accounted for about 65% annually to the national economy in which non-state SMEs occupy about 40%, and the rest is state SMEs (Report of MPI, 2000). The share of SMEs in the total GDP is 24%, according to the report of Ministry of Planning & Investment (2001). In fact, the non-state sector accounts for 60-65% in total GDP annually.

Increase the dynamism of the economy

In Vietnam, SMEs are very dynamic. They actively participated in numerous fields of economy. They mobilized economic resources effectively and dared to invest in very new areas. SMEs have very close relationship in both upstream and downstream agricultural companies. This linkage has a favorable impact in the overall cost of production. Moreover, SMEs can produce products or assemble parts that do not require high precision work, freeing resources of the large industries to concentrate on more important areas such as marketing, quality control, product design and research development. This complementary makes the economy more dynamic and competitive. SMEs also mobilized a huge amount of capital in the past years.

The correlation between the registered capital and created jobs

According to a report by Ministry of Planning & Investment (2001), the capital cost needed to create a working place in a state-owned enterprise for the year 1999 was 26 times greater than that in a private enterprise, appropriately 20 times greater than in a limited company, and about 4.3 times greater than that in a shareholding company. Creating jobs by SMEs is more cost - effective than other sectors. Moreover, a recent calculation shows that to create one job, the state-owned company spends an average US$ 18,000 while SMEs need only US$ 800 (Tuong Lai, 1999).

The Urgent Existing Obstacles

The contributions of SMEs for the Vietnamese economy are very highly appreciated by the government. However, these contributions will tend to stagnate overtime. SMEs still face many difficulties and challenges for their development.

The State Owned leading economy policy

As stated by IMF (2002), despite the recent improvements, private sector development still faces remaining impediments in Vietnam. The government's ten year socioeconomic development Strategy (2001-2010), which as endorsed by the 9th Party Congress in April 2001, envisages a more level playing field for the private sector. However, it still calls for a leading role for the stat sector, including continued stated protection of and investment in certain key industries.

Difficult to get investment capital

The main problems of the SMEs related to the investment capital are that collateral requirements are too high; valuations are too low and too narrow in terms of collateral categories. Almost of the available capital resources go to state enterprises rather than to private ones. It is unfair that, the state enterprises do not need the collateral when they get the long-term loans from the banks.

Lack of information

In Vietnam the private firms currently have few sources of information about foreign markets, customers, suppliers, prices and so on. Information about SMEs enterprises is very scattered. Accessing to information about the legal documents, markets, technological progress are still limited. Export companies were unable to penetrate markets by themselves because they still depend mainly on the trade agents to get information about foreign markets. These have a significant impact on private business activities.

Insufficient working capital

Most private firms can obtain the multiple short-term loans only from the bank. This capital is not enough for them to operate. Therefore, the firms usually get the capital from buyers who provide them all inputs, especially for garment companies. It is clear that the banking system‘s operation does not keep up with firm’s successes.

Technology

Most technology used by SMEs is obsolete. The main reasons are they lack capital and information, complex rules and procedures for technology transfer.

Training and management skills

The overall education level of SMEs owners is rather good, but the professional and the management skills in SMEs are very low relative to the required demand. The main reasons are the lack of modern market-oriented management experience, insufficient supports for training workers and training provided on business administration and management does not meet the needs of the enterprises.

Public attitudes toward SMEs

The attitude survey on SMEs conducted by UNIDO (1999) shown that there were many negative attitudes toward SMEs, especially private ones, for example, many people still prefer to working in the state sector because of social insurance and other welfare benefits.

East Asian economic crisis affects

This crisis has affected the export firms because of delayed payments from the foreign customers in the Asian region, canceled orders and falling prices.

Unclear government policies:

The regulations applied to SMEs frequently are unstable and changed over time. This directly influences the private firms’ activities, especially regulation in terms of land and tax.

A Lively Picture Of The Socio-Economic Development Impacts Between Small & Medium Enterprises

Visibly the roles and importance of SMEs in the national economy has been considered in Vietnam. The development of this sector strongly pushed the use and production of raw materials, creation of huge positive social and economic impacts such as social welfare, employment and capital. To assess the contributions and impacts of each type of enterprise, a comparison of development impacts between two small and MEs was conducted with a sample of seven Vietnamese companies in Hanoi. Any selected company that has no more than 50 people of full-time employees or the total capital is no more than VND 1 billion was considered as a small enterprise. A company that has full-time employees ranging from more than 50 to 200 people or the total capital ranging from VND 1 billion to 10 billion is a medium enterprise. There were five small companies among the total seven selected SMEs including Tin Export Co. (TEC), Hoang Kim Co., Electric and Mechanic Co., Dong Phuong Technology Co., and Hanoi Youth Advertisement Co.. There are only two medium companies such as Minh Tri Co., and Hoang Long Co. In this selection, the sample has various types of business including manufacturing, trading, services, and export activities. The medium companies are mainly in the manufacturing sector. The duration of operation of the small and MEs is also different, the average age among small groups is 6.4 years and the figure represented the medium ones is 3.5 years.

Cost-Effectiveness In Creating Jobs Between Small And Medium Enterprise

Regarding to the job creation, SMEs is more efficient than other sector in terms of the capital per created job. Interestingly, the survey shows that small enterprises (SEs) get win to Medium Enterprises (MEs) in a comparison in job's creation effectiveness. Capital needed to create one direct job in a SE (VND 13.84 million about US$ 974) is smaller than that in a ME (VND 18.63 million about US$ 1,331). Besides, the ratio of total investment versus new jobs in SE (VND 13.17 million about US$ 940 per employee) is also smaller than that in a ME (VND 16.27 million about US$ 1,160). It means that to create one new job in a SE it needs VND 13.17 million only while it needs VND 16.27 million in ME to do that. Therefore, SEs are more cost-effective than medium ones in terms of creating jobs.

Stability Of Jobs

This depends on the development, market size and manufacturing characteristics either seasonal or unseasonable of the company. The results of this survey show MEs offer more stable jobs (from 1-3 years) for employees than small ones. The ratio of stable employees in MEs is 49 % over all direct employees, while the figure is only 37% in SEs. In addition, the ratio of short-term contract labor (less than 1 year) over all the direct employees is higher in SEs. The ratio of long-term-contract employees in the selected MEs is 52% over 37% among the selected SEs. This proved that the employees who work for ME have more stable jobs than those who work for SE. This survey also pointed out the level of specialization in MEs is usually higher than that of SEs. Employees who work for MEs have a higher level of specialty than those who work for SEs.

Income generation for employees

Generating income for the employees partly expresses in part the efficiently of the company's operation and wage/salary rate expresses the health of company. However, salary payment for the employees also depends on many other factors such as the types of business and skill of the labors. Income in this research is defined as money amount including salary and other small allowances. According to the results, the employees who work for SEs get higher income than those who work for MEs. The average monthly income is VND 677,000 in compared to VND 487,000 for MEs. However this result contrasts to the result that was collected in another survey in the Southern of Vietnam (Doan, 2001). There are some reasons for that in terms of business type and size. Firstly, all selected MEs are the manufacturing companies in the field of garment and construction industries, where the interest rates are relatively low in comparing to the services, trading and manufacturing industries, which are the fields of the small selected companies. In fact, the employees who work for the trading, service and export companies usually earned higher income than those who work for other companies do. Secondly, there are more opportunities to evade taxes for SE than ME because the current accounting and audit systems do not function well. Thirdly, the ability for gain more income of the SE is also higher than that in ME. SEs are more flexible than MEs in terms of business opportunities. They are more flexible to extra work to increase income for the employees in SEs. Finally, because of the small size, SEs usually have a simple organizational structure so they have lower bureaucratic costs than ME.

Small companies employ higher educated and more skilled employees (38.4%) than ME (11.5%). Almost selected SEs provided higher supports in terms of lunch fee, housing fee, and other allowances for the employees than MEs.

Savings

Higher savings are very important for the employees to improve their living standard, upgrade educational level, and support family members. It is also good for the society in terms of development and new investment in long term (as a source of private capital). The result of this survey shows that the employees who work for SM save more money than those who work for MEs. The average monthly saving amount is VND 218,000 per employee in a SE and VND78, 000 per employee in an ME. This is a result of higher employees' income generation and more high-educated employees in SE than that in ME.

Educational Level

The study shows more employees in MEs completed primary/secondary school and high school, than in SE. For ME, more than 88% over all employees finished primary/secondary and high school and only 11.5% finished college and university. By contrast, there are only 61.6% of all employees as vocational labors and 38.4% of all employees who finished college and university in SEs. This created more advantages for SEs to develop their business.

Investment In Human Capital

Normally, the companies invest in human capital through education, training, improved nutrition and health care, which will stimulate employees to increase productivity in future.

Training activities

High skilled employees are very important for the company to improve business. Therefore, many companies have been investing more in their human capital, especially in large companies. Selected MEs invested about VND 653,000 per employee yearly 1.45 times more than SEs (VND 452,000). This difference is related to company size, capital ability, technology and lifecycle. MEs operate their business more professionally than the smaller enterprises, especially for mass production companies. For technology, skills and ability of the employees are very important for those companies and they affect the whole production line. Due to larger size, MEs are more difficult to change rapidly to other operation comparing with small ones in terms of flexibility. MEs have more capital potential, so it is easy for them to invest more in human capital than SEs.

Healthcare

Labor health is considered as a premise to create a stable labor force, higher productivity and quality of products. Healthcare is also the first consideration of the companies. Even though, labor health protection has become a matter in the Labor Law in Vietnam, it is a real problem in the companies in terms of health insurance and health care, especially in small companies. For MEs, the average number of employees who bought the health insurance is about 60% while the figure is only 15.4% for SEs. It means that healthcare of the employees who work for ME was significantly than for SE. Although health insurance fee was subsidized by the government, owner of the companies did not consider much on this issue. The main reason is the perceptions of companies on that issue. For larger companies, buying the health insurance for the employees is an obligation for the company's owner (*Labor Law, dated on 23 June 1994*). The employees themselves do not understand clearly about the benefit for buying health insurance. Even if the company subsidizes expenditure for them to buy the health insurance, few employees bought insurance. For example, Hoang Long company pays 20% of the total health insurance fee for the employees to buy insurance, but no employee bought the health insurance up to now. Concerning to the health examinations for the employees, MEs organized more health examinations for the employees than SEs. Some 50% of all selected MEs provided health examinations while only 20% of SEs do. However, health examinations for the employees also depend on the business type. Normally, labor's health examination is most required in the food and beverage industry, manufacturing, export filed than the other industries. Furthermore, Labor Union activities also affect a lot to labor health care because healthcare is one of the rights of the employees.

Social welfare

In social welfare contributions, the results of this study also are positive for MEs. SEs contributed about 6.5% of their total revenue for social welfare purposes while medium ones contributed 8% for these purposes. The average tax contribution of MEs is VND675 million per year while the figure is VND 357 million per year in SEs. The reason for this difference is that the revenue of ME (VND 8.39 billion per year) is more than that of SE (VND 5.48 billion per year), ME contributed a large portion to state budget than SE. Moreover, SE has more opportunities to evade taxes easily while it is more difficult for MEs to do this, because they are strictly controlled by tax collectors. Average social charity contribution of ME (VND 3.25 million per year) is also more than that in SE (VND2.7 million per year). In fact, creating good relationships with local administration offices, organizations and local people are the means for the companies to exist and operate longtime. MEs contribute more than small size enterprises. MEs are more interesting to charity organizations and local administration offices to subscribe to charity activities.

Gender

Many organizations, companies and the society as a whole consider of gender equality. The female labor force represents a larger share of total employees (74.1%) in the MEs. This is 2.3 times more than those in SE (24.9%). This difference is due to varying business type between SE and ME. The type of business of the ME is manufacturing companies. In addition, half are garment companies, so female employees account for the largest part. Stable jobs and sources of income are the primary objective of female employees. There are some studies, which showed that SE usually create insecure jobs and they can react rapidly to seasonal, cyclical and structural changes by adjusting the employment factor than ME in particular and larger size companies in general.

Labor Union

This is a very important organization in a company to protect the right of the employees. It also ensures benefits for the companies. The results view 50% of the MEs have labor unions while only 20% of the SEs have ones. Labor union also helps the company to organize the skilled workman, "golden hand" competition and holiday travels. All of these activities help the employees to be more relaxed and create a harmony throughout the company. It helps the company increase and maintains productivity in the coming years.

Backward And Forward Linkages

SMEs had strong backward and forward linkages, especially SEs. They improve economic relationships between and within the industries, and upstream and downstream in the various sectors from adding value to local raw material to obtaining services and goods from related suppliers. They not only create jobs for these linkages but also generate a significant source of income for them. Direct jobs in this paper include transporters, local raw material suppliers, constructors, intermediaries, and seasonal employees (less than 6 months of working duration). Selected SEs created more indirect jobs than MEs do. Every direct job of SE created about 2.6 indirect jobs while one direct job in ME generated only 1.2 indirect jobs. Using local raw materials also expresses strong backward linkages in terms of generating more income for the local suppliers. Meanwhile, the companies can reduce transportation costs through purchasing these materials. The survey shows that every VND 1 of revenue that earned by SE, VND 0.27 was spent to purchase local raw materials, that is 4 times more than MEs do (VND 0.07 of local raw materials buying cost per VND 1 of revenue). Because small producers consumed very small quantities of raw materials, it is not efficient for them to directly access to wholesale trades in terms of costs. It is also depends on the convenience, availability and saving cost.

Economic Efficiency

Better utilization of the national resources such as capital, labor and raw materials results in increasing productivity, real income and standards of living. Businessmen strive to get more economic efficiency in terms of getting as many competitive advantages as possible.

Labor productivity

Labor productivity is one indicator expressing the effectiveness of labor utilization. In this study, SE achieved higher labor productivity than MEs. The average SE get VND 141 million per employee while the figure in ME is only VND 55 million per employee, 2.6 times less than SEs. This difference is related to the flexibility of SEs. SE can easily get business opportunities and react rapidly without any impediment of labor and social legislation to changes in the environment than larger size companies. Therefore, they have more chances to increase their total revenue in terms of “many a little make a mickle”.

Transportation and construction costs

MEs spent more construction and transportation costs for backward and forward linkages to transportation companies and construction materials than SE do. Every VND 1 generated by ME there was VND 0.06 pent to the linkages in terms of transportation and construction cost, while SE only spent VND 0.04 to do that. The main reason is that SE consumed more local raw material than ME do, so they save more transportation and construction costs. In addition, construction scale of ME is also larger than SE. As a result, an SE more efficient than ME in terms of cost reduction

Capital Use

SEs are often perceived in the fact that they deploy their capital relatively economically from viewpoint of cost and revenue. They need only VN 0.1 to generate VND 1 of revenue, while MEs need 3.4 times more (VND 0.34) to do that. Besides the ratio of salary and other allowances over total revenue of SEs are also less than ME (0.07 vs. 0.13). In terms of investment, SE also achieved more effectively than ME did. The ratio of investment over revenue of SE (0.06) is less than the ME (0.20). The reason is that SE having a numerous opportunities for better capital management such as investment requirements with a shorter duration, use of second hand machinery and tools, avoidance of large scale capital misallocation and waste from bad decisions on major projects. One of the most important contributions made by SMEs, especially by SEs is the additional capital formation that it introduces into the national economy. For SEs, their capital was mobilized less from financial institutions than from their own savings, the reinvestment of profits and from loans taken out in the informal finance market such as friends, family members and relatives. The result of this study show that there are 70% of all selected small companies mobilizing their capital from their own saving, friends and relatives and only 20% get a short and medium loans from banks. There is only 10% of them can mobilize the capital from other sources such as purchasing raw materials on credit, and so on. For MEs and larger size companies in general, they can be easy to borrow money from bank in terms of collateral depositing and credit also.

Technology Impacts

Regarding to the positive technology impacts, MEs are more favorable than SEs. A large part of technology used by the companies is secondhand or very obsolete. For example, the ore dressing machine manufactured by TEC

Company used over 10 years. It is the time for upgrading its machine for ensuring and increasing the capacity. In the MEs about 85% over all machinery and equipment is very modern and new ones versus about 56% in SEs. This difference is due to larger size companies including MEs having an advantage of higher capital scale than small companies. As a result, it is easy for larger companies to spend more for investment, the ratio of investment over revenue of ME (20%) being higher than that of SE (6%). In addition, technology transferring or technology diffusion is implemented easily and rapidly for larger enterprises than small ones in terms of credit, relationships and technology accesses.

Outcomes Of The Study

At the end of the study, a set of development indicators has been created and express the comparison between Small and MEs.

Table 1: QUALITATIVE EVALUATION OF SOCIO- ECONOMIC IMPACTS OF SE AND ME

Indicators	Small enterprises	Medium enterprises
I. Social Impacts		
1. Cost effectiveness in creating jobs	Better	
2. Offering stable jobs for the employees		Higher
3. Monthly income per employee	Higher	
4. Saving per employee per month	Higher	
5. Educational level	Higher	
6. Investment in human capital		Higher
7. Social welfare contributions		Higher
8. Gender		Higher
9. Backward and forward linkages	Stronger	
10. Labor Union		Better
II. Economic impacts		
1. Economic efficiency	Higher	
2. Capital economies	Better	
3. Technology situation and diffusion		Better

The survey results again emphasized the advantage of SMEs in term of cost-effectiveness in creating job but more clearly that smaller is better. This is a concrete reference for the country or regional socioeconomics plans by setting up a hierarchical structure with the big enterprises in the cities and central towns or in the industrial zones, the medium ones are placed in the satellite towns and the SEs lead the economy of villages. This is on the way of the country development strategy.

This structure is secured by the income generation; savings for the employees, social welfare, gender…which are clearly stated that the employees does not need to immigrate from the villages to the towns or cities because the SEs can offer them good payments and savings. This is the reasons to attract high education personnel who still want to stay in towns for the high rate of salary. This trend strengthens the future of national socioeconomic equability between the cities and country side.

In term of forward and backward linkages, the hierarchical structure can also performs within one or related industries. The big enterprises as the root with medium ones in the intermediate level, the SEs as the numerous in numbers and the flexibility can play as the distributors, the suppliers and also customers of the big and medium ones.

How To Promote The Development In The Sme Sector

The outcomes of the study create a good future for the SMEs in the development process of the country. However, to make this come true, SMEs have to be strong enough to jump into the globalization wave. Therefore, the Vietnamese Government at different levels, donors agencies and other stakeholders of the economy have to consider to supports SME sector in terms of capital, technology, information and connection and training.

Capital:

In order to help SMEs to access to the capital sources, the agencies should:

- Create regulations and mechanisms those allow SEs to access to official financial aids, low interest rate capital, and quicker way to get loans from development and commercial banks.
- Consult and assistant for SEs to access the foreign financial fund as well as allow them to participate in the international development programs.
- Encourage foreign investment in SEs, setting up to connections between SMEs and foreign investors.

Technology

The government should create a good environment for SMEs to more easily access to higher technology sources and research organizations both in Vietnam and in international. Besides, the government should encourage SEs to adopt different levels of technology, as well as to pursue technological innovation at a suitable level. To achieve that, capital raising and intensive investment, raising join-ventures and integrated capital and creating and developing strong triangle linkage between government, science organizations, institutes and companies should be adopted and encouraged by the government.

Information and connection

The government and other stakeholders should find a good way to provide information about the markets through establishing information centers that connect between SEs and related sectors or organizations, including the encouragements and supports for activities of the Vietnam Council of Commerce and Industry (VCCI). This type of VCCI should be resized and placed in provincial level over the coutry.

Training

The government, donors and NGOs should support training centers to organize more courses for managers to exchange and update their management skills. Short training program of 1/2 to 1 months on management skills for managers and on job training for labors should be more favorable. The cost of these training programs should be supported, fully or partly, by government or donors at the beginning phase, especially for the SEs.

Suggestions For Small Enterprise Managers

In order to react with the supports from government and other agencies and to reduce the impacts such as healthcare, training, labor union, gender and other ones, small enterprise managers should

- Increase efficient capital use and upgrade management skills
- Implement sound accounting and financing procedures and other necessary administration procedures to avoid evading tax
- Be more open and actively access external environment through information centers, information media, and advertising, willing to exchange information and experiences with other companies and different sectors.
- Develop more professional and technical skills for the employees to get higher productivity.
- Create good working conditions to ensure the health for the employees and apply a supporting policy in terms of health insurance to encourage them to buy the health insurance.

References

[1] International Monetary Fund (2002), *Vietnam Sleeted Issues and Statistical Appendix*, IMF, Washington D.C.

[2] Pham Thi Kim Ngoc (2000), Master Research, *Evaluation of Development Impacts of Small and Medium Enterprises in Vietnam: A study of selected Companies in Hanoi*, SOM, AIT, Bangkok, Thailand

[3] Tuonglai (1999), Vietnam Economics Review, *The Role of Small and Medium Sized Enterprises in Renovation Course in Vietnam*, N^{0}8 (62).

[4] UNIDO-MPI Project (1999), Assistant to Industrial Small and Medium Enterprises in Vietnam, (US/VIE/95/004), *Research Report on Improving Macro Economic Policy and Reforming Administrative Procedures to Promote Development of Small and Medium Enterprises in Vietnam*, Hanoi Vietnam.

Appendix

Summary of social and economic indicators between SE and ME

Indicators	**Small enterprises**	**Medium enterprises**
I. Social Impacts		
1. Cost effectiveness in creating jobs	Better	
Total capital/total direct jobs (VND million/job)	*13.64*	*18.63*
2. Offering stable jobs for the employees		Higher
Long term contract labors/total direct jobs	0.37	0.49
Short term contract labors/total direct jobs	0.51	0.48
Working duration/operation duration	05.6	0.64
3. Monthly income per employee	Higher	
Average monthly income per employee (VND 1,000)	*677*	*487*
4. Saving per employee per month	Higher	
Average monthly saving per employee (VND 1,000)	*218*	*78*
5. Educational level	Higher	
College and University employees (%)	*38.4*	*11.5*
Primary/secondary and high school employees (%)	*61.6*	*88.5*
6. Investment in human capital		Higher
Training cost/total direct jobs (VND 1,000/job)	*452*	*653*
Health insurance (%)	*15.4*	*60*
7. Social welfare contributions		Higher
Total (tax + charity)/total revenue (%)	*6.5*	*8.1*
8. Gender		Higher
Female workers/total direct jobs (%)	*24.9*	*74.1*
Female managers/total direct jobs (%)	*3.19*	*3.59*
9. Backward and forward linkages	Stronger	
Indirect jobs/total direct jobs	*2.64*	*1.16*
Cost of purchasing local raw materials/total revenue	*0.26*	*0.07*
10. Labor Union		Better

II. Economic impacts		
1. Economic efficiency	Higher	
Labor productivity (total revenue/total direct jobs) (VND million/job)	*141*	*55*
Total (construction + transportation)/total revenue (%)	*4.1*	*6.1*
2. Capital economies	Better	
Economic use of capital	*Better*	
Total capital/total revenue	*0.1*	*0.34*
Total generated income/total revenue	*0.07*	*0.13*
Total investment/total revenue	*0.06*	*0.20*
Additional capital formation	*Better*	
3. Technology situation and diffusion		Better

Strategies Used in International Joint Venture in the Manufacturing Sector in Thailand

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Abstract

Foreign investment, one form of which is joint venture, is a major factor that fosters economic growth in developing countries. Since 1986, the Thai government has welcomed foreign investment for the economic development of Thailand and so international joint venture (IJV) is popular and it has been increasing in number. As a result, IJVs have significantly played an important role in Thai economy. As business becomes more competitive after the economic crisis in Thailand, the issue of strategies used to gain competitive advantages in international joint ventures has become a critical issue. Hence, it is important to identify various patterns of business strategies employed by international joint venture companies in Thailand and find out why these strategies are adopted by those companies. This paper presents the findings of a research on three randomly selected IJVs of different type, size and nationality in the manufacturing sector of Thailand. The research, based on the in-depth interviews with foreign and local managers, made an attempt to find out how the international joint venture companies in Thailand are adopting strategies to cope with the changing environment to gain competitive advantage. It also aimed to gain insight into strategic management and change processes in contemporary joint venture companies in the manufacturing sector of Thailand. The paper gives a review of the business strategies within the context of recent changes followed by a discussion on changes that need to be made.

Introduction

As business becomes more competitive after the economic crisis in Thailand, the issue of strategies used to gain competitive advantages in international joint ventures has become a critical issue. Therefore, it is important to identify various patterns of strategies employed by international joint venture companies in Thailand and find out why these strategies are adopted by those companies. To cope with the changing environment, the companies practice various strategies to survive and to sustain international competitiveness**.** In this context, the companies have challenged the situation to manage the company in effective way and increase competitiveness in the global marketplace. These strategies include restructuring of the organizational structure, reduction of hierarchy levels in the management team, making changes for working days for employees to reduce cost and the market structuring by more relying on the export to recover the sales revenue in responding the declining local market.

This paper presents the findings of a research on three randomly selected International Joint Ventures (IJVs) of different type, size and nationality in the manufacturing sector of Thailand. The research based on the in-depth interviews with foreign and local managers of the three international joint ventures companies in manufacturing. These are Urethane Elastomer Manufacturing Company, International Plastic Manufacturing Company and Polyester Yarn Manufacturing Company. Among them, two companies are counterparts with Thai and Japanese and one company is joint partnership with Thai and British. The next phase of the research, it has been planned to contact 30 international joint ventures in manufacturing sector to answer the question of what business strategies are being adopted by IJVs in Thailand.

This paper based on the findings from a preliminary pilot study in an attempt to find out how the international joint venture companies in Thailand are adopting strategies to cope with the changing environment and to gain competitive advantage. It also aimed to gain insight into strategic management and change processes in contemporary joint venture companies in the manufacturing sector of Thailand. The paper gives a review of the business strategies within the context of recent changes followed by a discussion on changes that need to be made.

The Overview of Strategies Used in International Joint Venture Companies

It describes the different strategies used in different type, size and nationality of the three international joint venture companies in manufacturing sector in Thailand.

The Overview of Urethane Elastomer Manufacturing Company

Company Profile

The Urethane Elastomer Manufacturing Company is a joint venture of Thai ownership 51% and Japanese ownership 49% with a total investment of 5 million baht. It started operation in1996. The company has been producing and selling high quality urethane elastomer products and has about 50 employees. The company is managed by a Board of Directors compromising one Thai and two Japanese. Day to day management is done by the Director and Managing Director (MD) with close consultation between them. For human resource, the company recruits only the relatives and/or friends of existing employees to form the close family and give them on the job training. Welfare of the employers including safety, social security, medical and health care are provided. Salaries are set a little higher than other companies.

The company is at present enjoying competitive advantage as it has little competition in the market. Picture of sales growth is as follows:

Year	Sales
2000	34.45 million baht
2001	35.00 million baht
2002	42.00 million baht

For its future plan, the market has structure to have local 90%, 10 % export and 5% each to Singapore and Japan within two years. Building a big factory in Thailand within five years and to export and seek market in Malaysia and Myanmar.

Strategy Employed

- *Forming the Joint Venture*

This international joint venture was established with the primary aim of supplying Urethane Elastomer industrial goods to manufacturing companies in Thailand. The Japanese partner chose Thailand, as it is comparatively better than other countries in the South East Asia Region. The factor includes Thai government encouragement of foreign investment, political stability the prospect of a favorable market for the finished products. The Thai partner reasons include accessibility to transfer of technology, expectation to share the international and domestic reputation of the foreign partner.

- *Market*

The main market is local with 90% of the product sold in Thailand and 10% exported to Singapore. The company tries to get and maintain local and foreign markets by participating in trade exhibitions and trade fairs in Thailand. It also reaches out to Singapore by setting up a branch factory there. The company also tries to find new markets through old customers. Old customers are given special price treatment to maintain the loyalty. The company's main target is the Japanese customer and it reaches out to Japanese customer by advertising in a Japanese newspaper in Thailand monthly. It is very effective because most of the Japanese companies subscribe to this paper. Another way of promotion is getting contact with the potential companies through telephone calls using the business telephone directory. Besides, the company keeps the price of export products the same as local price. It is the policy of the company not to make profit by taking advantage of the fluctuating foreign exchange rate.

- *Product Quality*

The company products are designed to fulfill the needs of high-tech machinery, industrial machinery and construction machinery. With an aim to get the best quality product, all the machineries were imported from Japan. High quality raw material used is imported from Japan and Europe. Quality control is strictly maintained at the factory. The products are carefully checked before sending them off to customers by the Production Engineering and the Quality Control Department. This department has been established so as to guarantee the reliability of its products and supply high quality product, which exhibit constant performance.

- *Host Country Environment*

There is no political interference in Thailand and the investment environment is favourable for the JV. Regarding cultural and social environment, there are differences between Japanese and Thais. For instance, if a problem arises relating to the customers' satisfaction of company product, the Japanese take it personally but Thai people are different as they think it does not effect them personally and they are not interested to solve it. If the problem needs to be solved immediately, the Japanese try to solve it even though it is not in the working hours. But Thai counterparts are not interested in solving immediately without overtime payment. Japanese consider customers as their meals provider and want to fulfil their wish and make them satisfied.

Regarding technology transfer, Japanese experts give training to the higher position Thai staff. But the problem is that higher position Thai staffs are not willing to transfer their expertise to the juniors. They wish to be indispensable persons with valuable knowledge kept by them. By working together closely and understanding each other culture, these differences should disappear in course of time.

The Overview of International Plastic Manufacturing Company

Company Profile

The international plastic Co Ltd., started operation in 1995, with registered capital of 4 million baht. The ownership share is Thai 60% and Japanese 40% respectively. Type of business is to produce made-to-order engineering plastic for electric household product, electronic and auto parts. To enhance customer confidence, requirement and satisfaction, JV plastic Co., Ltd. has adopted quality management system since 2000. Quality policy of the company is "Aim to develop plastic injection service with good quality, encourage development of technology and efficient delivery for customer satisfaction."

The majority of Board of Director is Thai and decision making mainly depends upon Thai partner. The company has about 90 employees and most of them are Thai. The procedure applied for recruitment in the company is simple and mostly depends on the government labour office. The employees are motivated by the bonus; it is 1.5 percent on monthly salary and also on the salary increase, ranging between (5-15) percent on the basic salary. The company practises occupational health and safety strictly set by the Thai government safety law.

The company targets local market and it mainly depends on four regular big Japanese motor companies. The company is the only one that produces the product in highly standardizes quality applied by using high tech from Japan. The company has got customers satisfaction with the products in terms of quality and time of delivery. The company intends to maximize customer satisfaction with delicate and good quality work.

The company's financing depends on the short term and long term loans. There is no profit in the first and second year of the establishment of the company. The economic crisis in 1997 hit the sales hard and aftermath of the crisis also causes the sales decline. To cope with the external changing environment, the company adopted the cost reduction schemes. The scheme was a strategic success and resulted the company to achieve both in sustaining the business and in gaining the competitive advantages. Starting from 2001 sales has increased with the profit of 25% on it and in 2002 it is increased 30%.

Strategy Employed

- *Management*

The company implemented the cost control strategy during the crisis by eliminating the Saturday work practice in responding the low market demand and to save the cost. This causes the employees reduction their wages from 5 to 20% according to what they earned. Eliminating the Saturday work has benefited the employees in some way as it gives them the value time to spend with their family and pursue their hobbies. This makes the company revive and survive. The company cost control strategy has achieved. Moreover, the company's organization structure has also changed to recover the changing environment. The strategy employed is reduction of hierarchy levels and making the management team more compact by filtering only the key persons in the team. This is resulted in efficient decision-making and greatly reduces the cost of paying high salary.

- *Market*

There are only a few competitors in the market that produces the same product. In this market, the quality and the time of delivery are the major factors to foster the market. The company employed the quality standardization in terms of customers' requirement. The basic strategy applied by the company for customers' satisfaction is the fulfilment of customers' needs and by controlling the highly standardized quality.

To get more market share, the company applied by getting personal contact with the potential companies and through old customers. The company is careful in expanding its market because of the insecure economic situation in Thailand.

- *Product*

The company strictly follows the customer standard by utilizing imported and local material. The company has problem with local raw material because it is not strong enough after testing for some specification. The company product is based on applying the technology that transfer from Japan. No competitors could do the same quality product of the company. The important quality control system is how to make the action plan after the company has got the problem.

- *Host Country Environment*

For the joint ventures company with the ownership share of Thai 49% and Foreign 51% it is in hard position of transfer of technology to the local within restricted period of time. It would be possible to transfer the technology locally, if the ownership is Thai 60 % and Foreign 40%. According to the law enacted by the Board of Investment (BOI), Thailand agreement is technology should transfer to local after one year of the joint venture establishment. The expatriates should not be in the joint ventures business within five years. Furthermore, after five years establishment of the joint ventures, the foreigners should only in the position of management level. However, there is none of the company able to follow the BOI agreement according to the experiences of joint ventures businesses in Thailand.

The competitive advantage of the company is the quality of product. It focuses on applying the high technology from Japan. And the company sends employees to the Japanese customers' companies for taking training in a particular area.

The Overview of Polyester Yarn Manufacturing Company

Company Profile

The company manufactures 100 percent polyester yarn, it is the joint venture of Thai and British partners, the majority of Board of Directors is foreigners. Most of the key managers at the management level are foreigners and marketing, finance and production are controlled by foreign staff. The ownership share of Thai and British partners is 50-50% respectively. The company started production in 1992. At that time, the company is the only player in this business, nowadays, there are also some other companies doing in this business. The company has a successive record as and over 10 years of operation in Thailand.

The leader mostly makes decision based on the consensus of the employee concerned. The company has about 750 employees. The company provides Cost of Living Allowance (COLA**)** allowance, transportation, and the education for children until high school and medical insurance. It also provides bonus on monthly and yearly basic that is the most attractive incentive for the employees.

The company local market is 40 % and export is 60%. The export markets are Asia, South America, North America, Canada, Europe and Middle East and Africa. It has strong structure for sales in Europe, Canada and Africa also and there is in house consumption in Europe. The export sales growth increases 30-40% in 2001-2002, 10-15% in 2000-2001 and 10-12% in 1999-2000. Return on Assets has been increasing 5-10% during 2000, 2001 and 2002. There are four main competitors in the local market but the company is number one player in Thai market. Overall performance (profitability and sales growth) increases yearly about 5-10%.

The company had impact of Asian crisis in 1997, 1998 and 1999 and the local market was in decline. The company had to reduce the production accordingly to the changing environment. During the crisis, the company relied highly on exports market. Before the crisis, the market structure of the company was as follow: export is 80% and local is 20%, during crisis the export is 95% and local is 5% (i.e. at the time of devaluation, there are only two customers but normally there are six regular customers in local market). At present, the export market is 60% (main target market is Europe and US) and local is 40%. The expected share in the future within two years will be divided equally between export 50% and locally 50%.

The company has developed a strategic plan since 2000 to develop more portions in Thai market. The company expects to expand more market in Thailand by doing downstream manufacturing and by producing more capacity to get long terms alliance with private companies and the Thai government-manufacturing factory.

The most significant achievement of the company is its ability to come out of the devaluation with steady sales revenue. The company is renowned for its quality product in Thai and global market and becoming one of the best exporters of polyester yarn of Thailand. It has accumulated the experience of local market along with the export markets.

Strategy Employed

- *Management*

The company holds monthly shareholder meeting to review the present status of JV and make a plan for the future. The decision is usually made based on the consensus of the management team.

For long-term commitment, the company mostly recruits fresh graduate and gives them on the job training. The company encourages the employee to be well informed and attend the related seminars around the world by sponsoring travel and living allowances. Although the expatriates are in the company but it sends some senior staffs to Germany for training courses and to be able to catch up with latest trends in industry. Even though the company provides the fringe benefits but there is still labor turnover especially at the operation level staffs that is about 15%-20% per year.

- *Product*

The company has been using German technology for more than ten years and the company maintains the quality-testing department for its products. The company maintains to generate low inventory and the scale of production that makes design for a particular rate of production. The barrier for the company is getting spare parts locally and it has to be imported and this sometimes causes the delays.

- *Market*

The company manufactures the basic polyester yarn in Thailand and it does not compete in the general sector, it just only focuses on high quality product. At present, the company produces yarn for medium high fashion market and it has got plans to produce yarns for more sophisticated and unique products. The local parent utilizes the company's polyester yarn for producing textiles and the company's yarn are used in making brand name product.

The company's local partner is in textile business for more than 30 years and this is the advantage for the company. In local market, the company has privileges of having old and regular customers. Presently, local market share is 40% and export market is 60%. The company plans to reduce export market as the local market is increasing and trying to get long-term alliance with the big companies and the big government manufacturers in Thailand. The company wishes to become a soul provider for few big companies. The company has its own marketing team supplemented by information shared by local parent. The advantage of the company is having the local partner with knowledge about its local market and also having the foreign partner with grouping and network chains across the world.

Marketing plans are built on the yearly development between local and all export markets. Additionally, the yearly marketing plan is updated every three months. It is predominantly derive on the realisation of the environmental changes.

- *Host Country Environment*

Thailand is becoming a heart of business in Asia-Pacific region. The country is considered politically stable with minimum risk and the government is very supportive and enacted concession policies such as the privileged tax-free policies for a particular imported machines. The government adjusts the tax between 5-10 percent based on the income ranges. Furthermore, the basic tax rates are relatively low. The cost of production is also low in terms of electricity charges and the labor costs.

The company also enjoys the ability of manipulating market in textile business as the company holds the majority of local market share and having not many competitors.

There is no big social and culture difference issues in the company. But the problem arises due to the inaccessibility of the skilled labours for the related positions. The position suitable for science graduates are not applied by science graduates in account of their social cultural in Thailand. Those positions are required to fulfil technical knowledge and to control the variances that needs for making decision by them. Therefore, the company trains the unskilled labours under strictly supervision of the related head of department (professional engineers). So that by learning the culture attitude, the company makes adjustments accordingly and able to overcomes the cultural barriers.

The reputation of the company being an international plays a significant role in Thailand. The local customers have the high impression of the company as the global company with network chain information. In the competitive environment, there are four companies producing the same product in local market and about two of them have higher capacity than the company. Nevertheless, the competitors could not compete with the company in gaining more market share. The quality of the product is unique and the company extends the business based on the customers' requirement.

Analysis of Strategies Used In the Three International Joint Venture Companies

By judging the results obtained from the interviews, first of all, it was found out that early entry into the market has significant role for the JVs operating in Thailand. For Urethane Elastomer Company, the joint venture started operation in 1996. It was an early entry without any significant competition. This early entry strategy has paid a handsome reward. In 1997, a big company from Japan planned to enter Thai market and built a factory for production of the same product but the plan was dropped mid-way due to the economic crisis of Thailand. Another Japanese competitor also made a plan for entering Thai market in 1997, but it was also cancelled because of the crisis. As the company had entered earlier, it could withstand the effects of the Thai economic crisis. It not only survived because of its settled status as an early entry, but also it could grip the market and maintained its influence in the business. If a new competitor enters the market, it would be very difficult for it to get customers because the present JV has been playing a significant role in the industry and has already occupied the market. It means that the company has secured a safe market niche. As the market is small there is no possibility of a new competitor to enter the market soon. For Polyester Yarn Company, it has been operating in Thailand for a decade and its early entry also benefits the company. It is the only kind of business that manufactures the polyester yarn at the time of its establishment. It has been enjoying the long-termed customers and knows ups and downs of the market well.

In analysing cultural aspect, in forming a joint venture, one of the motives of the Thai partner might be to learn from the foreign partner, for Urethane Elastomer Company and International Plastic Company, it is Japanese and for Polyester yarn Company, it is British who have the hi-tech knowledge. Though not specifically mentioned the organisational learning approach has been used in this case. When two partners work together for a considerable length of time it is natural that they absorb each other's knowledge and culture consciously or unconsciously.

Along with technology transfer, social and cultural values transfer would also take place. So in this case the Thai habits of unwillingness to take immediate action when a customer complains, the demand for overtime pay whenever they have to work outside official working hours, and the reluctance to share superior knowledge one has with the junior staff who need it very much will disappear in course of time and a unique form of corporate culture, Thai-Japanese/British style, will emerge.

In joint venture companies, human resource management is also an issue. For Urethane Elastomer Company, the problem is high labor turn over in the process worker. This put the company in difficult position when there is high demand in the market and high capacity production is needed. It was found out that this is due to the fact that the local employees tend to move around from company to company when there is the slight difference in their salary while the Japanese counterparts value more on having rapport, company norms and culture. To solve the human resource problem, subcontracting for employment should be given instead of carrying that out by the company and alternative is hiring the local recruiting agency to overcome this problem. For Polyester Yarn Company, it had to face another kind of problem and the company had to train the unskilled labours for the position required under strictly supervision of the related head of department to fulfil the needs of the employment. This kind of problem can be overcome by understanding the host country culture of employment.

In analysing how the JVs manage to get position in the local and global market, most of the interviewees have emphasised on having strong marketing team both locally and internationally in a joint venture company. By analysing Polyester Yarn Company's success story, having connected is crucial in marketing. For local market, the company has strong advisory team and very informed local partner. For export market, the foreign partner is well networked with alliances and grouping. These make the company well ahead of other competitors by having well rounded market information and to be in right position at the right time in the market.

Compare to Polyester Yarn Company, both Urethane Elastomer Company and International Plastic Company are not very well connected but their strategy to get market place is by having unique and quality product. They have positioned a good place in the market by maintaining and carefully controlling their product to target to quality conscious customers.

In analysing how the companies handle the effect of the crisis, the companies implemented the strategies that respond to the confronting situation. Before the economic crisis in 1997, the local market was booming and the companies were not concern much about the local financial health. But during the economic crisis, there is light of demand in the local market and local currency is very unstable. The companies have found out their own ways to handle their financial pressures and have employed strategies to handle this. For Polyester Yarn, the company observed its local customers' financial health by getting the information through direct contact with the customers' clients. If the company doubt about the credibility of the customers, their credit sales were controlled and eventually terminated according to their performance. As an alternative, the company had to offer the flexible interest period from 30 to 90 days to the customers. The company is in stable positioning now and plays as the main player in the local market.

It has also used other strategy to overcome the financial pressure. During the crisis, the company tried to rely more on the export market by expanding more markets in Europe and US, as they were not much effect by the Asia crisis. Knowing the changing environment well and turning the strategy into the right direction has benefited the company. By using the strategies in this way, the Polyester Yarn Company sustains the business and the market.

For International Plastic Company, it adopted the cost saving strategy to gain the sustainable market place with the changing economies in host country. It was implemented by terminating work on Saturday along with declining sales amount. The employees enacted the rules by the company not only deducting the working days but also on the amount of salary. In addition, the management team was restructured in terms of reduction of hierarchy levels. As a result, it becomes compact and makes it efficient in decision-making. In Urethane Elastomer Company, it had to negotiate the payment for its loan and installment accordingly to ease the financial pressure during the crisis.

Conclusion

This paper presents the various strategies used upon the changing environment in international joint ventures of manufacturing sector in Thailand. The strategies in various form stems from the environmental effects that on how strategic behavior influences the competitive positioning of the firm. The companies employed the strategies in these aspects: entry-time into the market, adjusting culture, handling crisis, human resource management and positioning the market. To sustain the business during and after the crisis, the JVs have found their own ways to handle the financial pressure and these strategies are discussed. In realising the three companies strategies, the following can be evoked: willingness to learn and understand each others cultural and norms in handling human resource management, knowing the time to change the target market during the crisis, enjoying the host government incentive and influencing the market being an early entrant and having alliances and grouping network in marketing and reduction of unnecessary hierarchy levels make the decision-making efficient and save the cost during the crisis are the strategies that made the companies sustain and success the business. The recommendation for the international joint ventures in Thailand that apply the strategies to be implemented as follows:

- The strategy implemented should be in balance between the company objectives and changing environment.
- The implemented strategy should be resulted to be effective in IJV to gain the sustainable competitive advantage.

References

[1] Aaker, David A. (1995). Developing business strategies. New York: Wiley Press.

[2] Adams, Gerard F., & Vernon, Heidi. (1998). How do firms adjust to economic crisis? The case of Thailand. Sasin Journal of Management. 4, 1-5.

[3] Huang, Tung-Chun. (2001). The effect of linkage between business and human resource management strategies. Personnel Review. 30, 132-151.

[4] Julian, Craig C., & Ramaseshan, B. (1999). The factors influencing the marketing performance of international joint ventures in Thailand. Sasin Journal of Management. 5, 1-16.

[5] Luo, Yadong. (1995). Business strategy, market structure, and performance of international joint ventures: The case of joint ventures in China. Management International Review. 35, 241-257.

[6] Mintzberg, Henry., & Lampel, Joseph. (1999). Reflecting on the strategy process. Sloan Management Review. 69-78.

[7] Porter, M.E. (1997). What is strategy. Harvard Business Review. 75, 162-171.

[8] Zahra, Shaker., & Elhagrasey, Galal. (1994). Strategic management of international joint ventures. European Management Journal. 12, 83-93.

Technological Cooperation, Innovation and Growth: The Role of Technology Parks – A Spanish Example

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Abstract

Innovation is commonly seen as a key factor for economic success, especially in industrial countries. Within the European Union the Spanish innovation rate ranks well below that of most member states. Only Greece and Portugal reach lower rates. This article deals with the relevance of Technology Parks as an important tool of the innovation policy. The main idea behind is the physical agglomeration of companies and public research institutes in order to derive synergy effects. In Spain, Technology Parks and Technology Centres have existed for 20 years. Up to now there has been no comprehensive study for Spain, measuring the performance of both. This article therefore examines German and French studies and presents the most significant results. In addition, a short overview about Spanish Technology Parks is made. The article proposes as conclusion concrete steps for further investigation, so as to make the Spanish situation more transparent.

Introduction

Companies all over the world are facing challenges resulting from world economic changes, e.g. the effects of globalisation, the growing importance of information technology or the tendency to shorter innovation cycles. But despite this European companies are confronted by the enlargement of the European Community towards Eastern Europe. Thirteen countries[1] have applied for EC-membership from which the first, Poland, will join the EC in 2004. For the Spanish economy this impact is mainly regarded as negative[2] because of

- the growing competitive pressure from the new members on the one hand and a partly similar export structure on the other hand. Spain and Poland for example have their major export market in the same countries (Germany, France, Italy, and UK) mainly with products from the automotive, chemical, and electronic and textile sector.[3] But unlike Spain and other countries of the EC the candidate countries do benefit from lower costs, first of all lower salaries, less strict environmental conditions and public subsidies.
- a geographical shift of "centrality" towards Central Europe which means that investment and commercial flows can move away from Spain to those countries, which are closer to the big markets.

In a situation of increasing competition, companies have, especially, to think about whether they want to stand the competition by setting-up a cost reduction strategy or by diversifying their product line. The first strategy is innovation oriented and focuses on reduction of costs that raises efficiency by changes in the production process (process innovation), while the second strategy refers to the launching of new products in order to improve the attractiveness of the product programme (product innovation). Usually, both types of innovation affect a company by technological changes, when the value chain has to be adapted on the new requirements.[4]

The, still, weak innovation system in Spain has led to a need for increasing investments in R&D to foster innovation so as to avoid a loss of competitiveness in future. The dimension of this task is characterized by the statements mentioned above and by the fact that from 2004, competition in Europe becomes harder.

Some Empirical Facts for Spain

Concerning innovations in Spain, empirical figures show that public and private expenditures in R&D are much lower than in many other countries of its competitors in the current EC. In 1999 Spain played a minor role in R&D. Private and public expenditures reached 0,90% of GDP, which is close to the dimension of Poland (0,75%) and Hungary (0,68%), but below the rate of the Czech Republic (1,27%). Among the major countries, leading investor nations were Japan, United States and Germany.

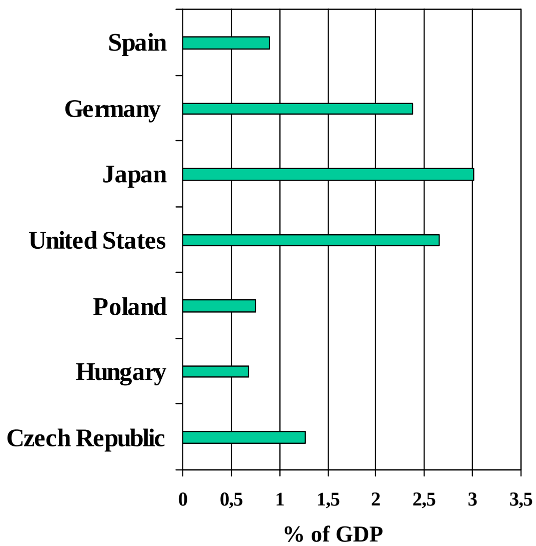

Fig.1: R&D-EXPENDITURE, PERCENTAGE SHARE OF GDP

A key success factor for development and diffusion of knowledge and innovation are people, who are scientifically and technologically well educated. Particularly in knowledge-based economies, human resources become ever more crucial for competitiveness. The figures show that compared with other European countries, Spain performed quite well and had, compared to Germany, almost the same percentage share of people with a scientific-technical university degree.

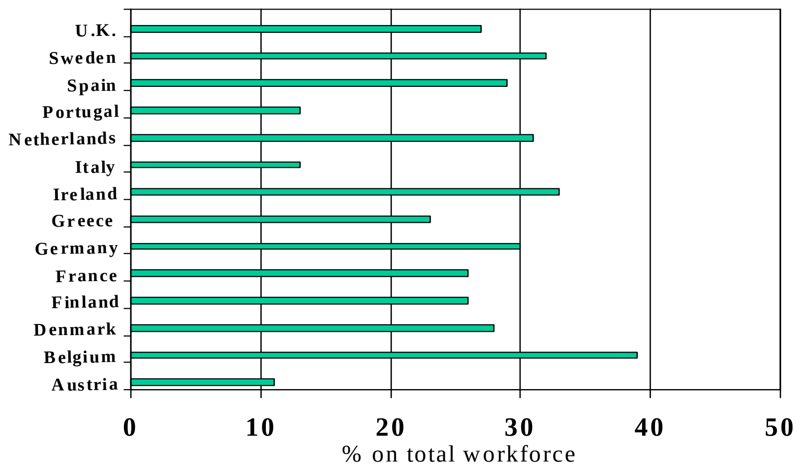

Fig. 2: WORKFORCE WITH SCIENTIFIC-TECNOLOGICAL EDUCATION ON TOTAL WORKFORCE

In fact, Spain has a broad basis of high skilled people in science and technology but a low level of patent application. On a national level, in 1997 the Spanish patent rate reached 0,6 per 10.000 inhabitants which was the same rate as in the Czech Republic, Hungary and Poland, but much lower than the average quote of the OECD (5,3) and the EC (2,5). Among the big European countries Germany (5,5) and Sweden (4,7) were best-ranked, while countries like France (2,2) and the United Kingdom (3,1) reached positions in the mid-field.[5]

In the international framework, the situation for Spain seems to be even more disadvantageous. The application of international patents for the three big markets, United States, Japan and Europe (triad patents), reached a figure of 2.9 per 1,000,000 inhabitants in 1998, while Japan reached 119.5, United States 88.3, Germany 86.0, Hungary 3.3 and the Czech Republic 1.6.[6] This means that Spanish companies were less inventive than their competitors in international markets and that the corporate sector in Spain had to spend more money to keep contact in innovative markets than this sector in other countries. According to an article in “El País”, this situation has not changed yet.[7] Currently, the Spanish economy pays about 1,700 million Euros for the right to use foreign patents and brands (so called *royalties*), while on the income side, sales of royalties reaches only 323 million Euros.

If, like in Spain, many high-skilled people are working in the field of science and technology, especially in the public sector, but the measured innovative output for the economy is low, then the following conclusions can be drawn:

1. The produced R&D-output does not match with the companies needs and therefore is economically inefficient,
2. The produced R&D-output matches with the companies needs but does not reach the corporate sector or the market. In this case the economy has a transfer problem, which means that R&D-results remain in the public sector.

Technology Policy

Definition and Economic Justification

Due to the essential function of innovation, many governments foster R&D activities through a technology policy. Meyer-Krahmer defines this as the public influence on technological development and its economic transformation.[8] This influence consists mostly of a direct or indirect public subsidy. Arrow and Nelson, the main exponents of the neo-classical innovation theory, justify these subsidies from the economic point of view, arguing that R&D activities epitomise positive external effects that can not be internalized by the respective knowledge creating company.[9] This can be explained by the public good[10] character of R&D efforts. Since third persons can not be excluded completely from R&D-benefits (spillover effect)[11], companies face fewer incentives to invest in costly R&D development. Therefore Arrow and Nelson conclude, that from the global economic point of view the optimal R&D expenditure is larger than it is from the single company' point of view.[12] This justifies those subsidies, which are able to compensate the knowledge producing company for the externalised value (spill over). A subsidy can be seen as successful, if it influences a distinct development, which would not take place or take place less efficiently without the subsidy. The policy can be seen as failed, if the desired result would have occurred even without the subsidy (profit taking effect).

Technology Policy Based on the Classical Innovation Model

There are a certain number of innovation models which provide explanations for the justification of technology policy as driver for economic growth and development. Since most technology policies, especially those of Technology Parks and Centres, are based on the linear innovation model, only this will be presented in the following (cp. Fig 3).[13]

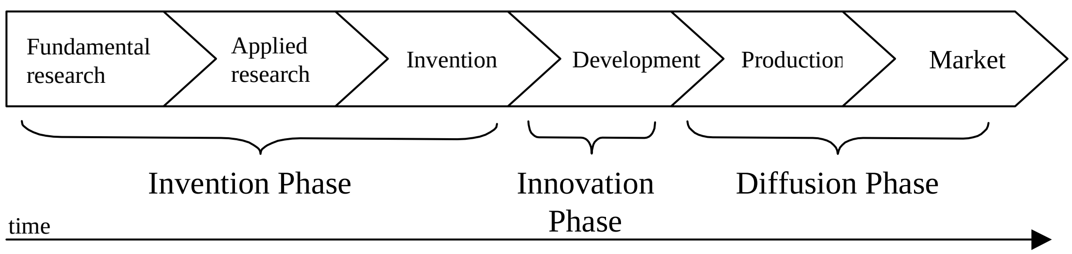

Fig 3: NEO-CLASSICAL INNOVATION MODEL

The model differentiates between invention-, innovation-, and diffusion phase. The invention phase describes fundamental and applied research activities of single persons and institutions. Research can be characterised as work, which widens preliminarily the scientific knowledge without the intention of a specific and direct application. Typical institutions of the invention phase are universities and public research institutes. The results of the fundamental and applied are the discovery of new problems and ideas defined as inventions. In the innovation phase intensive development activities lead to a transfer of these inventions into prototypes of commercially utilisable products. In the diffusion phase the production and market penetration takes place. It is not until this last phase that the innovation process results in economic success.[14]

The innovation model can be seen as a one way process which goes strictly along the innovation line. This is described as 'technology push' – the technology is pushed from research institutes and universities via companies into the market.[15]

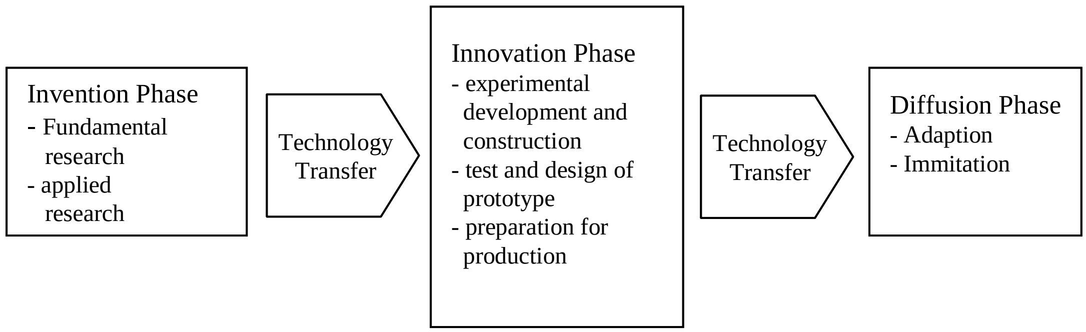

Fig 4: INNOVATION PHASES AND TECHNOLOGY TRANSFER

It is between the mentioned phases where the technology transfer[16] takes place. Two kinds of differentiation can be distinguished, pure transfer and personal transfer. Pure transfer pertains to supply of information such as libraries, databases or magazines as well as to research cooperations. The research results (inventions) are transferred from e.g. universities or research institutions to companies, which use these innovations to develop product innovations. Personal based transfer represents the most efficient form of technology transfer. Former employees of public or private institutions (technology supplier) continue to develop their inventions in newly founded companies. Those foundations are called spin-off start-ups[17] or spin-out start-ups[18]. The efficiency is gained due to the fact that the inventor himself transfers his invention to an innovation. Therefore information losses due to the transfer can be practically excluded. This argument is in itself good evidence for the importance of technology based company foundations.[19]

One can identify two traditional areas of technology policies. On the one hand the promotion of technological progress, the so called 'mission oriented policies' and on the other hand the promotion of the diffusion, the so called 'diffusion oriented policies'. Both policies are based on the rigid linear innovation model. The former promotes fundamental research or radical innovation of national importance such as aerospace, military, supersonic passenger planes, high speed trains. This direct promotion puts preliminary forth in the earlier stages of the innovation process. The latter is an indirect promotion which is put forth in the latter phases of the innovation process. It expedites the diffusion of innovations by supporting R&D companies (provision of risk capital, EU-structure program, etc.).

The modified innovation model as fundament for Technology Parks and Centres

Recent discussions concerning the models have led to certain modifications since it seemed to be too simple to represent the reality properly. The objections that all phases of the process must necessarily be passed through following the strict linear process. Instead, it was assumed that the innovation process is characterised by multifaceted interdependencies and feedback effects between the phases (cp. Fig 5).

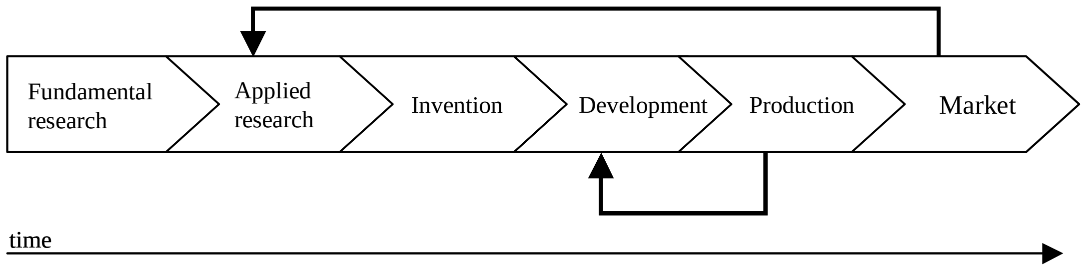

Fig 5: THE ADVANCED INNOVATION MODEL

For the linear model it was assumed primarily, that innovation was initiated exclusively from research institutions and university ('technology push'). But according to the newer point of view many innovation activities are initiated by market demand, which can be described as 'market pull' (e.g. upper arrow in Fig 5).[20] Therefore universities do not have a general knowledge and competence advantage due to the often better research equipment of companies (costly simulators of the airline industry, wind tunnel of the automobile industry). McQueen concludes that "Technology transfer *to* a university is just as important as technology transfer *from* it"[21] Other dependencies (e.g. lower arrow in Fig 5) can be observed if for example certain requirements of the production process are already taken into account in the development phase. Since the second part of the 20th century models like lean manufacturing and process reengineering postulated an interdependent creation of the product itself and the production process of the product.

If those critics of the model are taken into account by including interference between the phases, one has to change the policy from a phase oriented policy to a system oriented policy. The objective hereby is the promotion of cooperation along the whole innovation chain and not only on certain phases. This point of view leads to the newer discussion of "National Innovation Systems". Such a system can be defined as a network of institution of the public and private sector whose activities and interactions contribute to the initiation, import, modification and diffusion of new technologies.[22] The change to a system oriented technology policy is already performed in some countries. Imai and Yamazaki describe the process in Japan: "…it was the change from direct supports such as subsidies or low cost finance to indirect support of their self-help and independence by providing industrial infrastructure of technological diffusion, education and training and cooperative physical distribution systems."[23] Instead of supporting single companies, "innovation systems" should foster networking between the innovation institutions. One possible task for this policy is Technology Parks. They support the agglomeration of innovative companies, directly, by offering cheaper use of park services to the companies, and indirectly, by creating an innovative milieu (network) which expedites the cooperation and communication between the companies.

Central Aspects Concerning Growth, Technology and Innovation

- From a macroeconomic point of view, technology is considered an important factor for economic growth. In particular, countries with high labour costs feel the need to improve their competitiveness by substituting labour for capital and becoming more innovative. Under the assumption that technology determines quantity and quality of the production output, one can conclude that the enlargement of technological know-how leads to technological progress and finally to the development of new products or processes and to economic growth. In such a situation the economy is characterized by innovations.
- For the linear model it was assumed primarily, that innovation was initiated exclusively from research institutions and university ('technology push'). But according to the newer point of view many innovation activities are initiated by market demand, which can be described as 'market pull'.[24]
- Technology Parks can be regarded as tools to support the innovation process by offering a positive environment for R&D oriented companies. The idea of specific technology agglomeration comes originally from the USA. The first TPs were built in the late 40s, among them the 'Stanford Industrial Park', built in

1947 which is seen as one of the origins of the development of the Silicon-Valley.[25] But it was not until 1972 when the Cambridge and the Heriot-Watt Centers (both in Britain) emerged as the first European institutions.[26] France followed in 1974, Germany and Spain 1983.[27]

- Studies in France and Germany have shown that there is a positive interdependence between a company's cooperation and its innovation activities. Interviews with companies located in TPs proved that companies with an above average cooperation degree had only 17,29% fewer innovative products or processes while this number was 28,95% for companies with a below average cooperation degree.[28] Therefore cooperations can be seen as success factor for innovation.

  COOPERATION ⇒ INNOVATION

- There is a positive connection between the above mentioned innovation degree and the employment growth rate. Above average innovative companies in France had an average annual growth rate of 1,47 employees per year while this rate for below average innovative companies accounted only for 1,14. Therefore, innovation can be seen as success factor for economic growth.

  The two last points show a direct positive link between cooperation and economic growth.

  COOPERATION ⇒ INNOVATION ⇒ ECONOMIC GROWTH

- Significant differences are proved between the costs for extra-local vs. local cooperation costs. These costs are defined as transaction costs of identifying the partner, evaluating him, contract and control costs as well as coordination costs. The relevance of costs for local cooperations was considered to be of little importance while it was evaluated as of average importance for extra-local cooperations. This showed that companies evaluate small physical distance between cooperation partners (as in TPs) as significant cost advantage.[29] Assuming, that TPs lighten cooperations due to the little distance between prospective partners, one can derive that there exists a positive influence of TPs on the economic growth of the settled companies.

  TECHNOLOGY PARKS ⇒ COOPERATION ⇒ INNOVATION ⇒ ECONOMIC GROWTH

- It can be stated so far, that TPs create measurable economic value by accelerating the growth of the hosted companies through cooperation and innovation.

Technology and Science Parks in Spain

With regard to the technology deficit in Spain, the TP-concept seems to be appropriate to raising the level of technology and increasing the innovation capacity of Spanish firms. The relatively high percentage share of R&D in public institutes and universities shows the necessity of increasing efforts to apply public research results in the private corporate sector through R&D-transfer.

Spanish policy emphasizes innovative co-operation and regional development by implementing Technology and Science Parks (in the following simply: Parks) in all areas of Spain, but nevertheless the network of Parks is still very loose. The National Association of Technology Parks (APTE) counts currently 16 registered and 29 associate members.[30] The vast majority of the Parks was established during the nineties, except those in Zamudio and in Cerdanyola de Vallés, which were founded in 1985 and 1987. Under construction are the parks in Vigo and in Miguelterra, Castilla-La Mancha.

In February 2002 EADA asked the 16 members of APTE about the current situation, objectives and concrete policy to acquire companies. In general, future prospects are mainly seen as positive. Three Parks are planning to expand their capacities and the park management in Vigo notices a demand that already exceeds the supply, although the Park won´t be opened before 2003.

The company profile shows that the firms are mainly between 3 and 5 years old. Their main area of activity is in product development, production and research. Differences among the Parks exist in the percentage share of firms founded inside and outside the park. While some Parks attracted a lot of already existing companies, the quote of start-ups founded in the park is relatively high in Zamudio (about 75%) and in the Science Park in Barcelona (about 40%).

Target Goals of the Parks

Spanish Parks put emphasis on the cooperation aspect by technology transfer. The Parks were invited to value a set of objectives by scoring from 1 –irrelevant- to 5 -absolutely relevant-. The most relevant objective is the technology transfer between companies located in the Park and between companies and public institutions of R&D, like universities and public research centers. Research networks, project co-operation and outsourcing are the key strategies of success. A further important goal is to convince innovative companies, which are already established outside a Park, to move in, if they are supposed to give important innovative impulses to the corporate community in the Park. Obviously, the Parks´ policy is to create an innovative ambience by proximity, which means that cooperation within the park is more highly valued than between companies located in the Park and companies of the region.

Aspects dealing with regional development have a lower significance in comparison to the R&D-cooperation targets. The Technology Parks define their major objective in the success of the park itself and in how far it could improve technological cooperation, while aspects like regional development, job creation, etc. are seen as a consequence of a successful Park policy. Nevertheless, a questionnaire among the companies in the Technology Park in Cerdanyola de Vallés, carried out by the Park administration, shows that 80% of the companies which want to leave the Park, prefer to remain in the region. Taking into account that most of the companies are start-ups (35%), foreign companies (18%) and expanding companies (12%), it can be assumed that the employment effect for the region is positive, if they would not have been founded without the support of the Parks.

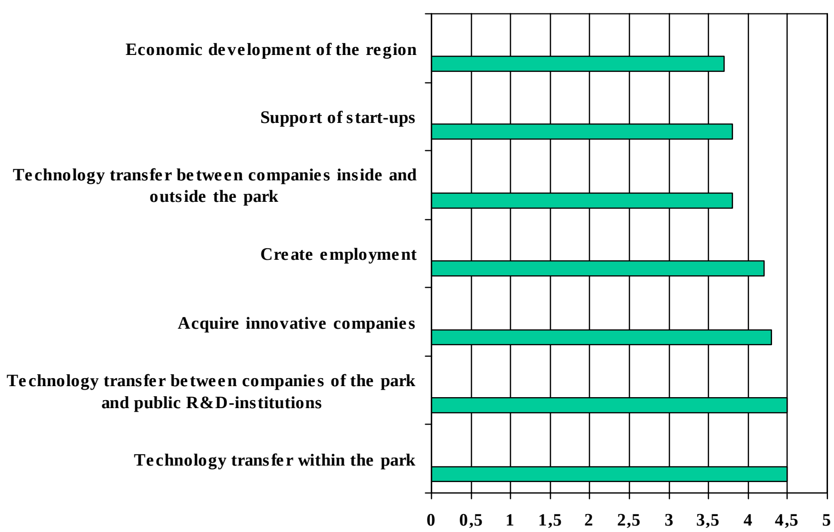

Fig. 6: RANKING OF OBJECTIVES

Due to their objectives, the Parks are looking for companies and public institutions with a high profile of R&D. They prefer start-ups, already existing companies and public institutions with intensive activities in R&D rather than companies with a low degree of R&D. Most of the Parks, that answered the questionnaire, are specialised in certain target sectors, i.e.:

- Biomedicine
- Information technology
- Ecology

- Automotive and logistics
- Aeronautics
- Development of materials
- Textile

Success Factors and Concrete Policy

If cooperation possibilities in the Park and the acquisition of innovative companies are major targets, then the question that arises is how to achieve them. Therefore, the Parks were asked to value, from 1 to 5, a set of factors concerning their relevance for success. The results show that, from the point of view of the Parks, the success depends first of all on external factors that belong to the region: the existence of a developed regional infrastructure and a highly skilled workforce. Both factors are considered as almost very relevant (score of 4,8). The Parks are aware that these environmental factors limit their performance and expansion possibilities.

To have a big company with a high degree of R&D in the park is regarded as a factor for success (4,6). It can be expected that big companies attract small R&D-firms, which act as suppliers, or engender directly technological spin-outs. Obviously, these activities have a positive impact on the image of the Park, which is valued as a relevant aspect (4,4). In a personal interview, a manager, who works for a company located in a TP, confirmed that a positive image of the Park influence also the image of a company positively. Less relevant are the quality of leisure time (2,6) and the existence of a big R&D-company in the region (3,4). It looks like Parks do not expect positive spill-over effects from these companies.

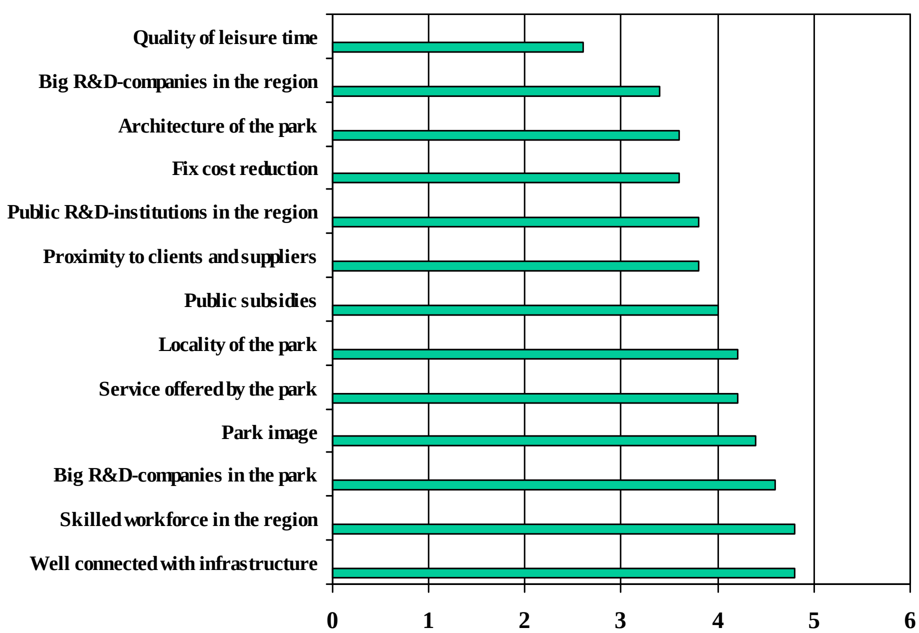

Fig 7: SIGNIFICANCE OF SUCCESS FACTORS

The firms, which settle in the parks benefit monetarily from some installations commonly used:

- Administrative services (e.g. computerized office services)
- Laboratories, rooms and equipment (e.g. meeting rooms, auditorium with translation equipment)
- Social installations (e.g. Restaurant, sports center)

In some cases, further benefits result from a rental that is below the market price and fiscal benefits.

Their intellectual benefit is related to consulting services that are provided by the park itself or in cooperation with external consultants. Due to the Parks´ main objectives (cooperation and innovation), the offered services by all or almost all Parks which answered the questionnaire refer to

- consulting of entrepreneurs located in the Park,
- consulting of the firms in the Park in the field of corporate strategies,
- support in the acquisition of financial subsidies,
- support in the creation of networks and co-operations.

This list does not include the aspect of patent consulting, which plays a minor role in the Parks´ consulting activities.

Beside service and equipment of the Parks, another important point is the way how the Park administration select the firms, that want to move in. According to the Parks answer, crucial criteria refer to technology and market aspects. The degree of technology in production and in the product itself is the most relevant criteria (4,4), followed by market expectations. Concerning the market, a relevant criteria refers to the fact that the company occupies niche markets (4,2) with only a few competitors. The expected company success (4,0) ranks third. Weaker criteria, which are more difficult to measure and which have a higher degree of subjectivity, are less relevant and ranked below. The subjective impression about the company (2,8) and the firm´s image (2,6) ranked at the end of the scale.

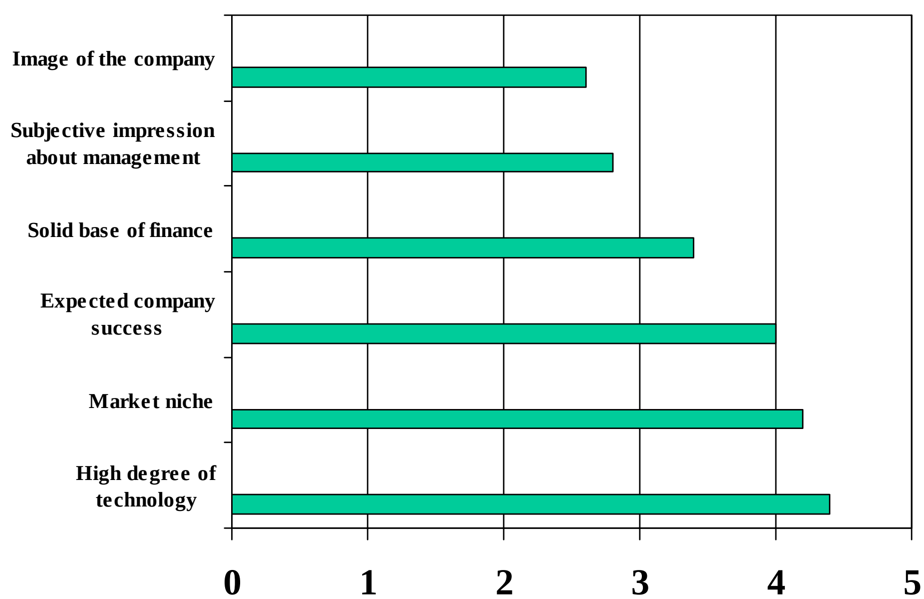

Fig 8: SELECTION CRITERIA

Conclusion

Spanish Parks try to foster cooperation between the different agents of the innovation system, which means the transfer of technology and know-how between research institutes and companies that are located in the Park. While on the one hand, the importance of spill-over effects for the region is ranked as an inferior goal by the Parks, they consider, on the other hand, regional factors, like the existence of a skilled workforce and a well developed infrastructure as very important for the success of a Technology Park. The target client is the already existing company with a high percentage share of R&D, which means that Spanish Technology Parks do not define themselves as incubator organisations for promoting start-up companies.

The Parks offer a wide range of additional services, which include physical installations as well as consulting services, but surprisingly, patent consulting plays a minor role in this variety of services. The question arises as to whether Spanish companies as well as the Parks are aware of the significance of patent application or are they managing this by themselves without asking for additional help.

References

[1] Arrow, K. J. (1962): The economic implications of learning by doing, in: Review of Economic Studies, 1962Vol. 29, p. 155-173.

[2] Behrend, H. (1996): Wirkungsanalyse von Technologie- und Gründerzentren in Westdeutschland, Heidelberg.

[3] Cotec (ED.) (1998), El sistema español de innovación. Diagnósticos y recomendaciones, Libro Blanco, Fundación Cotec para la innovación tecnológica, Madrid.

[4] Domar, E.D. (1946), Capital expansion, rate of growth, and employment, in: Econometrica, 14, pp. 137-147.

[5] El País (2001a), La política tecnológica entra en crisis, Negocios 21st December.

[6] El País (2001b), La escasa inversión en investigación dispara el déficit tecnológico de España un 21%, 5th march.

[7] El Periódico (2002), Els candidates a entrar a la UE, 13th March.

[8] Feldmann, F. (1999): Betriebs- und regionalwirtschaftliche Effekte von Technologieparks, Köln.

[9] Freeman, C. (1987): Technology policy and economic performance: Lessons from Japan, London.

[10] Harrod, R.F. (1939), An essay in dynamic theory, in: Economic Journal, 49, pp.14-33.

[11] Imai, K./Yamazaki, A. (1992): Dynamics of the Japanese industrial system from a Schumpeterian perspective, Paper presented at the International Joseph A. Schumpeter Siciety Conference, Kyoto, Japan, 19.-22. August.

[12] Knigge, R./Petschow, U. (1986): Technologieorientierte Unternehmensgründungen in Berlin. FHW Report, Nr. 1, Berlin.

[13] Meyer, J. A./Imberg, A. (1999): Kundenzufriedenheit in Technologiezentren, Berlin.

[14] Meyer-Krahmer, F. (1990): Evaluation der Wirksamkeit von Instrumenten der Forschungs- und Technologiepolitik, in: Krupp, H. (Hrsg.) (1990): Technikpolitik angesichts der Umweltkatastrophe, Heidelberg, p. 210-224.

[15] Organisation for Economic Co-operation and Development (2000), Main Science and Technology Indicators – 2000, 2, Paris.

[16] Pett, A. (1994): Technologie- und Gründerzentren. Empirische Analyse eines Instruments zur Schaffung hochwertiger Arbeitsplätze. Europäische Hochschulschriften, Reihe V, Bd. 1508, Frankfurt am Main.

[17] Pou Serradell, V. (2002), The 5^{th} Enlargement of the European Union, Round Table Presentation, EADA, unpublished manuscript, 7^{th} February 2002.

[18] Sandmann, A. (1999): Ein Vergleich zwischen dem Technologiepark Bremen und „Sophia Antipolis“ (Frankreich), Bremen.

[19] San Gil Otero, J. (2001): Centro Tecnológico: un modelo con futuro, http://www.fedit.es.

[20] Seeger, H. (1997): Ex-Post Bewertung der Technologie- und Gründerzentren durch die erfolgreich ausgezogenen Unternehmen und Analyse der einzel- und regionalwirtschaftlichen Effekte, Münster.

[21] Solow, R.M. (1956), A contribution to the theory of economic growth, in: Quarterly Journal of Economics, 70, pp. 65-94.

[22] Statistisches Bundesamt (2001), Wissenschafts- und Technologieindikatoren, Wiesbaden.

[23] Steinkühler, R. H. (1994): Technologiezentren und Erfolg von Unternehmensgründungen, Wiesbaden.

[24] Sternberg, R. (1988): Technologie- und Gründerzentren als Instrument kommunaler Wirtschaftsförderung, Dortmund.

[25] Thom, N. (1992), Innovationsmanagement, Bern.

[26] Westhead, P./Storey, D. J. (1994): An Assessment of Firms located On and Off Science Parks in the United Kingdom. Main Report, London.

End Notes

[1] Countries and dates of application: Turkey (1987), Cyprus, Malta (1990), Hungary, Poland (1994), Romania, Estonia, Lithuania, Bulgaria, Slovakia, Lavtia (1995), Czech Republic, Slovenia (1996).
[2] Cp. Pou-Serradell, V. (2002); El Periódico (2002), p. 11.
[3] Cp. Deutsch-Polnische Handelskammer, www.ahk.de; Instituto Español de Comercio Exterior, www.icex.es.
[4] Cp.Thom, N. (1992), p. 8.
[5] In 1997 Japan published a quote of 27,7 patents per 10.000 habitants. This figure is not comparable with the others mentioned above because of the singular Japanese way of registering patents. They divide one invention in various smaller units and ask for registration of each unit. The value for the United States was 4,5 per 10.000 inhabitants. Cp. Statistisches Bundesamt (2001), p.112.
[6] See before.
[7] Cp. El País (2001b).
[8] Cp. Meyer-Krahmer, F. (1990), p. 211.
[9] Cp. Arrow, (1962).
[10] The character of public goods makes it impossible to exclude third persons from its utilisation even if they do not participate in the production costs (free-rider problem), cp. Bender, D. e.a. (1992), p. 22.
[11] Although the patent law provides certain exclusion for R&D goods, often a little modifications suffice to circumvent a patent.
[12] Cp. Arrow, (1962).
[13] Cp. Seeger, H. (1996), p. 18.
[14] See before
[15] Cp. Feldmann, F. (1999), p. 9.

[16] One can differentiate between horizontal and vertical technology transfer. The former one describes the know-how transfer on the same level, the latter one the transfer along the steps of the innovation process. Since only the vertical transfer is relevant for this article, the horizontal will be catered to further, cp. Seeger, H. (1996), p. 19.
[17] Foundation of a new company undertaken by university members.
[18] Foundation of a new company undertaken by employees of a an existing company.
[19] Cp. Behrend, H. (1996), p. 31; Seeger, H. (1996), pp. 19.
[20] Cp. Feldmann, F. (1999), p. 9.
[21] Cp. McQueen (1992).
[22] Cp. Freeman, C. (1987), p. 1.
[23] Imai, K./Yamazaki, A. (1992), p. 42.
[24] Cp. Feldmann, F. (1999), p. 9.
[25] Cp. Sandmann, A. (1999), p. 1.
[26] Cp. Behrend, H. (1996), p. 76.
[27] Cp. Steinkühler, R.H. (1994), p. 1.
[28] Below/above average means below/above the median of all considered companies concerning the respective factor.
[29] Cp. Feldmann, F. (1999), pp. 120.
[30] Registered members: Cerdanyola de Valles, Balears, Barcelona, Alicante, Sevilla, Gijón, Alcala, Alava, Málaga, Asturias, Valladolid, Ourense, San Sebastián, Vigo, Zamudio, Granada.

The Entry Model of Taiwan's Venture Capital Industry with Investment in China

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Abstract

In order to boost operating efficiency and continue to expand business in an increasingly competitive global market, enterprises must go global. To achieve this goal, enterprises must adopt a successful entry mode. Taiwan Venture Capital industry has played a critical role in the rapid development of Taiwan's IT industries. To get a better understanding of how the VC industry in Taiwan has succeeded in this respect, we have conducted a research and interviewed 9 VC professionals were interviewed with respect to their progress in moving into Mainland China. Then we have sorted and analyzed the information and data thus collected with advanced methods. In the end, we have come to the following conclusions:1.The reasons why Taiwan VC industry has started moving to Mainland China including Market Growth Potential, Industry Migration, Regulatory, Domestic Recession; 2.When investing in China, VC firms usually take into account the following factors: Guanxi, Risk Management, System Establishment, Economic Outlook, Regulatory Framework, and Foreign Exchange Control; 3.Preferred sectors for investment by Taiwan VC firms include optoelectronics, biotechnology and software; 4.With uncertainty still hovering over investment prospects in China, attitudes adopted by the Taiwan VC industry include Observation, Evaluation, Participation, Commitment and Contribution sharing etc; 5.Entry model adopted by Taiwan-based VC firms are comprised of sole proprietorship and custody (joining forces with foreign investors to invest in China). The latter is considered as a better option for most VC firms in Taiwan. We hope the content of our study could provide VC firms and the government with some useful suggestions.

Introduction

Motivation

Executives of an MNE seeking to enter a foreign market must make an important decision concerning which entry mode to use.This choice is endogenous and self-selected because entry modes are chosen based on the internal capabilities of an MNE and external contingencies(Luo, 2001).Normative decision theory suggests that the choice of foreign market entry mode should be based on trade-offs between risks and returns(Anderson & Catignon,1986;Chi & McGuire,1996).Each entry mode has implication for the level of control the firm will enjoy over its foreign operations,the amount of investment required ,and the degree of risk the firm faces in venturing into a foreign market(Contractors,1984; Gatignon & Anderson, 1988; Hennart, 1988, 1989). It is generally recog- nized that as a firm moves from a non-integrated entry mode(e.g.,joint venture) to an integrated one(e.g.,wholly-owned subsidary), control, investment,and risk all increase(Agarwal & Ramaswami,1992;Anderson & Catignon, 1986;Barkema et al.,1996; Frramilli,1991). A MNE is expected to choose the entry mode that offers the highest risk-adjusted return on investment (Hennart, 1989; Madhok,1997,Luo, 2001)Facing the ever-increasing market competition, a company must boost operating efficiency and market share, maintain its competitive advantage in a bid to further expand its business. The only effective way to achieve this objective is through globalization. Moreover, entry modes determine the success of a company's globalization strategy. In general, reasons for companies to expand globally include:1.With dwindling domestic market share and intensifying competition, companies must continue to pursue sales and profit growth by going global; 2.To cover huge R & D expenses, companies must achieve economies of scale in terms of sales and production to support continuous new product development; 3.Facing much shorter product cycle and ever-shifting technological trend, companies must get the grips of market conditions to reduce operating uncertainty and risks.

Many any of the most successful high-tech companies are applying management models used by venture capitalists to find and fund good ideas quickly. Indeed, Andersen Consulting's recently released two-year Global Electronics Study reveals that corporate management at many high-performing electronics companies manage their business units much like venture capitalists manage their portfolios. The key elements of the corporate venture capital model include: 1.Setting a company-wide vision but ensuring business unit autonomy; 2.Hiring the best business unit management and motivating them with performance-based compensation; 3.Providing for a dynamic re-allocation of company resources when opportunity knocks (Robert, 1998).

Purpose of Study

Strategies adopted by multinationals have been studied over the years. Traditionally, these strategies were analyzed based on Transaction Cost (Caves, 1982; Anderson & Gatignon, 1986). By assessing transaction costs involved, companies can define their best strategies. However, by taking transaction cost into account, companies are unable to fully evaluate impact resulted from restrictions imposed by local governments. Nor can companies anticipate reactions from local enterprises facing their penetration into the local market. Model created by Tang and Yu (1990) improved the transaction cost analysis. They also found out that strategies adopted by foreign companies depend to some extent on their competitive advantages. It will work out best for companies with sales and marketing prowess to penetrate directly into a foreign market if local competitors are relatively weak. On the contrary, if one or two well-established local enterprises dominate the local market, companies with notable sales and marketing expertise can resort to joint venture or merger & acquisition, which will minimize the negative impact from local competitors' counterattacks. Furthermore, Multiple Licensing will be the best way to face fierce competition with several market players already in the game. As far as local enterprises are concerned, they can work out opposite market strategies to fend off foreign invaders in the market. Opposition will increase on the part of local enterprises when foreign companies launch aggressive marketing campaign to conquer the local market. Also the strategic importance of the market itself determines how companies elaborate their strategies. The more strategically important is the market, the more aggressive marketing strategies will be adopted. Discussions on entry mode strategies have been conducted for many years. However, there are not many systematical analyses with respect to cause and effect and other factors available. Therefore, we will probe the following subjects based on the Grounded Theory by Strauss & Corbin (1990)and Content analysis by Holsti(1969),these purposes are as follows :

1. Why do Taiwan VC firms want to migrate to Mainland China?
2. What are the factors affecting their investment decision making?
3. What's the Chinese government's attitude toward Taiwanese VC firms?
4. Which are their preferred IT industry sectors to make investments?
5. What is the connection between their entry model strategies and their performance in China?

Literature Review

What is Venture Capital Investment?

Venture capital investing can be defined broadly as "**investmentt by professional investors of long-term,risky equity finance where the primary reward is an eventual capital gain,rather than interest income or dividend**

yield"(Wright and Robbie,1997;Parker & Parker,1998).Fassin(1998) defined "Venture capital as a new financial service operates in the market of providers of funds and in addition in the market of service." Acker(1991) defined the venture capital industry has to position itself into a niche with other providers of capital. Therefore, this new service needs also a lot of general marketing communication: the promotion of venture capital as a specific product within the financial products or services.

Many any of the most successful high-tech companies are applying management models used by venture capitalists to find and fund good ideas quickly. Indeed, Andersen Consulting's recently released two-year Global Electronics Study reveals that corporate management at many high-performing electronics companies manage their business units much like venture capitalists manage their portfolios. The key elements of the corporate venture capital model include: 1.Setting a company-wide vision but ensuring business unit autonomy; 2.Hiring the best business unit management and motivating them with performance-based compensation; 3.Providing for a dynamic re-allocation of company resources when opportunity knocks.

Venture Capital in China

As the economy booms and trade liberalization progresses, China has become an important focus of international investment. Many multinational corporations (MNCs) increasingly target the large domestic market of China through direct foreign investment (DFI). However, for many intending MNCs, especially those from countries with cultural distance from China, questions of how to enter the Chinese market and how to choose entry modes still remain inconclusive. On the part of the host country, a study of MNCs' entry behavior is essential for the formulation of DFI policy and assessment of the role of MNCs in economic development(Sun,1999).

Venture capital is often called private equity investment since the recipients of most venture capital investment are companies not listed on stock exchanges.Most investments take the form of shares or loans convertible into share at a certain price in the future.Investee companies might be at early stages of development, but in China and Asia they more often are companies that have already established a market and are in various stages of expansion. Usually,these investments introduce technologies or services that might be advanced by international standards,but that have already been developed and demonstraated to be effective in economically advanced countries(Folta,1999).

In 1995, only 1-2 percent of venture capital fund investment in China went to " seed stage" projects-research and development, or product development investments made before a product even exists or a company is even organized.In contrast, about 30% went into start-ups,about 65% into expansion projects, and the balance into buy-outs(Folta,1999).Venture capital invetsments typically range from a new million to the low tens of millions of dollars for industrial and service-oriented investments.Investments in infrastructure projects range from the low tens to the low hundreds of millions of dollars.Usually venture capitalists take passive equity stakes of 10-49 % of effective voting control and require at least one out of five seats on the board of the investee company.In Asia,investors hold such stakes for an average of 4-5 years(Folta,1999).

Table 2: VENTURE CAPITAL UNDER MANAGEMENT IN ASIA AND CHINA:1995-1998

($ million)

	1990	1995	1996	1997	1998
China VC funds	113	3458	3612	3500	3112
Asian VC funds	4298	15772	19157	21102	29600
Asian infrastructure funds	0	1100	1880	3410	4005
Estimated Total China VC Funds	532	5069	5825	6454	7163
Estimated Total China VC Funds Raised/FDI		4.7%		2.4%	2.0%
Asian VC funds and infrastructure **Funds Raised/ FDI**		8.5%		7.5%	8.5%

Source:Asain Venture Capital Journal & Folta(1999).

Total newly raised China VC funds in 1995 made up 4.7 percent of China's FDI that year, and 2.4 percent and 2.0 percent of China's FDI in 1997 and 1998 (see Table 1). New Asian VC funds plus Asian infrastructure funds in 1995 made up 8.5 percent of FDI invested in Asia that year, and 7.5 percent and 8.5 percent of Asian inward FDI in 1997 and 1998, respectively. This poor fundraising for China and Asia in 1997 as the Asian crisis hit indicates that venture capital funds and their investors are more risk averse and less "vulturelike" than sometimes thought(Folta,1999).

Given the relatively small rise in China's FDI in 1998 (2 percent) and drop in Asian FDI in 1998 (-7 percent), and the supposed dire need for foreign investment in the region, VC funds raised for Asia appear more opportunistic than those raised for China. Of course, these figures may reflect other issues among investors and local companies seeking capital-such as perception of risk, value, and willingness to share management control. It possibly also reflects the speed at which funds can be raised(Folta,1999).

Comparing the 1997-98 growth in VC funds actually invested with the expansion of the VC fund pools fills out the picture. In Asia, VC investments increased even as GDP and FDI growth slowed. China-oriented funds mimicked this trend in 1997, but not in 1998 (see Table 3). Again, "vulture-like" investors would not have been expected to slow their investments in China in 1998. It is entirely possible that additional funds were available for investments in China in 1997 while investors waited to see what would be the extent and duration of the Asian economic crisis(Folta,1999).

Methodology

Data Collection

The Nondirective interview

The least structured form of interviewing is the nonstructured or nondirective interview.Here no prespecified set of questions is employed, nor are the questions asked in a specified order.Furthermore,no schedule is used.With little or no direction from the interviewer,respondents are encouraged to relate their experiences,to describe whateverevents seem significant to them,to provided their own definitions of their situations,and to reveal their opinions and attitudes as they see fit.The interviewer has a great deal of freedom to probe various areas and to raise specific queries during the course of the interview.There are three interviewing method as above.The researcher asked interviewees to gather together for focused interview,But they refused to get together because of secrets.So, The researcher used the In depth interview and nondirective interview.

In-depth interviews

We had in-depth interviews with 9 interviewees with either investment or market survey experience in China or having lived in China for some period of time. After obtaining their consent, we taped their reports for about 20 hours, which were later converted into written notes of 50 pages coded by serial numbers. We also requested background information of their companies and gathered press cuttings to complement the content of our interviews.When such initial decisions have been arrived at the researcher is ready to develop a list of interview questions or areas for observations.The initial questions or aresa for observation are based on concepts derived from literauture or experience.Since these concepts,as you know,do not yet have proven theoretical relevance to the evolving theory,they must be considered provisional.Nevertheless,they provide a beginning focus,a place for the researcher to start(Strauss & Corbin,1990).The content of our interviews consisted of the following aspects:1.The motives and reasons behind interviewees' decisions to conduct business survey and their migrations to Mainland China; 2.The factors interviewees have to take into account when investing in Mainland China; 3.Interviewees' attitude with respect to their investments in Mainland China; 4.Interviewees' entry modes when making investments in Mainland China; 5.Outlook of preferred sectors into which Taiwan's VC companies plan to invest;6.Which entry modes will best enhance investment performance.

With respect to sampling, researchers must at first define the outline of the subjects in their studies to pinpoint their research groups. Then they determine their data profile (observations, in-depth interviews or literature analysis) based on the availability of the data and researchers' schedule. By taking the above sampling principle into account, we outlined our interviewees' profile based on purposive sampling method:1.Members of Taiwan Venture Capital Association; 2.With experience in conducting business survey, participating in investment decision making and residing in China for several years;3.Working at well-established firms (which would enable us to obtain valuable information for our analysis)Thanks to assistance from Taiwan Venture Capital Association and several VC firms, we conducted our interviews with the 9 persons working in the Taiwan VC industry.

Sample Profile

We interviewed the following 9 persons with impressive VC background:

Table 1: THE RESEARCH SAMPLES

Code	Job Title	Company
A	Chief Secretary	Taiwan Venture Capital Association
B	President	All Asia Partners
C	Executive Vice President	CDC Tech Consulting Corp.
D	Vice President	Chien Bon VC Corp.
E	President	Chia Te Investment Management Co.
F	Executive Vice President, President of Mainland China Business Unit	Taiwan International Securities Corporation
G	Vice President	Pan Asia Capital Inc.
H	President	Sino Star Capital Co.
I	Board Director, President	All Asia Partners

Based on Grounded Theory, we have conducted our field research by using the following methods:

Document and file content

We collected related documents like written records of events and experiences with respect to investments in China, reports in newspapers and magazines, investment reports of several VC firms, periodicals, corporate overviews and prospectuses of listed companies with investments in China, along with such files as organizational charts, budgets, surveys, geographical data etc.

Observations

To get a closer look at the progress of Taiwan VC industry's migration to China, we went to Shenzhen to glean information of related seminars on investments in China.On top of the above methods, we also talked to some employees at the companies of our interviewees to fill the gaps in our information derived from our interviews.

Data analyzing

Content analysis

Content analysis allows the investigator to observe a communicator's public messages at times and places of the investigator's own choosing.The procedure also allows him to carry out his observation without fear that the attention will bias the communicator,something that would be more difficult if the analyst were trying to watch at the scene(Budd,Thorp & Donohew,1967).

Pretest

A composite relability coefficient may be computed by the following formula,in which N denotes the number of judges.I choose two samples (A,B.)and two judges to count the pretest reliability.According to interview records,the number of sentences is 78.I count the reliability as follows:

Table 2 THE PRETEST RELIABILITY OF THIS STUDY

	researcher	Judge 1
Judge 1	0.72	---
Judge 2	0.74	0.65

According to the formula, the average inter-judge agreement is 0.70,and the composite reliability score is 3(0.70)/1+2*0.70=0.875.The reliability is appropriate.I continue to the whole reliability.

Reliability of this study

A composite relability coefficient may be computed by the following formula,in which N denotes the number of judges.I choose all samples (A,B….I)and two judges to count the pretest reliability.According to interview records,the number of sentences is 265.I count the reliability as follows:

Table 3: THE RELIABILITY OF THIS STUDY

	researcher	Judge 1
Judge 1	0.68	---
Judge 2	0.70	0.65

According to the formula, the average inter-judge agreement is 0.67,and the composite reliability score is 3(0.67)/1+2*0.67=0.858.The reliability is appropriate.

Validity

It also sometimes referred to as content validity,has most frequently been relied upon by content analysis.If the purpose of the research is a purely descriptive one,content validity is normally sufficient.Content validity is usually established through the informed judgment of the investigator.Are the results plausible? Are they consistent with other information about the phenomena being studied? Consider a hypothetical analysis of Chinese and Soviet elite pronouncement during the 1960's which revealed that each nation's leader viewed.My research interviewed some experts in Taiwan who were experience, so this should be content reliability.

Grounded Theory

Grounded Theory is a general methodology for developing theory that is grounded in systematically collected and analyzed data. The methodology was presented initially by Glaser and Strauss in "The Discovery of Grounded Theory" (1967). Based on Grounded Theory, researchers get started by formulating the research question and a tentative model of group development. Then researchers identify similarities and differences across collected data and check emerging hypotheses against original raw data. By carefully conducting field research using multiple methods of interview, observations and literature analysis, researchers can provide validity and credibility to their studies.

At the very beginning of our study, we selected a company to conduct a pilot case study to formulate our research questions and determine our data content and collection. First, we contacted Taiwan Venture Capital

Association (TVCA) to obtain information on VC firms in Taiwan. We then selected some companies to conduct our preliminary case studies by having interviews with them. Our next step was to collect analyze data to find out what kind of problems we would encounter during our study and work out appropriate research process.

Theoretical sampling

In the beginning a grounded theroy study,there are many sampling matters that the researcher must think through.These initial decision about sampling may change once the project is underway,yet they give the researcher some sense of direction and a place from which to begin.What happens once data colleection actually begins is a matter of how well these initial sampling decisions fit the rreality of the data.Initially, decisions regarding the number of sites and observation or interviews depend also upon access,available resources, research goals,puls tour time and energy.Later,these decisions may be modified according to the evolving theroy(Strauss & Corbin,1990).

Sampling Proceedures

Sampling in grounded theory is directeed by the logic and aim of the three basic types of coding procedures,as will be seen below.Furthermore, it is closely tied to theoretical sensitivity regardless of type of coding.The more sensitive you are to the theoretical relevance of certain concepts,the more likely are you to recognize indicators of them in the field and in the data.This sensitivity uausally grows throughout the duration of a research project,and helps you to decide what concepts to look for,where you might find evidence of them,and how you can recognize them as indicators(Strauss & Corbin,1990). It is including:1.**Sampling in Open Coding:**The aim of open coding is of course to discover,name,and categorize phenomena; also to develop categories in terms of their properties and dimensions;2.**Sampling in Axial Coding:** Open coding is,. of course, soon followed and paralleled by axial coding. Sampling still proceeds on the basis of theoretically relevant concepts (categories),but the focus changes; 3.**Sampling in Selective Coding:**The aim of selective coding is to integrate the categories along the dimensional level to form a theory, validate the integrative statements of relationship, and fill in any categories that need further development.

The Paradigm Model

In grounded theory we link subcategories to a category in a set of relationships denoting causal conditions,phenomenon,context,intervening conditions, action/ interactional strategies, and consequences.Highly simplified, the model looks something like this:**(A)Causal Conditions → (B)Phenomenon → (C)Context → (D)Intervening Conditions→(E)Action/Interaction Strategies→(F)Consequences** (Strauss & Corbin, 1990).

Result

Why do Taiwan VC firms want to migrate to Mainland China?

Why the venture capital business in Taiwan will go west to Mainland China, this study has found the following factors: "Market Growth Potential", "Industry Migrationt" and "Regulatory","Domestic Recession" and here we would explain that respectively as follows:

Table 4: REASONS OF TAIWAN VC FIRMS MIGRATE TO CHINA

	Market growth Potential	Industry Migration	Regulartory	Domestic Recession
Number	43	28	48	45
Percent	26.2%	17%	29.2%	27.4%

What are the factors affecting their investment decision making?

Factors that can interfere with Taiwanese vc business go west to Mainland China include: "Guanxi", "risk management", "system establishment"," Economic Outlook "," Regulatory Framework "," Foreign Exchange Control " and we shall explain that respectively as follows:

Table 5: AFFECTING FACTORS OF TAIWAN VC FIRMS MIGRATE TO CHINA

	Guanxi	**Risk Manage-ment**	**System Establish-Ment**	**Economic Outlook**	**Regulatory Framework**	**Foreign Exchange Control**
Number	30	28	12	8	15	8
Percent	29.7%	27.7%	11.8%	7.9%	14.8%	7.9%

Which are their preferred IT industry sectors to make investments?

VC Portfolio by Industry (as a percentage of total VC investment amount in 1995, 1997 and 1999)

Table 6: VC PORTFOLIO BY INDUSTRY

1995	Information 30.4%, Semiconductor 22.92%, Traditional Manufacturing Industry 11.85%,

	Electronics 8.76%, Telecommunications 7.39%, Biotech 0.2%
1997	Information 21.57%, Semiconductor 15.77%, Opto-electonics 12.23%, Telecommunications 4.46%,
1999	Semiconductor 20.52%, Information 18.25%, Electronics 13.79%, Telecommunications 12,17%, Opto-electronics 10.33%, Biotech 2.18%

Based on our interviews, we have found out that sectors preferred by Taiwanese VC firms in China seem to be software and biotechnology. Thanks to large domestic market, China can support successful development of these industries, which have in due course become favored investment targets for Taiwan's VC funds.

Taiwan VC industry's attitude toward making investments in China

Taiwan VC industry's attitude toward making investments in China can be categorized into the following types:1.Observation:Facing the fledging capital market and almost non-existant exit mechanism in China, most VC firms prefer to wait-and-see to get a better understanding of local investment environment at early stage; 2.Evaluation:Having decided to invest in China, VC firms actively seek partners and conduct detailed evaluation to get ready for making investments across the Taiwan Strait;3.Participation:VC firms set up overseas holding companies or raise funds with foreign partners to invest in China via sole proprietorship or joint venture, while retaining their major operation base in Taiwan; 4.Commitment:VC firms commit significant resources, dispatch senior managers to China, or establish strategic alliances with Chinese VC firms; 5.Contribution Sharing:With successful investment experience, VC firms organize business delegations by inviting related companies to China to establish network of contacts.

What is the connection between their entry mode strategies and their performance in China?

The "sole proprietorship" mentioned in this study refers to the fact when the VCs do not have any cooperation with VCs in Mainland China in terms of capital or talents but enter Mainland China by way of foreign capital or cooperation with foreign capital. However, the "majority of shares" means that Taiwanese VCs' ratio of the capital for cooperation with Mainland China is above 50%. As for "the relative shares", it is the ratio of cooperative capital that Taiwanese VCs vs. VCs in Mainland China is 1:1. Similarly, the "minority of shares", it means that Taiwanese VCs has only taken no more than 49% among their cooperative capital. Last the "trust" means when Taiwanese VCs do not share any capital but only raise the capital in Mainland China.

Details of the 5 Entry Model and subjective performances listed in this research

Table 7: ENTRY MODELS OF TAIWAN VC FIRMS MIGRATED INTO CHINA

	Sole Proprietorship	Majority Stake	Equivalent Stake	Minority Stake	Custodian
Capital Contribution of Taiwan VC firms %	100%	51%~99%	50%	1%~49%	0
Control over New VC firms	100%	Dominant	50%/50%	Limited	Only offer consulting services
Incorporation of new VC Firms	Overseas Holding Company, Liaison Office	Overseas Holding Company, Liaison Office	Overseas Holding Company, Liaison Office	Overseas Holding Company, Liaison Office	Dispatch Senior Managers to maintain operations
Strategy	Function	Location	Cooperation	Exchange of Ideas	Consulting
Characteristics	Lower Risk with More Control	Lower Risk with More Control	Maximal Risk with Frequent Disputes	Higher Rick with Limited Control	Minimal Risk, Fixed Management Fee, Contacts
Subjunctive Organization Performance	Excellent	Good	Not Good	Good	Excellent

Most Taiwanese VC firms prefer to set up an overseas holding company to invest in China in a bid to hedge risks caused by inadequate exit mechanism and tight foreign exchange control. Even if they are not allowed to transfer any of their original investment money, they still can have a full control of their capital inside China.

Result of Grounded Theory

In grounded theory we link subcategories to a category in a set of relationships denoting causal conditions,phenomenon, context,intervening conditions, action/ interactional strategies,and consequences.Highly simplified, the model looks something like this:**(A)Causal Conditions→(B)Phenomenon→(C)Context→(D)Intervening Conditions→(E)Action/Interaction Strategies→(F)Consequences** (Strauss & Corbin, 1990). Based on our paradigm model developed as above, we have obtained our research results as follows:

Causal Conditions

Market Growth Potential
Industry Migration
Regulatory System
Domestic Recession

Intervening Conditions

Guanxi
Risk Management
Economic Outlook
Regulatory Framework
Foreign Exchange Control

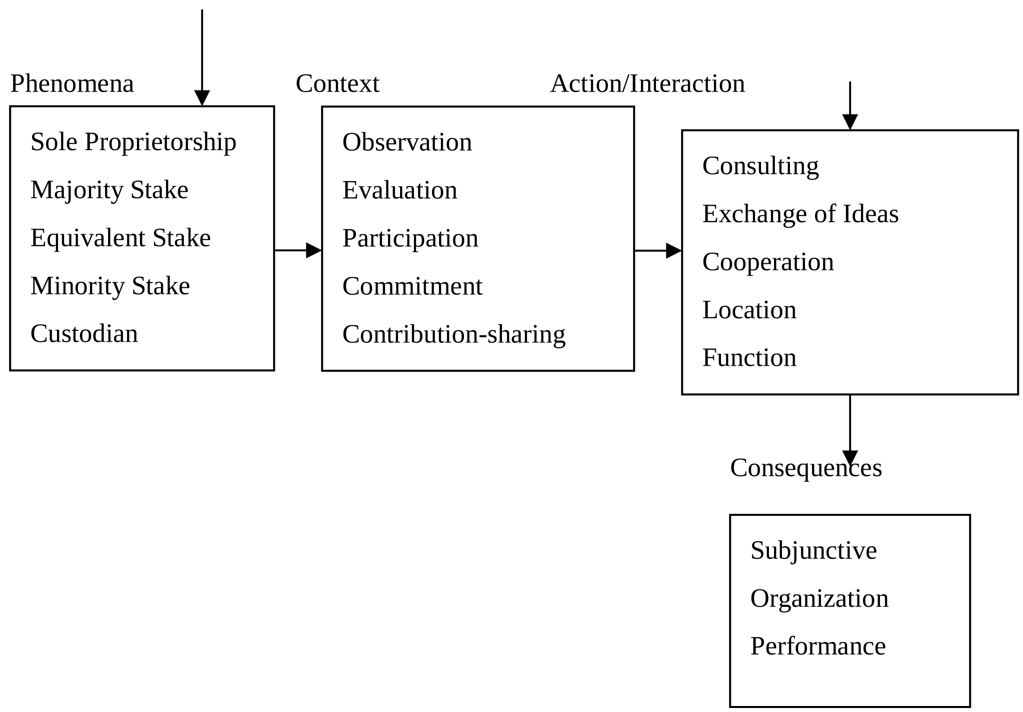

Figure 4.1: THE INTEGRATED MODEL

This study is to modify the gathered data through a paradigm mode from the encrypting process based on the abovementioned grounded theory to come up with the following graphs and explain the results of this study according to the order of these graphs.

Conclusion

In order to boost operating efficiency and continue to expand business in an increasingly competitive global market, enterprises must go global. To achieve this goal, enterprises must adopt a successful entry mode. Taiwan Venture Capital industry has played a critical role in the rapid development of Taiwan’s IT industries. To get a better understanding of how the VC industry in Taiwan has succeeded in this respect, we have conducted a research and interviewed 9 VC professionals were interviewed with respect to their progress in moving into Mainland China. Then we have sorted and analyzed the information and data thus collected with advanced methods. In the end, we have come to the following conclusions:1.The reasons why Taiwan VC industry has started moving to Mainland China include booming Chinese market, IT industry migration from Taiwan and current regulatory system in Taiwan; 2.When investing in China, VC firms usually take into account the following factors: connections, risk management and regulatory framework in China; 3.Preferred sectors for investment by Taiwan VC firms include optoelectronics, biotechnology and software; 4.With uncertainty still hovering over investment prospects in China, attitudes adopted by the Taiwan VC industry include observation, detailed evaluation, active participation, commitment and contribution sharing etc; 5.Entry modes adopted by Taiwan-based VC firms are comprised of sole proprietorship and custody (joining forces with foreign investors to invest in China). The latter is considered as a better option for most VC firms in Taiwan. The research also combined as above and developed a visable business modei by grounded theory.

Suggestions

Based on our research results, we would like to suggest the government, the VC industry and academic community take the following actions:

Government

Thanks to the tax incentive plan initiated by the government, Taiwan VC industry was able to enjoy significant growth in terms of fund size and number of registered VC firms over the past decade. Now with the tax incentive gone, source of VC capital is expected to decline as institutional and individual investors have no incentive to invest in VC funds. As such, Taiwan's VC community is concerned about their future and has started to look elsewhere for investment opportunities. Therefore, we suggest that the government put further stimulating measures into place, speed up bank reform and open up financial market, so that new capital infusion can be directed into VC funds and Taiwan VC firms can continue to keep their roots in Taiwan.

VC industry

With business scope restrictions on Taiwanese banks and insurance companies lifted, more and more financial institutions and banks will join forces with high-tech groups and conglomerates to establish new VC funds to make investments in the mainland. Facing the increasingly fierce competition, the Taiwan VC industry should take a more active approach by sending professionals to China to conduct in-depth industry and market research while building up extensive network of contacts to facilitate access to capital, information and investment opportunities. This has to be done soon. Otherwise they will not be able to take advantage of rapid economic growth following China's entry into the WTO.

References

[1] Acker,J.V.(1991) "Cursus:Marketing." Universiteit Gent.

[2] Agarwal,S. & Ramaswami,S.N.(1992) 'Choice of foreign market mode:impact of ownership, location,and internationalization factors', **Journal of international Business Studies**,23(1):1-27.

[3] Anderson, E. & H. Gatingnon (1986): "Mode of Foreign Entry: A Transaction Cost Analysis and Propositions", **Journal of International Business Studies**, 17(3),Fall:1-26

[4] Barkema,H.G.,Bell,J.H.J. & Pennings,J.M.(1996) 'Foreign entry , cultuiral barriers,and learning' **Strategic Management Journal**,41:7-26.

[5] Budd,R.W.,Thorp,R..K. & Donohew, L.(1967).Content Analysis of Communications,

[6] The Macmiilan company, New York.Collier-Macmillan Limited, London.

[7] Caves, R.E. (1971): "International Corporations: The Industry Economics of Foreign Investment", **Economica**, vol. 38, pp: 1-27

[8] Chi,T.& McGuire,D.J.(1996) 'Collaborative ventures and value of learning integrating the transaction cost and strategic option perspectives on the choice of Market entry modes', **Journal of International Business Studies**, 27:285-307.

[9] Contractor,F.J.(1984) 'Choosing between direct investment and licensing: theoretical considerations and empirical tests, **Journal of International Business Studies**, 15:166-188.

[10] Erramilli,K.M.(1991) 'The experience factor in foreign market entry behavior of service firm' **Journal of International Business Studies**, 22(Fall):479-501.

[11] Fassin,Y(1998) The Marketing of Venture Capital Funds,**Journal of Professional Services Marketing**,16(2):129-149.

[12] Folta,P.H.(1999) The Rise of Venture Capital in China,The China Business Review,November-December,6-15.

[13] Gatignon,H. & Andson,E(1988) ‘The multinational corporation’s degree of control over foreign subsidiaries:an empirical test of a transaction cost explanation’ **Journal of Law Economics and Organization**, 4(2): 305-336.

[14] Hennart,J.(1988) ‘A transaction cost Theory of equity joint ventures’, **Strategic Management Journal**,9:361-374.

[15] Hennart,J.(1989) ‘Can the new forms of investment subsitude for the old forms? A transaction cosst perspective, **Journal of International Business Studies**, 20 (2 :211-234.

[16] Holsti,O,R.(1969) Content Analysis for the Social Sciences and Humanities, Addison- Wesley Publishing Company.

[17] Luo,Y.(2001) Determinants of entry in an emerging economy:a multilevel approach,**The journal of Management Studies**,38(3):443-472.

[18] Madhok,A.(1997). ‘Cost,value and foreign market entry mode:the transaction and the firm’ **Strategic Management Journal**, 18:39-61.

[19] Parker,E. & Parker,P.T.(1998) Venture Capital Investment:Emerging Force in the Southeast,**Economic Review**,4:36-47.

[20] Robert,F.(1998) Learning from venture capitalists, **Electronic Business**, 24(2):11.

[21] Strauss & Corbin (1990): “Basic of Qualitative Research-Grounded Theory Procedures and techniques, Sale Publications, Newbury Park, London:New Delhi.

[22] Sun,H.(1999).”Entry modes of multinational corporations into China’s market:a socioeconomic analysis,”

International Journal of Social Economics, Bradford 26(5):642-661.

[23] Tang, Ming-Je. & Yu, Chwo-Ming, Joseph (1990): “Foreign Market Entry: Production Related Strategies”, **Management Science**, Vol. 3, pp: 476-489..

[24] Wright, RM. and Snell, S.A. 1998. "Toward a Unifying Framework for Exploring Fit and Flexibility in Strategic Human Resource Management." **Academy of Management Review**, 22(4): 756-772.

The Financial Management of Small and Medium-Sized Enterprises

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Abstract

Small and medium-sized enterprises (further only SMEs) currently form the widest spread entrepreneurial sector in developed economies. Such enterprises rapidly adapt to the market, are able to adjust and accommodate themselves to modern trends in supply, and to satisfy the demands of even the most demanding of customers. At the same time, they share in the creation of labour opportunities and thereby have a very positive influence on developments in unemployment.

Within the context of their Financial Management, the problems necessary to be solved are due to their low economic strength in comparison with large-scale enterprises; their more complicated access to capital; their worsened access to expert or specialised education; their reduced access to information and advisory services; their lower competitive ability in terms of public tenders; and the influence of poor discipline in their abilities to repay - often bringing with it a secondary wave of (in)solvency problems, and high administrative burdens.

Defining Small and Medium-sized Enterprises

In the Czech Republic, a generally valid definition of Small and Medium-sized Enterprises does not exist. In general, what is used is the definition set out by the European Commission, and recommended to member-states of the E.U., the European Investment Banks, and the European Investment Fund. It is equally recommended as a framework for programmes, policies, and legislation valid within the E.U. This definition, in the form of a recommendation, contains the following criteria:

- Their number of employees.
- Their turnover.
- Their Accounting Balance.
- Their degree of independence.

Table 1: CRITERIA FOR THE DIFFERENTIATION OF SMALL AND MEDIUM-SIZED ENTERPRISES

Type of Enterprise	Number of Employees	Turnover	Accounting Balance
Micro-Enterprises	Less than 10	-	-
Small Enterprises	10-49	To 7 m. EURO	-
Medium Enterprises	50-250	To 40 m. EURO	To 27 m. EURO

Source: www.komora.cz/eu

Apart from the above, all enterprises must conform to the criterion of independence, i.e. that part-ownership by a large enterprise of such an enterprise may not exceed 25%.

The Composition of SMEs in the Czech Economy

SMEs represent an important segment of the Czech national economy. According to the statistical data of the Ministry of Industry and Commerce, SMEs share of GDP amounted to 40.4% in 2000. Further, SMEs represented a full 99.8% of all economically active entrepreneurial subjects. They contributed to an overall 59.5% of total employment opportunities; 52.8% of performance; 52.6% of “value-added” creation; and 54.7% of wages costs (excluding other personal costs). SMEs share of overall investment activity however, represented only 40.6%.

SMEs are present in all branches and spheres of the national economy. From the perspective of their share in employment opportunities, their most significant standings are an 88.9% share in the Catering Industry; an 84.6% share in Agriculture; an 82.9% in Services; a 79.9% share in Commerce; and a 78.5% share in Construction. The employment creation share of SMEs is lower-than-average in Transport (24.1%), in the Manufacturing Industries (46.6%) and Finance (18.7%).

The share of SMEs in the creation of “value-added” is lower-than-average in Finance (11.9%); Transport (30.0%); and Manufacturing Industries (36.2%). SMEs are directly involved in the commercial exchange of goods with other countries, their share of exports exceeded 36% of overall export turnover; and 49.3% of overall imports.

From a perspective of their share of “value creation” in concrete spheres, their most significant contribution is in Services (with an 85.1% share); Commerce (with an 86.5% share); Catering (with a 76.3% share); Agriculture (with an 82.6% share); and Construction (with a 73.6% share).

SMEs Most Frequent Problems

The core strength of SMEs (especially small and small-to-medium sized enterprises), is their greater flexibility and, to a significant extent - their innovative abilities and creativity. The core weakness traditionally attributed to such enterprises is, above all, their lessened financial strength and the associated worsened access to loan resources essential to their development. This also holds true from the perspective of the practical implementation of their concrete innovation objectives. Apart from the relatively unfavourable general entrepreneurial climate (e.g. a greater tax burden; a legislation that is intricate and lacks clarity; problems with the exercise of one’s legal rights, etc.), the intensity of whose drawbacks are felt to a greater extent however by SMEs, and cause a whole range of specific influences and factors. Among which are a restricted access to loan resources, a more complicated access to distribution networks, and even handicapped negotiations with officialdom.

From the questionnaire-based research conducted by Tomas Bata University in Zlín, the following basic characteristics of SMEs became clear:

- They often lack a clearly expressed long-term aim for their business activities.
- They use profits and write-offs (depreciation) above all to finance their activities.
- On average, a third of their after-tax profits are ploughed back into investment projects for the renewal or expansion of their assets.
- A significant component of their financing arrangements is from their own resources.
- Risk Capital is minimally used by such enterprises. Many don’t even know this form of financing.
- SMEs use leasing arrangements above all as a source of external capital.
- Interest rates for SMEs are higher than average rates for the Czech Republic, (their activities are riskier).
- SMEs often encounter disinterest from banks to lend to them, or else they are unable to meet mortgage conditions. In some cases, banks refuse such enterprises essentially, without even bothering to analyse the risk-price relationship of a loan.
- The average level of indebtedness in a sector does not influence decisions as to the ratio of own to external equity capital.
- They are very often dependent upon financing through suppliers offering credits.
- Suppliers to SMEs do not provide discounts on the level of irrecoverable claims nor on claims beyond their payment date.
- A minimal number of these enterprises make use of the services of factoring or forfeiting companies.
- Cash funds are prioritised by these enterprises for the payment of debts, or else held on Current or eventually, Deposit Accounts.
- SMEs generally track cash incomes and outgoings, but not all plan their cash flows.
- SMEs involved in exports or imports do not manage their currency exchange risks and thereby produce corresponding currency losses.
- Only one in two SMEs establishes its financial plan for more than 1 year.

- Programmes designed to support entrepreneurial activities are essentially unexploited by micro-enterprises (to 10 employees); greater use of such resources is noticeable in Medium-sized Enterprises (50-250 employees).
- Small enterprises frequently have little or no information about support mechanisms.
- Managements often lack economic education, and do not know how to evaluate and exploit economic information (e.g. from Accounting or Financial Analyses).
- Many SMEs use accounting simply as a basis for determining tax liabilities, rarely though as a management tool.
- Accounting activities today are mainly in the hands of specialised employees and elaborated internally, (in micro-enterprises, preponderantly by the owners).
- Despite internal accounting being conducted by cca 90 % of enterprises surveyed, a third only conduct operational evidence with only half performing cost accounting.
- Only one in two enterprises allocate costs as fixed or variable.
- A preponderance of SMEs still set prices on the principle of Cost Price, with only two-thirds taking their competitors prices into consideration, and price-determination on the basis of demand for the product is used by only one in three SMEs.

The Financing of SMEs

SMEs, in comparison to larger economic subjects, are forced to rely upon their own resources for financing their further development – especially investments. Czech SMEs suffer above all from a relative inaccessibility to capital in the form of long-term bank loans, or eventually, from state-administered support programmes.

In the Czech economy, enterprises are financed from external resources predominantly by means of bank loans. Banks, which provide these enterprises with the majority of their financial resources, are key institutions in the Czech Republic. The Privatisation Coupon programme and Czech bank policies have only served to strengthen the already tight dependence between banks and industrial restructuralisation.

The last few years have, however, seen a marked growth in the share of risk capital loans in the banks. Almost a third of all loans are Classified Loans. Behind these developments lie the overall economic problems of the country, the inability of enterprise to repay their loans as a consequence of their worsening financial situation. Enterprises are often unable to repay the principal itself, thus falls in the interest rates have no significant impact on the loan process. The aggregate capital compensation of the monetary institutions is also worsening, because risky loans are growing faster than the overall capital of these banks. Today, banks very carefully select the clients to whom they are prepared to lend money. They complain however, that even with a sufficiency of available monetary resources that they could lend, there is an insufficiency of worthy quality entrepreneurial projects and enterprises capable of repaying the loans. The financial problems of their clients often flow from the low levels of competitiveness of their products, ineffective technologies, low labour productivity, but also from an inability to exploit assets, or manage outstanding credits and obligations. Many potential debtors have unclear ownership structures, an unfinished restructuralisation process, and un-ensured product take-up and so on.

The provision of banking commercial arrangements is always conditional on compliance with their purpose and specificity. Clients contractually bind themselves that the provided or guaranteed resources can be used only for the agreed-upon purpose. In order to circumvent unauthorised manipulations with funds, banks only allow loans in cash to clients under exceptional and justifiable cases. The overall effectiveness of each commercial banking activity is judged in the course of the provision of each individual type of loan in the form of the minimal effectiveness of a concrete case, given by the difference between established interest rates and the costs of securing loan resources. In the course of active crown-based trades, banks use an interest rate system derived from the base rate set by the Central Bank and deviations there from, agreed upon by the bank and its client. It is a common reality that Czech banks give preference to large enterprises over smaller entrepreneurs, even if Czech Bankers defend themselves against this charge. Loans to small and medium entrepreneurs are difficult to obtain, and for an entrepreneur beginning without the appropriate capital backup or a strong guarantor, the gaining of a loan is almost insurmountable.

The limited access of loans to SMEs has two main reasons. The first is the falling profitability in the majority of sectors of small and medium entrepreneurial activities, which is in part consequent from the decreasing purchasing power of the general population, and in part competitive pressures, especially from abroad. The second problem is the risks of such loans – small and medium entrepreneurs are riskier clients in general, because their business activities are more subject to fluctuations in the marketplace and economy in general and in addition, they frequently lack sufficient guarantees in the form of quality mortgageable assets. It is possible to improve the availability of loans for SMEs from programmes provided by the Czech and Moravian Guarantee and Development Banks, and on a case-by-case basis, some projects may be suitable for resources from programmes offered by international institutions. Nevertheless, clearly the easiest accessible source of financing for such enterprises will remain leasing arrangements. The majority of leasing contracts have less restrictive preventative measures than fixed-term loan contracts.

Last year saw an expansion in leasing agreements, helped by problems on the capital market and in the banking sector. Leasing is a markedly widely available form of financing, despite in the end being somewhat more costly. Apart from the traditional leasing commodities such as automobiles and computers, volume has also been noted in the leasing of technologies, machinery and equipment, property, and other commodities. It can be said that its ease of access is given by the advantages of leasing agreements (especially the question of guarantees) and the high levels of competitiveness between companies offering such leasing arrangements. Perhaps the most interesting such case is that of the leasing of property phenomenon. This practical use can be traced back to 1997 for a variety of reasons. Leasing companies rarely offered them beforehand due to the impossibility of exceptionally shortened depreciation periods, their discrimination against in the taxation system, a lack of experience, and the enormous capital requirements that had to be gained from the banks.

Young, flexible enterprises in particular, but also all enterprises in general with great development potentials, should interest themselves in risk capital. In our Republic, this is beginning to make a presence for itself through the agencies of domestic risk capital companies and foreign ones with a significant share of foreign investment activities.

Our legislature does not provide for significant tax advantages for the foundation of an SME, let alone the tax and general provisions securing venture capital. Experts consider our inflexible bureaucracy, the insufficient qualifications-base in the realms of finance of the majority of managers, and a non-functioning capital market here to be significant barriers to the correct functioning of venture capital, as compared to Western European standards. On the other hand, it is strengthened by the strong growth potentials of the Czech economy, the openness to foreign investors and the sense of fairness shown to international economic support programmes, which often do support the setting-up of venture capital companies.

A fundamental presumption for the improvement to the range of financial services offered is the completion of the bank privatisation programme. Nevertheless, it still isn't clear to what extent SMEs can count on the financing of their investments. It is (still) necessary to calculate with the fact that, more than ever previously, the profitability and effectiveness of banks own entrepreneurial activities will form the basic criteria for loan provisions, and one may only speculate today to what extent the expectations of SMEs shall be realised. The role of the state together with its supporting institutions and the entrepreneurial lobby will need to closely linkup with the borders defined by the commercial policies of the banks and complement them by precisely adjusted (financial) instruments, and thereby expand the current range of available financing arrangements.

From analyses conducted among 105 SMEs within the region around Tomas Bata University in Zlín regarding the financing of SMEs, it flows that in general, enterprises prefer financing themselves from their own internal rather than external resources (70 %). Of their internal resources, they use profits and depreciation above all. On average, these enterprises invest a third of their after-tax profits into renewals and expansions to their assets. It is understood that a significant component of their financing arrangements are the investment of their own financial resources - (currently, every tenth enterprise also functions using monies loaned from friends and family of the entrepreneur).

Table 2: SOURCES OF FINANCING OF THE SME SAMPLE

Type of Resource	**Number of Employees in the Enterprise**			
	1-10	**11 – 50**	**51 – 250**	**Total**
Own Equity	7 [70%]	29 [73%]	32 [54%]	68 [62%]
Borrowings from Friends and Family	1 [10%]	8 [20%]	2 [3%]	11 [10%]
Profits + Depreciation	8 [80%]	28 [70%]	49 [83%]	85 [78%]
Leasing	4 [40%]	18 [45%]	38 [66%]	60 [55%]
Entry of Partner	0 [0%]	2 [5%]	2 [3%]	4 [4%]
Bank Loan	0 [0%]	24 [60%]	42 [71%]	66 [61%]
Silent Partner	0 [0%]	1 [2.5%]	1 [2%]	2 [2%]
Risk Capital	0 [0%]	1 [2.5%]	0 [0%]	1 [1%]
Donation, SME Support	0 [0%]	3 [8%]	11 [19%]	14 [13%]
Other	0 [0%]	1 [2.5%]	2 [3%]	3 [3%]

Source: Own Research Materials Elaboration

Only one respondent uses risk capital, three others are preparing to make use of this form of financing in the future. One third will not use this form of financing because they lack a suitable project; for another third this form is unacceptable to the owners; the remainder either lack sufficient information or know nothing about this form of financing

Two thirds of these enterprises utilise bank loans for financing. There is however, a great difference in their use in correlation to the number of employees in the enterprise. Table 3 shows the share of loan use in the various groups and their averaged interest rates over the period 1999-2000.

Not one of the micro-enterprises uses bank loans; in other enterprises, the most commonly used form is medium-term loans, less frequently short-term loans. Long-term loans are rarely used at all. Enterprises replied that in cases where an ease of access to loans existed, they would apply (on average) for the following structure of loan provision: 30 % short-term; 42 % medium-term; and 28 % long-term. The last row of the Table shows, for comparison purposes, interest rates in the Czech Republic for newly provided loans.

Should we compare the conditions pertaining to loan provision to enterprises in the Czech Republic overall, and their provision to SMEs in particular, the tendency of an increased interest rate burden to be placed on SMEs is markedly evident. This fact corresponds to the greater degree of risk attached to SME business activities. Concurrently, it is also true to say that, banks sometimes refuse these enterprises a loan, without even having weighed up the Risk-Price relationship of the loan.

Table 3: SHARE OF INDIVIDUAL TYPES OF LOAN OF THE OVERALL LOAN STRUCTURE AND AVERAGED INTEREST RATES

Number of Employees	**Short-term Loans**		**Medium-term Loans**		**Long-term Loans**	
	1999	**2000**	**1999**	**2000**	**1999**	**2000**
1-10	-	-	-	-	-	-
11-50	36.8 % *(12.9 % p.a.)*	33.4 % (10.3 % p.a.)	54.5 % (12.7 % p.a.)	52.5 % (14.1 % p.a.)	8.7 % (19.5 % p.a.)	12.3 % *(19 % p.a.)*
51-250	36.5 % (10.7 % p.a.)	33.5 % *(9.2 % p.a.)*	44.5 % *(11.5 % p.a.)*	46.5 % *(9.8 % p.a.)*	19.0 % *(10.7% p.a.)*	20.0 % (11.0 % p.a.)
CR: Average New Loan Interest Rates	8.377 % p.a.	6.619 % p.a.	9.153 % p.a.	8.119 % p.a.	10.191 % p.a.	7.713 % p.a.

Source: Own Research Materials Elaboration; Czech Central Bank data.

From the research study conducted by Tomas Bata University in Zlín, we collated the comments of representatives of the enterprises involved as to the availability of bank loans. Reasons for SMEs problems in gaining bank loans are shown in Table 4.

Table 4: RESPONDENT’S OPINION AS TO BANK LOAN AVAILABILITY

Respondent’s Opinion	**Response Frequency %**
Bank’s disinterest in lending to SME	41.6
High interest rates	26.6
(We) don’t know how to comply with the bank’s requirements for an Entrepreneurial Aims and Objectives Statement	2.6
(We) don’t know how to comply with the bank’s requirements for guarantees	11.7
We can see no problems with gaining (bank) loans	17.5
Total	100.0

Source: Own Research Materials Elaboration

From another analysis, conducted by the Chamber of Commerce of the Czech Republic (CCCR), oriented to the accessibility of bank loans, it became clear that the low level of loan accessibility is one of the conditions restricting the development of entrepreneurial activities. The high percentage of respondents, concretely 28.2%, who evaluated the accessibility of loans – especially to the SME sector as negligible, flows from the reality that banks have no interest whatsoever in the provision of loans financing this category of entrepreneurial subject. A further 26.1% of survey participants evaluated the chances of SMEs as minimal reflects the unwillingness of banks to provide them with loans. A significantly large percentage of participants, concretely 39.6%, share the opinion that the conditions governing the gaining of a loan are so demanding because the banks set high demands on the “Bonito” or creditworthiness and solvency of applicants and the associated guarantees. Only 6.1% of respondents evaluated the situation in this sector as without problems and stood by their opinion that enterprises with a good entrepreneurial plan and the appropriate references can regularly gain bank loans. The highly sceptical evaluation by small entrepreneurs reflects to a significant extent their economic situation and dependence on external sources of financing as a pre-supposition for the further development of their entrepreneurial activities.

The opinions of representatives of enterprises of various size categories, which demonstrate significant differences, are collated in the following Table.

Table 5: LOAN ACCESSIBILITY EVALUATION CORRELATED TO
SIZE CATEGORY OF ENTREPRENEURIAL ENTITY

Enterprise Category	**Number**	*Loan Accessibility*							
		1 - Negligible		**2 - Minimal**		**3 - Demanding**		**4 – Without Problem**	
		N°.	**%**	**N°.**	**%**	**N°.**	**%**	**N°.**	**%**
LARGE	114	22	19.3	29	25.4	58	50.9	5	4.4
MEDIUM	231	42	18.2	60	26.0	106	45.9	23	9.9
SMALL	167	48	28.7	51	30.6	59	35.3	9	5.4
MICRO	112	56	50.0	26	23.2	27	24.1	3	2.7
Physical Entities	32	17	53.1	5	15.6	10	31.3	0	0
TOTAL	656	185	28.2	171	26.1	260	39.6	40	6.1

Source: Aggregated Report of the CCCR on the Outcomes of the Research Study: “Do We Have a Good Quality Entrepreneurial Environment in the CR?”

Notes:

1 – Negligible - Banks are not interested in loan provision to SMEs.
2 – Minimal - Banks are not overly willing to provide loans to SMEs.
3 – Demanding - Banks set high demands on the “Bonito” or creditworthiness and solvency of applicants and the appropriate guarantees.
4 – Without Problems - He who has a good business plan and references gets his loan.

Programmes Determined for the Support of SMEs

Small entrepreneurial subjects expect in the coming years prior to entry, and immediately upon entry to the European Union that their opportunities to draw on the financial resources requisite to their development from supporting funds will significantly expand; and that this will hold true within the framework of national programmes for the support of SMEs, as well as for support and perspective structural funds of the European Union.

Developments in the areas of the allocation and drawing down of state financial resources for the support of SMEs over the past few years do not support such hopes. The opportunities for real drawing on such resources have markedly oscillated from year to year, and over the recent past, it has been possible to note a tendency for their reduction. Financial resources from the state budget used for the support of SMEs within the framework of programmes implemented by the Czech and Moravian Guarantee and Development Bank, Inc. (PLC), over the period: 1991-1995, rose progressively from 809 million CZK in 1991 to 1,638 million CZK in 1995. In the following years, a reduction in this form of support to SMEs took place, when their levels approached 1,350 million CZK in 1996, 1,202 million CZK in 1997, and 1,060 million CZK in 1998. After growing to 1,536 million CZK in 1999 and 2,053 million CZK in 2000, a decrease in their levels in 2001 and 2002 was seen once again. For 2002, it is anticipated that the said programme in support of SMEs would draw from state resources to a tune of cca. 1.3 billion CZK. As regards the programme for the support implemented within the framework of the Sector-oriented Operational Programme: "Industry", oriented predominantly on medium-sized enterprises with 50-249 employees, similar developments have taken place, where it is anticipated that resources for calendar 2002 will reach 135 million CZK, whereas the year before, 240 million CZK were made available.

Based on the PHARE programme’s initiatives, June 1994 saw the founding of the Upper Silesian and Northern Moravian Regional Entrepreneurial Fund (REF). In 1995, the Risk Capital Fund (RCF) began operations. The RCF is oriented on projects in the areas of manufacturing and services. Apart from the afore-mentioned funds operating in the CR, other – foreign, venture capital companies also operate. The sum of 2 billion CZK was set aside for the funding of new entrepreneurial projects involving SMEs for 2000. A new element is the fact that it is now possible by means of these programmes to finance even several activities that had been unsupported to date – such as, for instance, the provision of operational loans or the association of SMEs in cooperatives. Apart from greater chances of gaining support, these programmes bring with them a darker side this year, and that is a tightening of the conditions under which they may be provided. Indubitably, the most significant can be considered the unambiguous definition of growth in employment opportunities in enterprises in receipt of such supporting funds. Emphasis is placed on the “solidity” of the applicant, i.e. whether they fulfil their tax, social and other obligations. The implementation of these regional programmes for the support of entrepreneurial activities and the transfer of support to such entrepreneurs continues to be entrusted to the Czech and Moravian Guarantee and Development Bank, a.s.

Table 6: LEVEL OF FINANCIAL RESOURCES SET ASIDE FOR THE SUPPORT OF SMES

Year	1995	1996	1997	1998	1999	2000
Programme Resources (in billions CZK)	1638	1295	1177	1081	1554	2000

Source: Ministry of Industry and Trade, CR

Support for SMEs is provided in the form of advantageously priced loan guarantees, leasing, capital entries (into an enterprise), regional guarantees of loans or, as the case may be, intensive guarantees for entrepreneurs directly damaged by the floods of 1997 and 1998 - the “GUARANTEE”, “CAPITAL” and “RECONSTRUCTION” programmes. Further, a range of middle and long-term loans with special advantages are provided - the “CREDIT”, “PREFERENCE”, “OPERATIONS” and “BORDERS” programmes; as well as contributions towards the repayment of interest payments - the “MARKET”, “REGION”, VILLAGE” and “REGENERATION” programmes; and by state donations. Donations may be provided towards the increasing of employment opportunities – the “SPECIAL” programme; or for the gaining of ISO 9000, 14000, or EMAS norms certification – the “MARKET” programme; or in the form of donations towards the costs associated with capital entries – the “CAPITAL” programme; and other donations – e.g. the “MOBILE SALESPOINTS” and “COOPERATION” programmes. Resources for these support initiatives are provided from the state budget. Support is provided based on contractual agreements after compliance with some basic conditions set out for these programmes in support of enterprise initiatives.

The entrepreneurial project must have a Industrial (Manufacturing), Construction or Trade/Craft production, Services (including Health Clinics and Pharmacies), Commercial or Mass Transport (with the exception of taxis) nature of regional significance. The Czech and Moravian Guarantee and Development Bank Inc., evaluate the validity of the support of the entrepreneurial activity submitted on the appropriate forms. The Ministry of Industry and Trade and the Ministry for Regional Development then provide the requisite financial resources.

Within the framework of a portfolio of measures aimed at the support of SME activities, the Ministry of Industry and Trade announced the launching of the “Small Loans” programme valid from 2nd August 1999, which shall be financed using resources provided by the PHARE Fund. These “Small Loans” should become an alternative source of financing for entrepreneurial development projects of manufacturing enterprises, in spite of the fact that in the course of the loan application period these enterprises may not employ more than 50 employees (classification of a “Small Enterprise” as per the EU). Further, the applicant must fulfil the criterion for independence, i.e. that one company or group of companies employing 250 and more employees may not own 25 % or more of the capital of such enterprises or their voting rights. Purpose-loans may be provided for the purchase, or respectively the modernisation of technologies, machinery, manufacturing or ancillary equipment (a minimum of 70 % of the loan value must be used for such purposes), and the purchase of “know-how” (to a maximum of 30 % of the loan’s value). Enterprises may gain loans ranging from 300,000 up to 1 million CZK.

Even though a range of institutions set up in support of SME activities exist, firms often don’t know about them nor do they know how to exploit their services. What is shocking is the fact that, according to research (conducted by the Faculty of Management and Economics in Zlín in February 1999 among some 287 small and medium-sized enterprises in the South-Eastern Moravian Region), 33 % of these enterprises did not know of the existence of the ČMZRB (The Czech and Moravian Guarantee and Development Bank, Inc.), nor had they ever heard of it. A further 24 % had heard of this institution, but knew nothing of the services it offered. From the above, it is possible to extrapolate that more than half of those questioned do not know of the opportunities offered to them by the state. A similar situation existed regarding other such institutions such as “Czechtrade”, the Chambers of Commerce of the Czech Republic and the National Educational Fund. However, their current levels of “being informed” are improving steadily.

The Chambers of Commerce of the Czech Republic conducted an analysis to evaluate the supporting programmes designed for SMEs, where more than half of the respondents, 55.4% to be exact, evaluated the state’s support programme of loans and loan guarantees as “less-than-average”. They judge that in this area, “there exists a lack of information and even resources”, and that “only small chances of gaining support resources exist”. A full 21.6% of respondents consider these programmes “bad”, “distinguishing themselves by the lack of clarity of the system itself and the very small volume of resources actually available”. The same percentage i.e. 21.6% evaluated these programmes as “sufficient”, with the proviso that “they be well organised and that the chance of gaining support is average in view of the not-always-sufficient volume of resources set aside for these programmes”. Only a negligible number of respondents – relatively expressed 1.4% - evaluated these support programmes of loans and loan guarantees as “very good” from the point of view the “very good level of information about their existence, their availability and the transparency of the support provided”.

Table 7: EVALUATION OF SUPPORT PROGRAMMES AND GUARANTEES FOR SMES

Enterprise Category	Number	*Quality of Support Programmes and Guarantees*							
		1 - Bad		**2 – Less than Average**		**3 - Demanding**		**4 – Without Problems**	
		No.	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**
LARGE	102	102	21	64	20.6	17	62.7	0	16.7
MEDIUM	218	218	40	114	18.4	60	52.3	4	27.5
SMALL	163	163	28	87	17.2	45	53.4	3	27.6
MICRO	108	108	37	61	34.3	8	56.5	2 7.4	
PHYSICAL ENTITIES	30	30	8	18	26.7	4	60.0	0	13.3
TOTAL	621	621	134	344	21.6	134	55.4	9	21.6

Source: Aggregated Report of the CCCR on the Outcomes of the Research Study: "Do We Have a Good Quality Entrepreneurial Environment in the CR?"

Notes:

1 – Bad - System not transparent; minimum of resources actually available – and then " for friends".

2 – Less than Average - Insufficient information and resources; small chance of gaining such support.

3 – Sufficient - God organisation; not always enough resources; average chance of gaining such support.

4 – Very Good - Very good information, availability, transparency and volume of resources provided regarding programme.

From the evaluation of this survey, it follows that in the evaluation of the effectiveness of such support programmes and guarantees for SMEs, there does not exist a significant difference between the relative size categories of the entrepreneurial entities. The non-availability of external sources of financing, that is to say above all of bank loans is perceived in the entrepreneurial field as a grave obstacle to the development of their entrepreneurial activities. The State's support programmes in this area are mainly implemented by the Czech and Moravian Guarantee and Development Bank Inc., and are considered to be inadequate, above all from the perspective of the practical availability of the appropriate form of support.

It is quite clear that the research studies, conducted by two independent organisations came to similar conclusions as regards the same set of questions. SMEs represent an enormous economic potential, but in the way of their full exploitation, there exist a range of obstacles, whether in the form of the economic police state, in the approach of banks to SMEs, or in the approach of such enterprises themselves to their management and financing. Problems regarding these areas are so highly specific that it is impossible to establish a universal manual as to how to approach these issues.

It is only possible to recommend to the managements of such SMEs, that they should track the range of offers involved in the support programmes for entrepreneurial activities - and concurrently, that they should extend their best efforts to improve the quality of the financial management of their enterprises.

On the other hand, it would seem to be justifiable to require of government institutions e.g. the Chambers of Commerce, that they endeavour to expand the range of support instruments and general level of information regarding the means by which SMEs may gain financial resources and loan guarantees for SME from these support programmes.

The Global Automotive Industry: It's Never Over Until it's Over

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Abstract

The global automotive industry is in a continuous state of flux with respect to technology and ownership. The American producers, once the envy of the rest of the industry are struggling while two of the Japanese firms and several European manufacturers are flourishing. At home, in North America, they are losing market share, especially to Toyota and Honda. Recently Ford Motor lost as much as Honda earned in a record setting quarter.

How did some of the Japanese firms become so successful? By and large, it followed some American suggested management practices that the Big Three refused initially to adopt. They did not contemplate their adoption until the Japanese were utilizing these techniques in North America. It was only when the Big Three became convinced that Japanese success was not culturally imbedded in Japan, did they wake up to the cost cutting and quality enhancing methods of lean production. Even then, they were slow to implement the methods. General Motors had a perfect training ground in the joint venture that it had with Toyota in California. But for the longest time, its arrogance combined with its enormous size, caused it to ignore the lessons that could have been learned. On the whole, productivity and quality have dramatically improved, but still elude the Big Three relative to that of Honda and Toyota. This has led to the latter two companies having North American best sellers in various vehicle classes.

The web of ownership and strategic alliances in the industry is dense and global. The Big Three of North America have large stakes in some of the smaller Japanese firms (Mazda, Izusu and Suzuki) and GM now controls Korea's Daewoo. GM has bought Saab while Ford now has Jaguar and Volvo in its stable. Renault calls the shots at Nissan. All three German manufacturers produce in North America, with Daimler-Benz, in fact, taking over one of the Big Three, Chrysler. Aside from equity ownership, the companies often share technology and buy parts from each other. Even arch rivals, Toyota and Nissan share technology. Moreover, in recent years some of the assemblers have sold off their own parts divisions to increase the efficiency of these former subsidiaries and to make it easier for them to sell to competitors.

This paper gives some historical perspective to the global automotive industry, highlighting the key developments in the past with an eye to how the industry may look in another decade or so.

Although the globalization of the automotive industry may not be a unique phenomenon, the intensity of inter-corporate linkages present within the automotive sector appears to stand alone in terms of sheer scope and complexity. As the global automotive industry matures and competition intensifies within traditional markets, it has become necessary for established companies to branch out to pursue emerging markets, and develop new niche segments. This has in turn spurred on changing relationship structures, with an apparent realization by many within the industry that alliances of differing sorts may be necessary to compete effectively, allowing fierce competition to rationally coexist alongside cooperation that does not violate anti-trust legislation. This "co-opetition" has become the rule rather than the exception, as the web of interdependence amongst not only manufacturers, but also suppliers, has grown denser over the past decade. Before examining this web and its implications, a brief historical overview will show what helped push forward these global changes.

The Japanese Transplant Phenomenon and the Concept of "Lean" Thinking & Manufacturing

The dominant position in the North American market of the "Big Three," (GM, Ford and Chrysler), was permanently altered in the 1980s. The oil crises of 1972/73 and 79/80 helped pave the way for the Japanese to penetrate the American market, making their smaller, more fuel-efficient cars an attractive alternative to the gas-guzzling offerings of the Big 3. As the US government reacted with protectionist measures in the 1980s, namely a voluntary export restraint negotiated with Japan in 1981, the Japanese turned to importing fewer cars, but at higher price and quality levels. In order to increase sales above quota-restricted levels, the Japanese then setup US manufacturing bases, termed transplants, beginning with Honda's Ohio plant in 1982 [Smitka, Winter 1999]. These transplants solidified the Japanese presence in the North American market, and acted as a catalyst to a more global approach by the Big 3, which saw them view Asia as a potential market, both for export and production.

In the 1950s, Toyota absorbed into its corporate culture the teachings of U.S. government advisor W. Edwards Deming, who stressed continuous improvement as the means by which productivity and quality could best be enhanced. The Japanese, beginning with Toyota, took this concept and made it their own, terming it *kaizen*. The result was that the Japanese achieved enormous gains in manufacturing efficiency, developing flexible methods of assembly that allowed them to manufacture various models on a single line. Combined with a holistic approach that sees all stages of design, engineering, & component manufacturing as having important implications on final assembly, this concept is termed "lean manufacturing." The Japanese, due to their embrace of these principles, sustained continued growth in the US market long after fuel efficiency ceased to be the deciding factor. Rather, they stole away market share with superior product quality, and competitive prices, a trend that has continued to this day. The US manufacturers, experiencing declining domestic market share, have had to make adjustments, even if these adjustments have been occurring at a snail's pace. Some lessons have been learned from joint ventures engaged in with Japanese manufacturers, such as the Toyota-GM NUMMI California plant, but the impact is only recently being felt, reflecting the often lumbering gate of the American giants' response to needs, versus the nimble motions of the Japanese. Acknowledging the quality gap, General Motors Vice Chairman Robert Lutz suggested "In two years' time, we will match Toyota and Honda – not only in IQS (Initial Quality Study), we are going to match them in long-term reliability [Reuters, September 17, 2002].

Oh, What a Tangled Web It Is!

Whereas in the not-so-distant past, it may have been difficult for a casual observer to determine where an automobile had been manufactured, it is now nearly impossible for even those who follow the industry, to trace a finished product to its originating source. With so much sharing of components, cross badging, outsourcing of assembly, and joint designing occurring in modern automobile production, it may no longer be accurate to term some cars as being a specific "brand." Instead, it may be more accurate to describe many finished products as being a result of a concerted group effort, with final nameplate decisions resting more on strategic or tactical arrangements than being a true reflection of a car's *technical* origins. As an example of this complexity, General Motors, the most broadly diversified global player, has relationship agreements with 35 different manufacturers, including eight minority equity ownership arrangements and over 13 current joint venture projects [*Ward's Automotive International*, 2001, 12-14]. Relationship linkages can be forged in a variety of ways, with varying degrees of integration, with methods including direct equity ownership, joint ventures, and component sharing arrangements.

Table 1
Global Vehicle Sales and Market Share: 2001

	Sales	Mkt Share
GM*	8350000	15.08%
Ford	6906548	12.47%
Toyota	5927568	10.71%
Volkswagen	5107000	9.22%
DaimlerChrysler	4500000	8.13%
PSA/Peugeot-Citroen	3182800	5.75%
Honda	2670000	4.82%
Hyundai	2652412	4.79%
Nissan	2580328	4.66%
Renault	2409226	4.35%

Source: *Automotive News 2002 Market Data Book*
*estimated

Equity Ownership Holdings

Within the ownership structure, there are varying degrees of control and exposure, determined not only by percentage holdings, but also corporate legislation and the structure of equity ownership already in place prior to share acquisition. The types of companies either acquired or allied with through equity ownership, also vary considerably, with Ford moving upscale, GM allying with small-vehicle manufacturers, and Mercedes-Benz and Chrysler combining two distinct traditional market brands under one corporate structure.

Joint-Ventures and Component Sharing

Honda, eschewing the recent trend of using equity holdings to promote alliance incentives, has remained outside the dense web of equity relationships, instead limiting its involvement largely to technological agreements and supply arrangements. One such arrangement has Honda supplying 90,000 V-6 engines and automatic transmissions annually to GM, over a five-year period beginning in 2003, while Honda will use GM's Onstar communication system in its Acura vehicles. Joint ventures are also prevalent amongst those manufacturers that realize the substantial savings to be had in areas that require especially large investments and yield mutual benefits. Such is the case for projects dealing with auto emissions and pollution, as well as advanced propulsion technologies. USCAR is one such joint venture project that sees GM, Ford and DaimlerChrysler work together on environmentally based technology solutions [Ward's International Automotive International, 2001, 5]. Although not an equity-based joint venture, even archrivals, Toyota and Nissan, are embarking on long–term technological cooperation related to hybrid fuel systems that they are currently developing independently. Initially, Toyota will supply Nissan with components for its state-of-the-art hybrid system currently used in a number of its specialty vehicles. The agreement allows Toyota to amortize its development costs over a larger volume and it will allow Nissan to obtain a system that it would find difficult to replicate on its own [Nissan].

Changing Market Realities

Although the traditional markets of North America, Japan and Western Europe will remain important regions in terms of sheer volume of automobile sales for some time to come, growth prospects in these areas are limited. As emerging market economies expand and become viable vehicle consumer markets, automakers will pursue these markets to carve out market share and stake claim to future growth.

Slowing Pains, The Maturing of Traditional Markets

The advanced industrial countries are saturated with vehicles, with some characterizing these traditional markets as being "reduced to replacement purchases by an aging population" [Hiraoka, 143]. Using *Automotive News' 2002 Market Data Book's* North American vehicle sales projections data, we have calculated a geometric average growth rate of -0.38 percent/annum over an eight-year period from 2002 to 2006 for US auto sales, versus a growth rate of 3.57 percent/annum over the same period for Mexico, an emerging market [*Automotive News*, May 27, 2002, 25]. [1] As competition increases in traditional markets, there will be greater pressure on established players to retain their current market share, as sales demand growth will be insufficient to absorb added capacity. Ford estimates that there were 31 brands fielding 56 sport-utility nameplates in the United States in 2001, resulting in an accelerated erosion of market share for its mainstay products by new entrants into this high-margin segment [Connelly, August 5, 2002, 30]. Margins and market share may be defended through a combination of lean manufacturing techniques, encompassing an overall approach of "lean thinking" in conjunction with brand leveraging and new product offerings [*Automotive News A*ugust 5, 2002, 30]. Without such an approach, lean manufacturers that have greater flexibility will be able to adapt to new trends faster and more cost-effectively, leaving traditional manufacturers with reduced market share and higher costs.

The Emerging Markets: China, S. America, S.E. Asia, Eastern Europe

Emerging markets are characterized as having strong but volatile growth in vehicle sales. According to automotive

Table 2:

Design Parent/ Plant Location	Average Vehicle Production Per Plant
North America	149,664
Europe	119,110
Japan/Korea	267,008
S. America	61,198
Emerging Markets	61,364

Source: *Automotive Industries*, February 2002 representatives from Ford, DaimlerChrysler and GM, Asia is expected to account for 50 percent of the growth in global car sales over the next 10 years [*Automotive News*, June 10, 2002, 16]. However, economies of scale are not internally feasible for most growth markets at present, and high levels of protection make imports prohibitively expensive. Thus manufacturers are encouraged to setup shop within those countries that are accommodating toward FDI and have regional trade arrangements, utilizing them as export bases for the surrounding region. This allows not only market share to be captured in otherwise protected regions, but also allows regional plant output to approach or meet minimum efficient size, which would otherwise not be possible had production been relegated to serving only a small domestic market. Currently, there are substantial differences in manufacturing plant sizes between emerging market regions and traditional markets (see table 2) [*Automotive* Industries, February 2002, 14].

Mexico and Thailand provide examples of where domestic assembly output far exceeds domestic consumption, with the majority of production being exported. The ratio of total passenger vehicle production to vehicle sales in Mexico is over 2:1 [*Automotive News*, 2002 Market Data Book, 8-9]. Fostering brand recognition and loyalty is particularly important in securing a stake in these emerging markets. Toyota has indicated that it will expand facilities in both Mexico and Thailand. In Mexico, it will build a new pick-up truck plant [Kazim and Ibison]. To Thailand, in search of lower labor costs, a large market and protection against the volatility of the yen, it will shift its global pick-up truck production base from its Hino Motors plant in Japan. The intention is to produce about 200,000 vehicles a year that will account for about 40 percent of the company's total global pick-up truck capacity. Half the output will be exported.

Strong export ties between Japan and China have enabled Japanese manufacturers to leverage a positive brand image into increased market share, helping to propel Japanese automakers to a 25 percent share of China's passenger vehicle market. The push into China continues with recent major announcements by Toyota and Nissan. As previously mentioned, Toyota is teaming up with China's largest indigenous automaker, First Automotive Works. The joint venture is expected to produce up to 400,000 vehicles a year by 2010, equivalent to what VW, China's leading car manufacturer now sells. The venture is part of Toyota's goal to grab 15 percent of the world's automotive market by 2010. Assuming it meets its plan, it will either be the largest or second largest automaker; currently it ranks third after GM and Ford [*The Globe and Mail*, September 23, B8]. Nissan, 44 percent owned by Renault, in an even bigger deal, is going to purchase 50 percent of Dongfeng Motor Corporation, China's third largest indigenous producer. Together they are expected to produce 900,000 vehicles within a decade. Commercial vehicles will bear the Dongfeng brand and autos will be Nissan-branded cars [Treece, September 23, 2002, 3].

Of even greater importance to emerging market success, is the ability to produce a small car that fits within the budget of the consuming masses. The small car segment is overwhelmingly the largest segment in emerging markets, accounting for 50 percent of the Mexican market at present, with that share expected to rise and level off at 60 percent in the long term [Economist Intelligence Unit, 73-74]. For small car production to be profitable, manufacturing efficiencies are crucial, making experience in small chassis and engine development an important asset to anyone that wishes to compete. Following along these efficiency requirements, there is also a need for supplier efficiencies to be maintained. Manufacturers are increasingly calling upon suppliers to commit resources and share in the risks (and rewards) of setting up manufacturing bases overseas, with GM, for example, requiring suppliers to share the costs and risks of its Gravatai complex in Brazil [*Ward's Auto World*, September 2000].

Motivations Toward Global Relationship Enhancements: Economies of Scale/Scope

Procurement Cost Savings

New relationship structures that combine the purchasing powers of two or more manufacturers reduce costs simply through realizing greater economies of scale. GM and Fiat, by combining both companies' purchasing efforts in an arrangement facilitated by GM's 20 percent equity stake in Fiat, hope to reduce costs by $1.2 billion for the combined companies in 2005 alone [Guilford, September 10, 2001, 1]. Similarly, Renault and Nissan, allied after Renault's acquisition of a 44 percent stake in Nissan, have outlined in their long-term strategic planning a common procurements body, the Renault-Nissan Purchasing Organization (RNPO). Savings through this arrangement are projected to be $2.9 billion by 2005 [Cullen, August 5, 2002, 34]. Following logically from common purchasing, is common platform and component sharing. Mazda and Ford have leveraged their equity relationship through parts commonization as in the development of a new power plant for Mazda's 2003 Atenza, for which Mazda designed the engine so that key components such as blocks, cylinder heads and connecting rods could be used through the Ford Motor Co. family regardless of brand. Furthermore, "by teaming with Ford, Mazda expects to realize scale merits from global output of 2 million units, rather than 425,000 if production were limited to Western Japan" [*Automotive Industries*, March 2002, 26].

Global Platform Engineering

Volkswagen has been particularly efficient in terms of basing multiple models off similar or identical platforms, currently utilizing only four platforms for its entire product range, down from 16 only nine years ago. [*Ward's Auto World*, March 2001, 46]. The idea behind global platform engineering is to utilize common components and platforms across previously dis-integrated manufacturers. The result is even greater efficiencies in design and assembly, as a common chassis may be carried over and refined for an extended period of time; retaining major components when at all possible in order to reduce redesign costs. The ability to reap volume production for platforms that can then also be used by niche-oriented products reduces development time and increases quality through a reduction in redesigns across multiple models. Instead, production can be done at a further point along the general learning curve than otherwise possible for each revision of the base platform. This strategy is becoming increasingly important, as cars that are exported to various markets must adhere to certain market-specific environmental requirements. Reflecting on this, Mazda's senior managing director in charge of purchasing, Mutsumi Fujimara says, "Having a global production base is especially beneficial for holding down investment in future market-specific derivatives, and with each major market setting different standards for emissions, these investments will be quite substantial" [*Automotive industries*, March 2002, 26].

The production of small cars can be enhanced by utilizing a platform across a global scale, both as an emerging market "global car" as well as a traditional market niche product, allowing higher volume production to be realized. Toyota leads the charge with three major global platforms while Volkswagen, Mitsubishi, Ford, Fiat and PSA are currently developing global platforms for several Asian locations [*Automotive Industries*, January 2002, 7]. GM too is reducing the number of its global car platforms or "architectures", from thirteen to seven by 2005. Sharing platforms across an acquired brand that has special marquee qualities can result in synergies that would not be possible in the absence of the partnership or acquisition. Ford for example, through the usage of common components and platforms between its Ford range of products and that of Jaguar and Volvo, can reap benefits of scale production that Jaguar and Volvo could otherwise not achieve as "Ford products such as the Lincoln LS and its European Mondeo currently share platforms with Jaguar, and the next generation Ford Taurus reportedly is based on a Volvo platform" [*Ward's Auto World*, March 2001, 46]. This is done while still retaining the benefits of Jaguar's prestige image, and Volvo's reputation for quality and safety, and so long as the changes remain largely "under the skin" and invisible to the consumer, gains can be had in the form of increased margins. There are potential dangers, however, as in the case of Ford's merging Jaguar, Land Rover and Aston Martin into a single business unit within Premier Automotive Group, a move that is "causing concern over the potential for eroding their brand identity" [Rechtin, November 19, 2001, 1]. Unfortunately, the zeal for over-commonization can be just as detrimental to long-run profitability as not engaging in global platform engineering in the first place, particularly in such cases as with Jaguar, where dilution of brand image may occur, largely negating the gains of the leveraged name.

R&D Expense Sharing

As new environmental constraints come to pass, R&D is becoming increasingly essential to offering innovative products in the home market, while also reducing costs of materials processing and assembly in emerging ones. Alternative fuel cells are a prime example of an R&D investment that requires substantial funding, and in which a breakthrough may bring mutual benefits to all manufacturers. Examples of relationships that are driven by this need to distribute research and development costs across numerous manufacturers are many. Toyota is involved both with Ford and General Motors. It is talking with Ford about "creating a pool of common hybrid engine parts" to reduce hybrid power train technology costs while concurrently signing a five-year R&D agreement to develop advanced propulsion technologies with GM. Meanwhile, Ford has an additional "memorandum of agreement" with DaimlerChrysler and Ballard Power Systems to develop hydrogen-powered fuel cells [Zachary and Priddle, February 1, 2001, 9].

Using Equity Stakes and Alliances for Filling Gaps in Product Porfolios, Geographic Reach and Technological/Manufacturing Capabilities

Geographical Reach

The key to attaining diversification across markets on a global level is the ability to offer appropriate products to appropriate regions. This has been a difficult concept for the US manufacturers to accept, as they have historically served a large enough domestic market to remain indifferent to external tastes and needs, with their European divisions highly insulated and independent of North American operations. The acquisition or partnership with firms that serve foreign markets may be an effective way to cross this hurdle. DaimlerChrysler, despite their strength in Western markets, have little presence in developing markets without their equity partners, Mitsubishi Motors and Hyundai. Their equity stake in Mitsubishi provides DaimlerChrysler access to Asia/Pacific, the world's fastest-growing market, in addition to well-placed manufacturing facilities across the continent, while Hyundai is a dominant player in the fast growing Korean market [*Ward's Auto World*, February 1, 2002]. In its goal of enhancing sales in Asia, DaimlerChrysler is expected to take a greater stake in Mitsubishi Motors truck division [Miller and Zaun, September 18, 2002, B11]. GM "recognizes that its (own) brands don't attract much attention in many Eastern markets, fueling GM's strategy of forming alliances" [*Ward's Auto World*, January 1, 2002, 44]. GM and Toyota will soon be selling Toyota-badged vehicles in Japan originating from the NUMMI joint venture with GM in California. Recently, GM injected more cash into Isuzu in return for a controlling interest of the firm's truck division, where it is expanding production [Yamaguchi, August 19, 2002]. Similarly, through the Renault-Nissan alliance, Renault, traditionally strong in Europe but lacking any market share in North America, "can now use Nissan's established channels of distribution to reintroduce its vehicles, which it plans to do under the Nissan marque" [Hiroka, 26].

Distribution and marketing channels are oftentimes difficult to setup and make effective if there is little or no experience in the region. Alliances that fill geographic gaps when combined with platform sharing, allow for partners to share one another's resources and strengths, facilitating entry into each others markets, together capturing a greater share than either could alone. In Mexico, Nissan gains in its ability to utilize greater plant capacity and to obtain financing from Renault, while Renault benefits with an effective method of re-entering the Mexican market by utilizing Nissan production facilities in Aguascalientes and Cuernavaca [Economist Intelligence Unit, April 2000, 11]. In some cases, however, the volatility of certain markets may make green field FDI unappealing. Hence, the outsourcing of assembly to Chinese manufacturers might be an alternative approach to setting up transplant factories [*The Economist*, April 13, 2002]. Mazda has followed this tactic, outsourcing production of its Mazda 6 model to FCC to start production in March 2003, using knocked down assembly sets supplied by Mazda.[2] This approach is "expected to strengthen Mazda's brand presence further, which will support sales and market share growth," while providing it with an export base for the region. The move "doesn't involve any capital tie-up" in the form of foreign plant investments, but does "give Mazda access to the strong local sales network of First Auto Works Group, China's largest automaker"[*The Globe and Mail*, August 6, 2002, B9]. Such a setup, if executed properly, can result in brand strengthening and distributorship connections, without the same exposure to risk that setting up a full-fledged plant entails. "Stenciling" of a brand mark over an outsourced assembly, although already practiced across various markets, is likely to be a frequently recurring strategy in new and highly volatile automobile markets, where establishing brand presence is a first-order objective.

Manufacturing Presence and Foreign Export Bases

Many automakers see certain types of investments in emerging markets not so much as risks, but as necessary steps to remaining competitive. In fact, the movement of manufacturing centers from high-wage areas such as Japan, to lower-wage, less developed countries has been a recent trend. "In 2001, assembly plants in Japan produced 57 percent of all vehicles made in Asia. But in 2003, vehicle production in Asian countries outside Japan will surpass Japan for the first time" [*Automotive News*, June 10, 2002, 16]. Thailand is particularly well positioned to serve as a manufacturing base because "unlike many Asian nations that want to protect domestic manufacturers, there are few manufacturing restrictions such as high local-content mandates," providing foreign manufacturers with flexibility in sourcing of parts and supplies [Zachary, December 1999]. Thailand increased production by 28.2 percent over the one-year period of 2001-2002, moving from the #8 producer by unit output in the Asia-Pacific region to the #5 producer, fueled almost entirely by export demand as domestic sales increased 7.8 percent over the same period, and accounted for only 21.7 percent of the new production output.

What is gained in terms of cost savings by producing in such a developing market? According to one PWC analyst "there is about a $1,500 cost advantage per vehicle in small cars in the Asia-Pacific region when compared with the North American Market" [Harrison, June 2002, 18-19]. Small car expertise is necessary to truly take advantage of such potential savings, which demonstrates once more the advantages of having appropriate allies for successful emerging market penetration. Through its alliance with Isuzu, GM is strengthening its manufacturing presence in Asia with the production of 40,000 to 50,000 Isuzu one-ton pickups moving from Japan to Isuzu's Thai plant in mid-2003, intended for Asian export [*Ward's Auto World*, January 1, 2002, 44]. The notion of utilizing these markets as export bases is enhanced by the Association of Southeast Asian Nations (ASEAN) regional trade agreement, which allows products to move between member nations with reduced tariff rates. It is not only low-end cars that are being manufactured in S.E. Asia, however, as BMW plans to produce its 7-series product in Thailand in 2003 partly to take advantage of a planned reduction in tariffs by ASEAN on such products as automobiles, to 5 percent or lower by 2005 [*Japanese Transportation Scan*, August 5, 2002]. Due to all this activity, Thailand is known as "The Detroit of the East", with Toyota, Mitsubishi, Isuzu, Ford, Mazda, Honda, GM and BMW, all manufacturing vehicles there [Zachary, December, 1999]. Of course, Thailand is not the sole base for exports, as "Honda wants to increase auto component production in China and export it to global markets." [3] Toyota, typically cautious in terms of entering new markets, has finally made a move into China, teaming with FAW in a move that will likely see Toyota catapult ahead as it takes advantage of strong brand recognition [*The Globe and Mail*, August 30, 2002]. GM through their takeover of select assets of Daewoo intends "to use Daewoo as an export base in Asia." The acquisition of such a company that has small-car expertise, allows GM to have mini-car market share in excess of "70 percent of the domestic minicar market" with a product (the Matiz) that also "enjoys mounting sales in European and emerging-economy markets" [*Business Korea*, 29-30].

Product Portfolios

Having a broad product range is critical to maintaining market share, both within individual markets and globally. Across markets it is essential to have a product mix that reflects growth opportunities, therefore making a small car product an essential component of any emerging market strategy. Sometimes, however, it is difficult to develop a competitive product for segments in which a company has no previous experience. North American manufacturers have little experience in producing small cars relative to the Japanese and Europeans, where space and energy is scarcer than in North America. The DaimlerChrysler merger failed to "give Chrysler a global small car that could compete in emerging markets like Brazil, China and India," something that would necessarily have to be "smaller and cheaper than Chrysler's Neon." Mercedes had the SMART car, but it was "found to be too expensive, considering its attributes and untested nature." Robert Eaton, former CEO of Chrysler, reflecting upon the new DaimlerChrysler entity "acknowledged the need for a small global car needed for emerging markets," and understood that in order to "reduce development time and costs, the global car would have to be developed in partnership with another firm or through acquisition of outside expertise" [Hiroka, 110, 111, 137]. This outside expertise eventually came in the form of Mitsubishi, which DaimlerChrysler obtained a 34 percent share of in 2000, increasing it to 37.3 percent in 2002. Ford has Mazda to assist it in its small car development, but for the most part has continued to market higher-end vehicles, not conducive to strong sales in emerging economies. "The Ford brand in Mexico has been a near-luxury to luxury brand" according to the head of Ford's Mexico operations, Kathleen Ligocki [Connelly, January 22, 2001, 34]. Japanese manufacturers seem to be more attuned to emerging market needs. When GM introduced the GL8, it was found to be "too big and unwieldy for most of China's crowded, narrow roads," whereas Honda tailored their recent minivan offering to the Chinese market, making it smaller than their Japanese model and demonstrating once more the advantages of flexible manufacturing for emerging markets, as both their home-market product, and the Chinese variant, were produced on the same line [Webb, April 15, 2002, 8]. Having a broad product range can also help to maximize profits in traditional markets, using prestige brands to capture higher-end margins, while other models reap volume benefits, all the while costs are kept low and scale benefits are leveraged, as all ranges are based off common platforms. Some predictions have it that vehicle manufacturers will – with the exception of certain 2-seater roadsters and a number of low volume "specialists" – largely stop developing sports cars which are not based on another, high volume car platform.

Learning to Get Lean: How Partnerships Affect Manufacturing Expertise/Technological Capability

As American manufacturers attempt to "get lean," their greatest source of inspiration and information come from their partners. Acquisitions, joint ventures and alliances accelerate the absorption of manufacturing techniques such as lean manufacturing, the prime example being that of the NUMMI plant in California, a joint venture between GM and Toyota initiated in 1984 [Culpan, 123]. Although GM was slow to take advantage of the information gathered at this plant, they nevertheless have begun to implement many of techniques employed by Toyota. The concept of ``running common" - using the GM Global Manufacturing System and common processes, is a system "adopted from knowledge gained about Toyota's manufacturing system at the New United Motor Manufacturing Inc. plant in Fremont, California" [Guilford, June 24, 2002]. Similarly, the CAMI plant near Windsor Ontario was intended to "give Suzuki greater access to the North American marketplace while giving GM knowledge and experience of Japanese small-car manufacturing methods" [English, March 25, 2002]. GM has implemented lean concepts in plants such as its Oshawa car and truck plants, where worker feedback is encouraged and rewarded as part of GM's *Ideas for Excellence Program*, with savings of $6,000,000 for the 2001 year at the truck plant, reflecting an increase of employee suggestion participation by 57 percent. When touring the plant, significant adoptions of Japanese-style practices could be seen, including signs dedicated to "Continuous Improvement" (kaizen), as well as productivity charts on the walls near workstations. Manufacturing cost per truck also improved over the same 2000-2001 period by 8 percent, with the result being that the *2002 Harbour Report*, named the #1 Oshawa plant as the most efficient truck plant in North America with 16.79 HPV (hours per vehicle), while the neighboring #2 car plant received JD Power & Associates Gold Plant Quality Award for North America in 2002.[4]

JD Power & Associates Initial Quality Survey (2002)
(Defects per 100 cars)

MANUFACTURERS WITH MULTIPLE BRANDS

AUTOMAKER	**2002**	**2001**
1. Toyota	107	115
2. Honda	113	133
3. GM	130	146
4. DaimlerChrysler	141	145
5. Ford	143	162
6. Nissan -- tie	152	145
6. Volkswagen -- tie	152	159

Source: *Automotive News*, various issues

Looking Ahead: Future Implications of a Global Sector

Manufacturing and Outsourcing to Move into Emerging Market Regions

One trend that is destined to continue is the movement of manufacturing bases out of traditional economies and into less developed countries. Typically, these areas consist of labor forces that are open to flexible manufacturing initiatives due to a lack of any historical union base. Through the transfer of manufacturing expertise into these regions, in combination with lower wage levels, firms can leverage their "intangible assets" or technological capabilities into areas of low-cost. Mexico is a good example of such a location. According to Ron Harbour of Harbour and Associates, "Unlike many other North American plants that frequently have workforces that passively or actively oppose lean manufacturing techniques, Mexican plants are instituting them with a vengeance" and in addition to this "their application of lean has been deep and rapid, and it's paying off with quality, cost and productivity improvements" [*Ward's Auto World*, May 2000].

Lean Manufacturing Critical

Last year's Harbour Report (2001) suggested that Japanese makers held a $500 to $700 per vehicle cost advantage over the Big 3 in North America, because of their more efficient plants. This year's 2002 report shows that "the Big 3 would each save about $350 per vehicle if they matched their Japanese rivals' hours-per-vehicle rate," indicating both the importance of lean manufacturing for remaining competitive, as well as the relative improvement of US manufacturers. Of US manufacturers, GM appears at present to be in the best position to fully take advantage of the efficiencies of lean manufacturing, as "both NUMMI and Saturn ushered in progress for GM," as did the stakes it has taken in numerous small Japanese manufacturers. Although "transferring those advances across the automaker's diverse manufacturing operations proved daunting," GM has applied what it has learned in its newer emerging market plants such as its Brazilian "Blue Macaw" plant, regarded by some as being "one of the leanest and most cost efficient car factories in the world" [Wilson, August 21, 2000, 3]. The acceptance and usage of lean practices has paid off in quantitative terms as demonstrated in the 2002 Harbour Report where "for the first time, General Motors was more efficient than Ford Motor Co. in its assembly and hours spent per vehicle." Harbour has indicated that "GM (has now) learned more from NUMMI than Ford Motor Co. ever did from its U.S. auto making venture with Mazda Motor Corp., and more than DaimlerChrysler has from its 15-year-old U.S. manufacturing alliance with Mitsubishi Motors Corp." GM is aggressively trying to disseminate what it learns from its alliances with such partners as Suzuki, Isuzu and Subaru (Fuji), launching the GM North American Project Center, which "gathers the most innovative manufacturing practices from around the world," to then be applied in GM manufacturing plants around the world [*Automotive News*, August 21, 2000, 3]. Chrysler on the other hand, has done poorly in North American efficiency, becoming the high-cost producer "because the company didn't adopt a lean production culture fully," according to Tom Lasorda, Chrysler's executive VP of manufacturing [Kurylko, June 10, 2002, 3]. There also appears to be strong correlation between quality and productivity, perhaps due to the fact that if the design of an automobile takes into consideration assembly to improve productivity (as lean manufacturing calls for), the simplified processes should result in less errors being made, and therefore higher quality products.

Harbour and Associates' Ranking of Average Assembly Productivity In North America (2001)

Automaker	**Hours per Vehicle**
Nissan	17.92
Honda	19.78
Mitsubishi	21.82
Toyota	22.53
NUMMI	22.68
GM	26.10
Ford	26.87

Source: *Automotive News*, see endnote 4

The Need to Diversify, and the Dangers of Over Reliance on a Single Market or Product Segment

In a manufacturer's regional portfolio of products, there is safety in diversification. Just as in a financial portfolio, having too much invested into either a single product, or single region, may make for spectacular gains in the short-run if the product and/or region are doing well, but will only increase volatility in earnings in the long run. The relationships engaged in by the manufacturers will help determine their risk profile and the amount of diversification across both the markets and products that they have chosen. GM is a good study of how strategic alliances and affiliations can fill most of the gaps previously discussed, in geographic reach, product portfolio, and manufacturing capability, and provide a company with a more diversified portfolio both within and across markets. As table 3 shows, GM's alliance structure has little effect in its core US market, increasing core market share by less than 3 percent. Meanwhile, GM's share in growth markets such as China, India, South Korea and Latin America has increased considerably, by over 2 percent in Latin America, and 31 percent in selected Asian countries. In 1998, when including its affiliates, GM held a 34 percent share of the world's eight fastest-growing markets, whereas without those affiliate shares, it controlled only 8 percent [Winter, August, 2000]. Ford on the other hand, has little presence in emerging markets, as Ford is "still in need of a one liter car to keep pace with emerging market models on the way from GM-Suzuki and DaimlerChrysler-Mitsubishi," despite the recognition that "Ford knows much of its longer-term growth is going to hinge on bigger success in the Asia/Pacific" [Zoia, June 2000].

The structure of Ford's US product fleet shows its different approach to product offerings when contrasted with the Japanese. Table 4 depicts the amount of small car offerings by Ford on the US market, both by model and volume, as well as for two Japanese manufacturers, Honda and Toyota. Ford, with only 8.24 percent of its volume sales being in small cars as a percentage of its entire US fleet, in contrast with Honda's 28.16 percent and Toyota's 16.5 percent demonstrates a greater reliance on large cars than its main foreign competitors. Notice as well, how effectively Toyota is matched between its model offerings and the sales volume that those models must carry, versus Ford and Honda, perhaps reflecting Toyota's efficiency in terms of product line. Average passenger car vehicle weight by volume shows little diversification between Ford's core products and that which it acquired, as consolidated vehicle weight comes in at a relatively hefty 3,390lbs, versus 3,343lbs when including acquired brands. Toyota and Honda on the other hand, weigh in at 3018lbs and 2955lbs respectively, making for an over 300lb average weight difference between Ford and its Japanese competition, a difference that is increased if light truck sales are factored in. This leaves Ford highly susceptible to rising energy prices as well as any softening in the now booming light-truck market, as light trucks accounted for over 65 percent of Ford's US sales in 2001, making it the most heavily exposed manufacturer to the segment. The US manufacturers over the past few years have been sustaining profits largely on the back of light truck sales, areas which are increasingly coming under market share pressure [Grant, August 6, 2002, 13]. From 2000-2001, Toyota was able to increase its share of the light truck market by 1.5 percent, while Ford lost 1.2 percent, falling to the number two seller of light

Table 3: GM Passenger Car Market Share Data in Units Sold, selected regions (1999)

	GM Core	**GM + Affiliates**
U.S.	29.6%	31.4%
Japan	N/A	15.2%
Western Europe	11.5%	21.1%
China/India/S.Korea	1.09%	32.65%
Latin America	20.87%	46.36%
World*	15.1%	23.7%

Source: *EIU MBI,* April 2000, *includes cars and light trucks

Table 4: US Market Small Car Analysis of Selected Manufacturers

	By Current Model Offerings		**By Sales Volume (2001)**		
Manufacturer	Core	Core + Affiliates	Core	Core + Affiliates	Including L. Trucks
Ford	8.3%	8%	21%	21.5%	8.24%
Honda	12.5%	12.5%	37.85%	37.85%	28.161%
Toyota	23.08%	23.08%	30.1%	30.1%	16.5%

Sales data from *Automotive News 2002 Market Data Book* trucks as GM gained 2 percent over the same period, putting it ahead of Ford. Partly as a result of this movement into this "uniquely American" light truck market and the ceding of the small car market to the Japanese and Korean manufacturers, US overall market share has been in decline as U.S market share declined by 10 percent from 1995 to 2002, with each percentage point decline representing approximately $4 billion in sales [Muller and Kerwin, July 15, 2002].

Conclusion

The global automotive industry is in a constant state of flux, with relationship trends that reflect what is determined to be the overarching needs of the time. Currently these needs are multifold, and include not only efficiency requirements in order to compete profitably in traditional segments, but also quality improvements. As quality is now a more quantifiable criterion through such measures as *J.D. Power and Associates "Initial Quality Survey,"* the degree to which manufacturers meet expectations is now readily measurable and highly visible. Relationship building with suppliers and other OEMs strong in these areas is vital and when mutual benefits are available to both parties these relationships can be expected to continue to grow more complex in nature and more frequent in occurrence. The need to gain stakes in growing regions that have high volume potential such as much of Asia, further reinforces this move toward increasingly complex relationship structures in order to facilitate market entry, whether through joint ventures with government-backed manufacturers, as in China and India, or with small-car makers to provide much needed product experience and ultimately, cost savings.

References

[1] Automotive Industries, (January 2002). Emerging markets need global platforms, 7.

[2] Automotive News (February 2002). Global isn't global yet, 14.

[3] Automotive News (June 10, 2002). Vast Area, income range makes Asia a challenge, 16.

[4] Automotive News (May 27, 2002). 2002 Market Data Book, 25.

[5] Automotive News, (March 2002). Big volume, big value: Mazda gets a whole lot for its money in revamping an old engine plant to build its critical new "global" 4-cylinder engine, 26.

[6] Automotive News, (June 10, 2002). Vast area, income range makes Asia a challenge, 16.

[7] Business Korea, (October 2001). GM likely to tame Hyundai-Kia dominance, 29-30.

[8] Connelly, Mary (August 5, 2002). Ford answers call for sports wagons. Automotive News, 30.

[9] Connelly, Mary, (January 22, 2001). Ford bulking up in Mexico. Automotive News, 34.

[10] Cullen, Thomas J. (August 5, 2002). Nissan see $2.9 billion in potential purchasing savings. Automotive News, 34.

[11] Culpan, Refik (2002). Global Business Alliances: Theory and Practice, Westport, Connecticut, London: Quorum Books, 123.

[12] Economist Intelligence Unit (April 2000), The worldwide automotive industry. Motor Business International, 73-74.

[13] English, Bob (March 25, 2002). GM, Suzuki venture awaits new product. Automotive News, 12.

[14] Grant, Jeremy (August 6, 2002). Detroit fights back. Financial Times, 13.

[15] Gulford, Dave (June 24, 2002). GM to push common manufacturing with partners. Automotive News, 6.

[16] Harbour Report North America (2002), Chicago: Harbour & Associates.

[17] Harrison, Joan (June 2002). Consolidation reconfigures the automotive industry landscape. Mergers and Acquisitions, 18-19.

[18] Hiraoka, Leslie S. (2001). Global Alliances in the Motor Vehicle Industry, Westport, Connecticut and London: Quorum Books.

[19] Japan Transportation Scan, (August 5, 2002). BMW to produce 7 Series cars in Thailand.

[20] Kazmin, Amy & Ibison, David (September 20, 2002). Financial Times, 19.

[21] Kurylko, Diana T. (June 10, 2002). LaSorda's goal: 20 hours per car at Chrysler. Automotive News, 3.

[22] Kynge, James & Ibison, David (September 19, 2002). Nissan deal with Dongfeng to create new Chinese car giant. Financial Times, 15.

[23] Miller, Scott & Zaun, Todd (September 18, 2002). Trucks Pulling Daimler. The Globe and Mail, B11.

[24] Muller, J., Kerwin K., Welch D. (July 15, 2002). Autos: A New Industry, Business Week, 100.

[25] Rechtin, Mark (November 19, 2001). Premier Automotive merger sparks worry. Automotive News, 1.

[26] Smitka, Michael (Winter 1999). Foreign Policy and the US Automotive Industry: By virtue of necessity? Business and Economic History.

[27] The Economist (US), (April 13, 2002). Leave it to the locals; Cars in China.

[28] The Globe and Mail (September 23, 2002). Toyota Motor Company. B8.

[29] Treece, James B. (September 23, 2002). Nissan's China deal stings rivals. Automotive News, 3.

[30] Ward's Auto World (March 2001). Rethinking Platform Engineering, 46.

[31] Ward's Auto World (September 2000). Global Manufacturing; Brazilian Revolution.

[32] Ward's Auto World, (January 1, 2002). Ripening relationship; GM's Asia alliance bearing fruit, 44.

[33] Ward's Auto World, (March 2001). Rethinking platform engineering, 46.

[34] Ward's Auto World, (May 2000). Global Strategies; Ay Caramba!

[35] Ward's Automotive International (2001). Interrelationships among the world's major automakers, 12-14.

[36] Webb, Alysha (April 15, 2002). Honda finds the fast lane in China; Chinese buyers like Japanese quality and solid reputation. Automotive News, 14.

[37] Wilson, Amy (August 21, 2000). GM Blue Macaw will fuel change. Automotive News, 3.

[38] Winter, Drew (August 2000). GM: new and improved! Ward's Auto World.

[39] WWW.autonews.com (August 5, 2002). Traverse City Yoshino: Standard tools equal nimble plants.

[40] WWW.autonews.com/news. GM moves up in Power survey. Automotive News

[41] WWW.autonews.com/news. GM Surpasses Ford in the Harbour Report 2002. Automotive News.

[42] WWW.globeinvestor.com. (September 17, 2002). GM says to match Japan car quality in 2-3 Years. Reuters.

[43] WWW.mazda.com/publicity/public (August 2002).

[44] WWW.nissan-global.com/EN/STORY, (September 2, 2002). Nissan Motor Company. Toyota and Nissan Agree to Tie Upon Hybrid Technologies.

[45] Yamaguchi, Yuzo (August 19, 2002). GM's cash buys Isuzu's plums. Automotive News, 6.

[46] Zachary, K & Priddle, A. (February 1, 2002). Magical mystery tour. Ward's Auto World.

[47] Zachary, Katherine (December 1999). 2000 State of the Industry Asia/Pacific; Back on Tract. Ward's Auto World.

[48] Zdun, Todd & Leggett, Karley (August 30, 2002). Toyota links with partners for major push in China, The Globe and Mail, B7.

[49] Zoia, David E. (June 2000). Bogged Down Abroad. Ward's Auto World.

Endnotes

[1] Calculations based on sales projections from *Automotive News'* "2002 Market Data Book." *Automotive News* (May 27, 2002): 25

[2] August 5, 2002 FROM MAZDA.COM http://www.mazda.com/publicity/public/200208/0805e.html

[3] Aug 5, 2002 "Traverse City: Yoshino: Standard tools equal nimble plants." www.autonews.com/article.cms?articleId=40303&a=a&bt=Honda

[4] "GM Surpasses Ford in Harbour Report." *Automotive News*, "www.autonews.com/news.cms?newsId=2527&bt=GM%20surpasses%20Ford"; "GM moves up in Power survey." *Automotive News*, www.autonews.com/news.cms?newsId=2383&bt=GM%20moves%20up%20in%20Power%20survey"

The Influence of State Policies on Locational Decisions of Entrepreneurs

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Abstract

Different states seek to attract entrepreneurs through various schemes, offering numerous incentives. These incentives include sales-tax concessions, subsidies, developmental loans, infrastructure etc. While these incentives do influence the decisions of the entrepreneurs to some extent, the actual delivery and effectiveness of these incentives vary across different states as well as within the same state. In addition, many factors other than the incentives play a major role on the locational decisions. To identify the extent of the influence of these incentives on setting up of these enterprises, a set of industrial clusters on both sides of state boundaries are selected. Usually the entrepreneurs who have set up these industrial units are attracted to the particular cluster through various incentives offered by the respective states. Thus, the locational decision by an entrepreneur could have been the result of the influence of the industrial policy of the particular state. This paper attempts to study the influence of these factors.

Introduction

It has been established by various studies that there is a significant relationship between the level of entrepreneurship and the extent of economic activity in a country. The strength of the association varies from country to country. The latest report of the "Global Entrepreneurship Monitor" indicates that the countries with the highest level of "necessity" entrepreneurship are also the most under-developed [3]. Similarly, the countries which are well integrated into the global trading economy have much lower levels of "necessity" entrepreneurship. In other words, it is necessary to promote entrepreneurship in the country to achieve economic development as well as integration with the global economy. Consequently, it is no surprise that many countries articulate special policies towards promotion of entrepreneurship activity.

In a large country like India, the policies for the development of entrepreneurship are formulated at the national as well as the regional levels. While the national level policies are broad in nature, it is the state level policies that effect the entrepreneurs at the ground level. These states compete with each other to attract entrepreneurs. They offer different levels of incentive structures to the entrepreneurs. These incentives are usually in the form of fiscal or infrastructural in nature. The fiscal incentives include subsidies, loans at zero or subsidized interest rates, tax concessions and tax holidays etc [2]. The Infrastructural incentives include provision of land and buildings at below the market rates, provision of adequate power and water supply, transport facilities and even locational advantages by concentrating different industrial units in a given area there by facilitating availability of skilled labour, better transport facilities, specialized inputs etc. While different states offer different incentive structures, the success rates also vary.

Understanding the effectiveness of these state level policies is important to formulate such policies which are capable of attracting entrepreneurs to a particular location. The entrepreneurs make their locational decisions based on their own expectations with respect to the incentives offered by the state. At the same time the states may not be able to completely fulfill their expectations in the actual delivery of the incentives promised. The experience of the entrepreneurs varies across different states which is an indication of the state's ability to translate the policies into action. In India, the entrepreneurs are free to set up their units in any state. The very fact that the entrepreneur had finally decided on a particular location indicates that there are certain factors that influenced his decision in favor of a particular state. These decisions obviously are based on his or her expectations with regard to the promises made by the state's policy.

Methodology

The policy of attracting entrepreneurs to a particular location centers around the concept of "industrial estates". These industrial estates are expected to provide infrastructural facilities such as sheds and buildings, utilities such as power and water, communication facilities such as telecommunications, road and rail links. Often, the concept of industrial estates is used to attract entrepreneurs to locations where the state intends to promote industrialization. These locations are also linked to financial incentives such as subsidies, sales tax rebates and developmental loans. Many such industrial estates are located very near to the state borders. One possible reason is that such locations will be able to attract entrepreneurs from other states across the border. There are situations where the two states across the border had set up such industrial estates very close to the state borders. Given the geographical proximity of such estates, the factors such as nearness to the markets, availability of raw materials, skilled and unskilled labour etc. are very similar in both the estates. The main differentiating factors would then be the incentives offered by the respective state governments in terms of financial incentives and the infrastructure provided. In such a situation, the entrepreneur's decision to locate his or her unit in a particular state is influenced primarily by the expectations with respect to the various incentives provided by the respective state government. The relative importance of each of these incentives and other factors in influencing the decisions of the entrepreneur can guide the formulation of the state policies.

The entrepreneurs have the freedom to setup their units in the industrial estates on either side of the state borders. The very fact that he or she had actually setup the unit in a particular state indicates that the incentive structures offered by the particular state had a positive influence on the locational decisions. The locational decision is obviously made by the expectations of the entrepreneur with respect to the incentive structure or the state policy. This is more so if the entrepreneur actually belongs to a different city or state and is attracted to a particular location. The effectiveness of the state policy can be evaluated based on the level of expectations and extent of fulfillment of the expectations. In order to analyze the influence of the state policies on the locational decisions, clusters of industrial estates located on either side of the state borders are identified. Data is collected from a sample of entrepreneurs who had already setup their units in the respective estates. Since the incentive structures are mainly targeted towards the small and medium industries, the sample is limited to such enterprises. The sample of the entrepreneurs is selected from special geographical clusters with industrial estates that are spread across state boundaries. Thus, the entrepreneur did have a choice of locating the unit on either side of the border, since there are no restrictions in such locational decisions. Nevertheless, the very fact that the entrepreneur did finally locate the unit in a particular state indicates that there were certain factors specific to the policies of that particular state which did influence the final decision. Also the importance of different factors is measured based on the experience of the entrepreneurs. Data is collected on various incentives availed by the entrepreneurs as well as their expectations with respect to a number of factors before setting up of their unit in a particular state. Data is also collected with respect to their actual experience after setting up the unit. The experiences vary across different states indicating the ability of the states to translate the policies into action. The entrepreneurs are asked to rate their expectations as well as their actual experiences on a 5 point scale, with 5 indicating the most important in terms of expectations or actual experience.

Two clusters of industrial estates were selected for the sampling purpose. The first cluster is the Anekal-Hosur cluster. The Anekal industrial estate (including the neighboring Bommasandra Industrial Estate) is located in Karnataka state where as the Hosur industrial estate is located in Tamilnadu state across the border. Data was collected from 23 entrepreneurs from Anekal and 42 from Hosur. The other cluster included Coimbatore in Tamilnadu and Palakkad in Kerala. The sample consisted of 28 entrepreneurs from Coimbatore and 31 from Palakkad. Figure 1 shows the locations of the two clusters.

Sample Profile

Data was collected from a total of 124 entrepreneurs. More than 50 percent of the entrepreneurs were graduates. About 20 percent were post-graduates. Entrepreneurs who had education only up to school level constituted less than 25 percent of the sample. The distribution of the sample entrepreneurs on the basis of educational levels is given in Table 1. In general, the entrepreneurs in the sample are well qualified and are likely to have considerable information with respect to the various incentives as well as the implications of the policies of the state governments.

Many of the entrepreneurs are first generation entrepreneurs. The entrepreneurs who do not belong to the first generation category accounted for only 20 percent in the sample. In other words, the sample consisted of predominantly those who are well educated and are intent on becoming entrepreneurs. The average work experience before setting up of the unit was about 5 years. The first generation entrepreneurs had longer work experience than the others. The entrepreneurs from the Hosur industrial estate had the maximum work experience where as those in Palakkad industrial estate had the lowest work experience. Table 2 presents the data with respect to the work experience of the entrepreneurs in the sample for both the first generation entrepreneurs as well as the others.

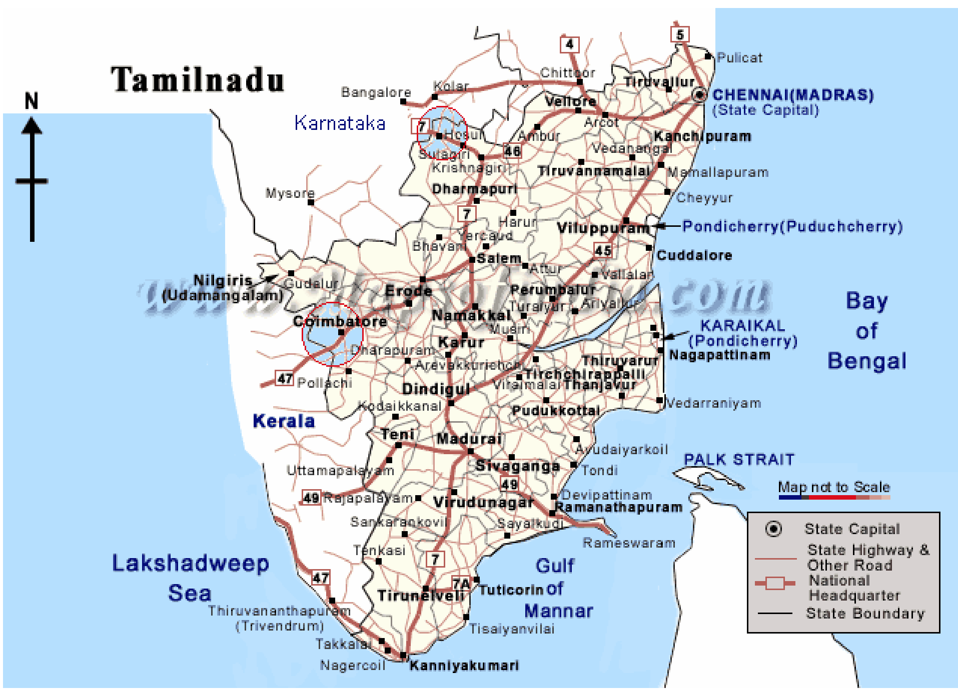

Fig 1: MAP SHOWING COIMBATORE-PALAKKAD AND ANEKAL-HOSUR INDUSTRIAL CLUSTERS

Table 1: DISTRIBUTION OF THE ENTREPRENEURS BY THE LEVEL OF EDUCATION

	Post-Graduate	Graduate	Non-Graduate	Schooling	Total
Anekal	8	14		1	23
Hosur	6	17	10	9	42
Coimbatore	1	17	3	7	28
Palakkad	7	17	6	1	31
Total	22	65	19	18	124

Table 2: AVERAGE WORK EXPERIENCE OF THE ENTREPRENEURS (IN MONTHS)

	First Generation Entrepreneurs		Others		All	
	Number	Mean	Number	Mean	Number	Mean
Anekal	21	39.62	2	72.00	23	42.43
Hosur	39	112.92	3	41.67	42	107.83
Coimbatore	21	39.95	7	82.29	28	50.54
Palakkad	20	31.20	11	33.27	31	31.94
Total	101	66.33	23	52.65	124	63.79

Most of the units in the sample were setup during the past five years. Table 3 presents the distribution of the units by the year of setting up. Almost 65 percent of these units were set up during the past 10 years. All the units in the sample were in operation for at least two years. The entrepreneurs in the sample had enough opportunity to evaluate the actual experience as compared to their expectations with respect to various factors that influenced the locational decisions.

Table 3: DISTRIBUTION OF THE UNITS BY THE YEAR OF SETTING-UP

Year of Setting up	Anekal	Hosur	Coimbatore	Palakkad	Total
Before 1985	3	9	7	4	23
1986-90	4	5	10	3	22
1991-95	6	10	8	7	31
After 1996	10	18	3	17	48
Total	23	42	28	31	124

As mentioned earlier, many of the states setup the industrial estates nearer to the state border with a view to attract the entrepreneurs from across the state border. The sample does not indicate that these estates are actually attracting entrepreneurs from across the border. Only 15 percent of the entrepreneurs in the sample came from other states to setup their units. On the other hand, about 45 percent of the entrepreneurs came from a different district. In other words, while 15 percent of the entrepreneurs in the sample were attracted from some other state, 30 percent were attracted from some other district within the same state. More than 50 percent of the entrepreneurs originally belonged to the same district where the industrial estate was setup. Table 4 presents the data on the state of origin of the sample entrepreneurs.

Table 4: STATE OF RESIDENCE OR ORIGIN OF THE SAMPLE ENTREPRENEURS

		Anekal	Hosur	Coimbatore	Palakkad	Total
Belong to the Same State	No	3	11	1	3	18
	Yes	20	31	28	28	106

Total		23	42	28	31	124
Belong to the Same District	No	9	24	1	21	54
	Yes	14	18	27	10	70
Total		23	42	28	31	124

In summary, the entrepreneurs in the sample are predominantly from the same district where the industrial estates were setup. They are well educated and had obtained sufficient work experience before setting up of their units. Many of them are first generation entrepreneurs.

Factors Influencing the Locational Decisions

Data was collected with respect to 17 different factors that are likely to influence the locational decisions. These factors are grouped into 5 categories as follows:

1. Financial incentives: These include subsidies, state and central sales tax concessions and developmental loans.
2. Infrastructural facilities: These include availability of industrial shed, supply of power and water
3. Communication facilities: These factors include telecommunications, availability of road and rail network
4. Production factors: These are the factors which effect the production. These include availability of raw material, skilled and unskilled labour, technology and nearness to market.
5. Environmental factors: These factors refer to the presence of units similar in terms of industry or product, law and order situation and nearness to the home town of the entrepreneur.

The entrepreneurs base their locational decisions on their expectations with respect to these factors. The average expectations of the entrepreneurs with respect to each of these factors are presented in Table 5. These averages are indicative of the relative importance of each of these factors in the locational decisions.

Table 5: AVERAGE RATINGS OF THE EXPECTATIONS BY THE SAMPLE ENTREPENEURS

Factor	All Clusters	Anekal	Hosur	Coimbatore	Palakkad
Financial Incentives					
Subsidy	3.13	2.96	2.67	3.50	3.55
Sales Tax Concessions	2.98	2.48	2.31	3.54	3.77
Developmental Loans	2.45	1.91	1.98	3.18	2.84
Infrastructural Facilities					
Availability of Shed	4.03	3.52	4.00	3.89	4.58
Availability of Power	4.10	3.61	4.33	3.68	4.52
Availability of Water	2.97	3.04	2.67	2.57	3.68
Communication Facilities					
Roads	4.11	4.09	4.05	3.75	4.55
Rail	2.16	1.57	1.64	2.14	3.32
Telecommunications	3.92	3.61	4.10	3.54	4.26
Production Factors					

Technology	3.56	3.17	4.07	3.96	2.77
Skilled Labour	3.91	3.30	3.74	4.54	4.03
Unskilled Labour	3.15	2.70	2.76	3.54	3.65
Raw Material	3.70	3.39	3.69	3.82	3.84
Nearness to Market	3.51	2.65	3.36	3.93	3.97
Environmental Factors					
Nearness to Hometown	2.87	2.91	2.57	3.46	2.71
Presence of other similar units	2.13	2.09	1.74	1.71	3.06
Law and Order Situation	2.65	2.87	2.86	1.43	3.32

It can be seen from the above table that Infrastructural and communication facilities have been rated as most important in terms of the expectations of the entrepreneurs. Even among these, the most important were availability of power, industrial sheds, roads and telecommunications. The next set of important factors constitute the ones which are production related. Among the production factors, availability of skilled labour and raw material appear to be the most important factors. The financial incentives ranked only after the production and Infrastructural facilities. Interestingly, the environmental factors had a very low importance.

There are significant differences in expectations across different industrial estates. The expectations with respect to rail network in the Anekal - Hosur cluster were the lowest. There was no rail link available near this cluster when the industrial estates were set up. A railway line had been constructed only after the development of these estates. Presence of other units with similar products/industry was an important factor in Palakkad where as it was not rated as high in the other estates. This is because of the presence of large number of chemical industries in Palakkad and the industrial estate, over a period of time, has become the preferred centre for chemical industries. Similarly, the law and order situation was an important factor in Palakkad where as it was rated very low in Coimbatore across the state border. The Kerala state had a long history of strong political leanings towards leftist ideology, even though the elected government oscillated between the leftist and non-leftist parties. Consequently, the state of Kerala was known for strong labour unionization.

Fulfillment of Expectations with respect to Various Factors

The entrepreneurs are attracted to a particular location by various factors. After their units are setup, the actual experiences could be different from the expectations. The average ratings of the actual experience as compared to the expectations by the sample entrepreneurs are presented in Table 6.

Table 6: AVERAGE RATINGS OF THE ACTUAL EXPERIENCE OF THE SAMPLE ENTREPRENEURS

Factor	All Clusters	Anekal	Hosur	Coimbatore	Palakkad
Financial Incentives					
Subsidy	2.85	2.43	2.50	3.57	3.00
Sales Tax Concessions	2.43	2.13	2.31	3.36	1.97
Developmental Loans	2.14	1.35	1.88	3.07	2.23
Infrastructural Facilities					
Availability of Shed	3.71	2.87	3.86	4.04	3.84
Availability of Power	3.64	2.91	3.88	3.75	3.74

Availability of Water	2.63	2.70	2.52	2.64	2.71
Communication Facilities					
Roads	3.77	3.91	3.98	3.96	3.23
Rail	1.91	0.83	1.71	2.11	2.81
Telecommunications	3.44	3.04	3.86	3.61	3.03
Production Factors					
Technology	3.49	2.65	3.95	4.11	2.94
Skilled Labour	3.56	3.04	3.55	4.54	3.06
Unskilled Labour	3.23	2.43	3.21	3.43	3.68
Raw Material	3.64	3.09	3.95	4.32	3.00
Nearness to Market	3.32	2.48	3.45	3.68	3.45
Environmental Factors					
Nearness to Hometown	2.65	2.74	2.55	3.25	2.19
Presence of other similar units	2.41	1.35	1.93	2.00	4.23
Law and Order Situation	2.23	2.26	2.64	1.54	2.29

It can be seen from the above table, that the actual experience had been below expectations for many of the factors in almost all the industrial estates. In the case of financial incentives, the experience had been uniformly below expectations. The actual experience with respect to Infrastructural facilities had been better than expectations only in the Coimbatore industrial estate. All the other three estates failed to meet the expectations of the entrepreneurs. Similarly, the actual experience of the entrepreneurs had been lower than the expectations even in the case of environmental factors such as nearness to home and presence of similar units. The information about these factors is very well known, well before the setting up of the unit. It is likely that the disappointment with respect to the other factors had influenced the entrepreneurs' feelings on these factors also. On the whole, the entrepreneurs in Coimbatore area appear to have realized the expectations more satisfactorily as compared to the other areas.

The entrepreneurs were specifically asked if they would have preferred to setup their unit at the same place, given the actual experience of the location. In other words, this question was to measure the level of satisfaction with the particular location, after having setup the unit and carried out the activities. A total of 46 entrepreneurs had indicated that they would move to a different place, where as 78 of them indicated that they would still prefer the same locations. In other words 78 of the 124 entrepreneurs in the sample are satisfied with their locational decision and have no second thoughts or regrets on this aspect. In order to identify the factors that had influenced the satisfaction or dissatisfaction of the entrepreneurs, a sign test (paired sign test) was carried out using SPSS package. The results of the test are summarized in Table 7. The 78 entrepreneurs who are satisfied with their locational decisions are referred to as Group I and the other 46 are referred to as Group II.

Table 7: FACTOR-WISE TEST STATISTICS AND THE SIGNIFICANCE LEVELS OF THE SIGN TEST

	All Entrepreneurs		Group I		Group II	
Category	Z-Value	Significance Level	Z-Value	Significance Level	Z-Value	Significance Level
Financial Incentives	-3.1502	0.0016	-0.9150	0.3602	-3.5000	0.0005
Infrastructural Facilities	-2.1243	0.0336	-0.5835	0.5596	-2.4371	0.0148

Communication Facilities	-2.2792	0.0227	-0.4743	0.6353	-2.6304	0.0085
Production Factors	-0.1104	0.9121	-0.8571	0.3914	-0.6963	0.4862
Environmental Factors	-1.5556	0.1198	-0.4243	0.6714	-1.7961	0.0725
No. of Entrepreneurs	124		78		46	

The Z-values in the above table represent the standard normal variate as calculated in the procedure of the sign test. The significance level indicates the probability of committing Type I error (α) when the null hypothesis is stated as "there are equal number of observations with positive and negative differences". The differences are calculated as the difference between ratings of the actual experience and the expectations, pair wise, for each entrepreneur. A negative Z-value indicates that the expectations are higher than the actual experiences, as measured by the ratings. The ratings are totaled for the relevant factors falling within a category as explained earlier. The Group I entrepreneurs are the ones who are satisfied with their locational decisions and Group II refers to those who are unhappy with their locational decisions.

It is important to note that the Z-values are negative for all categories as well as for all groups. This indicates that on the whole, there are more number of entrepreneurs whose experience fell below their expectations in all categories and in all the groups. The sign test is not significant with respect to the Production factors and the Environmental factors when all the 124 entrepreneurs are considered (considering a significance level of 10 percent). On the other hand, the sign test was significant with respect to the financial incentives, Infrastructural facilities and communication facilities, even at 3 percent level for α. When the Group I entrepreneurs are considered, none of the categories of factors yielded a significant result on the sign test. This implies that the levels of expectations more or less matched with the actual experiences of this group. In the case of Group II entrepreneurs, all the categories of factors, except production factors turned out to be significant. This implies that there are statistically large number of entrepreneurs whose experiences fell short of their expectations in this group. Obviously, this is the reason why they are unhappy with their locational decisions. What emerged as important is that the sign test was not significant with respect to the production factors in all the three cases. All the entrepreneurs are able to match their expectations with the actual experiences. The reason for this could be that most of the variables with respect to the production factors are within the ambit of control of the entrepreneurs.

The most important result of the sign test is that it showed significant difference between entrepreneurs' expectations and their actual experience with respect to the Financial incentives as well as the Infrastructural facilities and Communication facilities. It is to be noted that the Z-values are negative with respect to all these three categories of factors implying that more entrepreneurs have rated the actual experience much lower than the expectations. These are the very factors that the state governments use as policy instruments for attracting the entrepreneurs. If the state governments want to attract and retain the entrepreneurs, they need to fulfill their expectations with respect to these factors. The most important policy decision that these governments could implement is to make sure that the Infrastructural facilities and the Communication facilities are well established. When these are in place and then if they are linked with the financial incentives, the state governments will automatically be able to attract the entrepreneurs.

References

[1] Manimala M. J. (1999) *Entrepreneurial Policies and Strategies*, Sage Publications, New Delhi.

[2] Padmanand V. and Jain, P. C. (2000) *Doing Business in India*, Response Books, New Delhi.

[3] Reynold, Paul, D., S. Michael Camp, William D. Bygrave, Erkko Autio and Michael Hay, Global Entrepreneurship Monitor, Executive Report 2001, www.entreworld.org

End Notes

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The Opening Up of Telecommunications Market and the Development of the Telecommunication Industry

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Abstract

The paper first reviews the development of world telecommunication, and briefly illustrates the development of telecommunication industry in the USA, Japan, Britain and China. Then it compares the telecommunication industries between developing countries and developed countries in the aspects of technology, management, service and room for development.

The focus of the paper is the changes that the entry of WTO would bring to telecommunication industry and the corresponding strategies that China should adopt. China had made the commitment to open the telecommunication service market according to the rules of WTO and WTA. In order to make a full preparation to the entry of WTO, China had adopted a series of measures from 1988 to 2000 to introduce the competition system, and the competitive market mechanism has gradually come into being. But it doesn't necessarily mean that China's telecommunication enterprises have fully prepared to the international competition. Compared with the telecommunication industry of developing countries, China is still lag behind in the terms of overall development level, infrastructure construction and operational level of the service. So China still need to restrict its opening-up of the market and cannot allow foreign investors to be the main players of the competition. However, if China wants to take the advantage of opening-up and avoid the risk of being defeated, then she cannot neglect the external competition. And the problem of competence must be solved. Meanwhile, several facts brought about by WTO must be taken into consideration: firstly, the international environment for the development of telecommunication industry in China is improved. Secondly, the inadequate competitive pressure may reduce the drive for reforms in the service. Thirdly, the old management and operation mechanism and the laggard infrastructure construction may affect the rapid and healthy development of the industry. Finally, the paper concludes the influences caused by the entry of WTO on the fixed telephone operation, mobile phone sector, wireless BP sector, data communication sector and telegraph services and the corresponding measures that China should adopt.

It also makes some suggestions on China's telecommunication policy. They are as follows:

1, to make full use of related WTO articles

2, to encourage more new enterprises to operate telecommunication business

3, to expand finance/investment channels for telecommunication industry

4, to carry out modern enterprise system reforms on the existing national telecommunication operators

5, to encourage the participation of telecommunication enterprises in international competition

6, to use legislative force to regulate telecommunication industry

To sum up, after China's entry into WTO, there are both challenges and chances for the telecommunication industry. Only after fierce competition can China's telecommunication industry grow and prosper.

The Opening Up of Telecommunication Market and the Development of the Telecommunication Industry

Comparison of Telecommunication Industry in Various Countries

World Telecommunication Industry

Innovative ideas from the Industrial Revolution accelerated the emergence and development of the telecommunication industry. It is widely accepted that Morse invented wire telegraph on which he got the patent in 1838. Then in 1844 the United States operated the first telegraph line from Washington to Baltimore and Morse sent the first telegraph message in the history --"God has created such a great miracle!" Another significant invention that opened a new era in the development of the telecommunication industry is the telephone invented by Bell on March 10th, 1876. Telegraph and telephone were then industrialized and widely spread. Wireless communication further promoted the transformation and development of the modern telecommunication industry. In 1895 an Italian named Marconi invented an efficient telegraph system which soon covered the whole world. With the development of wireless telecommunication technology, innovations constantly came up in the wireless fields. With the pervasive utilization of transistor in telecommunication technology, telecommunication industry entered the revolutionary time and developed by leaps and bounds. The demand on telecommunication services for individuals accelerates rapid growth of the new generation of wireless communication technologies. In 1978 scientists from Bell Laboratory in Chicago successfully tested the first cellular mobile telecommunication system in the world which was a most significant invention in the development history of mobile telecommunication. Later in 1978 the first mobile telecommunication system was put into operation in Chicago. In 1979 Japan opened the first cellular mobile telecommunication network. After the rapid development in 1980s and even faster one in 1990s, the number of mobile phone users has amounted to 500 million .

On October 4th, 1957 the former Soviet Union launched the first man-made earth satellite in human's history which opened the era of space development of telecommunication. Later on August 12th , 1960 US National Space Bureau launched "Echo" – the first passive communication satellite in the world – which made television and telephone transmission successfully. Then on July 10th, 1962 US National Space Bureau sent the first active satellite "Electronic Star" which was used for communication and television broadcasting. This satellite made the television broadcasting and multi-route telephone across the Atlantic Ocean possible. Later on December 13th, 1962 US National Space Bureau made first successful public relay broadcasting of television program across the Pacific Ocean. Satellite communication technology integrates various advanced technologies such as space technology, communication technology and dynamics technology and manifests the great human intelligence. Only by employing space telecommunication of satellite can we realize the dream of telecommunications for individuals.

The new technologies emerging afterwards such as gain set, switch technology, carrier telephone, and coaxial cable and marine cable further consummate telecommunication as a means for communication. New businesses related to mobile, Internet, ISDN, data and IP Phone become growth fields and play increasingly important roles in the development of telecommunication industry. The development of world telecommunication shrinks the distance between various countries and people, reduces the differences between them and contributes to the formation of the earth village.

Internet was first developed for military purpose in the 1970s. But because of its great charm, it was turned into an important communication means for civil usage. Since late 1990s Internet has begun to develop with amazing speed and almost every country in the world connect itself to the net. The Internet really integrates the world. Besides, ISDN, a communication network based on IDN that can transfer voice, video and multimedia, provides a general communication network platform for future telecommunication businesses and new telecommunication technologies.

Since Bell invented telephone in 1876, telephone as an important and indispensable communication tool between people has penetrated into various aspects of our daily life. In the telecommunication technology revolution at the turn of the century, telephone technology has grown from a simple tool for voice transmission into a comprehensive multimedia service that covers voice, data and image. The switch method has also developed from mechanic exchange, crossbar switch into digital switch, comprehensive switch and IP switch.

Louis Stan, president and CEO of Canadian Bell, has pointed out in the book *the Future of the Telecommunication Industry*:"I think that the telecommunication industry in the 21st century should have the following features. Firstly, the boundary now existing among telecommunication, television and radio broadcasting and computer network will gradually disappear; Secondly, though we are not clear about the competitive mode in the future new telecommunication industry, we are sure that it will be similar to today's computer industry which possesses unique pricing and investment model; Thirdly, demand from the market and customers is the driving force for future telecommunication development and technologies will provide means for such development; Fourthly, the future Internet will be a seamless, multi-level and highly interactive network. It can provide wire and wireless services, enable access of ten various equipment and have thousands of applications. It is a global network based on broadband optical communication technology and IP packet switching. Driven by molecular computers, this intelligent and powerful network can realize the individual telecommunication so that people can get access to the network at any time and any place."

The development of telecommunication has become an important driving force for economic growth. In developed countries the prosperous value-added telecommunication services, to some extent, accelerate the development of data services which results in the advancement of telecommunication industry and the prevalence of information. The prospect of value-added telecommunication services benefits from the large number of enterprises that provide value-added services. The content of value-added telecommunication services enriches and the rapid growth of data services has shifted some traditional items into IP network. The business volume increases have mainly come from IP data service in recently years. According to the statistics published by International Data Center (IDE), the revenue from global IP business can reach 19 billion US dollars by 2004 and the IP business will possess 75% of the international long distance telephone market .

US Telecommunication Industry

The United States is the birthplace for modern communication technologies such as telephone, telegraph, computer and many other high technologies. And it is now gaining the leading position again in the competition of Internet age. As a superpower in information resources and information industry, it takes the lead in telecommunication technology, management and global telecommunication union. It is to some extent the telecommunication industry in US that drives the development of the world telecommunication.

The telecommunication regulation system is comprehensive and unique. It comprises NTIA, FCC, state public welfare committees or public service committees and the verdict of the courts.

With the slowdown of the of US economy since the new century, people think that telecommunication as an infrastructure industry also enters a downturn. Tens of non-listed telecommunication companies and at least 6 listed ones all went bankrupt. The industry has cut off employment by 110 thousand, the most serious one in all US industries. The failure of US telecommunication operators has ripple effect on other related industries. The intergrowth of telecommunication with other industries is an important factor that worsens the situation of telecommunication industry. When one company goes bankrupt, the partners, customers and agencies will be affected too. On average, the financial situation of one Telecommunication Company is closely related with other four companies.

However, experts in the industry have predicted that the US telecommunication industry will weather through this difficult time because the economic downturn is only a period of the economic cycle and not the end of telecommunication revolution. The growth momentum for telecommunication equipment manufacturers is far from end and there are many opportunities ahead. With the emergence of many new technologies and the improved efficiency of telecommunication regulation, the telecommunication industry will maintain good imputes for growth. Though the terrorist event on September 11th, 2001 has significant negative effects on US telecommunication industry, many new business opportunities have appeared. For instance, more companies implement videoconference systems inside and the demand for communication equipment increases greatly. So we could even say that telecommunication industry benefits after the “9.11” terrorist event. And the event will have certain effect on the world telecommunication industry in a long term.

Japanese Telecommunication Industry

Japan has the second largest telecommunication market. Mobile phone becomes one of the main driving forces for Japanese information technology revolution and the combination of wireless communication with Internet is the hotspot in the development of Japanese telecommunication industry.

Japanese telecommunication operators emphasize the research and development of new technologies. They have proposed to develop “Five Sense Communication” which will transfer olfactory, tactile and gustatory information other than visual auditory information so that the communication between people becomes more natural and real. The Japanese information service industry is also very advanced. All large enterprises have established computer network within and 80% of them have connected with outside network. In government bureaus every 1.02 people own one computer and in the executive offices every 1.96 people own one .

Though Japan's Internet technology lags behind that of the United States, it is fostering strengths and circumventing weaknesses by establishing "Mobile digital communication network" to compete with US in the world information market.

The Japanese government and the industry hope that information technology can stimulate the recovery and growth of its stagnant economy. Japanese telecommunication industry has gradually opened since 1980s and experienced from wholly state-owned operation to the monopoly operation by a few enterprises. Japanese government has issued *Law for Electronic Telecommunication Industry* and *the Restructuring of NTT* which accelerate the reform of Japanese telecommunication industry. The Japanese government has decided to implement further reform in the telecommunication market according to the restructuring of the economy. The three measures to promote competition are as follows. Firstly, it will deregulate, open the market further and enhance the vitality of the market; secondly, it will make use of cable TV to explore new method for low-cost local communication; thirdly, it will eliminate the limitation imposed on the percentage of foreign investment in telecommunication industry and prepare itself for the challenge of internationalization of telecommunication market.

China is closely related with Japan in Business. So the telecommunication industries in these two countries are planning a series of cooperation in several fields. For instance, Japan Telecommunication Corporation and China Telecom Group has reached a cooperative agreement on the establishment of international high speed data transferring service system by ATM. Japan has lagged behind European and American telecommunication operators in entering Chinese telecommunication market. If in the next round of competition for Chinese market share Japanese enterprises could take first move, Japanese economy and the restructuring of Japanese overseas market will benefit greatly. It is quite possible for Japan to acquire first-move advantage since Japanese companies are eager to enter Chinese market and they are as sensitive to overseas markets as their European and American competitors. Moreover, Japanese government offers better industry policy instruction than European governments.

British Telecommunication Industry

After the mid of 1990s, main telecommunication enterprises in Western Europe have experienced a series of reform and M&A and shown good momentum for growth. The revenue keeps growing and its increase rate is higher than that of GNP. The revenue increase mainly comes from the vitality resulting from industry strengths and reform. Almost all enterprises rank profitability as a more important indicator of performance than business revenue.

UK is developed in telecommunication industry since long ago and is the pioneer of telecommunication reform among European countries. Its telecommunication industry has developed from commingling operation of government and enterprises to bi-oligopoly competition and finally to overall competition. Its development offers good reference for reforms in other countries. In the past several years, UK government has gradually opened up its telecommunication market and encouraged competition to facilitate the growth of the industry. Afterwards, the business has increase rapidly and the business scope has also expanded vastly. We could safely say that UK owns several very competitive multinational telecommunication enterprises such as BT, C&W and Vodafone mainly because of its choice of telecommunication industry policy.

The opening up of telecommunication market has brought great benefits to the country. Users have more choices over telecommunication equipment and services and benefit from the price competition between telecommunication operators. The British government regulates the market by enacting and implementing regulations as well as licensing and thus enhances the obligation of telecommunication common service. The entering of new telecommunication operators has also input vitality to the market and improved the network capacity and communication quality.

On realizing the gap of its information level to that of US, UK is speeding up the framing of economic development plan suitable for the information age. It plans to build an “Electronic UK” adaptive to the knowledge economy. The premier Blair thinks that the three key factors for the knowledge economy include: firstly, the stability of macro-economy which is the prerequisite for investment and development in E-commerce field; secondly, technology renovation, especially the information technology innovation; thirdly, high emphasis on education and skill training.

Chinese Telecommunication Industry

Since the implementation of economic reform and opening up, Chinese telecommunication industry has benefited a lot from the preferential national policies and good macro-economic environment. It has experienced rapid development and in-depth change. Since 1990s Chinese telecom industry has maintained continuous high growth for several years and become one of the fastest-growing industries in the national economy. During the “Ninth five-year plan” period, the business volume of telecommunication industry has increased by 28.8% annually and the increase rate is 3.2 times than that of GDP in the same periods . The telecommunication network has developed from small capacity, analog technology and single service to large capacity, data technology and diversified services. At present, the telecommunication market has several players to compete with each other. China Telecom still dominants the fixed telephone market. China Mobile and China Unicom compete in the mobile market. In long-distance call market the competition becomes severe with the prospect of IP services. In broadband communication market the competition structure has come into being. BP market has realized perfect competition with the largest number of users and the largest scale of network in the world. With the expansion of the network, the improvement of technology and the enhancement of comprehensive ability, China has possessed necessary conditions to enter the leading group in world telecommunication market.

The Comparison of Telecommunication Industries in Developing Countries and Developed Countries

Difference in Technology

The overall level of telecommunication technologies in developing countries lags far behind that in developed countries.

Difference in Management

The regulating system and enterprise operating system in telecommunication industries of most developed countries are well designed. They have established scientific and intensive management approach such as cost accounting and fee accounting. And the telecommunication service industry has experienced revolutionary changes through two stages --competition and globalization. However, laws and regulations on telecommunication market are far from perfection in developing countries. Monopoly in telecommunication service industry still exists and there is a long way to go before the realization of domestic and international competition.

Difference in Services

The primary service in developed countries has developed from voice service provider to multimedia service provider. The Internet services have grown amazingly. However, in developing countries, the primary service is still at the stage of providing voice services.

Difference in Room for Development

The regional differences among telecommunication industries are striking. In those least developed countries and areas, the prevalence rate of telephone is calculated on every one thousand people while in developed countries every family owns a telephone. The prevalence rate of fixed telephone in certain developing countries is even lower than that of mobile phone in developed countries. The great difference in telecommunication development has enlarged the economic gap among different nations. Now room for further development in telecommunication industries of those developed countries is limited and these markets need new vitality. Compared with domestic development, the exploration of overseas market has lower operation risks while offers more profits. It is the development gap and the demand for self and co-development between developed and developing countries that will finally lead to the elimination of monopoly, deregulation and the liberalization in telecommunication industry of developing countries.

China's commitment to WTO on the opening up of telecommunication services market

GATS and Telecommunication Services

GATS is a new set of international rule governing international trade in services sector. It comprises three parts: its articles, appendix and commitment schedules of member nations and areas.

GATS include 29 terms of articles of which the most important ones are most-favored-nation treatment, transparency, more participation of developing countries, market access and national treatment.

GATS has 8 appendix among which two are concerned with telecommunication services—*Appendix on Telecommunication* and *Appendix on the Negotiation of Primary service*. The purpose of these two appendixes is to acknowledge the special nature of telecommunication services sector and its dual role as a special economic sector as well as the basic transferring tool for other economic activities. These two appendixes have given more specific provisions to telecommunication sector on the principles of implementing GATS.

·Provision on transparency: "Every member has the obligation to publicize related materials that will affect access to and utilization of public telecommunication transmission network and services."

·Provision on technology cooperation: "Every member agrees and encourages providers of public telecommunication network and services as well as other entities in both developed and developing countries to participate international and regional organizations"; "Every member should cooperate with related international organizations and, if possible, provide information about telecommunication services, industry and technologies to developing countries and help them to enhance their domestic telecommunication service sectors. "

The specific commitment schedule states the obligations of members on national treatment and market access agreed in bilateral negotiations. It clearly specifies the restriction imposed on the implementation of national treatment and market access to other members.

China's commitment to WTO on the opening up of telecommunication service market

According to the commitment given by Ministry of Foreign Trade and Economic Cooperation of China on December 11th, 2001, the schedule for opening up of China's telecommunication services sector is as follows:

·In the first year after the accession of WTO, China will gradually open network services (mainly ISP);

·In the second year after the accession, China will gradually reduce regional restrictions on value-added services. The major area is mobile communication, wireless BP and Internet services;

·In the third year after the accession, China will begin to open its cable and optics network, eliminate the regional restriction totally on value-added services and reduce tariffs on semi-conductors, computers, computer equipment, telecommunication equipment and other high-tech products;

· In the fourth year after the accession, China will gradually increase the sharing percentage restriction on foreign investment in primary service from 25% to 49%. In value-added telecommunication service sectors such as BP, data compression and transmission the limitation will gradually rise from 30% to 50%.

·In the fifth year after the accession, China will gradually eliminate regional restriction on foreign investment in fields of BP, the importation of mobile phones and the domestic fixed telephone services. China will also open its network services completely.

·In the sixth year after the accession, China will open its cable and optics network completely. The traditional monopoly structure will be broken and a competitive telecommunication market will come into being.

The Game Rules—WTA and its main terms

On February 15th, 1997 69 members of WTO reached an agreement on telecommunication liberalization—WTA and the agreement came into effect on February 5th, 1998. WTA comprises *The Fourth Protocol of GATS, its appending Commitment Schedules of members, exemption list of most-favored-nation treatment* and *reference file*. The key principle of WAT is to commit unqualifiedly to other members to open partially or completely the domestic primary service markets on an objective and just basis. This multilateral agreement on telecommunication service trade has laid a solid foundation for future development of telecommunication service sector in the new century.

As an important component of rules governing trade in service sector, WTA follows the following basic principles within the frame of WTO:

Principle of Most-Favored-Nation Treatment

Most-Favored-Nation Treatment is one of the most basic principles of multilateral trading system. Members should ensure foreign telecommunication service providers to receive most-favored-nation treatment when they provide cross-nation telecommunication infrastructure related services. Unconditional most-favored-nation treatment will give those WTO members who haven't signed WTA the same opportunity and treatment of market access as those who have signed.

Principle of Transparency

The principle of transparency requires members to publicize timely all laws, regulations, executive instructions and conventions that may influence the execution and implementation of WTA no matter whether such laws or regulations are made by central, regional or authorized non-government institutions. Such publicity must be before their effective days. Without transparency, no fair competition can be guaranteed among those protected telecommunication markets.

Principle of National Treatment

National Treatment is an obligation depending on specific commitment of members with consideration of the interests of developing countries. According to this principle, all members should give the same treatment (based on the conditions and qualification specified in the commitment schedule) to other members as to domestic enterprises within the committed sectors. Therefore, many developing countries with monopolistic telecommunication market have to change their management approach to the market and ensure equal competition among foreign and domestic telecommunication service providers.

Principle of Market Access

National Treatment is an obligation depending on specific commitment of members. It requires every member to give services and services providers from other members treatment no lower than the term, limitation and condition specified in the commitment schedule. On this principle, most members allow partial market access. Usually developed countries offer high-level market access and developing countries maintain low-level market access.

One of the major challenges that WTA impose on its members is how to balance the effective government regulation over domestic telecommunication services market and the implementation of WTA and their commitment. To put it more specific, how can members ensure adequate competition in the primary service market?

No Return to Monopoly—China's Accession into WTO and Telecommunication Reforms

Economic Liberalization Pushes Forward Reforms on Global Telecommunication System

From a global perspective, reforms on economic systems always go ahead of other reforms and such a trend is indicated by the startup of WTO negotiation and the final agreement. Uruguay round of negotiation began with the Proclamation of Premier Conference in Aelst (   ) of Uruguay on September 20th, 1986. After 7 and a half years negotiation participated by 125 nations and areas, it finally ended on April 15th, 1994. Since January 1st, 1995, WTO came into being and begun to operate. The emergence of WTO is a most important fruit of the seven-year negotiation, which indicates and represents the liberalization trend of the world economy. The globalization and liberalization of the world economy accelerate changes in telecommunication industry. In market economy, telecommunication should not be public welfare and operated by the government. Instead, it should operate as an industry opening for competition according the principles of market mechanism and capital operation. To integrate telecommunication more into the globalization and liberalization of the world economy, we must carry out reforms on the traditional telecommunication system.

The essence of global reforms on telecommunication system lies in privatization. Before the 1990s, in most countries except US, UK and Japan, telecommunication is a public welfare owned and operated jointly by government and enterprises. After the 1990s privatization as a new trend has swept over the state-owned telecommunication industries. Government privatized those 100% state-owned telecommunication operators and released partial or whole control over them. The finance of enterprises opens to the nation, to their competitors and to the international market.

Major Reforming Measures on Telecommunication system are as follows:

·to separate post and telecommunication;

·to separate government from the operation of enterprises;

·to establish an authoritative, independent and special regulating body for telecommunication to enhance the industry regulation;

·to break monopoly, allow domestic private enterprises to operate telecommunication business, increase the number of operators and to properly support some new competitors;

·to open up the market, allow foreign investment into domestic enterprises and give National Treatment to foreign enterprises to ensure their fair competition with domestic enterprises;

·to encourage capital restructuring in domestic market and participate in mergers, acquisitions and cooperation in the international capital market;

·to ensure and improve the telecommunication common services;

·to expand the business scopes of telecommunication operators and allow mutual interoperation.

The features of reforms on the world telecommunication system are as follows:

·Different countries and areas are almost at the same stage of reform. However, because of the political, regional and cultural differences, they are different on terms of the force and approaches of reforms.

·A well-designed legal protection system should be first established to meet the need of reforms on telecommunication system.

·There will be significant changes in the institution and system. The full restructuring of post and telecommunication institutions is necessary for telecommunication and post to operate independently as enterprises. Government is separated from the operation of enterprises. However, today with the development of information technology, post and telecommunication will cooperate with each other and establish a new partnership in the new competitive market.

Chinese Reforms on Telecommunication System

Though Chinese reforms on telecommunication system started late but developed with a very fast speed. During 1998 to 2000, China implement reforms with more force than many other countries:

·China dismissed the former Ministry of Post and Telecommunication and merged it with the Ministry of Electronics to form the Ministry of Information Industry;

·To enhance the supervision of government over the industry, an administrative bureau was established inside the Ministry of Information Industry. This accords with the requirement of WTO;

·After the separation of government from the operation of enterprises, the former General Bureau of Telecommunication was restructured into a complete enterprise—China Telecom;

·China Telecom was divided into four after the restructuring in 1999: China Telecom, China Mobile, Guoxun BP and Satellite Communication. Meanwhile, China Unicom was also restructured with the merger of Guoxun BP. The restructuring completed in the first half of 2000.

·China Netcom and Jitong are allowed to establish their own network communication infrastructure and to operate different primary services (such as IP and Internet business) and value-added services;

·China established China Railway Communication Corporation in December of 2000 and this corporation came into operation in March of 2001;

·During the telecommunication reforms, China issued *Regulation on Telecommunication of People's Republic of China* in September of 2000. The purpose of this regulation is to specify clearly the supervision function of government, to regulate the actions of enterprises, to maintain a just and transparent environment for competition and to protect consumers' interests. As a result, this regulation improves the legislative construction of telecommunication industry.

To sum up, though China started late in reforms on telecommunication system compared with developed countries, it only took China two years to do reforms that usually cost 8-10 years in developed countries.

After the separation of government and enterprises and the restructuring of telecommunication companies according to their businesses, monopoly has been broken down in China's telecommunication operation market. By the end of 2000, there are seven main players in China's telecommunication market. They are China Telecom, China Unicom, China Mobile, China Netcom, Jitong, Satellite Communication and China Railway Communication Corporation. In the primary service market, the competitive market mechanism has gradually come into being. Every business is operated by at least two large companies and they compete with each other.

The regulation of China's telecommunication market gradually adjusts itself to meet the requirement of WTO and becomes more scientific and efficient. It becomes similar to world common practice. The institution settings and the regulation environment have improved a lot in the past few years.

China's Telecommunication Service Industry Faced with International Competition

China's entry into WTO means that our telecommunication industry has integrated into the world telecommunication market and become part of it. Since WTO has its own rules, our telecommunication industry should also follow and understand the new rules and meet the requirements of new rules. Foreign investment will keep different paces in entering different market sectors. Foreign investment will enter value-added services sector and wireless BP sector quickly since they have low market barriers, are more open, need small input while offer immediate payback. In primary service sector, the most attractive business for foreign investment is mobile and data services. And foreign investment may first enter fixed telephone area because at present the rate structure for international and domestic long-distance call is twisted which includes subsidies. The access barrier in IP market is also very low. However, in local phone business, since it is almost impossible to establish the network infrastructure, foreign investment may enter through cable access services.

The impact of China's entry into WTO on domestic telecommunication service industry depends on two main factors: firstly, the opening degree of domestic telecommunication market; secondly, the international competence of telecommunication services providers. The WTO rules that govern telecommunication services include *Agreement on Information Technology*, *GATS* which include *Appendix on Telecommunication* and *WTA*. Other related ones include *TRIPS* and *Agreement on Subsidy and Anti-subsidy Measures*. Analysis on the above-mentioned WTO files indicates that:

Limited Opening-up of the Telecommunication Market

·China will gradually opens its telecommunication market but still imposes time and regional restriction on foreign investment which foreign investment has to meet;

·Foreign investment can only operate telecommunication business in China by establishing joint ventures. No wholly foreign-owned enterprises are allowed in telecommunication market. To gain investment qualification in China's telecommunication market, foreign investors have to first find Chinese cooperative partners;

·The scale and growth speed of foreign investment in joint ventures will be limited by the scale and growth speed of its Chinese partners.

Foreign investors cannot be the main player in China's telecommunication market

·Since foreign investment can only enter China's telecommunication market by joint ventures, multinational telecommunication companies cannot establish their completely-owned subsidiaries in China. Therefore, after the entry into WTO, multinational enterprises cannot compete directly with Chinese telecommunication companies in Chinese telecommunication market.

·With restriction on the percentage of foreign investment, it is very difficult for foreign investors to acquire dominant position in and to control the operation of these telecommunication enterprises. The development of foreign investment in China is depending on the development of their joint partners. Therefore, foreign investment and domestic one have to maintain partnership instead of rivalry.

·There is limitation on the percentage of foreign investment but no restriction on Chinese investment. With the great potential of Chinese telecommunication market, many wholly owned Chinese enterprises would emerge with the entry of foreign investment. Therefore, in China's future telecommunication market, there will be competition between Chinese enterprises and joint ventures, within Chinese enterprises themselves and within joint ventures. But there will be no direct competition between Chinese enterprises and foreign enterprises.

However, this does not mean that our existing telecommunication enterprises are of adequate competence to meet the challenges of international competition. The telecommunication service industry is concerned with the information and economic security of the whole nation. We cannot open the market completely just because the industry lags far behind those in developed countries in terms of development stage and competence.

The gap in the overall development level of the telecommunication industry

Since the 1980s till now, reforms in telecommunication industry of developed countries have gone through two stages—competition stage and globalization stage. Most developed countries made good preparation within before they open their telecommunication service market to other countries. The preparation usually covers the following work:

·The introduction of competitive mechanism into the domestic telecommunication industry has almost completed;

·They provide infrastructure for new businesses by inputting hugely to speed up the new construction and reconstruction of existing telecommunication network;

·They set international market as the target for development and increase the international competence of the whole industry by mergers and acquisitions. They prepare good domestic room for development for those multinational telecommunication enterprises.

To sum up, most developed countries have experienced competition and globalization stages in telecommunication service industry so that the whole industry has experienced revolutionary changes compared with the traditional monopolistic one. However, the domestic competition still has a long way to go and the monopoly structure has not been broken yet. So our telecommunication industry lags far behind those in developed countries.

The gap in infrastructure and operation level of telecommunication service

At present, the infrastructure in developed countries has developed from voice services to multimedia services. Especially the Internet business has grown rapidly. The infrastructure construction in China still stays in the stage of voice services and such voice content infrastructure still needs time to develop fully. This restricts the development of new business. Though we are at the same starting point with developed countries in Internet business, large gap exists between us and developed countries in the service level, the number and quality of services provided.

Faced with the competition from international market, our telecommunication service industry should find proper ways to make use of the benefit of market opening while avoid the risks of being overwhelmed. The essence lies in the increase of international competence of China's telecommunication service industry. To put it more specific, the new challenge that our telecommunication industry faces is how to improve international competence quickly to a level where we could compete with world advanced enterprises. The only way to improve our international competence is to improve the overall development level of our telecommunication service industry. In speeding up the reforms, we should also take into consideration of various situations after the entry into WTO:

The improvement of international environment for the development of China's telecommunication industry

Since foreign investment can enter Chinese market after China's entry into WTO, it will bring technologies and management skills and improve the international environment for China's telecommunication industry;

The inadequate competitive pressure may reduce the drive for reforms in the telecommunication service industry

Most reforms before in Chinese telecommunication industry were carried out because of the prediction about the possible serious challenges China may face after the entry into WTO. However, from the present situation, the entry into WTO will not have significant impact on the industry. Due to the inadequate pressure, it is even more difficult to introduce competitive mechanism and to push forward further reforms in telecommunication industry. The limitation on the percentage of foreign investment participation may result in the dominant position of Chinese employees in decision-making. This will make foreign investors more careful in the introduction of advanced management skills. The fact that capital and management personnel needed mainly come from China may to some extent further delay the development.

Problems that may affect the rapid and healthy development of telecommunication service industry

The main problems existing in China's telecommunication industry appear to be the inadequate infrastructure, the smaller scales of equipment and the lower level of development compared with those of developed countries. Actually, the development of telecommunication industry should comprise at least two aspects: one is system improvement and the other is infrastructure construction. The two are like the hardware and software of computers and are both indispensable for the smooth operation and rapid development of telecommunication service industry. Due to the laggard primary service, China always emphasizes infrastructure construction while ignores system improvement. So system improvement does not get along with the expansion of infrastructure. When the nature of telecommunication has changed from monopoly to competitive, China still keeps the traditional management and operation mechanism. No competitive mechanism was established and telecommunication business has limited finance resources. The industry policies and the management system are based on the files delivered by governing agencies or even the speech of certain leaders. Because of the laggard system improvement, only few enterprises can participate in the infrastructure construction. The capital needed mainly come from the enterprises themselves. All these practices seriously restrict the development of the whole telecommunication industry.

The impact of China's entry into WTO on the development of various telecommunication operations and our countermeasures

The impact of China's entry into WTO on fixed telephone operation and our countermeasures

At present, our fixed telephone operation has possessed certain competence in terms of hardware. The scale of the network ranks second in the world and is very near the first. The technology capacity of network has also reached advanced level. By the end of September of 2001, the long-distance operation circuits have reached 3.435 million lines and the total length of optical lines has reached 1.305million Kilometers. The total capacity of local exchanger has reached 195million lines . By the end of October 2001, the number of users of fixed telephone has amounted to 174.76 million and everyone one hundred people own 24.4 telephone .

Therefore, we should not be terrified by our foreign rivals. Moreover, fixed telephone is in the primary service market that will open step by step. The fixed telephone operation is characterized by entire network. It is not very attractive for foreign investors since it takes a long time and vast input to build the network while offers a slow payback. The economic barrier for entry is quite high.

Therefore, our fixed telephone business will not be seriously influenced within certain period after China's entry into WTO. On the contrary, we may welcome a “spring” for development:

·The introduction of capital and technology will be much easier so that the bottleneck restricting the development of fixed telephone will be eliminated. Our telecommunication industry, especially the fixed telephone business, has suffered long from inadequate capital. In July 2001 China canceled the initial installation fees for fixed telephone, which reduced the capital resources for telecommunication construction by 1/3. The entry into WTO facilitates the introduction of more foreign investment.

·It will enlarge domestic market for fixed telephone business in the following ways. Firstly, with the development of our market economy, the increase of international competition and improvement of people’s living standard, demand for telecommunication services will increase abundantly. Fixed telephone business serves as the basis for many other telecommunication businesses; secondly, with the opening of value-added service sector, the number of value-added service providers will increase. More related service function of fixed telephone and the service types will be further explored and developed; thirdly, since the prevalence rate for fixed telephone is still low, we can explore potential market that are unreachable by present research ability.

Of course, WTO is not a charity organization. So the entry into WTO will impose some challenges for fixed telephone business:

·Compared with multinational telecommunication giants, we lack the advanced operation mechanism and competition experiences in fixed telephone business. While after the entry into WTO, capital strength, capital operation and marketing operation become even more important than network construction and business R&D in the more complicated international environment.

·After China’s entry into WTO, China’s telecommunication market will become one integral part of the world telecommunication market. It will develop toward a completely open and pluralistic market where several fixed telephone operators compete with each other. The severe competition will affect to some extent the development speed of the whole telephone business.

·More advanced, individualized and fashionable communication tools (such as mobile phone and IP phone) will grow fast in China’s market and diverse the business volume from that of fixed telephone. The business revenue of fixed telephone will shrink and finally this sector may develop into a platform for many new businesses.

The future for fixed telephone business after China’s entry into WTO can be summarized into two points: one is that opportunities and challenges co-exist with more opportunities than challenges; the other is that hopes and difficulties are both ahead but we have more hopes in the hand. Therefore, the existing fixed telephone operators should see clearly the present market situation so that we could make use of the opportunities while overcome the challenges. We should make good preparation and strengthen ourselves in the “buffering period” after the entry into WTO to meet the competition from multinational giants:

·The future trend of telecommunication network will be broadband, intelligentization, comprehensiveness and individualization and we should follow this new trend closely. Since fixed telephone network will finally develop into a platform for other communication businesses, we should make full use of foreign capital and technologies to upgrade as well as optimize the fixed telephone network.

·As we all know, the subdivision of market will create new market opportunities. So we can expand the whole fixed telephone sector by subdividing the existing market and taking first-move advantage in these newly emerged market niches.

·We should make full use of existing resources to explore the potential function of fixed telephone business. We should try to extend the life cycle of fixed telephone sector by fully developing those value-added services that can stimulate volume increase, improving service quality and accelerating the development of secondary consumption market of fixed telephone.

The Impact of China's Entry into WTO on Mobile Phone Sector and our Countermeasures

The establishment of China Mobile and China Telecom signifies the accomplishment of the restructuring of China's telecommunication system. The monopoly has been broken and China's telecommunication market enter a competitive age with several major players such as China Telecom, China Mobile and China Unicom etc.

Because of the special feature of personal communication, mobile phone sector has great potential for future development. Meanwhile, because it is comparatively easy to build the wireless network, it has low entry barrier and offers profitable payback. Therefore, the market competition will be very severe. China's mobile phone sector is a fast growing market. According to the statistics provided by the Ministry of Information Technology, by the end of July 2001 the number of mobile phone users has reached 1360million and ranks number 1 in the world. By the end of October 2001 the number has increased to 1360million with a monthly increase of 5million . The opening of mobile phone sector attracts both the domestic and international attention.

During the opening of China's mobile phone sector, government regulation is necessary to ensure the orderly development of China's mobile communication. The government should fulfill the following tasks:

·The government shall enhance the strengths of mobile phone sector and increase their international competence. The government shall grasp the opportunities in the "golden age for development" to promote the rapid development of mobile communication.

·The government shall take into consideration comprehensive factors to maintain the business distribution and power balancing in the market when giving licenses to qualified operators. It should try to avoid excessive power differences in the market so that no real competition will emerge before the complete maturity of the open market.

· The government should maintain reasonable pricing to protect the interests of the country and enterprises. Mobile communication sector is a capital and technology intensive industry and it is very difficult maintain growth potential without adequate profits.

The Impact of China's Entry into WTO on Wireless BP Sector and Our Countermeasures

The rapid prevalence of mobile phones in recent years seriously affected the wireless BP sector. The most important issue for wireless BP operators is how to keep the healthy growth of wireless BP business.

Wireless BP business is far from vanishing

Though China has the largest number of wireless BP users in the world, the prevalence rate is only 6.3% while that in rural area is even lower than 1%. In developed countries, the prevalence rate usually exceeds 10%. Therefore, there is great market potential for wireless BP communication.

With the rapid development of Internet, some wireless BP business has adjusted itself for some new services. Thus, beeper becomes a totally new information terminal. So we may safely conclude that wireless BP business will not die in the following few years and the number of BP stations will not decrease either. The future trend is “the information BP and individualized services”.

The wireless BP sector should explore new market niches

Faced with new challenges, the wireless BP sector should absorb new technologies and keep innovation to maintain its share in telecommunication industry. For instance, it can explore China’s vast market of Internet mobile application by connecting various BP stations, mobile stations and information resources together to form a two-way network and increase and adjust the service function of BP stations. The BP platform for value-added information service can help beeper users to call from webpage, book stock information, get stock precaution, get mail notice, make PDA information and revise user information. Such services will attract new users as well as keep former ones.

The wireless BP operators should continue to be active in the information market to gain international competence. Thus, the wireless BP business will operate more closely to the market and to people’s daily life. Mergers and acquisitions are necessary to form intensive operation with only few specialized groups and to enhance the overall strengths of the sector.

The Impact of China’s Entry into WTO on the data communication sector and Our Countermeasures

In recent year, China’s data communication services grow rapidly and its business revenue as well as its share in the whole telecommunication businesses keeps increasing. The total revenue of data communication in 1998 is 2.88billion RMB and accounts for 1.2 percent of the total revenue of the whole telecommunication industry. In 1999 the total revenue increased to 3.66 billion RMB and the share also increases to 2.89%. The total revenue in 2000 even doubled that of 1999. The prerequisite for rapid increase of data services is the fast development of data network with IP as the key technology. Besides China Telecom, China Unicom, China Jitong and China Netcom are all building their own IP network. China Unicom and China Jitong employ IP/ATM technology in the network while China Netcom employs IP/DWDM and build IP on optical networks.

To develop data services has become an irrevocable trend and value-added telecommunication services are an important component. In US telecommunication business, the data sector has accounted for 80% while the rest 20% belongs to voice services. However, our data services are just starting. The revenue from data services makes limited contribution to the increase of total telecommunication revenue. Related technologies that will provide development foundation for data services, such as broadband, GPRS, CDMA and 3G have not been fully developed and played their roles. It cannot be denied that we have great market capacity for data services and need more enterprises to operate and develop this sector. Therefore, we should make great efforts to develop IP and wireless data services. Value-added telecommunication services are an important segment in data services. Meanwhile, we shall encourage related enterprises to make use of information technology and network technology, to support the opening of market access and to be actively involved in the renovation of value-added telecommunication services.

After China's entry into WTO, we could introduce more foreign investment timely so that telecommunication could have more adequate finance, more skillful personnel and more advanced technology. We should enable the market to fully perform its role so that more opportunities will be created for the development of data communication business.

The impact of China's Entry into WTO on telegraph services and our countermeasures

From August 1st, 2001 on, all telegraphs are not to be added with "increased urgency". But almost no one ever noticed it since the born-to-be-fast telegraph has slowed down in the market. In Beijing Telegraph Building, long-distance call, ISDN, Internet and newly emerged ADSL have occupied dominant position in the market and people have forgotten the counter for telegraph. With the increase of data service, staffs joke that "Telegraph building" should be renamed into "Data building".

At present, with the prevalence of telephone and the emergence of Internet, such modern communication tools have occupied the whole market. The nature of telegraph has changed from a tool for urgent communication into a tool for ceremonial expression. With further penetration of more advanced communication tools, telegraph will surely die away. The entry into WTO will not bring a favorable turn for it.

Policy Suggestions for Telecommunication Industry

The opening up of the market will create many new opportunities while impose new challenges. And the essence for the operators is how to grasp the opportunities. The core of reforms carried out in developed countries on telecommunication industry is the introduction of competitive mechanism. The reforms mainly cover three aspects: reforms on enterprise system, industry restructuring and reforms on regulation system. As for the present situation of China's telecommunication industry, we should also set the introduction of competitive mechanism as the essence and carry out thorough reforms in telecommunication industry. Meanwhile, we should speed up the infrastructure construction. To put it more specific, we should implement the following policies to maintain the rapid and healthy development of telecommunication industry and foster international competence of our telecommunication operators.

To make full use of related WTO articles

Some of the telecommunication related WTO articles need further clarification and some can be revised. For instance, as for market opening, we could revise the opening time schedule without change of the opening target. We should make full use of related WTO articles to achieve two goals: one is to ensure a stable international environment for domestic reforms in telecommunication industry and make full use of foreign investment. The other is to revise the opening time schedule according to the progress of reforms and the development level of domestic telecommunication industry.

To encourage more new enterprises to operate telecommunication business

The government should encourage more new enterprises to operate telecommunication business, especially the primary ones, which will offer the following benefits. Firstly, it promotes competition in the industry. Secondly, it increases financial resources and investment channels for telecommunication construction. Thirdly, it helps to provide different consumer groups in different regions with appropriate services.

The government should encourage participation of both large enterprises, regional and specialized mid-and-small-sized enterprises. When increasing the number of voice service operators, it should also increase the number as well as the scale of enterprises in new business sectors such as Internet services. According to the present market situation, government shall give new operation licenses in a proper way to increase the entry of large-sized enterprises. However, the government should give more regional and specialized operation licenses to allow operation in a certain area and to limit the number of large national telecommunication services providers who own infrastructure construction right. Since the private capital is not very mature, the new operation licenses could be given to one enterprise or enterprises joint group.

To expand finance/investment channels for telecommunication industry

In present system, the investment in telecommunication industry mainly comes from the internal capital of enterprises. The limitation of self-accumulated capital has restricted the rapid development of the industry and such finance/investment system needs reforms. The government shall allow China Unicom and other newly licensed telecommunication operators to use stock finance.

To carry out modern enterprise system reforms on the existing national telecommunication operators

Since the introduction of competitive mechanism is essential for the development of the industry, we must carry out system reforms on national telecommunication operators. The specific approaches include to sell out state-owned stocks or to increase individual stocks while retaining state-owned stocks. Moreover, operator-stimulating mechanism should be established within these enterprises and the assessment of return on assets should be emphasized.

To encourage the participation of telecommunication enterprises in international competition

Since our telecommunication service industry has partially opened, other members of WTA should open their domestic market to our enterprises according to the principle of equality. In order to accumulate experiences for the participation in international competition, we should encourage domestic enterprises to operate abroad as business existence.

To use legislative force to regulate telecommunication industry

The government should speed up the legislation of *Telecommunication Law*. This law should be based on the present industry situation and meet the present demand. It will perform two functions: one is to change the disordered management of the market and the other is the promote competition. *Telecommunication Law* should specify the nature of telecommunication industry and emphasize the development goal, main policies and procedures to fulfill the goal.

To sum up, opportunities and challenges co-exist after China's entry into WTO. In the short term the competition severity will increase greatly. While in the long run, advantages will exceed disadvantages because market opening and competition will accelerate the development of telecommunication industry. Positive effect from the impact will appear after some time. We firmly believe that in the new tide of globalization, China's telecommunication industry will grow and have a promising future.

The Public Not-for -Profit Hospitals in China

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Abstract

In China, there have already existed two categories of medical facilities. One embraces the non-profit medical organs providing public welfare and charitable medical services, plus some public medical organs and non-profit hospitals funded by charities, expatriates and overseas Chinese.

This essay will introduce some important theoretical models on the not-for-profit hospital, such as market failure model, Altruism Models and Physician Cooperative Model .

Due to the different conditions in China ,this essay will also analyze the problems in the Chinese public not-for-profit hospitals such as the efficiency of the management of the state-run non-profit hospitals and how the private for-profit hospitals' entry influence the behavior of the public nonprofit hospitals, etc.

The conclusion is that, to improve China's medical service market, it is highly necessary to show solicitude for the behavior pattern of China's public non-profit hospitals.

Development of the not-for-profit and for- profit hospitals in china

In the past, Chinese government regarded medical establishments as a public welfare cause instead of for-profit organizations. On February 21, 2001, eight departments including the Structural Reform Office of the State Council jointly promulgated "Ideas about the reform of the urban medical care system", which divided medical institutions into not-for--profit and for-profit, marking an important breakthrough in China's medical reform. In July 2000, Ministry of Health, Administrative Bureau of National traditional and Western Medicines, Department of Finance and the National Planning Commission jointly issued "ideas about how to manage by classification the urban medical organs ", which again divided hospitals into for-profit and not-for-profit ones according to their ownership structures. The document carries the following specifications.

First, not-for-profit medical institutions are established for the interest of the public with no profit purpose. Their income is used for the reform of the medical service and their surplus receipts from the actual operation is only for self development, like for improvement of the medical conditions or introduction of technology, etc. For-profit medical organs are those facilities whose proceeds can be used for investment to get economic returns. Government does not run for-profit medical operations.

Second, government-sponsored non-profit medical institutions enjoy the financial allowance provided by the governments of similar rank, while other non-profit medical organs cannot. Non-profit medical facilities follow the prices stipulated by the government and enjoy the relative preferential tax polices correspondingly. However, for-profit medical facilities operate by themselves, pay taxes according to the laws and regulations and their prices are open.

Management by classification is a significant adjustment done to the existing management system of the medical facilities in our country. In reality, actually there have already existed two categories of medical facilities. One embraces the non-profit medical organs providing public welfare and charitable medical services, plus some public medical organs and non-profit hospitals funded by charities, expatriates and overseas Chinese. The other refers to the for-profit hospitals with investment returns as their purpose, including cooperative or jointly funded medical facilities, shareholding hospitals and private hospitals.

Up till now, China has basically finished categorizing and registering the medical organs. Non-profit organs are mainly government-run, while the profit ones are largely private clinics. In 2001, the government sponsored 8226 hospitals, 1.56 million beds and 1.8 million medical technicians, accounting for 40%, 70% and 73% of the total respectively. For-profit medical organs account for 44.2% of the total medical organs; for-profit hospitals account for less than 1% of the total hospitals; the number of beds, doctors and nurses in for-profit medical organs account for 1.4%, 9.4% and 0.8% of the total respectively. In terms of the services, the outpatients of the for-profit medical organs account for 7.7%, annual inpatients for 2.9% and annual surgical operations for 0.7% of the total.

Then, in what way do non-profit hospitals influence the utilization of the resources and the social welfare? What is their behavior pattern? This essay will analyze the behavior pattern of the Chinese hospitals based on the relevant theories.

Review of theories concerning the relationship between the ownership structure and the behavior pattern of hospitals

In neoclassical microeconomics, for-profit hospitals enjoy higher productivity because explicit stipulations in ownership can better motivate the lowering of costs for more profits. However, owing to the unique feature of the medical service market, traditional explanations about for-profit and non-profit hospitals have some limitations, and therefore there appeared many new theoretical models.

Model 1 ------ Market Failure Model

Because of the uniqueness of the medical service, hospitals and doctors have more knowledge of the nature of the patients' diseases and the relevant therapeutic effect. In other words, hospitals and consumers hold different amount of information from each other. In this case, for-profit hospitals have the motivation and also the opportunity to gain more profits by providing consumers with less than promised or more than expected and more expensive services. As non-profit organizations cannot and will not seek profit maximization, according to Arrow (1963), the non-performance of the medical service market will turn them into the best choice in the society. Some other economists maintain that if there already exist non-profit hospitals in the market, profit-making hospitals will only act as a supplement to meet the excessive demand due to the insufficient supply in the market. (Weisbrod, 1977, 1980)

Similar to the above are theories like the Non-contractible Quality Model by Hansmann (1987, 1980), Easley and O'Hara (1983).

The logic of this model is that because consumers cannot contract on product quality, for-profit firms have an incentive to shirk on quality because this will lower their costs and increase their profits. The non-distribution constraint of not-for-profit status mitigates this incentive because they cannot distribute profits and cannot get as much benefit as for-profit ones can from lowering the costs and sacrificing quality. In some way, not-for-profit status serves as a signal that a firm will not shirk.

Model 2 ------ Altruism Models

Altruism models are the oldest and most common formal models of not-for-profit hospitals, which emphasize the role of altruistic intentions of not-for-profit managers. This altruism is captured by including quantity and quality of output in the objective function of the firm. Therefore, according to Newhouse (1970), non-profit hospitals maximize utility over quantity and quality--but not profits--subject to a budget constraint. Of course, because non-profit firms enjoy the preferential tax policies from the government and meanwhile the consumers who have bought medical insurance are not sensitive to the prices of the medical services, non-profit hospitals are in a position to pursue high quality service at high costs. (Feldstein, 1971)

In prediction of the firm behavior, according to this model, non-profit hospitals are more elastic in output compared with for-profit ones, more productive, better in quality and more active in R&D. Naturally, pretax costs are also higher in non-profit hospitals than in for-profit ones. If the practices of the non-profit hospitals lead to the expected marginal returns of the medical service exceeding marginal cost, there still exists efficiency; but if the medical expenses turn out to be too high, then the efficiency is very low.

Model 3 ------ Physician Cooperative Model

According to Rosenberg (1987), physicians' prescriptions, value concept, professional career, rewards obtained and the increasingly proficient special knowledge have an important bearing on the development of the hospitals.

Not-for-profit firms act as labor-managed firms, in particular physician cooperatives. Doctors make input and output decisions to maximize their private income (or their per capita net income), resulting in the oversupply of the medical services.

Weisbrod (1998) held that physician cooperatives exist only when a huge amount of rent is under the control of the doctors. When the rent decreases, the behavior of non-profit hospitals is more like for-profit ones. For example, from 1800 to 1950, American hospitals were shifted to physician cooperatives by the donator-controlled charity hospitals for the poor. That is because technology progress has made the physicians' work more efficient and more valuable, which prompted the demand for medical services and therefore increased the wealth of the hospitals and doctors. Doctors with rich special knowledge handle the daily work and play a dominant role in the hospitals. Beginning from the 1980s, because of the emergence of HMO, the traditional ways of paying according to the services were no longer feasible and the government cut spending on hospitals. The position of the doctors declined and they were more like a group of influential excellent workers. (Edward 2001)

According to this model, the demand of the non-profit firms for labor, especially doctors, is lower than that of the for-profit firms.

In addition, Daniel and Mclellan (2001) pointed out that for-profit hospitals have a spillover effect on non-profit hospitals, which is very important. When facing the competition from the profit-making hospitals, non-profit hospitals might follow the practices of the for-profit hospitals.

The behavior pattern of the public non-profit hospitals in China

The above economic models gave an in-depth analysis to the relationship between the ownership structure and the behavior of the hospitals from different angles, which to some extent can explain the behavior of the non-profit hospitals in China. For instance, many Chinese consumers would first consider choosing the state-run non-profit hospitals, because they believe the purpose of the government is not for profits but for the benefit of the public, and therefore the quality of the medical service of non-profit hospitals is supposed to be higher. Besides, the doctors in the public non-profit hospitals can also in a way influence the decision-making of the hospitals.

But on the other hand, as these models are basically used to analyze the economically advanced European and American countries, it is necessary to analyze the behavior pattern of Chinese hospitals because of the different conditions in China.

First, the objective function of public non-profit hospitals

In China, a large number of non-profit hospitals are state-owned. Their objective is to provide the basic medical services (including some non-basic medical services) to accomplish the tasks assigned by the government so as to meet the demand of the public as fully as possible.

The model for the objective function of the Chinese non-profit hospitals can be expressed as:

$$\text{Max} \quad U = U[G, Y, q(Y_C)] - U\{C[G, Y, q(Y_C), n, T]\}$$

$$\partial g / \partial Y_C > 0 \qquad\qquad \partial C / \partial n < 0$$

Where Y is the amount of the medical services in the hospitals; q stands for quality; G is the other social objectives set by the government; n refers to the number of the upper-level administrative units of the hospitals; T is technology showing the service amount provided by for-profit hospitals.

This model indicates that the degree of satisfaction non-profit hospitals can give to the society is $U[G, Y, q(Y_C)]$; but on the other hand, paying for the cost of the hospitals, $C[G, Y, q(Y_C), n, T]$, will lead to the loss of the utility--- $U\{C[G, Y, q(Y_C), n, T]\}$. Therefore the objective of the hospitals is to realize the maximization of the net social welfare.

For a clearer understanding of the implication of this model, it is necessary to give some explanations to the specific operational situation of the non-profit hospitals in China.

The first problem is the market entry of the private for-profit hospitals.

At present, the basic principle of the social medical care system pursued by the government is "low level, wide coverage". Local governments stipulate a ceiling and a floor limit. The social welfare will not cover the expenses beyond the limit. The beneficiaries only account for 13% of the nation's total population. The large number of rural population and the minors in the urban areas are not included in the social medical insurance. Because of the relatively low income, the rural consumers cannot afford commercial insurance in the short term. They can only pay medical fees out of pockets rather than through a third party. Such being the case, many consumers are very sensitive to the prices, which poses a threat to the survival of the public non-profit hospitals with low efficiency and high cost but provides room for development for some private for-profit hospitals with "low profit and more sales" as their strategy.

In addition, hospitals co-funded by China and the foreign side have begun to enter into China, occupying one part of the medical service market. Up to February 2001, 38 joint ventures, cooperative hospitals and specialized hospitals and 139 medical facilities like clinics have been approved and registered by the Ministry of Health.

At present, although the public non-profit hospitals are still playing a dominant role in the medical services, they have already felt the competition from all kinds of for-profit hospitals. For example, the hospitalization expense for a birth is about 2800 RMB Yuan in Beijing Hospital of Gynecology and Obstetrics, a Grade A public hospital of the third rank; while in Beijing Jian Gong Hospital which has just been transformed into a shareholding company the fee is only 2000-2500 Yuan. Beijing Harmonious Home Hospital (established in 1997 with foreigners controlling the share, mainly providing service for foreigners in Beijing and the high-income class) charges US$5000 but still attract a lot of consumers and has reportedly started to make profit in China.

In China, public hospitals have the technology, research and teaching strength and therefore higher level of medical service in general compared with private for-profit hospitals. However, due to the lack of effective competition mechanism, the service quality of the public non-profit hospitals is not particularly satisfactory to the patients. Some doctors treat the patients coldly and are not responsible enough. The impact from the private for-profit hospitals is likely to produce a stimulus effect, urging the public hospitals to get rid of their bureaucratic practices and further improve their service quality. As medical services belong to differential product, the private hospitals' accession will not greatly influence the prices of the medical services in the public hospitals.

The management system of the hospitals is another problem.

Government as an investor stands for the people as a whole. Although it has the ownership of the hospitals in name, it does not really manage or make use of it. This leads to the situation that everyone has a share and everyone is managing but no one really represents or takes charge of the state assets. Take public hospitals in China as an example. The Department of Finance is responsible for providing funds for the hospitals and the Planning Department responsible for the importation and innovation of large equipment. The Health Department takes charge of the access of the facilities and personnel and the Pricing Department setting prices. The Social Security Department takes care of the medical insurance, the Tax Department charges taxes according to the regulations and the Ministry of Foreign Economic Relations and Trade takes charge of the foreign affairs. The Administrative bureau of Industry and Commerce deals with the registration and approval procedures, the Medicine Supervisory Department supervises the medicines, and the Organization Department is responsible for the appointment and promotion of managerial personnel. Lastly, the Department of Personnel controls the staff size. The presidents of the hospitals seem to have no right but actually have a say in many cases.

Due to the lack of distinction between investment, decision-making, management and supervisory bodies, the efficiency of the management of the state-run non-profit hospitals has long been low, resulting in the increase of the administrative costs. Therefore, an important task in the reform of the medical system is to establish a modern hospital management system, under which a special organization is designated by the government to take charge of the hospitals.

Second, a supplementary explanation of the cost function of the public non-profit hospitals

Doctors play a very important role in a hospital, like receiving patients, introducing therapeutic methods, writing prescriptions, setting operation timetables, doing operations, and importing medical instruments etc. Doctors diagnose diseases, write out prescriptions and undertake a certain degree of risk, and therefore should get properly rewarded. But, in China's public hospitals, doctors get very low pay and so the government implements the practices of "compensating for the doctors with medicines". It is stipulated that the difference rate of the retail and wholesale prices is 15% or more and doctors can get rebates from the prescriptions, which encourages doctors to write out excessive prescription medicines. Some doctors even take bribes for surgical operations. In addition, under China's medical system, fees are charged according to the items not diseases. Too much examination and treatment is a common phenomenon. In the recent 10 years, China's public non-profit hospitals import and use a lot of expensive inspection facilities and technology and in some cities there is an over allocation of medical resources.

Thus, in China's public non-profit hospitals, the social cost function embodied in doctors and other medical staff can be expressed as follows:

$$C_1=W_1(Y \quad Y_m)+R+\alpha W_1(Y \quad Y_m)+\beta R \qquad \alpha>0 \qquad \beta>0$$

where C_1 stands for the overall social cost embodied in hospital staff; W_1 is wage income, a function of medical service amount and the quantity of medicines; R is the additional income of some staff members, like the bribes taken by surgical doctors; $\alpha W_1(Y \quad Y_m)$ and βR show the negative social effect caused by excessive medical service and bribe-taking respectively.

This model implies that properly increasing the prices of the medical services and the income of the doctors, having treatment separated from medicines and fees charged according to the diseases rather than service items can not only guarantee the income of the doctors but also lower the social cost.

Third, the objective function of the managers in non-profit hospitals

The behavior of the managers has an important bearing on the development of the enterprises regardless of the ownership structure of the enterprises. As an economist, the managers in China's non-profit hospitals seek the maximization of their own utility. Their utility function can be expressed as follows:

$$U=U\,[W_2, Y, G, d\,(\pi)\,]-U[C_2(t, W_1, n) \qquad d\geq 0$$

Where W_2 shows the wage income of the managers; π shows the profit of the hospitals; d is the currency or non-currency returns of the managers from the profit of the hospitals (Assumption: all the non-currency reward to the managers for their turning loss-making into profit-making hospitals can be transferred into currency); t stands for the degree of the managers' dedication (can be expressed with their working time); C_2 is the management cost of the managers.

This model suggests that the management cost is connected not only with the dedication of the managers but also with the cooperation of other staff as well as the number of the higher level management organs. Generally speaking, the higher the wages of the staff, the more they are willing to cooperate with the managers; while the more the higher level management departments, the less efficient the managers' work will be.

Here there is one point that needs to be explained. It doesn't mean that public non-profit hospitals cannot make profit. Due to the limited government funds, an important function of the hospital managers is to accomplish the social objectives and at the same time try to get rid of the loss to lighten the burden of the government. If d equals zero, the managers of the hospitals will have no incentives to lower the cost and improve efficiency. When d is not zero, the higher the value of d, the more the hospital managers will pay attention to the efficient use of the resources and the behavior of the non-profit hospitals will tend to be similar to that of the for-profit hospitals.

Conclusion

Providing medical services (like biological research, medical education and public health) can produce tremendous positive externalities. Especially, the role of the public non-profit hospitals in this aspect cannot be replaced. However, if the resources in the public hospitals can not be used well when private for-profit hospitals are allowed to liberalize, there will be a great deal of waste in resources. Therefore, to improve China's medical service market, it is highly necessary to show solicitude for the behavior pattern of China's public non-profit hospitals and all sorts the problems they may come across during their development.

References

[1] Anup Malanl, Tomas Philipson,Guy David"Theories of Firm behavior in the non –profit sector : a synthesis and empirical evaluation " The university of Chicago

[2] Arrow Kenneth,1963, "Uncertainty and the Welfare Economics of Medical Care" American Economic Review,53: 941-73

[3] Culter david and Jill Horwitz,2000"Coverting Hospitals from not –for –profit to for –profit status: Why and What Effects ?" In David M. Culter ,ed. , The Changing Hospital Industry :Comparing not –for-profit and for profit Institutions. University of Chicago press

[4] Daniel Kessler and Mark Mclellan,2001,"The Effect of hospital ownership on Medical Productivity"

NBER Working paper 8537

[5] Easley , Davkd and Maureen O'Hara (1983), "The economic role of the nonprofit firm Bell Journal of Economics,14(2):531

[6] Edward L.Glaser ,Harvard University and NBER 2001Preliminary Draft

[7] Felgenbarm, Martin S. "hospital cost inflation : a study of non profit price dynamics" American economic review ,1971

[8] Glaeser , Edward L. and Andrei Shleifer, "Not –For –Profit Entrepreneurs,"Working paper, Department of Economics, Harvard University , 1998 Hansmann, Henry BB. ,"The effect of Tax Exemption and Other Factors on the MarketShare of Nonprofit versus for –Profit Firms," National Tax Journal, 40(1987),71-82

[9] Hansmann, Henry BB. , "The Role of Nonprofit Enterprise ," Yale Law Review, 89(1980),839-901

[10] Newhouse, JosephP.(1970)," Toward a theory of nonprofit institutions: an economics model kof a hospital", American economic review, 60:64-74 Pauly ,Mark, and Michael Redisch (1973), "The not –for Profit hospitals," New England Journal of Medicine, 309(6):347-53 Rosenberg,C.(1987)The Care of Strangers: The Rise of America's Hospital System. New York: Basic Books

[11] Weisbrod Burton, 1977, The Voluntary Nonprofit Sector (Lexington, MA: DC Health)

[12] Weisbrod Burton, 1988, The Nonprofit Economy (Cambridge, MA: Harvard University Press)

[13] Weisbrod,B,(1998)To Profit or Not To Profit: The Commercial Transformation of the Nonprofit Section. Cambridge: Cambridge University Press

The Strategic Contributions of Small and Medium Enterprises to the Economies of Japan and Malaysia: Some Comparative Lessons for Malaysian SMEs

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Abstract

There is a growing interest in the role of SMEs in economic development. SMEs have a number of acknowledged characteristics that arguably make them more, rather than less, important to modern economies. They form by far the largest number of enterprise; they employ more workers per unit of capital than large enterprises; they contribute towards achieving a more equal income distribution in society; they have a favorable impact on regional development; they serve as a "training platform" for upgrading and developing skills of industrial workers and entrepreneurs; they contribute significantly to establishing forward and backward linkages; and they play a vital-complementary role to large and giant firms in the economy. This paper attempts to examine the these aspects of the strategic contribution of SMEs to the economies of two countries, -. Japan and Malaysia. It then draws comparative lessons with respect to potential and future development of SMEs in Malaysia.

Introduction

During the 1960s there was a tendency amongst development economists to assume SMEs were indicative of low levels of economic development; and that as economies developed then SMEs would become less important. It was thought that industrial concentration associated with an increase in average plant size provided many benefits such as greater stability, access to markets, economies of scale and the ability to undertake research and development. Large corporations were seen to be the wave of the future. The assumptions have been increasingly questioned, especially in developing countries where it has become clear that the emphasis on capital-intensive activities alone in stimulating economic growth was counterproductive. The high capital costs per job created, scarcity of available capital, and the increases in the labor force which these countries experienced, meant that labor, rather than capital-intensive methods of production, were seen to be more attractive. Empirical evidence indicated that there were considerable opportunities to substitute labor for capital without losses in efficiency serving the dual function of alleviating the shortage of capital while enabling many individuals to be employed. At the same time, the output levels were maintained [28]. Since SMEs are inextricably related to this method of production in the 1970s and 1980s, scholars, policy makers and related agencies began to recognize the relative increase in the importance of SMEs in economic development of many countries, developed and developing countries alike. While many developed countries, with their dependence on capital-intensive large corporations experienced severe recession, or decreasing competitiveness compared to the New Industrializing Economies (NIES) these fast growing economies owed much of their success to SMEs. This was especially true of Hong Kong, Taiwan, Singapore. South Korea was something of anomaly because to the emphasis of governments of that period of fostering large conglomerates, the *chaebol*. Meanwhile SMEs contributed much to the continued rapid growth of Japan during that period. Perhaps now, SMEs are the 'seeds' from which an economy in many developing countries is grown. Perhaps, within this boundary also that SMEs occupy a prominent position in the development agenda of most countries nowadays.

As far as the total number of the establishment is concerned, SMEs account for a huge proportion in many countries. Figures on this are easily available in many countries and a composite table for the 33 countries participating in the OECD's Bologna Conference on SMEs in 2000 is given in the appendix.. The figures are compelling. It is noted that 99 percent of the total number of establishments in Canada are SMEs; 99 percent of all firms in the United Kingdom employed less than 50 people representing a major part of the United Kingdom's economy, SMEs account for 99.3 percent of the total number of enterprises in South Korea with 39.7 percent of the total value added production and 70 percent of the employment; SMEs play an important role in the expansion of manufactured export in the Thailand's economy since SMEs comprise 98.3% of the total number of establishments with 118,648 enterprises; There are more than 700,000 SMEs in Taiwan, comprising over 98 percent of the total number of enterprises; SMEs represent over 99% of the total number of establishment in New Zealand; There are 5,072,922 SMEs in Japan, a 99.4% share of the total number of firms with 60.1 percent of the employment and 55.7% of the total value added. In China, SMEs employ more than 42 percent of the total labor force and generated 87 percent of the total rural output value. About 90 percent of the total establishments are classified to be SMEs in the Philippines; In Pakistan, over 98 percent of the total numbers of establishments are SMEs [23]. For many countries SMEs are viewed as the "backbone" of the economy. Much more important than their numerical predominance in the economy is the significant role SMEs play in the overall industrial development. In short, SMEs employ more workers per unit of capital as compared to large enterprises; they contribute towards achieving a more equal income distribution in society; they have a favorable impact on regional development; they serve as a "training platform" for upgrading and developing skills of industrial workers and entrepreneurs; they contribute to significantly establish forward and backward linkages; and they play a vital-complementary role to large and giant firms in the economy. This paper first will discuss the contributions of SMEs to Japan's economy, followed by the contributions of Malaysia's SMEs. The paper argues that Malaysian SMEs are not realizing their potential and that there are lessons to be learned from their Japanese counterparts..

The contribution of SMEs to Japan's economy

SMEs play a major role in every sector of the Japanese economy. Indeed, no one can give a picture of the economic development in Japan without stressing the role of SMEs. Their number had been continually increasing since the Second World War until the recession of the nineties. Between 1963 and 1986 the number almost doubled, from 3.9 million to 6.4 million (Table 1). Thereafter there has been some decline in numbers, but their share of total enterprises has remained at 99%. One is undeniably right to argue that no other industrialized nation has experienced such a continued and considerable growth of SMEs especially in the late 20th century, as did Japan. Furthermore the late 20th century was the period of fastest growth of SMEs in Japan in particular and the world in general. Nonetheless, the significance contribution of SMEs in Japan has always been understated. One of the main reasons for this is that the Japanese industrial characteristic which have attracted the attention of many researchers and business managers has been the large firm sector which provide a leading role in the entire industrial system.

Perhaps the best indicator of the important role of SMEs in Japan is the production of exportable goods. SMEs played an essential role for earning reserves especially at an early stage of Japan's economic development. Before 1950, the goods produced by large enterprises were not very competitive in foreign markets and they were mainly marketed in the domestic markets as substitutes for imported goods. The goods exported at that time were mainly produced by SMEs and they included textile products, apparel, toys, electrical machines, optical equipment, bicycles and other small machines. The export of good produced by large enterprises started to expand in the 1950s, but their export value was still smaller than that of SMEs. In the later half of the 1960s, the goods produced by large enterprises became competitive in the foreign markets and their exports started to expand rapidly. However, the exported goods produced by large enterprises contain many parts produced by SMEs. For instance, in 1980 the share value originated from SMEs in those exported goods was 24.3 percent in the electrical machinery industry, 23.8 percent in the precision machine industry, 23.1 percent in the general machine industry and 20.4 percent in the transportation machine industry. The share of value originated from SMEs in the exports of large enterprises in the manufacturing sector as a whole was 19.1 percent in that year. At the same time, the exported goods produced by SMEs contain materials produced by large enterprises, so it can be said that SMEs also produce an export conduit for large companies.. Evidence shows that the export value of SMEs was larger than that of large enterprises before 1963. Even though the SMEs' export was not expanding as fast as the large enterprise's export after 1964, it was still growing steadily in terms of real value. However, seeing SMEs and large firms in isolation is the overlook the symbiotic relationship between the two sectors which is so characteristics of the Japanese economy. Although many

Japanese SMEs have operated independently, to large extent the growth and development of the SME sector has been directly the result of expansion and development of large firms

Japan's SMEs in the Total Establishment and Employment

The importance of SMEs in the economy is indicated by predominantly large share of SMEs in terms of number of establishments, total number of employees, total wholesale sales, total retail sales and total added value in the manufacturing sector. According to Small and Medium Enterprises Agency (SMEA) of Japan, there were 5,089,191 SMEs in 1999, comprising 99.7 percent of the total number of enterprises in Japan. This figure excluded the primary industries. This figure shows a slight decrease in terms of the number of establishments, as compared to 1994. However, the share of SMEs in terms of the total number of establishments has relatively remained more or less constant over the last three decades (Table 1). This suggests that SMEs in Japan have consistently performed well, even in times of economic adversity. The most affected industry was wholesale and retail, including restaurants and catering. The scale of decline in this industry is more than 100,000 in two years. However this may have been due to legal and structural factors, particularly the relaxation of the Dai-ten Ho ('Big Store Law') as much as recession itself. Changing regulations removed the protection that had been afforded to small family businesses [10]. Even SMEs in the manufacturing industries were under pressure of the recession but there was a large-scale replacement of old ones by new start-ups. In addition, the phenomenon does not imply the instability of SMEs; rather it is more a sort of life cycle. Old ones were likely to exit as founder enterprises became outdated and old-fashioned, but of course with some exceptions. Besides, new enterprises acquired new skills, knowledge and experience, technology, products services etc. from the younger generation and renewed themselves. Japanese SMEs also acquire technology, and sometimes staff, from large enterprises to which they are connected. This illustrates the importance of maintaining and developing the dynamism of SMEs. Although employment is being reduced at existing establishments due to restructuring processes at large enterprises and big corporations, the birth of new establishments continually provides new employment opportunities. Moreover, there are creative SMEs that are developed new products and opening new markets ([14]. Arguably, SMEs are the key to Japan's industrial growth.

Table 1: JAPANESE SMES BY NUMBER OF ESTABLISHMENTS
(in non-primary industries)

No. of Establishment	1963	1972	1986	1994	1999
SMEs	3,883,573 (99.6)	5,083,270 (99.4)	6,448,123 (99.3)	6,470,532 (99.1)	5,089,191 (99.7)
Total Establishment	3,900,178 (100.0)	5,113,723 (100.0)	6,494,341 (100.0)	6,531,980 (100.0)	5,102,642 (100.0)

Note: () in percentage
Source: Japan Small and Medium Enterprise Corporation 2001, http://www.jasmec.go.jp/english/esme2.html retrieved on 08.08.2001)

Japanese SMEs have a reputation for being resilient, flexible and creative. This is reflected in the figures as the absolute number of SMEs has, despite recession, increased from 3,883,573 in 1963 to 5,089,191 enterprises in 1999. According to Table 2, the manufacturing and retail sectors have the highest percentage of SMEs in the sector with 99.8 percent and 99.7 percent respectively, while SMEs comprise 99.1 percent of the wholesale sector. The statistics clearly reflect that SMEs are essential to the Japanese economy. As Fig 1 illustrates, most (non-primary) SMEs are in the retail sector (37%), followed by manufacturing (33%), services (24% and, a long way behind as might be expected, wholesale (6%).

Table 2: DISTRIBUTION OF JAPANESE SMES BY ECONOMIC SECTOR

	SMEs			Total enterprises
Economic Sector	Number	% of enterprises	% of SMEs	Number
Wholesale	287,122	99.1	5.6	289,660
Retail	1,945,182	99.8	38.2	1,949,234
Services	1,200,445	99.7	23.6	1,203,904
Manufacturing and others	1,656,442	99.8	32.5	1,659,844
Total (non-primary industries)	5,089,191	99.7	100.0	5,102,642

Source: Ministry of Economics, Industry and Trade of Japan 2001,
(website http://www.chusho.meti.go.jp/english/basic/japanese_sme3.html retrieved on 08.08.2001)

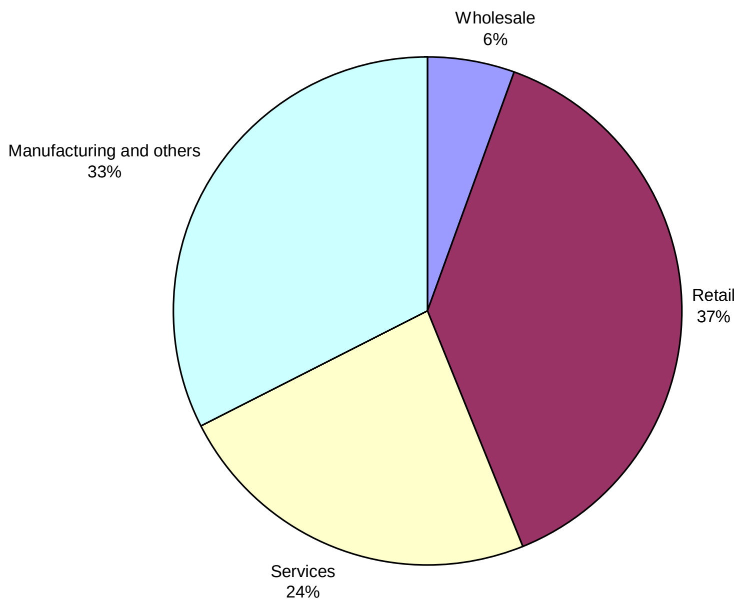

Fig 1: SECTORAL DISTRIBUTION OF JAPANESE SMES

Of the 57.38 million people in employment nationwide (excluding those in primary industry), 41.68 million or 72.7 percent were employed by SMEs in 1999. Table 3 shows that the SME share of total employment decreased over the last three decades from 79.0 percent in 1963 to 72.2 percent in 1999. However, in terms of absolute number, SME employment has increased significantly. The data may indicate that SMEs in Japan have gone through a restructuring process to a more modernized and capitalized production, that method of labor-intensive production has been steadily reduced as the capital intensity has constantly increased and applied.

Table 3: SMES IN JAPAN BY TOTAL NUMBER OF EMPLOYEES 1963-1999

	1963	1972	1986	1994	1999
SMEs	21,526,247 (79.0)	30,400,491 (78.4)	39,505,716 (80.6)	42,273,745 (78.0)	41,677,536 (72.7)
Total Employment	27,241,465 (100.0)	38,793,883 (100.0)	48,995,224 (100.0)	54,163,807 (100.0)	57,376,770 (100.0)

Note: () in percentage
Source: Japan Small and Medium Enterprise Corporation (JSMEC) 2001,
(website: http://www.jasmec.go.jp/english/esme2.html retrieved on 08.08.2001)

Table 4 below illustrates the number of employees in SMEs by economic sector in 1999. It reveals that SMEs in the services sector have the highest percentage in the number of persons employed with 78.1 percent as contrast to wholesale and manufacturing, i.e. 68.1 percent and 69.2 percent respectively. The data confirms numerous evidence in other countries that SMEs in the services sector tend to use more labor intensive method of production than other sectors in the economy. Moreover, the value added per labor of manufacturing SMEs in Japan is about 50 to 60 percent of that of large manufacturing enterprises [20]. This is again largely due to lower capital intensity by SMEs and it is the reflection of the fact that many SMEs are engaged in more labor intensive production.

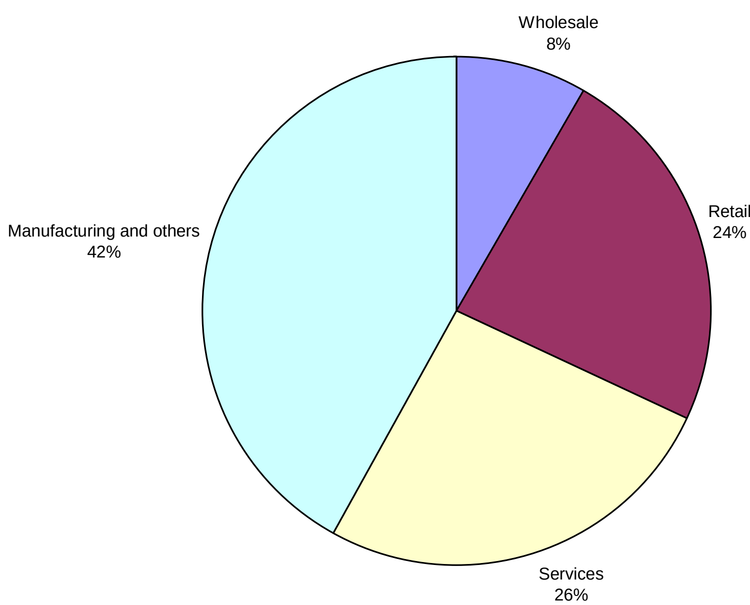

Fig 2: EMPLOYMENT IN JAPANESE SMES BY SECTOR

Table 4: EMPLOYMENT IN SMES IN JAPAN BY ECONOMIC SECTOR 1999

Economic Sector	SMEs			All enterprises	
	Number	% of employees in SMEs	% by sector	Number	%
Wholesale	3,449,300	68.1	8.3	5,061,342	8.8
Retail	9,919,386	75.4	23.8	13,147,719	22.9
Services	10,775,162	78.1	25.9	13,801,764	24.1
Manufacturing and others	17,533,688	69.2	42.1	25,335,945	44.2
Total (non-primary industries)	41,677,536	72.7	100.0	57,376,770	100.0

Source: Ministry of Economics, Industry and Trade of Japan 2001,
(website http://www.chusho.meti.go.jp/english/basic/japanese_sme3.html retrieved on 08.08.2001)

Japanese SMEs vary considerably by size, in terms of average number of employees, across the sectors. Whilst the average for non-primary SMEs is 8.2, the sectoral average ranges from 12.0 for the wholesale sector to 5.1 for the retail. That disparity is not surprising, given the functional relationship between the two sectors. However, what is significant is the relatively high number of employees in the manufacturing sector, 10.6, which may suggest a higher level of capital intensity.

Table 5: AVERAGE NUMBER OF EMPLOYEES IN JAPANESE SMES, BY ECONOMIC SECTOR, 1999

	Enterprises	Employees	employees per enterprise
Wholesale	287,122	3,449,300	12.0
Retail	1,945,182	9,919,386	5.1
Services	1,200,445	10,775,162	9.0
Manufacturing and others	1,656,442	17,533,688	10.6
Total (non-primary industries)	5,089,191	41,677,536	8.2

Source: As tables 2-4, calculations by authors

Contribution of Japan's SMEs to Sales, Value-added and Exports

The contribution of SMEs to the national economy of Japan can also be seen through the amount of the total sales in all sectors. Table 6 shows that the amount of sales from SMEs in 1999 (excluding primary industries) is 366.82 million yen, comprising 42.5 percent of the total sales. The importance of SMEs in the various sectors can be gauged from their share of total sales in their sector; this varied from 55.7% for retail SMEs to 37.5 % for manufacturing SMEs.

Table 6: AMOUNT OF SMES' TOTAL SALES BY INDUSTRIES (MILLION YEN)

	SMEs		All enterprises	
Industries	Sales Amount *(million yen)*	Percent of Total *%*	Sales Amount *(million yen)*	Percent of Total *%*
Wholesale	157,703,699	42.1	374,366,896	100.0
Retail	79,585,270	55.7	142,757,490	100.0
Manufacturing and others	129,529,617	37.5	345,862,959	100.0
Total (non-primary industries)	366,818,586	42.7	862,987,345	100.0

Source: Ministry of Economics, Industry and Trade of Japan 2001,
(website http://www.chusho.meti.go.jp/english/basic/japanese_sme3.html retrieved on 08.08.2001)

The value added of SMEs in the whole industry has remained more less the same over the last three decades from 1963 to 1998. Table 7 indicates that the proportion of value added of SMEs has experienced only a small decrease from 58.9 percent of the total value added in the whole industry in 1988 to 56.6 percent in 1998. However, the absolute figures show an increase from 129,343 billion yen in 1963 to 153,157 in 1998. The figure indicates that SMEs contribute more than large enterprises to the industrial economy of Japan.

Table.6: VALUE ADDED IN JAPANESE INDUSTRY, ROLE OF SMES AND LARGE FIRMS, 1988-1998
(Billion yen and percentage)

	1988	1990	1992	1995	1996	1997	1998
SMEs	129,343 (58.9)	138,668 (56.2)	154,570 (57.7)	158,715 (57.2)	147,384 (54.6)	152,907 (55.5)	153,158 (56.6)
Large	90,166 (41.1)	108,304 (43.8)	113,463 (42.3)	118,558 (42.8)	122,336 (45.4)	122,754 (44.5)	117,263 (43.4)

Source: Ministry of International Trade and Industry, Industrial Statistics 2001,
(website http://www.chusho.meti.go.jp/english/basic/japanese_sme4.html retrieved on 08.08.01)

Japanese SMEs' Exports and Overseas Operations

The export role of SMEs tends to be neglected since it only comprised 14 percent of exports in 1998. However, the export share of large enterprises that use components produced by SMEs was 40 percent. This means that the significance of SMEs is understated if only their direct production is considered, since many large enterprises specialize in assembling and depend on SMEs for their supplies. Taking this into account, the export value of SMEs in the manufacturing sector is presented in Table 8. It reveals that the proportion of SMEs' export for manufacturing products has not changed that much over the last three decades as it has increased only slightly i.e. from 50.3 percent of the total export in 1963 to 51.1 percent in 1981 and 51.6 percent in 1998. Nonetheless, the value of SMEs' export has increased dramatically to almost 10 times in absolute figures i.e. from 11.977 billion yen in 1963 to 115.042 billion yen and 157.940 billion yen in 1981 and 1998 respectively. Although the figures are not adjusted for inflation they do reflect the significance contribution of SMEs in building the economic power of Japan during the stated period. Moreover, since the yen has appreciated considerably against the US dollar, especially since the mid eighties, the same date expressed in US$, even at constant value, would show impressive growth.

Table.8: EXPORT VALUE OF SMES IN THE MANUFACTURING SECTOR OF JAPAN 1963-1998
(billion yen and % of total)

Size of Enterprise	1963	1972	1981	1990	1995	1997	1998
SMEs	11,977 *(50.3)*	41,455 *(51.2)*	115,042 *(51.1)*	167,410 *(51.8)*	157,139 *(51.3)*	164,025 *(50.8)*	157,940 *(51.6)*
Large	11,845 *(49.7)*	39,507 *(48.8)*	109,670 *(48.9)*	155,962 *(48.2)*	148,890 *(48.7)*	159,047 *(49.2)*	147,929 *(48.4)*
TOTAL	23,822	80,962	224,712	323,373	306,030	323,072	305,869

Source: Ministry of International Trade and Industry, Industrial Statistics 2001,
(website http://www.chusho.meti.go.jp/english/basic/japanese_sme4.html retrieved on 08.08.01)

Japanese SMEs have an even wider role in earning foreign exchange through their relationships with product markets and customers around the globe as well as their involvement in inter-industry relations and industrial organisation in Japan. In other words, Japanese SMEs are well integrated into social and economic systems through a connected and collective production system within the social division of the labor structure. The earlier part of the chapter highlighted the existing characteristics of Japanese SMEs in a number of categories according to their role and presence in the well-integrated economic system of Japan. This includes SMEs in the categories of 'local industries' or 'regional industries', SMEs as 'subcontractors or suppliers', 'independent SMEs', and 'purely independent SMEs'. However, the contribution of SMEs to the Japanese economy is not restricted to the four stated categories which focus on their position within the Japanese domestic economy. SMEs also play a big role through their presences and operations overseas. This role increased in importance from early the 1980s when the process of globalization and restructuring of production strategies of big Japanese corporations as well as the strong yen appreciation and soaring domestic production costs, began to have a considerable impact on SMEs' investments overseas. In addition, prominent SME suppliers were invited to begin overseas operations and production by their prime big corporation customers and to establish local supplying inputs and networks. This was a way of reconciling the preference of large Japanese corporations for dealing with fellow Japan companies with whom they had a long-standing symbiotic relationship with the need to cut input costs [1]. While the location of investments can be found elsewhere around the globe, most of investments, however, were directed to first Newly Industrializing Economies (NIES) -Taiwan, South Korea, Hong Kong and Singapore - and later to other ASEAN countries (such as Malaysia, Thailand, Indonesia and Philippines) [2]. By the late 1980s and early 1990s, most investments were concentrated on China, where the economic growth rate was among the fastest in the world, costs were low and there was the promise of a huge domestic market. It has been evident that the operation of Japanese SMEs in Asia is welcomed and is making profits. One of the reasons is that the existing cheap and abundant labor provides greater opportunities for more labor-intensive SMEs, far different than in America and Europe, where the main driver of Japanese FDI has been the circumvention of import restrictions [19].

Even though data on the amount and share of the SMEs in Japanese investments in these countries is unavailable, it is clear that one of the major objectives of investment has been the establishing of new production bases to cater for global and Japanese markets rather than the domestic market of the targeted countries themselves. China may be an exception to this. There are at least two main types of Japanese SME investments overseas. The first is SMEs who launch overseas operations by transferring part of their operation and production from Japan. Their investment level is low, their strategic planning is limited and their future prospects are uncertain. They are responding energetically, if not always wisely, to mounting costs at home and opportunities abroad. Typical of this type are rather small manufacturers operating in Asian subsidiaries or joint ventures in various Asian countries, especially China. The second type are capital intensive and semi-high-tech SMEs which were established purely to cater to the specific needs of their main customers in the local markets of Asian countries. In many cases, an SME's operation is located in one particular Asian country to cater for the surrounding Asian market. This is highly connected to the ongoing economic restructuring which inevitably forces this second type of SME to expand overseas operations on larger scale. Quite often, SMEs in this type invest in high-tech based and knowledge-intensive operations. Many of them are also quite independent and are strategically developing global networking operations on their own other than supplying large companies. There are, in addition, other drivers behind this type of Japanese SMEs. One is that they move international because the domestic (niche) market is too small for them. Meanwhile, the overseas encounters and exchanges with different cultures and human knowledge provide and spur creativity, which become in turn the main resource and motivation for the future expansion and development of many SMEs. It is within this context that SMEs support overseas investment in many ways, further validating their role in the economy of the country. Presumably, it is within this framework that many argue SMEs are the mother of creation and innovation for Japan's economy.

The Contributions of Malaysia's SMEs

SMEs in Malaysia account for a large proportion of the total establishments in the various sectors. In the manufacturing sector, for instance, SMEs comprise 93.8 percent of all establishments. Moreover, of the total number of SMEs, small enterprises comprise 76.0 percent, while medium companies account for 17.8 percent of all manufacturing establishments [27]. Meanwhile, the Eight Malaysia Plan (2001-2005) estimated that 90 percent of all manufacturing establishments were SMEs, employing some 868,000 workers or 38.9 percent of the total [7].

Small enterprises account for 3.9 percent and 11.4 percent, while medium enterprises contribute 23.4 percent and 27.5 percent in manufacturing output and employment respectively. Overall, 85 percent of the small establishments generate less than 5 million Malaysian Ringgits (RM 5 m) in output annually and employed less than 25 workers [27]. SMEs in the manufacturing sector are found mainly in textiles and apparel, food, wood-based and fabricated metal products sectors, while SMEs in wood-based products provide the largest employment share followed by food, textiles and apparel, fabricated metal products.

The significant role of SMEs in all sectors in the economy is demonstrated by their output which was worth about RM 4.3 billion or about 20 percent of the Malaysian Gross Domestic Product (GDP) in 1990 and was projected to be around 50 percent or RM 120 billion by the year 2020. During the Sixth Malaysia Plan (1991-1995), the government expected SMEs to have invested around RM 80 billion, increasing to RM 126 billion under the Seventh Malaysia Plan (1996-2000) [5][6]. Meanwhile, during the Eight Malaysia Plan (2001-2005), the government provides RM131.9 million as soft loans to the State Economic Development Corporations to develop SME Industrial Parks, and combined all the allocations in the Plan totaling to RM 1,091.8 million.

Table 9 indicates that 28.2 percent of SMEs in the manufacturing sector are in the electrical and electronics sub-sector, while non-metallic products and wood-based products are also quite important. However, based upon this listing, SMEs are quite diverse in terms of their distribution. Meanwhile, Table 10 shows that a substantial proportion of SMEs operate in the state of Selangor, followed by the states of Johor, Penang and Perak.

Table 9: DISTRIBUTION OF MALAYSIAN MANUFACTURING SECTOR SMES BY TYPE OF PRODUCTS, JUNE 1999

Type of product	*Number*	*Per cent*
Food products	82	3.6
Textile and garment	30	1.3
Wood and wood-based products	14.7	6.5
Paper and printing products	34	1.5
Petroleum products	51	2.3
Chemical products	7	0.3
Rubber and rubber-based products	48	2.1
Non-metallic products	203	9.0
Base-metal products	103	4.5
Fabricated metal	129	5.7
Machinery	120	5.3
Electric and electrical products	639	28.2
Transport equipment	87	3.8
Poultry farming	3	0.1
Other products	264	11.7
No info.	318	14.0
TOTAL	2,265	100.00

Source: Small and Medium Industrial Development Corporation (SMIDEC) 1999, Listing of SMES in the manufacturing sector (unpublished); SMIDEC, Kuala Lumpur. The SMEs are as registered with SMIDEC

The most popular argument in favor of SMEs is that they create substantial employment opportunities. This is argued on the basis that SMEs, by their nature, use relatively labor-intensive production techniques. Thus, they may employ more labor than otherwise would be the case. A study, for example, has shown that fixed assets per worker rises significantly with employment size i.e. fixed assets per worker in establishments employing 100 full-time workers and above is more than forty times higher than those establishments with less than 100 full-time workers There are two major implications of this. First, since SMEs use less capital, a given amount of capital will create more jobs if it is spread over a large number of SMEs than if it is focused on a few large ones. Second, since the capital-labor ratio gives, in general, a clear indication of the level of mechanization of production, it may be assumed that the smallest group-size operates at the lowest level of mechanization and vice-versa. The exception to this, which is more pertinent to highly developed economies, rather than to Malaysia, are small high-tech niche companies.

Table 10: DISTRIBUTION OF MALAYSIAN MANUFACTURING SMES BY STATE, JUNE 1999

State	*Number*	*Per cent*
Johor	268	11.8
Kedah	112	4.9
Kelantan	19	0.8
Malacca	67	3.0
Negeri Sembilan	64	2.8
Pahang	89	3.9
Perak	133	5.9
Perlis	4	0.2
Penang	263	11.6
Selangor	806	35.6
Terengganu	43	1.9
Kuala Lumpur	54	2.4
Sabah	31	1.4
Sarawak	3	0.1
No. Info	309	13.6
TOTAL	2,265	100.0

Source: Small and Medium Industrial Development Corporation (SMIDEC) 1999, The Listing of SMES in the manufacturing sector (unpublished) SMIDEC; Kuala Lumpur. The SMEs are as registered with SMIDEC

SMEs serve as a "training ground" for upgrading and developing the skills of industrial workers and entrepreneurs. The lower cost of setting up small and medium-scale units enable enterprising workers not only to provide themselves with a livelihood but also to offer employment to others. Many employees in SMEs are those who do not have a high level of formal education [4]. These employees would have found it difficult to secure a well-paid job in the labor market. Out of 882 full-time workers in SMEs in Kuala Lumpur, studied in 1991, 59.1 percent obtained the Lower Certificate of Education (LCE) or equivalent, while 29.5 percent of them have only attended primary school. None of them were found to have obtained a tertiary certificate. However, the training and experience that they acquired in the operation of their enterprises have enabled SMEs to expand and grow. Therefore, it is imperative to emphasis that SMEs should play an active role in upgrading the country's efforts towards achieving the knowledge-based economy through training for their workers. It is time that a shift in the mode of production from production-based workers to knowledge-based workers through the provision of training and upgrading workers among export-oriented SMEs in the country should occur. It is essential for Malaysia to recognize that globalization and the competitive global market require SMEs to play an active role in promoting knowledge-based workers, mastering technical, engineering and design skills, rather than solely assembling the products.

Meanwhile, the role of promoting entrepreneurship is very much related to SMEs. Here, large enterprises also have a complementary role to play. Many entrepreneurs received their initiation in a large enterprise. In this regard, large enterprises normally provide them with the skills, knowledge and opportunities to acquire the necessary capital to start their own venture. Thus, the establishment of a small enterprise enables the newly initiated entrepreneurs to apply their skill and knowledge into daily practice. Through SMEs, entrepreneurs are able to acquire further experience and to improve abilities gradually with the growth of the business enterprises. Moreover, SMEs represent the platform through which indigenous entrepreneurs can progressively upgrade their investment and management skills. SMEs play many vital roles in providing avenues for local investors to diversify into manufacturing outputs, and at the same time develop the skills and knowledge of local entrepreneurs. An earlier study conducted by Chee [4] indicated that 74.8 percent of owners of SMEs did not have upper secondary education, and if not for owning their businesses these entrepreneurs would have found it difficult to secure jobs in the market. A similar finding is indicated in the study of 51 entrepreneurs in Penang, Malaysia, where the majority of them, i.e. 52.9 percent, obtained the Medium Certificate of Education (MCE) or equivalent, while the entrepreneurs who passed primary school or who obtained a degree form the least significant proportion (both 5.9 percent).

Linkages are of immense importance both to SMEs themselves, and to the economy. Malaysian SMEs are, of course, mainly indigenously-owned. They develop linkages not merely with large Malaysian corporations, as described earlier, but also with large-multinational corporations in Malaysia. These foreign linkages are an important way of enhancing the development of local SMEs and complement the process by which local large firms to foster the growth and expansion of SMEs. It has indeed to be realized that, as the Malaysian economy moved into a more complex phase of industrialization and became much more globalised there developed backward and forward integration of an efficient network of supplier industries, which was essential for export-oriented activities. Furthermore, many SME assembler firms in Malaysia are either joint ventures with foreign companies or at least licensees of foreign firms. In this case, technological transfer and other spin-offs to domestic supplier firms are relevant with respect to the issues of inter-firm linkages. Most of all, as feeder industries to larger firms, SMEs could provide ready business networks and distribution channels through which further industrial deepening and diversification could be enhanced. This is very important since more and more SMEs in Malaysia act as specialist suppliers to large companies. This can be noticed through the increasing number of SMEs becoming vendors through the Vendor Development Programmes such those SMEs in food, furniture and automobile sub-industries. Linkages between multinational corporations (MNCs) and local SMEs provide not only provide business through MNCs' local sourcing of their component parts, tools, equipment and sub-contract jobs of general services but also help in upgrading of the technical capabilities of the local SMEs [25].

In many cases large firms rely on SMEs (wholesalers and retailers) for the distribution of their products to consumers. SMEs readily provide large enterprises with many services, supplies and raw materials; for example General Motors which buys from 37,000 suppliers, most of whom are small. The Malaysian national car-maker, PROTON, now has about 91 vendors who are SMEs. Although there is no accurate information on SMEs as a source of innovation in Malaysia, their involvement in economically diverse activities appear to suggest that SMEs contribute to this aspect of innovation at all levels. This is simply due to the fact that they are more flexible, dynamic, and more sensitive to shifts in demand than larger firms [29]. This contribution can be also correlated to the fact that SMEs are the seed-bed from which large enterprises can grow. This is indeed the case in the developed countries such as United Kingdom, the USA and importantly Japan. In the USA, for instance, many of the enterprises listed in the Fortune magazine's 500 largest companies started from small enterprises. These include Ford Motor, Chrysler, Sears Roebuck and McDonnell Douglas which were started by entrepreneurs with very limited capital. Although there a lack of studies on this, there is evidence that suggests some of the large public-listed companies in Malaysia grew from smaller enterprises. As such there are quite a number of small private enterprises that managed to grow big and become listed on the Kuala Lumpur Stock Exchange (KLSE) as public companies [23].

SMEs, through their growth, expansion and development, enhance regional development and create a more equitable income distribution. Large and giant firms normally tend to produce a small number of high wage incomes and this affects in a relatively small number of families. SMEs produce a significant number of relatively low wage payments. The income distribution characteristics of different establishment sizes can be deduced by observing the wages rates, the wages share and, to the extent possible, the distribution of labor and capital income. It is found out that small establishments pay their workers, on the average, about 40 percent less than large establishments (see Chee, 1986). Therefore, the development of SMEs would increase income for a relatively large number of people and one may conclude that the income distribution impact of SMEs is more favorable than that of large-scale enterprises. Other than that, SMEs offer a better regional distribution of industry and more variety and diversity in term of products and services, choices and preferences to the local consumers.

This is especially so when the ability of individual enterprises to develop external markets is one of the most important factors determining the long-term growth prospects of any economy [29]. Even though SMEs that market their products or services outside regional and international markets vary considerably between sectors and locations, they contribute significantly to regional income generation through external sales and import substitution. Although there have been no accurate figures on income generation through external sales for manufacturing SMEs in Malaysia, the share of the manufacturing sector for export market has been consistently increasing since 1990. The data suggest that the manufacturing sector contributed significantly to the total exports of the country from 69 percent in 1992 to 75.4 percent in 1995, to 79.8 per cent and 80.7 percent in 1997 and 1999 respectively [13].

SMEs' Strategic Contribution to the Manufacturing Sector

Malaysia's economic and industrial development has been closely linked to developments in the international economy, mainly due to the "openness" of the economy and the dominance of the trade sector. Over the past three decades, growth of the industrial sector has been strong, involving significant changes in the structure of output, exports and employment. Until the late 1960s, expansion of domestic demand supported by earnings from primary commodity exports provided the main impetus to industrial growth. Resource-based industries (both agricultural and mineral) had contributed about 60 percent to overall industrial sector growth. Their contribution, however, fell in the 1970s with the rise in importance of non-resources-based industries, most particularly electronics and textiles. Malaysia entered the 1980s and 1990s with an export-oriented industrial structure but narrowly concentrated in the electronics and electrical sub-sector, relying heavily on competitive wages and still vulnerable to adverse external developments. Malaysia's manufacturing sector generally is still at a stage in which it imports most of its technologies from abroad. The processes involved in introducing the imported technologies locally have required a minimum of design, development and engineering capabilities. In the absence of the stimulus and support normally expected from large-scale enterprises, technical, engineering and design skills remain scarce and relatively underdeveloped throughout the manufacturing sector. The development of ancillary industries as a mechanism for the transfer of technology and thereby for a more internally integrated industrial structure has remained at a minimal level.

These central features in Malaysia's pattern of industrialization embody a number of structural problems and weaknesses. The greater tendency towards capital and import intensity inherent in the changes, which occurred in Malaysia's industrial structure hindered the development of a more diversified and balanced industrial base. The Free Trade Zones-based (FTZs), footloose, primarily assembly-type operations which are predominantly foreign-owned transferred few skills, introduced limited technology (contributing little to local technological development) and contributed little to the deepening and widening of Malaysia's domestic industrial structure. Linkages with the rest of the economy have remained weak. In view of this phenomenon, Malaysia needs to achieve an optimum configuration between the large, mainly foreign-owned enterprises, and the small and medium-scale, mainly locally owned enterprises, in order to enhance inter-sector and inter-industry linkages and the development of SMEs. It is within this framework that the focus on the strategic role and growth potential of SMEs in general, and on technology-based export-oriented SMEs in particular, should be fully realized, to further foster the impetus in Malaysia's industrialization drive in the new millennium.

It is within this framework that government support programs for SMEs are viewed as being potentially highly important in enhancing industrial deepening. This is because the development of SMEs will provide room for a counter-balancing force which could reduce an existing imbalance in the industrial base and hence lead to widening and deepening of the pattern of domestic manufacturing activity. It is therefore argued that in order to achieve a more balanced industrial structure the promotion of SMEs should be effectively integrated into the mainstream of industrial development. In particular, SMEs would have the potential to reduce the dependency on large foreign-owned investments, which predominantly control many industrial sub-sectors in the country. Therefore, SMEs once again are essential in contributing towards developing a much wider structure of the manufacturing-based activity in the Malaysian economy.

Comparative lessons for Malaysia's SMEs

This paper argues that SMEs in Japan are the backbone of support industries and the 'core' of the economy. SMEs also form a vital part of the Malaysian economy, but very much less so compared to Japan. SMEs in Japan prove to be highly integrated in forward and backward linkages throughout diverse sectors in the domestic economy as well as regional economies through their overseas operations and productions. On the other hand, Malaysia's SMEs have limited forward and backward linkages in the domestic economy and have yet to establish any significant presence in the region. A review indicates different stages of the SMEs' contributions to the economies of Japan and Malaysia, being developed and developing countries respectively. Certainly, the contributions of SMEs in Japan are more central, crucial and critical than that of their counterparts in Malaysia. But more importantly, Japanese SMEs form a direct connected, integrated and collective production system within the economic and social division of the labor system. The different characteristics of the two countries' SMEs reflect this nature of the contributions and role SMEs play in Japan. While recognized the differences arising from the general economic status of the two countries – Japan being classified as developed and Malaysia as developing - there are a number of lessons that may be worth pinpointing. Malaysia's SMEs have a lot to learn and the experience of Japanese SMEs have a lot to offer.

Malaysia's SMEs need to gain a lot knowledge and be exposed to continued experience and learning to reach the stage where Japanese SMEs currently are in terms of characteristics, position and, perhaps role in the economy. Malaysia's SMEs seem to have great potential for further growth over the next few years and beyond. This is especially so in line with the continued strengthening of national economic fundamentals. SMEs also offer excellent opportunities for more efficient capital utilization, greater productive employment, entrepreneurship and training development, better regional distribution of industry, better linkages with large enterprises and a complementary role in the economy, greater room and scope for technology transfer and promotion of changes for widening and strengthening the industrial base and structure of the country. Creating and nurturing viable, resilient and forward-looking SMEs is the challenge for Malaysia.

In view of this, it is believed that SMEs have a bright future in Malaysia. Moreover as the country's industrialization develops, SMEs will become even more strategically important and will be accorded even greater priority than what is presently assigned to them by the government. Experiences from Japan and perhaps other developed countries very much support this prediction. In countries such as the United States, Japan and Canada, there is a strong tendency to link SMEs with large enterprises. Yet, SMEs remain a vital independent force in industrial activities and their importance has increased rather than diminished. Moreover, the governments in these countries recognize the strategic role of SMEs, and have continued to extend various forms of assistance. In Canada, there is a Minister of State for Small Business, which was created to provide dedicated support to SMEs. In the United States there is the Small Business Administration, which was created in 1976 to protect, strengthen and effectively represent SMEs within the Federal government. The important role of SMEs in the Japanese economy resulted in several agencies being established to promote and assist them, as well as the passing of various pieces of several legislation pertaining to the development of SMEs. The best known agency is the Small and Medium Enterprise Agency which not only performs functions similar to those of the US Small Business Administration, but it also has branches in many other countries where Japanese SMEs operate.

Currently, many SMEs are quite inefficient and still rely on traditional organisation and techniques of production [21] [22]. Thus, there is a clear need for SMEs to modernize, change or modify their product lines and update their production technology. Although a vast majority of SMEs have demonstrated their ability to go into businesses and survive without government support, it is plausible to argue that survival is not sufficient for the country with a clear vision of future industrial development. Indeed, to become an industrialized country, adequate attention must be paid to the development of SMEs, and a widening and strengthening of the Malaysian domestic industrial structure. On the whole, SMEs in Malaysia have plenty of scope and ample evidence that they can substantially increase their productivity and rate of growth in the wake of the Malaysian economic recovery, which in turn provides further impetus for SMEs' activities in the overall industrial development of the country. Faced with the current global business environment and a high level of business competition, SMEs will require being more adaptive especially in the use of information technology to maintain their present contribution to the Malaysian economy [3]. While SMEs will need new strategic direction and planning and outward looking managers and entrepreneurs with knowledge and skills, the continued efforts and support of the government in enhancing the development of SMEs retains equally significant. All these require more commitment and hard work from both the public and private sector to utilize and maximize the available resources and opportunities to ensure that SMEs are capable of meeting the challenges of globalization.

Appendix

Tables

Table A1: Role of SMEs in countries participating in the Bologna Conference

(in %)

	Firms			Employees		
	Small	Medium	Large	Small	Medium	Large
OECD Countries -EU-1						
Austria	92.4	6.1	1.5	30	26.5	43.4
Belgium	96.1	2.9	1.0	32	18.4	49.6
Denmark	94.3	4.6	1.1	32.2	25.3	42.6
Finland	96.1	2.9	1.0	24.6	20.3	55
France	95.6	3.5	0.9	33.2	20	46.8
Germany	93.2	5.0	1.8	24.4	15.8	59.8
Greece	96.7	2.8	0.5	45.2	28.2	26.5
Ireland	79.6	15.8	4.6	21.9	14.1	64
Italy	98.0	1.7	0.3	54.3	19.5	26.3
Luxembourg	89.6	7.5	2.9	19.9	22.5	57.6
Netherlands	92.6	5.8	1.6	30.7	21	48.3
Portugal	96.0	3.5	0.5	44.4	30.1	25.5
Spain	97.3	2.3	0.4	51.1	21.2	27.7
Sweden	93.5	5.0	1.5	24.9	20.7	54.4
United Kingdom	96.4	2.8	0.8	27.4	20.5	52.1
EU Total	96.1	3.1	0.8	34.8	19.8	45.5
Other OECD Countries1						
Australia	95.8	3.7	0.5	35.5	27.8	36.6
Canada	98.1	1.6	0.3	29.3	9.9	60.8
Czech Republic	97.9	1.7	0.4	33.6	21.9	44.4
Hungary	96.9	2.5	0.7	32.1	25	42.9
Iceland	99.7	0.3	0.0	62.2	37.8	0
Japan	95.7	3.8	0.5	39.7	32.2	28
Korea	91.0	8.0	1.0	40.4	26.3	33.3
Mexico	95.4	2.7	2.0	33.4	15.6	51
New Zealand	97.8	1.9	0.3	51.7	19.5	28.9
Norway	97.8	1.8	0.4	41.7	23.5	34.8
Poland	98.1	1.5	0.4	20.2	16.3	63.5
Switzerland	96.1	3.4	0.6	45.9	27.2	26.9
Turkey	97.7	1.7	0.5	41.6	20.9	37.6
United States	96.8	2.5	0.7	32.4	15.5	52.1
Other OECD Countries Total	96.8	2.6	0.6	34.4	20.1	45.5
OECD Countries Total	96.5	2.8	0.7	34.5	20	45.5

Non-OECD Countries Total2	98.3	1.4	0.3	51.7	16.1	32.2
Countries participating to the Conference Total	98.1	1.6	0.4	47.9	17	35.1

Source: OECD, Bologna Conference website, http://www.conferenzabologna.ipi.it/Eng/dati_statistici/index.html, retrieved August 27, 2002

Note: The original describes Korea as "Korea, Dem. Rep." This is clearly a mistake and they mean Republic of Korea

References

[1] Beal, T. (1984a). Japan and the South: Aid, Trade and Investment, Glasgow: Department of Marketing, University of Strathclyde (East Asia Papers #2)

[2] Beal, T. (1984b). The Implications for the South of Recent Developments in Japan's Direct Foreign Investment, Glasgow: Department of Marketing, University of Strathclyde (East Asia Papers #5)

[3] Beal, T. & Moha Asri Abdullah (2002). Information and Communications Technology in Asia Pacific Countries: Implications for Small and Medium Enterprises in Malaysia. Australian Journal of Information Systems10.1 (forthcoming)

[4] Chee L. P. (1986). Small industry in Malaysia. Kuala Lumpur: Berita Publishing

[5] Government of Malaysia (1991). Malaysia: Sixth Malaysia Plan (1991-1995). Kuala Lumpur: Government Printer

[6] Government of Malaysia (1996). Malaysia: Seventh Malaysia Plan (1996-2000). Kuala Lumpur: Government Printer

[7] Government of Malaysia (2001). Malaysia: Eighth Malaysia Plan (2001-2005). Kuala Lumpur: Government Printer

[8] Japan Small and Medium Enterprise Agency (2001) Ministry of Economy, Trade and Industry SME-related policies and informations retrieved August 29 2002 from the World Wide Web: http://www.chusho.meti.go.jp/sme_english/index.html

[9] Japan Small and Medium Enterprise Corporation (JASMEC) (2001) Statistics on Small and Medium Enterprises retrieved August 8 2001 from the World Wide Web: http://www.jasmec.go.jp/english/esme2.html

[10] Melville, I. (1999). Marketing in Japan. Oxford: Butterworth Heinemann

[11] Ministry of Economics, Trade and Industry of Japan. (2001) White Paper on Small and Medium Enterprises retrieved from the World Wide Web August 8 2001: http://www.chusho.meti.go.jp/wp2001/english/basic/japanese_sme4.html

[12] Ministry of Economy, Trade and Industry of Japan (2001) White Paper on Small and Medium Enterprises, retrieved from the World Wide Web September 7 2001: http://.chusho.meti.go.jp/english/wp2000/images/image1.gif

[13] Ministry of Finance of Malaysia (2000). Economic Report 2000/2001. Kuala Lumpur: Percetakan Nasional Malaysia Bhd

[14] Ministry of International Trade and Industry of Japan (1997). White Paper on Small and Medium Enterprises, retrieved from the World Wide Web August 8 2001: http://www.chusho.meti.go.jpwp1997/english/basic/japanese_sme4.

[15] Ministry of International Economics, Trade and Industry of Japan (2001) Industrial Statistics 2001. retrieved from the World Wide Web August 8 2001: http://www.chusho.meti.go.jp/english/basic/japanese_sme4.html

[16] Ministry of International Trade and Industry of Japan (1999). Industrial Statistics Tokyo: Ministry of International Trade and Industry

[17] Ministry of International Trade and Industry of Japan (1997). White Paper on Small and Medium Enterprises, retrieved from the World Wide Web October 22 2001: http://www.chusho.meti.go.jp/english/wp1997/bchu701e.html

[18] Ministry of International Trade and Industry of Malaysia (1992). Survey on Small-scale Industry in Malaysia. Kuala Lumpur: Ministry of International Trade and Industry

[19] Mitsui I. (1997). Restructuring Japanese companies: Implications for small and medium-size enterprises in K. Sugiyama and S. Leong (eds.) Revitalisation of Japan's Economy: Implications for Malaysia, Kuala Lumpur: ISIS

[20] Mitsushashi K. (2000) A challenge for small and medium enterprises in Japan: Reorganization of industrial clustering, in Moha Asri A. and Bakar M.I. (eds.) Small and Medium Enterprises in Asian Pacific Countries (Vol. II), New York Nova Science

[21] Moha Asri Abdullah (1997). Interfirm linkages and the performance of urban small firms in Malaysia. Malaysian Management Review 32.1

[22] Moha Asri Abdullah (1999a) The accessibility of the government sponsored-support programmes for small and medium-sized enterprises in Penang. The International Journal of Urban Policy and Planning 16.2: 83-92

[23] Moha Asri Abdullah et.al. (2000) Small and medium enterprises in Asia Pacific: Prospects in the new millennium. New York: Nova Science

[24] Organisation for Economic Cooperation and Development (OECD). (2000). Enhancing the Competitiveness of SMEs in the Global Economy: Strategies and Policies, (Conference held in Bologna 13-15 June 2000), retrieved August 29 2002 from the World Wide Web: http://www.conferenzabologna.ipi.it/Eng/index.html

[25] Salleh, Mohd Ismail (1991) Promotion of small-scale industries and strategies for rural industrialization: the Malaysian Experience. Kuala Lumpur: Sun U Book

[26] Small and Medium Industrial Development Corporation (1999) The listing of SMEs in the manufacturing sector (unpublished data), Kuala Lumpur. SMIDEC

[27] Small and Medium Industrial Development Corporation (2002) SMI Development Plan (2001-2005): Executive Summary. Kuala Lumpur. SMIDEC

[28] Storey D. (1994) Understanding the small business sector London: Routledge

[29] Wyer P., Smallbone D. & Johl D. (2000) The implications of the economic crisis on SMEs: A Micro Perspective. In Moha Asri Abdullah et. al. (eds.) Small and Medium Enterprises in Asian Pacific Countries New York: Nova Science

Tourism in Transition: A Quantitative Analysis based on Vietnamese Data in the Tourism Industry

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Abstract

Around one third of the world's population has been affected in recent years by the transformation of former planned economies, but the transition process has been neither easy nor similar for the various countries involved. Within transition economies, firms have had to pursue important organizational change programmes in order to cope with their environment transformation. The paper examines the effect of some key factors of change on the positive perception of change of tourism employees, taking as an example the case of companies in Vietnam. The first section of the paper concerns the economic and tourism trends in Vietnam. The second part will described the theoretical literature about organizational change. The third section briefly addresses the location of the empirical research and questions of methodology. The article then progresses to the results of the quantitative survey realized in tourism firms operating in Vietnam. We collected 373 questionnaires from Vietnamese employees working in the tourism industry at the beginning of 2001. These analyses lead to a conclusion.

Introduction

After intense intellectual work to explain the transition process in former communist countries (Kornai, 1992)(Lavigne, 1995), the literature is starting to analyse the integration process of countries which have undergone a radical change process in the last 20 years (Andreff, 1998) (Nuti, 1996). In fact some countries such as Vietnam have already been especially successful in achieving their economic and political transformation (Venard, 1998).

At a macro level, Vietnam has attracted a good amount of Foreign Direct Investments. One of the most notable achievements is achieving membership of ASEAN. The current economic and political challenge for this country is integration within ASEAN and at the same time transition toward the "Socialism of Market" as the communist leaders call their economic system. In fact, Vietnam is faced with rapid transformations.

At a micro level, enterprises in Vietnam have also undergone important changes to become as competitive as their Asiatic competitors. The tourism industry in Vietnam is a good example of sector facing rapid and important changes. On the one hand, tourism demand since the opening of the "Doi Moi" has been completely transformed with a large shift away from poor clients and rare communists to more international, wealthy and demanding clients.

On the other hand, tourism firms in Vietnam (both local and multinationals) have been carrying out important change in order to cope with the environmental changes, such the 1997 crisis.

Furthermore, tourism firms have to target foreign clients with international quality standards and at the same time use local Vietnamese resources, very often not used to those international standards. These classical concomitant challenge of producing / delivering locally tourist activities and using Vietnamese resources, imply that tourist firms, especially multinationals, have to engage in important organisational change programmes to meet their international quality standards. For the tourism multinationals example, the agenda is to integrate their local subsidiaries within their international group.

This organisational change is far from an easy task for tourism firms. Many restraining forces may disturb the changing process. One of the reasons for inertia could be analysed at an individual level. In some cases, employees are reluctant to change and may even try to interrupt the process. In a time of high competitive pressure, the change has to be carried out as fast as possible to meet the tourism demands. Therefore, addressing the positive perception change factors is a key strategic issue for the success of tourism firms in transition economies.

The paper examines the effect of some key factors of change on the positive perception of change of tourism employees, taking as an example the case of companies in Vietnam. The first section of the paper concerns the economic and tourism trends in Vietnam. The second part will described the theoretical literature about organizational change. The third section briefly addresses the location of the empirical research and questions of methodology. The article then progresses to the results of the quantitative survey realized in tourism firms operating in Vietnam. We collected 373 questionnaires from Vietnamese employees working in the tourism industry at the beginning of 2001. These analyses lead to a conclusion.

Tourism in Transition Economy at a macro level: the case of Vietnam

Around one third of the world's population has been affected in recent years by the transformation of former planned economies, but the transition process has been neither easy nor similar for the various countries involved. Even the term "transition" has been called into question for legitimizing the underlying idea of an obligatory trajectory between two clearly defined points (Csaba, 1995). Researchers have pointed to the important role played by various inertial factors that have interrupted the economic development of socialist countries (Nuti, 1996; Andreff, 1998). The heterogeneity of emergent transition outcomes has its echoes in the transition economic literature, with concepts of the mutant economy (Hanson and Teagre, 1992), the mixed economy (Lavigne, 1995) and the dual system (Kornaï, 1992).

Vietnam is typical of a dual economic system. While most communist countries were collapsing in the late 1980s, Vietnam engaged in a new economic policy of *Doi Moi* or the Open Door (Vu Tuan Anh, 1994; Venard, 1998). However, far from the changeover from a planned economy to a market economy generating political change, the 1992 Vietnamese Constitution actually reaffirmed the essential role of the Communist Party as "the vanguard of the working class"(Venard, 2001). As Schultz (1994, p. 46) pointed out, "many conservative Vietnamese condemn the concept of free enterprise, the consumption mentality and materialism that drive it."

The Vietnamese Government is trying to strength the economic development of the country, especially by attracting foreign direct investments. At the same time, some key economic sectors are being carefully developed since they could provide to the country with financial investments, new technology, jobs and tax revenues.

Tourism is one of those major economic sectors. As an example of its importance, it should be highlighted that the Vietnam National Administration of Tourism is directly under the supervision of the Prime Minister.

As for many other economic sectors, the tourism industry has been increasing its activities since the middle of the 80's. A lot of efforts have been made to attract foreign tourists since 1986. Therefore, tourism has become Vietnam's fourth largest foreign-exchange earner (The EIU, 2002: 36). The total number of visitors (including holidaymakers, business people and overseas Vietnamese visiting their family) grew from 7000 in 1986 to around 200 000 in 1990 and an estimated 1.8 million in 2000 (cf. Table 1) . In 2000, an estimated 29% of visitors came from China, 7% form Taiwan. This is a considerable change in comparison with 1993 where the Chinese tourists where rare (cf. Table 2). Around 16% of the visitors are overseas Vietnamese.

Table 1: NUMBER OF TOURISTS IN VIETNAM PER YEAR

Year	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**
Total in thousands	250	300	440	669,9	1018,2	1351,3	1607,2	1715,6	1520,1	1781,7	1775,6

Source: Vietnam National Administration of Tourism, 2001

Typically foreign visitors stay in Vietnam just a few days and do not return. The reasons given include the relatively high cost of the destination (comparatively to Thailand or Indonesia), the difficult administrative processes (especially visas) and the lack of local attractions. This may change since the Vietnamese government and tourism firms are investing in the country's overall infrastructure.

A construction boom in the 90's resulted in about 55 000 new hotel rooms being built, over half of which are of international quality. Occupancy rates, while recovering after the 1997 crisis, are still low, at about 50%.

Domestic tourism is increasing rapidly within the country and outside. With the increase of revenues and freedom of movement, the number of Vietnamese travelling abroad has also increased from 15 000 in 1996 to 54 000 in 1999.

Table 2: NUMBER OF TOURISTS BY ORIGINATING COUNTRIES IN 1993 AND 2002

Year → Originating countries	1993	2000
US	180 916	175 193
Taiwan	96 257	176 356
France	73 935	70 300
Japan	31 320	122 911
UK	20 231	46 570
China	17 509	507 726
Hong Kong	16 845	21 624
Thailand	16 695	21 526
Other	146 730	633 447
Total	600 438	1775 653

Source: Vietnam National Administration of Tourism, 2001

Key factors of Organisational Change

Growth of the demand, transformation of the demand, evolution of the competition and multiplication of the hotel offer explain the need of the tourism industry to pursue rapid change. At a time of rapid economic and social change, it is important for firms in Vietnam to carry out important organisational change programmes to adapt to the environmental transformations. This is particularly true in an economic sector such as tourism which is in contact with international clients. As described before, in the last ten years, the international tourism demand has completely changed in Vietnam. This implies that the tourism actors have had to undergo radical organisational change in order to adapt their internal resources according to the external demand. But the change is far from an easy task for firms. The question is therefore to understand how to facilitate organisational change in the tourism sector in Vietnam.

Indeed the academic literature has recognised that several critical personal factors have an impact on change programmes. In this research, the focus will be on some specific change factors: information and communication, empowerment, education, and incentive.

First of all, it is useful to have an appropriate information policy in any organisational change programme. The idea is to make staff aware of the process of change by identifying their needs and subsequently by developing a common vision of the changes to be carried out. Stronger commitment in the change process is generated by more information and exchange (De Brentani, 1989) (Easingwood et al. 1996). For example, Lievens and Moenaert demonstrate the importance of communication for the success of a radical change as in a new service innovation (2000).

Secondly, the literature has stressed the importance of empowerment since the beginning of research into group dynamics (Cartwright, 1951). Demand for more active participation in organisations has been constantly highlighted (Goldstein, Burke, 1991). Group dynamics helps counter resistance mechanisms and stress generated by change. Senge has developed the idea of an essential dialogue in the organisation through his proposed open system thinking which will be efficient if there is enough individual participation (1990). Giving authority of decision and in general improving job design could increase the feeling of commitment and therefore the chance of success (Child et al., 1999)(Quinn, 1980)(Nielsen, Host, 2000).

Thirdly, an important factor in the change process is education. The literature highlights that employees in a learning organisation are more willing to accept organisational change programmes (Pettigrew, Whipp, 1995). A principle is to facilitate the circulation of ideas and practices which could be new or pre-existent (Huber, 1991)(Koenig, 1994). We have decided in this research to analyse the influence of the education level of the employee on their ability to accept change.

The last change factor is the incentive scheme within each organisation. It has been recognised that the level of commitment of employees in change programme is related to the incentives that they received (Chang, F.S., Wiebe, H. A., 1996). When a signalled extrinsic monetary reinforcement is applied, a significant increase in task performance is generated (Scott, W. E., Farh, Jiing-Lih, Podsakoff, P. M, 1988). Satisfaction at work in general but also during any radical change has a strong link with the satisfaction regarding the salary, the social benefits and other premiums. Some intrinsic reinforcements such as job promotion, could also be applied. The incentive could be given for commitment within the organisation, or in particular to a specific change programme.

We have also added as independent variables hierarchical level and importance of change since the literature has stressed their importance to understand change perception (Whittington, and al. 1999)(Buchanan, Claydin, Doyle,1999).

Before analysing the effect of the selected factors in organisation change, the research design will be first presented. Then, the selected change factors will be discussed in the context of the surveyed firms. This will lead to the conclusion.

Research design and methodology

The focus of the present research is the case of organisational change undertaken by tourism firms. The example that has been chosen is that of tourism firms in Vietnam at the end of the beginning of 2001 (the determining factors in this choice were access to fieldwork and to companies).

In the initial phase, documentary research was carried out into the different aspects of transition economies, Tourism in Vietnam and organisational change. The research work was based on a transversal theoretical approach. Organisational change is very interesting from a theoretical point of view because it can be, and indeed is, studied from different disciplinary approaches (economics, management, sociology, political science), thereby offering precious ground of common interest and potential dialogue amongst the various branches of the social sciences.

The second part of the research was to collect information through fieldwork. The collection occurred in 2001, essentially from various companies based in and around Ho Chi Minh City and Hanoi. Some tourism firms were contacted by mail and then by telephone to fix the interviews. At the beginning of 2001, 26 face-to-face interviews were carried out in the various organisations in the tourism industry and in specific economic bodies such as the Tourism Ministry of Vietnam, for the purpose of building an appropriate questionnaire. Each interview was conducted at the workplace of the interviewee and lasted between one and two hours. Those interviewed held various different positions: Managing Director, Technical Director, Human Resources Manager, Marketing Manager, Cost Controller, employees such as receptionist or “chef”, etc. This qualitative phase covered topics such as the description of the firm, the history of the development process, explanation of the description of the former and the new organisation and the organisational change programmes.

The third phase was to create a questionnaire. The preceding phase gave a better idea of organisational change carried out in tourist firms and gave substance to the realisation of a prototype questionnaire. A careful translation was realized from English to Vietnamese and then back to English for verification. An initial questionnaire was tested among some Vietnamese employees to check the understanding and the flow of the questions. Some adjustments were made. The questionnaire was divided into three parts with 44 closed questions. Those interviewed had to give their point of view concerning the actual organisation on topics such as communication between employees, distribution of responsibility in the organisation, perception of change… The respondent had to indicate the degree of agreement or disagreement by writing appropriate numbers beside the statements according to the following scale: 1 for “I do not agree”, to 5 for “I completely agree”. In the last part, the employee had to give some personal information concerning sex, age, education, number of years of work experience for the company and position.

The fourth part of the research was to administrate the questionnaire to various companies in Vietnam. 5 companies in the tourism sector accepted the principle of quantitative analysis. For reasons of confidentiality and anonymity the names of the companies analysed cannot be given. A brief description of all the companies will be given later in the included tabled. The 3 page questionnaire was given to all the employees from different hierarchical levels of the five companies at the end of the beginning of 2001 (for a total of 506 employees). The 373 received questionnaires were completely anonymous. The overall response rate was 74% which is very high compared to other recent European surveys of organisational change (Ezzamel et al. 1996)(Whittington et al., 1999).

Organisational change in the tourism industry in Vietnam

The first step in our analysis was to conduct a principal component factor analysis with varimax rotation in order to create some clusters concerning the various change factors. The various items were clustered in 6 dimensions. The indexes all had Cronbach's alphas above .7753, over the reliability level of .70 (Nunnaly, 1978). Regression analysis was used to test our specific hypotheses. Table 3 and 4 show the results of the regression analysis. The model was highly significant, with an R2 of .436 and an adjusted R2 of .399.

As the table of the multiple regression implies there are some significant correlations between some key factors of change and the positive perception of change. We will consider only a correlation which is significant only at 0.05 level (Signification p < = 0.05)(See Table 3 and 4 for details). Thus, it is not possible to find a significant correlation in the multiple regression between the information perception and the perception of change.

One key element for the success of a change programme is empowerment. Indeed, a correlation exists between the empowerment perception of the employees and the positive perception of change. The more employees are empowered, the more they will have a positive perception of change.

Incentive is another element to explain the positive perception of change. The more employees think that rewards are fairly distributed; the more positive they are concerning the change.

Another change perception factor is the hierarchical level. It appears that there is a correlation between the positive perception of change and the hierarchical position of the respondents. The higher an employee is in the hierarchy, the better will his perception of change be. It is true that executives are usually involved in the change programmes and therefore are positive about it.

On the contrary, the employees are less positive about change when they have a good level of. This is the only negative correlation of the table. Better educated Vietnamese are more critical about change programmes in their organisation. This is quite surprising since other research as highlighted the contrary and also considering that high level employees have a positive perception of change. It seems that high level Vietnamese graduates are "kept" at low position in their organisations and therefore criticised their organisation.

Finally, the importance of change is another analyzed factor. The greatest is the organizational change, the better perception of the change is. This is also a surprise since it is usually the contrary in the literature. One explanation could be that some of the participating companies were quite stable and some employees were willing to accept some changes, especially concerning incentives.

Table 3: MODEL SUMMARY COEFFICIENTS CONCERNING THE CORRELATION BETWEEN POSITIVE CHANGE PERCEPTION AND SOME CHANGE FACTORS

Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	0,653	0,427	0,398	0,6627317

Table 4: COEFFICIENTS CONCERNING THE CORRELATION BETWEEN POSITIVE CHANGE PERCEPTION AND SOME CHANGE FACTORS.
Dependent Variable: Positive Perception of Change
Independent Variables concerning various factors
ANOVA

	Sum of Squares	**Df**	**Mean Square**	**F**	**Sig.**

Regression	39,242	6	6,540	14,891	0,000
Residual	52,706	120	0,439		
Total	91,947	126			

Independent variables	**Unstandardized Coefficients B**	**Std. Error**	**Standardized Coefficients Beta**	**t**	**Sig.**
(Constant)	**0,418**	**0,252**		**1,659**	**0,10**
Change importance	**0,152**	**0,076**	**0,156**	**2,000**	**0,04**
Information available	7,5474E-02	0,85	0,074	0,896	0,37
Empowerment	**0,247**	**0,079**	**0,286**	**3,115**	**0,00**
Incentive	**0,233**	**0,086**	**0,257**	**2,695**	**0,00**
Education	**-0,139**	**0,066**	**-0,154**	**-2,122**	**0,03**
Position in the company	**0,267**	**0,139**	**0,137**	**1,919**	**0,05**

The bold line are the one with Sig. < 0,05

Conclusion

Transition economies have undergone rapid and important social transformations in the last 20 years. For example Vietnam has succeeded in entering World competition after many years of wars and economic embargo. The tourism sector in Vietnam is a good example of this rapid transformation. In a few years, the tourism demand has changed in size, markets of origin, needs. The tourism industry has therefore carried out radical organisational change programmes.

This research confirms the necessity of using organisational change facilitators (Buchanan et al., 1999). We were able to highlight the correlation between various change factors (especially empowerment and incentives) and the positive perception of change (except information).

But, it is necessary to be able to translate the concept of empowerment and incentives in Vietnamese society. In fact, despite the existence of an important amount of work on organisational change, both prescriptive and repetitive in its advice, empirical data suggest that managers have difficulties in translating them into their particular context. Adapting managerial concepts in a local environment is certainly the most challenging issue for managers and academics.

References

[1] Andreff, W. (1998) “ Les aspects inertiels de la transition ” – France, Angers: *Cahier de la Recherche de l’ESSCA*, N°5, p.11-90.

[2] Bowman, C., Ambrosini, V. (1997) “Using Single Respondent in Strategy Research” - *British Journal of Management*, 8 (2), pp.119-32.

[3] Buchanan, D., Claydin, T., Doyle, M. (1999) “Organisational development and change: the legacy of the nineties" - *Human Resource Management Journal*, vol. 9, 2, pp. 20-37.

[4] Cartwright, D. (1951) “Achieving Change in People: some Applications of Group Dynamics Theory ” - USA : *Human Relations*, 4, N°4, 1951, pp.381-392.

[5] Chang, F.S., Wiebe, H. A. (1996) “The ideal culture profile for total quality management: a competing values perspective” - *Engineering Management Journal*, Vol.8, No.2, June.

[6] Child, J., Pitkethly, R., Faulkner, D. (1999) “Changes in management practice and the post-acquisition performance achieved by direct investors in the United Kingdom” - *British Journal of Management*: Chichester; September. vol. 10, Issue 3. pp.185-198.

[7] Csaba, L. (1995) *The Capitalist Revolution in Eastern Europe. A contribution to the Economic Theory of Systemic Change* - Edward Elgar, Aldershot.

[8] de Brentani, U. (1989) "Success and Failure in New Industrial Services" - *Journal of Product Innovation Management*, 6, pp. 239-58.

[9] Easingwood, C., Edgett, S., Kleinschmidt, E., Storey, C. (1996) "What Distinguishes the Top Performing New Products in Financial Services" - *Journal of Product Innovation Management*, 11, pp. 281-99.

[10] Edvardsson, B., Edvinsson, L., Nystrom, H. (1993) “Internationalisation in Service Companies” - *The Service Industries Journal*, Vol. 13, No. 1, January, pp. 80-97.

[11] Eiglier, P., Langeard, E. (1987) *Servuction, le Marketing des Services* - Paris: McGraw-Hill.

[12] Economist Intelligence Unit, EIU (2001). Vietnam. Country profile. UK: London, The Economist, 59p.

[13] Ezzamel, M., Lilley, S., Willmott H. (1996) “The View from the Top: Senior executives’ perceptions of changing management practices in United Kingdom companies” - *British Journal of Management*, 7, 2, pp. 155-168.

[14] Goldstein, L.D., Burke, W.W. (1991) “ Creating Successful Organizational Change ” - USA : *Organizational Dynamics*, Spring, pp.117-134.

[15] Hanson, P., Teague, E. (1992) “The Comparative Political Economy of Employment in Mutant Economies ”. Trento, Italy: EACES Proceedings, (March 1992).

[16] Kornaï, J. (1992) *The Socialist System. The Political Economy of Communism* - Clarendon Press. Oxford.

[17] Lavigne, M. (1995). The Economics of Transition: From Socialist Economy to Market Economy. UK: London, Mac Millan.

[18] Nielsen, J., Viggo Host, V. (2000) "The path to service encounter performance in public and private bureaucracies" - *The Service Industries Journal*: London; January, Vol. 20, pp. 40-60.

[19] Nunnaly, J. (1978). *Psychometric Theory*. USA: NY, McGrax Hill.

[20] Nuti, D.M., (1996). " Post-Communist Mutations ". *Journal of Transforming Economies and Societies*, vol.3,1, Autumn, pp. 53-67.

[21] Pettigrew, A., Whipp, R. (1995) *Managing Change for Competitive Success* – United Kingdom: London, Blackwell Business, 2nd ed.

[22] Quinn, K.B. (1980) Strategies for Change: Logical Incrementalism – USA : Irwnin.

[23] Shultz, C.J. (1994) "Balancing Policy, Consumer Desire and Corporate Interest." *Columbia Journal of World Business*, pp. 43-52.

[24] Scott, W. E., Farh, Jiing-Lih; Podsakoff, P. M (1988) "The Effects of "Intrinsic" and "Extrinsic" Reinforcement Contingencies on Task Behavior" - *Organizational Behavior and Human Decision Processes*; New York; Vol. 41, 3, June, pp.405-426.

[25] Senge, P. M. (1990) *The Fifth Discipline* - USA: New-York, Doubleday Curency.

[26] Stafford, J., Sarasin, B. "Evolution du tourisme étranger au Vietnam". Canada: Montréal, *Téoros*, Conjoncture, spring 2000, vol. 19, N°1, pp. 67-71.

[27] Venard, B. (1998). Vietnam in Transition : will it be a next Tiger or a future Jaguar ? - Singapour: *Asia Pacific Journal of Management*, National University of Singapore, Issue 1 of Vol 15.

[28] Venard, B. (ed.), 2001, *Econoy and Management in Transition Economies*. Hungary: Budapest, 421p.

[29] VNAT, Vietnam National Administration of Tourism, « Vietnam – a destination for ther new millennium ». Vietnam : Hanoi, 2001, internal report, 15p.

[30] Vu Tuan Anh (1994). *Vietnam's Economic Reforms: Results and Problems.* Hanoi: Social Science Publishing House.

[31] Whittington, R., Pettigrew, A., Peck, S., Conyon, M. (1999) "Change and Complementarities in the New Competitive Lanscape: A European Panel Study, 1992-1996" - *Organization Science*, vol.10, 5, September- October, pp. 583-600.

Transformation of Real Estate Markets in Visegrad V4 Countries: Institutions, Outcomes, Problems, Risks, and Future

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Abstract

The real estate markets in Visegrad (V4) countries have emerged in early nineties and since that time they have been gradually maturing, although mostly in largest cities, such as Budapest, Warsaw and Prague. The present paper focuses its attention predominately on the selected segments of these markets, that are most seriously influenced by the forces of globalization, i. e. real estate office and commercial markets, as well as real estate investment markets. Growing political stability, evolution of market institutions, and high yields on investments are important attractors of the foreign investors into the region. Perspective of close European Union enlargement will further amplify these processes, but may also be the source of new risks for local economies.

The role of real-estate markets in economy

The real estate market is the market that encompasses all transactions, which involve dealings in rights or interests in land and buildings. A dealing means the transfer of a right temporarily or permanently from one party to another in return for a consideration, usually money.

In developed market economies, the function of the real estate market in allocating and reallocating land resources is very important contribution to economic prosperity.0 The market is the means of access to real estate and tends to ensure that there is a range of opportunity and choice in terms, for example, of location, types of premises, tenures, and terms and conditions for occupancy across economic sectors. Thus it has the relationship to productive activities, construction sector, labor mobility, national economy, etc. Low financial affordability of the office, industrial, inventory and commercial real estate and high rents discourage the investors from making the business in the certain localities, and it reduces its competitiveness resulting from excessive costs.

Since the real estate sector is closely linked to the functioning of the national economy, the disproportionate development of the real-estate sector is important risk factor for the development of the financial sector and the economy as the whole.

The globalization of the financial markets, new financial products, the computerization tightened the links between the financial and real-estate sectors. It practically means that some segments of the real estate markets are not any more independent, but they are closely associated to global financial markets. That also means that financial funds are relatively easily available for new real-estate projects in the countries with the reliable institutional environments and mature real-estate markets. At the same time this may be the source of the serious risks. Excessive offer of the financial funds on the real estate markets led in many cases to overbuilding and to financial crises (such crises had taken place for instance in the Southeastern Asia in nineties). Removal of barriers to capital flow, increasing information, IT development and liberalism in financial markets over the last decades has made it easier and more attractive to diversify internationally with global investment strategies frequently seeking to target the countries in different phases of the economic cycle.

For developed countries it is characteristic that the real estate sector is capable to provide the reliable information for the institutional investors about the real-estate yields, risks, and about the correlation between the real-estate yields in relationship to other asset classes taking into account the inflation. In such an environment are then institutional investors more willing to invest their money into the development projects. Such economic and institutional environmentis, however, much less developed in the transition countries.

Urban real estate markets in Visegrad (V4) countries

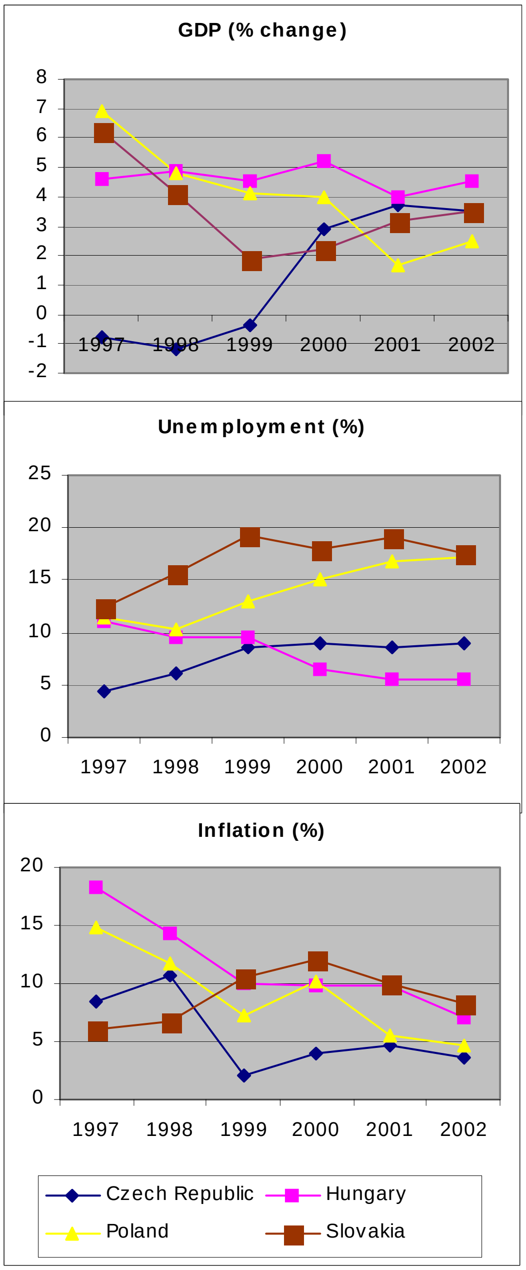

Fig 1: MACROECONOMIC INDICATORS OF V4 COUNTRIES

The Visegrad group of countries (V4) - that now consist of four Central-Eastern European countries: Czech Republic, Hungary, Slovakia and Poland - was created in February 1991 with the goal to accelerate the accession into Euro-Atlantic political and economic structures. This goal was partly achieved in 1999 when Poland, Hungary and Czech Republic became members of NATO, which was the positive signal for foreign investors.

V4 countries have been able to make an important progress in their transition to market economy in past twelve years. The latest development of macroeconomic indicators (see the graphs on GDP, inflation and unemployment on Fig. 1), is in spite of the numerous regional economic crises in the World, promising, although not without problems (high unemployment level in Poland and Slovakia).

Real estate markets in V4 countries are gradually evolving. The free markets existed before World War 2, but after the War Visegrad countries have became the part of Soviet block with centrally planned command economies. As a consequence of that, the private ownership was in most cases substituted by the socialized, state or cooperative ownership, the economic freedom abolished, the prices of real-estate became very much distorted, and the institution of expropriation was abused by state. Real estate markets became marginal, and mostly considered being the part of the shadow economy, with very limited transactions that were partly illegal.

The emergence of real estate and property markets in V4 countries necessitated the correct operation of elementary factors, such as guaranteed property rights, regulated ownership relations, freedom of trading, efficient system to register property right, use of property rights as the collateral, and improved access to capital. In addition it was necessary to educate a cadre of professionals providing services to the market players.0

The changes in V4 countries have stimulated substantial levels of foreign direct investment (FDI) inflows. (See the graphs on FDI inflows0 on Fig. 2). The great part of this investment has gone to purchase of state enterprises, joint ventures and the purchase of real assets with the impact on real estate markets. Furthermore the influx of international companies has stimulated the demand for real estate.0 The most visible impacts of such demand could be observed on changing urban patterns of the most important cities of the region.

Cities are places where new trends in thinking, technologies are concentrated. In major cities the dynamic social development is going on. The important aspect of the globalization is that it concentrates the command and control function in a small number of metropolitan areas. Such areas attract transnational corporations, international organizations and important events as well as real estate developers and investors[18] and that is reflected in the concentration of prime quality real estate.

The transition to information economy is changing relative importance of cities by creating opportunities and challenges to cities for growth and prosperity, but also increases their vulnerabilities. To attract the flow of FDI, the cities must offer a variety of external economies of scope and scale to existing or potential business.

With globalization, cities in central Europe are performing the gateway functions. Such cities as Prague, Warsaw and Budapest became the major entry points for foreign companies seeking to expand their operations. The growing attraction of investment flows to these cities is strongly influenced by the comparative advantage of city markets. Lowering national barriers, developing the global networks and interregional alliances is a great challenge for the cities of former command economies.

Internationalization of urban property and real estate markets can be considered to consist of three distinct phases: Firstly the occupational market is internationalized by firms either as tenants or owner-occupiers with increasing activity by different actor groups including developers and real estate consultancies. This phase plays the significant role in transferring expertise in terms of real estate management, professional and brokerage service. Secondly the investment market becomes internationalized as a consequence of institutions making strategic investments decisions related to their portfolio. In V4 countries this phase was mostly driven by external actors, including the property developers, investors, brokers/agents, and users of property, with the low participatory level by local companies. In the third phase, that is already taking place in the greatest cities of the region, we may witness the emergence of a more indigenous real estate and property market with the growing participation of local expertise and companies. Such a development is important milestone toward the further integration of local and international property markets. At the same time the progress in the development of economic structures is the important factor of the urban dynamics and real estate markets.

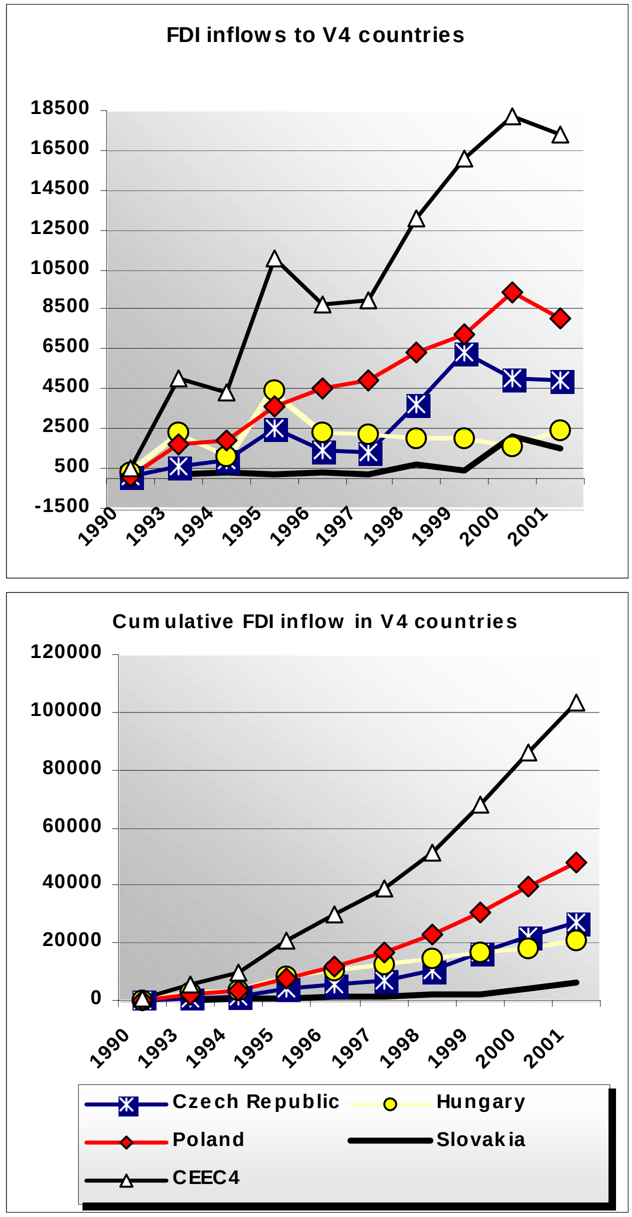

Fig 2: FDI INFLOWS IN V4 COUNTRIES

Real estate markets in Hungary

Hungary was one of the best prepared countries for economic reforms in former Eastern block after the fall of iron curtain[i], because of earlier reforms under central planning system, strong political commitment to attract foreign capital to finance current account deficits and external debt, and the credible commitment of successive governments to establishing competitive markets. The favorable investment climate and political stability of the early nineties were the reasons why Hungary was able to absorb the largest part of the foreign direct investment inflow from CEEC countries. Impressive performance of the Hungarian economy would have been impossible without FDI. Foreign firms have modernized Hungary's manufacturing sector, and Hungarian exporters have dramatically improved their competitiveness in high-technology products.0

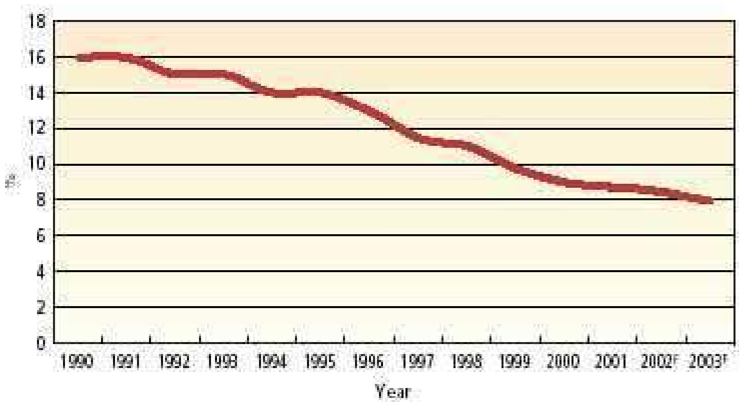

Fig 3: BUDAPEST OFFICE YIELDS

As the result of foreign companies operating in Hungary, the demand for the Class A properties has seriously risen in Budapest. With the growing saturation of the demand for office spaces, the yields have been declining (see the graph on Budapest office yields[1] on Fig. 3).

The real estate office in Budapest market is very dynamic. Currently around 1 mil. m^2 of office space meets Western European standards. Half of that space was built in last three years. The surplus of office space is already felt in 2002. By the end of 2001 the vacancy level for Class A offices achieved 16%.

The commercial real estate market is also very dynamic. There is a new wave of international franchises. Retailers are more demanding in their choice of location – generally shopping centers or prestige streets in the center of towns.

Real estate markets in Czech Republic

Last two years in Czech republic brought the end of the recession and the growth of the GDP was reestablished. The Czech economy has continued to successfully attract significant amounts of foreign direct investment (FDI) partly due to the implementation of effective state incentives for incoming investors which include tax holidays of up to ten years, duty free technology imports, and subsidies for building infrastructure.

At present Prague provides modern buildings with flexible layouts, a good selection of well-appointed buildings with excellent tenants. Modern office stock achieved 975,000 m^2 by the end of 2001. Vacancy level achieved 11% in 2001.0 The market has the positive rental outlook. At present time there is not a big risk of excessive supply over demand in the administrative and commercial spaces in Prague, thanks to continuing interest concerning the new products that will substitute the older and physically deteriorated premises that need the refurbishing. Risks at the Prague market are being reduced through more transparent accounting in business and strict trading guidelines imposed by EU. Thus Prague market offers value for money. An increasing number of international investors targeting limited stock, have been the key factor in driving the yields downward. Major office investment transactions in 2000-2001 include 10 transactions by such purchasers as Europolis, Creditanstalt fund mail, Heitman, Flow East, Czech Real Property Partners, APD, etc.

The new development projects for the office spaces are being launched in the inner and outer cities, since in the center, there is too much historical building stock, and that means, that the possibilities to build in the center are exhausted.

With a yield sharply higher than in other European capitals (10 to 11% average for quality buildings), the office market in Prague remains an investment opportunity. Demand for quality space is continually rising. With the maturing markets, the yields are going down. (See the graph on Prague – chronology of yields on Fig. 4).

Real estate markets in Poland

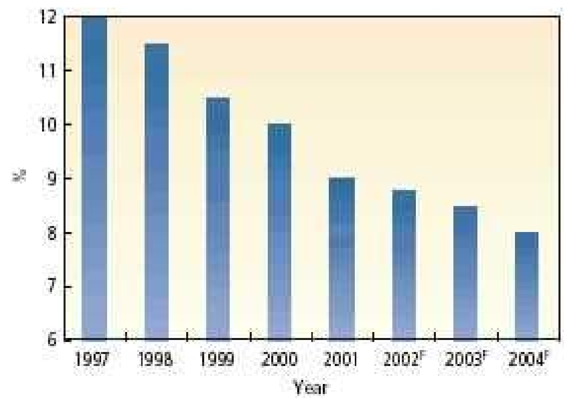

Fig 4: PRAGUE - CHRONOLOGY OF YIELDS

The Poland is the greatest country of V4, with numerous big towns and large population. Such country is very attractive for real-estate developers. Warsaw's property market has developed later than in Prague and Budapest. However it is considered to provide a better long-term prospect than its competitors being the capital of much larger country and hence offering better growth potential. In contrast to Budapest and Prague (with many well preserved historical buildings in their centers) there is as significant developmental space in Warsaw, though strict procedures for building permits, unresolved property rights and lower market transparency has inhibited the new construction in the center of the city.

As fears for the political and economic stability of the country are reduced, Poland is becoming more credible, and the number of international investors considering the investment in Poland is rising. Investors mainly from Austria, Germany and USA are particularly attracted by the high yields, although the real estate market is still immature when compared with Western Europe. Most of the transactions have been for the office buildings, however the number of products for selling has been limited, and so the investors are now turning their attention to the smaller regional cities, as well as to other real estate products.

The real estate market in Poland has undergone rapid development since 1989: It started with the essential modification of national legislation. This was the prerequisite for the re-emergence of the property market after 40-year break. Most important changes were privatization, adjustment of the tax system, introduction of convertibility of currency, liberalization of foreign trade, reinstatement of the local government system and municipal ownership, commercialization of the banking and insurance system, and setting up a stock exchange market. First phase of privatization created the strong demand on office spaces, however because of limited supply, the rental levels skyrocketed and achieved the level of approximately USD 50/m^2 /month. Rental levels were sustained at or over this level between 1993 and 1996 due to the continuing excess of demand over supply in quickly growing economy. In 1996 the developers started to build in Warsaw more office spaces than in previous five years combined and the abundance of the office space has been delivered to the market in 1997.

From 1997 to 1999, market activity and absorption for new class A office remained strong. However the accelerating growth of new supply coupled with periods of economic uncertainty caused vacancy rates to rise and rental levels to decline approximately 40% from their peak in the early 1990‘s. In 1998 and 1999, more than 350,000 m^2 of Class A office space was delivered each year to the Warsaw market. Another 297,000 m^2 of office space were added to existing stock in 2001. That led also to the growth of vacancies and the decline of rents. At the end of 2000, Warsaw‘s total class A office inventory amounted to more than 1,3 million m^2 which is estimated to comprise 38% of city total inventory (all classes including the 9% occupied by public sector. The changes of the real estate market were accompanied by changing number of all real estate transactions (see the graph on number of transactions0 on Fig. 5).

At present there is 1 435 000 m^2 of office space with internationally recognized standards (75,500 m^2 are located in CBD and 680,000 m^2 in the secondary locations)0. The effective interplay of demand and supply was not yet established - the prices and rents are still higher then in other important cities of V4 region. Demand for upmarket office space remains strong.

Real estate markets in Slovakia

Slovakia is the smallest V4 country, and so it has also the smallest real estate market. It was founded in 1993 after her separation from former Czechoslovakia. The separation has caused the temporary slowing down the economic reforms, because of the constitution of the new state and related political instabilities. The change to market economy[ii] came later in Slovakia then in other V4 country due to the quasi-authoritarian policies of Vladimir Meciar and slow pace of reform and non-transparent privatization during his administration 4 years ago. Since then, the situation has ameliorated. It became easier for foreign companies to enter Slovak market either by purchasing local companies or establishing the greenfield operations.

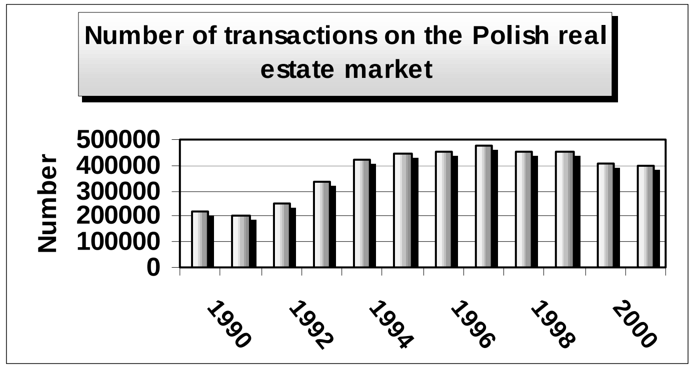

Fig 5: NUMBER OF TRANSACTIONS ON THE POLISH REAL ESTATE MARKETS

From the point of view of international investment the most interesting market is in the capital of Slovakia Bratislava, Bratislava, with 450,000 inhabitants is much smaller capital then its another three V4 counterparts. It is located only 60 km of the Austrian metropolis Vienna, with more then 1 million inhabitants, which is both advantageous and disadvantageous.

The total stock of the administrative offices in 2001 was 674,000 m^2 (another 43,000 m^2 were located in single family houses). Despite the recent development the city still suffers from a lack of Class A office space (about 160,000 m^2 at the end of the year 2001). Since the demand for Class A office space is quite high, more office development is expected. The average Class A office rent level in Bratislava is in interval EURO 13.7 – 19.5 /m2/month (the prices for best offices have been stabilized on the level Euro 18). This level should be retained in future years because of positive demand projections. Vacancy levels in the new build schemes are below 12% both in the city center as well as out of town. It is expected then during the years 2002-2005 the stock of Class A and Class A+ of administrative spaces will grow by 100 –150 thousand m^2.0

In comparison to Hungary and the Czech Republic, Slovakia is more limited investment real estate market. Investment market in the Hungary and Czech Republic has started to evolve three years ago. This was the result of the construction of the high-quality premises, their lease to well standing companies for acceptable leases. These factors have raised the confidence of investors. On the contrary in Bratislava such premises practically were non-existent. Nevertheless a several transactions by institutional investors have been done in past three years. Yields can be around 12% for quality Class A properties that are let to strong covenant tenants up to 13% for less well located properties with a less impressive tenant mix. Consensus is that yields for secondary or well less located properties yields of 15% and above are appropriate. Yields in general follow about a 3-year lag time when compared to those of Czech Republic and Hungary.0 The Slovak market for real-estate institutional investors will take a few years to develop as the economy and positive growth proves its sustainability.

The warehouse and industrial market in Slovakia is in the early stage of development and can be compared to the market in Czech Republic 5-7 years ago.

In past two years we are witnessing the significant development of retail premises, especially in Bratislava, however, there is large difference between capital and other towns in Slovakia.

Reforms' outcomes and the future necessary institutional changes

Hungary was the first of the central European countries to re-establish the market environment placing Budapest in a prime position regarding the attraction of foreign firms and investment, with Prague and Warsaw following. With the high influx of FDI in early nineties, Budapest office market has matured faster then the market in the other CEEC cities. This is well reflected on the graph on central and east European property yields in the year 20000 on Fig. 6.

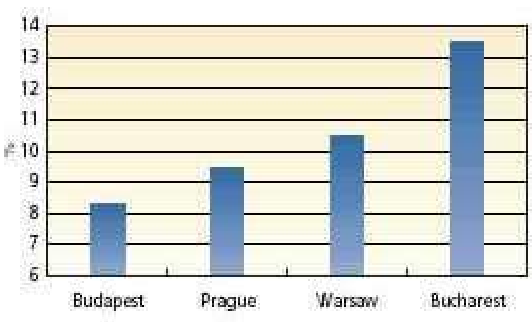

Fig 6: CENTRAL AND EAST EUROPEAN YIELDS IN 2000

The high yields in Poland, Hungary and Czech Republic contrast with the view over the border in Germany and Austria, where prime office yields are in the five to six per cent range. Yet the prime occupation cost is lower then in Western European cities (see the graph on prime office occupation costs 0 on Fig. 7). There is the expectation concerning the real estate markets in Warsaw, Prague and Budapest, that the yields on these markets will converge to level of EU within 5-7 years. The fact that both national and international companies look for the quality spaces and that the real estate yields in major cities of V4 are high attracts the interest of investors in real estate. The yields will inevitably drop because of better products delivered to market, stronger tenancies, new development, and also as the result of inevitable increased competition among investors. It also means that as that investors penetrate deeper into the markets, we may expect more development in Bratislava and other medium sized attractive cities of the region. The big cities of V4 countries will be increasingly exposed to global influences in terms of investments flows, property development and the occupier market.

The number of development/-investment funds has been established throughout the region over the last two to three years mostly of foreign origin. In response to the globalization of investment markets, local property cultures in central Europe are transforming to suit practices and requirements of institutional property markets.

Traditionally developers them-selves have financed much of the investment in the region. With the growing interests from the institutional investors it is now easier to developers to sell their production.

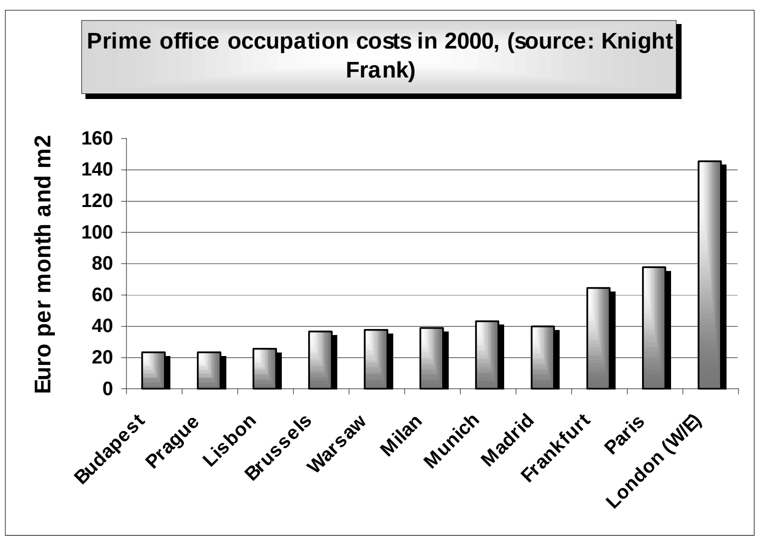

Fig 7: PRIME OFFICE OCCUPATION COSTS IN VARIOUS EUROPEAN CITIES

Institutional interest in the regions is likely to grow. Assuming that the progress toward EU accession continues, investors buying the property now can expect many of the current drawback of the region to be eliminated. Thus, it appears that the sentiment for the region as the safe haven in an otherwise stormy emerging market world is only strengthening. Many of the institutional investors currently looking at five- to seven-year investments in Central and Eastern Europe anticipate a substantial increase in capital value of property on EU entry. The investment market is however still underdeveloped, with a low number of transactions structure well developed.

Investments in the real estate markets depend heavily on the development of the banking system. In past few years we could observe the privatization of the banks in the regions, establishment of the foreign banks, the progress in the mortgage legislation, and mortgage lending, consolidation of the banks as the whole.

At the same time it is necessary to strengthen the banking supervision related to the real estate lending, since the lessons from the US savings and loans crises, South Asian and Mexican crises shown that the rising share of real estate improperly valued in the banking portfolios can be the source of the considerable banking and even currency risk.

The mature real estate markets are quite complex. Their functioning is hardly possible without sophisticated property specialists, associated institutions and networks that are capable to take into account the complex requirements for use and investment. Therefore the considerable effort in V4 countries has to be done to prepare the good professional for work at these markets.

Participants in real estate markets require access to real estate professional services, such as valuation, investment advice, and property management. The absence of markets and market prices meant that valuers could not function in the central planning economies. So the profession of valuers is developing gradually.

The functioning of appropriate professional services that support real estate markets requires that the higher schools and universities have the capability to produce suitably qualified graduates, who can then obtain appropriate supervised professional experience before acting as professional in their own right. The adherence of technical, educational and ethical professional standards must be enforced through devices such as licensing or self-regulation by a credible professional body.

Public service in V4 countries should also become more market-oriented and business sensitive. It is necessary to develop stronger ties between public and private sector in form of partnership. The urban planning functions should be strengthened and excessive bureaucracy removed. The low respect to the urban planning decisions on one hand, or bad urban planning decisions on the other hand, are the sources of the negative urban externalities, economic loses and costs (such as urban congestion, urban sprawl, bad urban services, unsustainable economic development, etc.), that are expensive for the society, corporations and citizens. Better urban planning is not possible without better data on markets. Meanwhile the data sources on real estate markets are still relatively poor, with lack of the transparency. It is a serious constraint not to have a credible benchmark data for the markets. It is therefore necessary to strengthen the partnership structures also in the areas of monitoring data on real estate markets.

Despite the progress, there are the risks. In addition the economic infrastructure being generally less developed than in West, the region suffers from legal and tax systems which are subject to frequent change, a regulatory framework which is often contradictory or unclear, and the investment guarantees for foreign investors have to become stronger.

The successful development of the real-estate markets in the Eastern European countries can be only the result of the interplay among the implementation of the economic reforms, institutional arrangements, and creation of the development of the networks of the entrepreneurs in the real estate. The process is closely related to the political processes in the countries, to the capabilities of the elected representatives of the population to solve the problems, their priorities and their political will.

Real estate markets risk after the European Union enlargement

In the progress report published by European Commission in November 2001, it was confirmed that the group of 10 accession countries (Malta, Cyprus, Poland, Hungary, Czech Republic, Slovakia, Slovenia, Estonia, Latvia, Lithuania, Bulgaria, and Romania) may join European Union (EU) by the year 2004, if they complete the EU negotiation by that time.0 These countries already direct around 2/3 of their export to the countries of EU. On the other hand they benefit from high level of FDI inflow from EU and other countries, and this inflow should only intensify as the date for EU enlargement approaches. Economic criteria for accession require the concerned countries to increase dramatically levels of investment including FDI. Also it is necessary to enhance the administration and transparency of the tax system, together with other bureaucratic procedures. New entrants to EU are obliged to demonstrate a stable and supportive regulatory framework enforced by an efficient public administration. Before the joining the EU the following problems should be resolved: political instability, economic uncertainty, currency volatility, and deficiencies in the legislation governing investor protection, taxation and real estate ownership. Nevertheless merely being considered for membership in a prestigious club brings a certain respectability for the accession countries.

In November EU controlled the achievement economic criteria of accession and has stated that the relevant countries in our studies i.e. Czech Republic, Hungary, Slovakia and Poland are functioning market economies, that they are able to withstand the competitive forces related to the joining of EU in near term. The EU enlargement will give also the new impetus for the development of real-estate markets of V4 countries, since these countries will need in more modern commercial, administrative and industrial spaces.

The enlargement will not be an easy the process for EU itself, since it shall increase the diversity and complexity of EU in the unprecedented way. In economic terms, the discrepancies in real capita income and price levels between accession countries and Euro area are of unprecedented magnitude. On the other hand the combined GDP of all the accession countries accounts for only around 5% of that of EU. Nevertheless substantial institutional reforms are needed to ensure that the EU can continue to function effectively after enlargement.

The enlargement is not possible without the liberalization of capital flows. So far the potential new member states do not request substantial opt-outs from the monetary union, and that means that after accession they will become members of economic and monetary union with derogation from the adoption of the common currency. The new entrants will be required to treat their economic policies including exchange rate policies in the interests of the European Union, which means that they will not be able to use the competitive devaluation, fully flexible exchange rates, and adopting theirs country‘s currency as the competitive tender. The macroeconomic policy makers will have less correcting instruments, by which they could correct the negative aspects of the economic development. Furthermore the new member will be obliged at the certain moment after the entry to European Union to participate on ERM 2– the exchange rate arrangement between the Euro area and EU members outside the Euro area. During the second stage, they will be expected to adopt and implement the policies necessary to fulfill the convergence criteria that will enable to adopt them Euro. It is expected that many accession countries would like to join ERM-II simultaneously with the entrance to EU. The third stage will come with adoption of Euro that is with joining EMU (European monetary union).

During the second stage there is the great likelihood of substantial change of nature, origin and sectoral destination of FDI flows to Central and Eastern Europe. It is expected that the inflow of foreign funds will strongly stimulate the aggregate demand. Since they will be heavily intermediated by the banking system, capital flows will lead to large increases in the assets and liabilities of bank and non-bank institutions in the new member states. Such inflows, if not adequately managed, can bring the overheating of the real economy posing the risks to financial stability. There is even the risk that a financial bubble could develop; and when it burst, a downturn may cause a sudden capital outflow, as a result of change in investor sentiments.0

Outflow could be relatively fast, and negative effects could accumulate at a similar rate. In the first phase of crisis the foreign investors may bring the money into the country in the good faith, because the country is considered to be the healthy economy with the optimistic outlook. Their prudential behavior threshold may be then lowered by a fixed exchange rate promising a safe return on their investments without the risk depreciation due to the exchange rate changes (as happened in case of Thailand in nineties). Then there is the risk that the crisis of responsibility would occur. That means that investors as well as banks in the target investment countries may leave their exchange positions insecure.0 The sudden outflow of capital or exchange rate crisis may then augment the overall cost of crises.

In the interregnum between EU and EMU membership a banking crisis of this sort would be the principal threat to the ability of the accession economies to satisfy the convergence criteria of Maastricht Treaty at an early date. Such crises can have the negative effect on EU as the whole. There are no perfect solutions to this threat, although we may argue that EU accession will itself help to guarantee and enforce improvements in macroeconomic stability, the operation of the financial sector and arguably also the efficiency of public administration.

The potential economic threats could be further amplified by the speculative booms in the real estate markets, which are often even more amplified by the willingness of banks to fund the dubious development projects when the real estate cycle is booming, but the depression is not far away. It will be therefore necessary to:

- to develop more sophisticated financial intermediation system, that will be able to cope with sudden withdrawal of the foreign funds,
- to increase the effectiveness of prudential regulation and supervision in preventing the banks from financing low-quality investments including the real estate investment.

The probability of such crises has been analyzed by W. Hook0 on case of recent development of commercial real estate markets in the Central Europe. W Hook argues that the fast development of the commercial real-estate market in Central Europe seriously surpasses the growth of the consumption. For instance today there are more big shopping centers and shopping malls in Czech Republic then in Italy, and the new ones are under the construction. The yields of the largest international players on Czech retail markets are close to 3%. The strategy of international retail chains is therefore oriented on future. In case of crises they are financially strong enough to consolidate the industry, while weaker players will become bankrupt, leaving the bad debts to domestic banks. If such a development would achieve the mass scale, financing banks would be in troubles. That may lead to their bankruptcies, although the majority of central European banks was in near past sanitated and sold to the foreign investors. It is not clear, however, if in case of crises the investors would be willing to put the financial injections into the banks that have the troubles, or they would let them go bankrupt. The second situation would lead to the growth of inflation and maybe even to the devaluation of local currencies and to the augmentation of the tax load of tax payers.

The arguments of W. Hook could be documented by the data published by Salerin0 on the rapid development of the commercial spaces and commercial centers in V4 countries (see Table 1).

TABLE 1: COMMERCIAL SPACE AND COMMERCIAL CENTERS IN VISEGRAD COUNTRIES

Indicator (year 2001)	**Poland**	**Slovakia**	**Hungary**	**Czech Republic**
Population (in millions)	38.6	5.3	10.1	10.3
Medium expenses per capita in EURO	1,740	1,996	2,476	2,832
Global commercial surface (m^2)	2,000,000	244,100	850,000	93,9061
Number of commercial centers greater than 5000 m^2	1 in 1996; 124 in 2001	14	5 in 1996; 32 in 2001	2 in 1996; 54 in 2001
Projects	until 2006: 100-150 projects	Until 2005: 4 projects	In 2002-2003: 150,000 m^2	until 2005: 23 projects

Conclusion

During past twelve years V4 countries have passed difficult transformation of their economic and institutional systems, nevertheless they achieved the significant progress. At the same time the real estate markets have been slowly developing with the most visible results in the most important and attractive cities of the region with the high influx of foreign direct investments. Such cities as Prague, Warsaw, and especially Budapest have achieved a certain degree of the market maturity (still much have to be done), while the markets in Bratislava and other medium-sized cities have received the new impulses for the real-estate markets only recently. These processes are likely to be accelerated with the approaching date of European Union enlargement. Accession countries are now under the growing pressure to accelerate their institutional and economic reforms, while strengthening their economics to be able to withstand the new competitive pressures in the united Europe. The strengthening of the banking system, transparency of markets, better public service (related especially to urban planning, building permits, property rights, cadastre, the enforcement of international accounting standards), business ethics, better education system have also the strong relevance for more efficient real estate market functioning and for growth of their maturity. The growing maturity of markets may be the way, how to reduce the risks from excessive construction of new real estate especially during the interregnum between the EU and EMU membership in European Union soon after the **enlargement**.

References

[1] *2002 Central nd East Real Estate Review* (2002*)* Colliers International.

[2] *2002 Central nd East Real Estate Review*, Ibid.

[3] *2002 Central nd East Real Estate Review*, Ibid.

[4] Adair, A., Berry, J., McGreal, S., Sykora, L., Parsa, A.G., and Redding, B. (1999*) Globalisation of Real Estate Markets in Central Europe*. Planning Studies 7 (3), Pp. 295-305.

[5] Begg, D., Eichengreen, B. – Halpern, L., Von Hagen, J., and Wyplosz, Ch.(2001) *Sustainable Regimes of Capital Movements In Accession Countries*. Center for Economic Policy Research. Final Report.

[6] *EU Enlargement and Convergence Process* (2002) RZB Group, Issue 4.

[7] Hampl, M.-Matousek, R. (2000) *Credit Contraction in Czech Republic, Causes and Effects*. WP No. 19. Prague

[8] Hook, W. (2001) *The Over-Development of Real Estate In Central Europe and the Risks of Financial Crisis*. A Policy Paper by the Institute for Transportation and Development Policy.

[9] Hunya, G. (2002) *FDI in Southeastern Europe in the Early 2000s*. A Study Commissioned By the Austrian Ministry of Economy and Labor. Vienna: The Vienna Institute for International Economic Studies (WIIW).

[10] HVB Real Estate Management.

[11] Kalkowski, L. (1997) *Rozmiary i podmioty Polskiego rynku nieruchomosci* [The Scope and Actors On The Polish Real Estate Market], Instytut Gospodarki Mieszkaniowej. Krakow; and Uchman, R. (2000) *Rozwoj rynku nieruchomosci mieszkaniowych w Polsce*. [The Development of the Housing Real Estate Market in Poland]. Konferencja Polski Rynek Nieruchomosci, Warszawa.

[12] Kaminski, B., and Riboud, M (1999) *Europe and Central Asia Poverty Reduction and Economic Management Series. Foreign Investment and Restructuring. The Evidence from Hungary*. World Bank Technical Paper No. 453, Washington, D.C.: The World Bank.

[13] Keith, S., Heywood, M., Adlington, G., Perrotta, L., and Munro-Faure, P. (2000*) Developing Real Estate Markets in Transition Economies* In: Financing for Development UN/ECE Regional Conference 6-7 December.

[14] *Knight Frank.*

[15] Kucharska-Stasiak, E., and Zaleczna, M *(2001): Transformation of Polish Real Property Market. Department of Investment and Real Estate*. Lodz: University of Lodz.

[16] Ladewig, H. (2001) *Institutional Real Estate Investment In Central Europe*. First World Congress Of International Real Estate Society. Anchorage, Alaska. 28 July.

[17] Salerin, R. *L'Europe de l'Est quadrillee par les enseignes internationales* (2002) [The Eastern Europe Is Quadrated by International Brand Marks], LSA. Dossier: Centres Commerciaux. No 1760, 21 Mars.

[18] Sykora, L.: *Globalization, Real Estate and City Development*. http://www.natur.cuni.cz/sykora.

[19] *V meste este chybaju kvalitne kancelarie* (2002) [The Quality Offices Are Missing in Town]. Bratislavske noviny. No 15. p. 10. The data quoted in the article were prepared by company J&T Global.

End Notes

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[i] Even more liberal was the situation in former Yugoslavia, however this advantage was later lost because of country split, political instabilities, and ethnic wars in nineties. The advantages were retained only in Slovenia, that is in fact today one of the most prosperous countries of CEEC.
[ii] European Union formally acknowledged it at the end of 2001.

UMTS - the Largest Technology Bet in the Business History

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Abstract

The European operators invested altogether $120 billion for the UMTS licenses and billions of dollars to build the UMTS infrastructure. UMTS enables super fast data transfer and increased capacity for mobile phones. One after another the European operators found out, that they invested too much into this technology without having and testing a business model for this technology. The applications, which could attract customers to use this technology and pay for it, are not available. This was proved also by the little success of the UMTS in Japan. It seems that gradual innovation without tremendous investments by adding new data services to current GSM networks might have been a better option for the industry. The strongly decreased revenue expectations from UMTS as well as high debts put operators under pressure. The consequence might be a new round of consolidation in the industry and decreased number of European telecom operators.

The UMTS – the revolutionary and very expensive mobile phone technology

The UMTS (Universal Mobile Technology System) is the recent major innovation in the mobile phone industry. UMTS is the third generation (3G) of mobile phones. At the same time it is the largest bet in the business history on the introduction of a new technology. Three years ago the whole telecommunication industry expected very much from the UMTS. The operators supported the idea of UMTS as a new industry standard together with the technology suppliers, who supply networks and phones. The main reason was the high capacity and very high-speed data transmission capability of UMTS. The shareholders, investment bankers, mutual funds, and other investors in telecommunications also favored the UMTS idea and linked the ratings of the telecommunication companies to their engagement in the UMTS projects. The European governments shared also the excitement about the UMTS. They sold the UMTS licenses through auctions and they received totally more than USD 120 billion for them, e.g. one license in Great Britain cost about USD four billion. The operators in Europe were expected to start with UMTS in 2002 or 2003 and to provide full coverage in 2006-2008, depending on the country.

Japan was the first country, where the local operator NTT DoCoMo started to operate the UMTS with the name FOMA (Freedom of Multimedia Access) in October 2001, five months later, than planned. The introduction of UMTS in Japan was behind the expectations of the operator NTT DoCoMo. It gained significantly fewer customers than expected, despite a massive marketing campaign. After nine months it has only about 130 thousands FOMA customers. The Japanese market is a very good place for introduction of new technologies. Japanese love new technologies. Japan was the first market, where the cellular phones became a mass-market. The little success of the UMTS in Japan influenced the rest of the world.

European operators started to re-evaluate their UMTS plans at the end of 2001. It became clear, that the costs associated with the UMTS - license fees and network investments - are very high and the revenues are unsure. The European mobile phone operators paid until now about Euro 120 billion to governments for the licenses. Operators should also invest into new networks; the UMTS technology needs four times more basic stations than the current GSM technology. Analysts started to speak about 10 to 20 years payback of UMTS investment. Some of them say that UMTS is largely a waste of money for carrier companies, consumers, and applications developers alike.

The operators' optimism was caused by very strong GSM growth in the past

The increase in mobile phone sales was very high in the last five years; from 1996 till 2000 it was about 60% yearly. The market has expanded rapidly thanks to big price cuts, and the surprising success of text messaging (SMS). Operators though at the end of the boom in 2001, that within six to twelve months capacity might reach critical levels for GSM systems. Currently, the traffic grows more slowly and it does not translate into revenue growth. In the rich world at least, markets are saturated. In 2001 decreased the mobile phone sales compared with the previous year by 8% in Europe.

The three wireless network generations

First-generation wireless networks (1G) used analogue technology to transmit voice, the second generation (2G) went digital, adding capacity to the network, increasing voice quality and letting data be transmitted as well. Important advantage of the 2G was also roaming, so one could use the same phone in networks of more operators. The recent innovation - 2.5G lets packets of data be sent separately from voice, allowing always-on data connectivity. This is already a revolutionary step forward. Another recent innovation – EDGE (Enhanced Data Rates for Global Evolution) gives GSM networks the ability to handle 3G-level data transmission speeds. The third generation (3G) promises super-fast data transmission and increases in capacity, a major issue for overburdened wireless networks. The very high-speed data transmission capability of 3G allows the usage of the whole range of Internet and video applications on cellular phones. It enables to communicate anything from anywhere at warp speed and without cables, fast Internet connection and the sending and receiving of video and audio to and from mobile phones. 3G promised to be a global standard, allowing usage of the same phone all over the world – in Bangkok, San Francisco and London. 3G is known in Europe also as UMTS.

The technology standards for wireless networks

There are currently more technology standards for 2G in the world. The leading 2G standard is GSM, which is now used in about 65% of the world's mobile networks; it is used in Europe and in East-Asian countries. The 2.5 upgrade for GSM is called GPRS (General Packet Radio Service) [1]. A competing 2G network standard, CDMA (Code Division Multiple Access) and its 2.5 upgrade, 1XRTT, allows data speeds comparable to those of GPRS.

The Europe's 3G is based on one broadband technology, WCDMA. A similar rival technology is CDMA2000. The WCDMA and CDMA2000 are not compatible. Experience in Japan, the first country where 3G has been launched, suggests that CDMA2000 may have the edge. Japan's NTT DoCoMo's 3G launch, using WCDMA, has been slow to take off, while its rival, operator KDDI, using CDMA2000, has been gaining customers quickly. CDMA2000 is running also in South Korea. Equipment makers and operators that are already using CDMA have a head start. In such countries as South Korea, Brazil, India and Mexico, where existing 2G networks already use CDMA, upgrading to 3G's higher speeds in the form of CDMA2000 is relatively cheap and simple. Countries that adopted GSM, however, have to build new networks from scratch at great expense. Spain's Telefonica has said that Europe's 3G standards do not allow a system that is stable or cheap enough to compete with existing technologies. As a result, some parts of the developing world may have high-speed mobile networks before many European countries. This is largely because WCDMA is entirely new—unlike CDMA2000, which is an evolution of a mature standard. Another problem is that the WCDMA camp is much larger than its rival, which means it takes longer to get everybody to agree, and to get their equipment to work together. The result is a face-off between CDMA2000 technology, which is already available, and WCDMA technology, which is late and more expensive, but is more widely backed. The likely outcome is that WCDMA will end up as the dominant 3G standard, with around 80% of the market; CDMA200, will have a smaller share, but will be rolled out sooner.

The missing “killer-application” for UMTS

The main reason for questioning the UMTS is the uncertainty of the demand. Peter Drucker [2] says that successful innovation should satisfy one important current need of customers. The basic question of UMTS, although it seems trivial, is the most important one. The question is what for would customers need the new technology and how much would they be willing to pay for it. The demand could not be properly tested, because both attractive applications and phones for good price are not available. Tom Peters states [3] that pilots and tests are the only way how to prove a new technology would be successful. The UMTS is not needed for the basic applications for mobile phones, which are currently normal speech, sending of short text messages (SMS) and basic data transfer. The current GSM standard enables these applications in good quality and for reasonable price. The question of UMTS is whether users need to browse on Internet super fast, play videogames, and download movies via mobile phones. The WAP - an easy version of Internet for mobile phones, working on current GSM phones, turned out to be unsuccessful. Videophones on fixed lines are also not widespread. Nobody knows what kind of services consumers really want from UMTS. The whole industry is looking for the so-called “killer application”. The current best bet, based on the runaway popularity of text messaging (which now accounts for 14% of European operators' revenues and is expected to account for 25% in 2006) is that consumers will pay extra to zap photos between camera-equipped phones, a service that is already popular in Japan. After that, the industry has high hopes that customers will fork out to play electronic games with each other while on the move. Major technological innovations are usually first adapted by business. Business is able to invest into an innovation, which brings return back. The PC became a widely used consumer device only after two decades of computer use by business. The question, which attractive services could UMTS offer to business, is also open. The lesson of the past few years is that the telecom industry is notoriously bad at gauging demand for its services. The two most successful new telecommunications technologies of the past decade - Internet access on fixed networks, and text messaging on mobile networks - were both unexpected breakthroughs that emerged in spite of, rather than because of, the industry's best efforts. Might be an unexpected technology that nobody in the industry has yet heard of, would appear and solve this basic problem.

The end devices - phones are missing

The golden rule for mobile telecoms is: the handsets are always late and they are late for UMTS as well. UMTS phones are more demanding for power than existing models. The handsets contain more software - they are, in effect, pocket computers. There is also need to have hybrid 2G and 3G phones for the transition period, which makes the situation also more complicated. The current trend toward smaller mobile devices is not exactly the optimal trend for UMTS that promises rich media delivery. The question is how to work on it, if it has miniature display and keyboard.

The involvement in UMTS causes serious financial problems to telecom operators

One after another the European mobile phone operators announced delays in UMTS start (Tab 1). The main reasons were lack of handsets, uncertainty of return on the investment and technical problems. Delays are usual in this industry - previous technologies as GSM, WAP and GPRS were all late as well. However, the UMTS delay means that operators would get revenues from UMTS later than expected and they make losses. Due to huge investments into UMTS licenses, extensive building of networks and acquisition of stakes in other operators, operators have very high debts (Fig. 1). Banks refuse to finance further investments into telecom industry. Bank’s global exposure to the industry is estimated at $1 trillion. Some analysts reckon that as much as half of that may yet have to be written off.

Instead of expansion, the European operators would have to sell assets, retrench in their home base, and raise new money from the capital markets. British Telecom has led the way in pursuing this kind of debt-reduction strategy. By spinning off mmO2, its wireless arm, selling minority stakes in overseas operators and launching a rights issue, it has reduced its debts from around $47 billion to less than $23 million over the past 18 months. It has also replaced its senior management team. Deutsche Telekom announced it would lay-off 22 thousand employees till the end of 2004. Recently it also changed its CEO. Analysts expect that Deutsche Telekom returns to black figures only in 2007.

Table1: CARRIERS ANNOUNCING DELAYS IN UMTS DEPLOYMENT [4]

Carrier	Country	Comment
Vodafone	All networks outside Japan	Lack of handsets and handset functionality
Telefonica Moviles	Germany, Italy, Austria, Switzerland	Abandoned participation in joint ventures
Hutchison Whampoa	Hong Kong	Cited dropped calls from 2G to 3G networks
Ipse	Italy	Indefinite delay
Tele2	Norway	Requested delay citing lack of potential revenue
Broadband Mobile	Norway	Dissolved
Orange	Sweden	Requested 3-year delay from 2003 to 2006
Hi3G	Sweden	Delay from 3Q02 to 4Q02 citing lack of phones
Swisscomm	Switzerland	Says network is installed but handsets are not available

The worst situation is for the new entrants, such as Hutchinson 3G in Britain and Group 3G in Germany, that do not have 2G networks and so must start from scratch to build up the UMTS network. Group 3G - joint-venture of Finland's Sonera and Spain's Telefonica already abandoned plans to enter four European markets with UMTS: Germany, Italy, Austria and Switzerland. The joint venture was suspended after the two firms decided that they would not be able to make an adequate return on any further investment. In Scandinavia one operator returned its UMTS license to the government for free few months after expensive acquisition of it.

Network operators also use "vendor financing" in which equipment makers, such as Nokia, Ericsson and Alcatel, lend them money to buy their equipment. Some vendors are now lending as much as 200% of the cost of hardware purchased, thus providing operators with working capital that they are unable to raise from banks and public markets. This means that the equipment vendors are taking on risk, particularly when lending to new entrants that do not have any revenues at the moment. And debt is still debt, whoever is lending the money.

Operators want to decrease their financial burden by introducing new services on the 2.5G technology, sharing the networks and postponing the investments into UMTS

Some operators decided to add features like GPRS and EDGE to GSM gradually, coming to UMTS later. Application developers, Internet service providers, etc. can start figuring out ho to make money out of the data services without tremendous amounts invested into the technology. Carriers are not interested any more in big investments without seeing what it will be used for. Examples of services in operation, which could be provided by the 2.5G is i-mode and MMS. With i-mode one could browse on special Internet sites, send pictures and multimedia messages, and play games. Currently there are available more than forty thousands i-mode sites with news, e-mail, on-line shopping, ticket reservation and entertainment. In Japan i-mode has about 34 million users, 90% of the subscribers also use it. The users are charged on the volume of data transferred, not on the time basis. The Japan operator - NTT Docomo plans to spread i-mode worldwide through strategic alliances with other telecoms. Currently i-mode has more than 100 thousand users in Germany and Netherlands. The expectation is that one million customers will be using i-mode in 2003 all over the world. At this moment the most interest is for the categories 'melody and images' and 'news'.

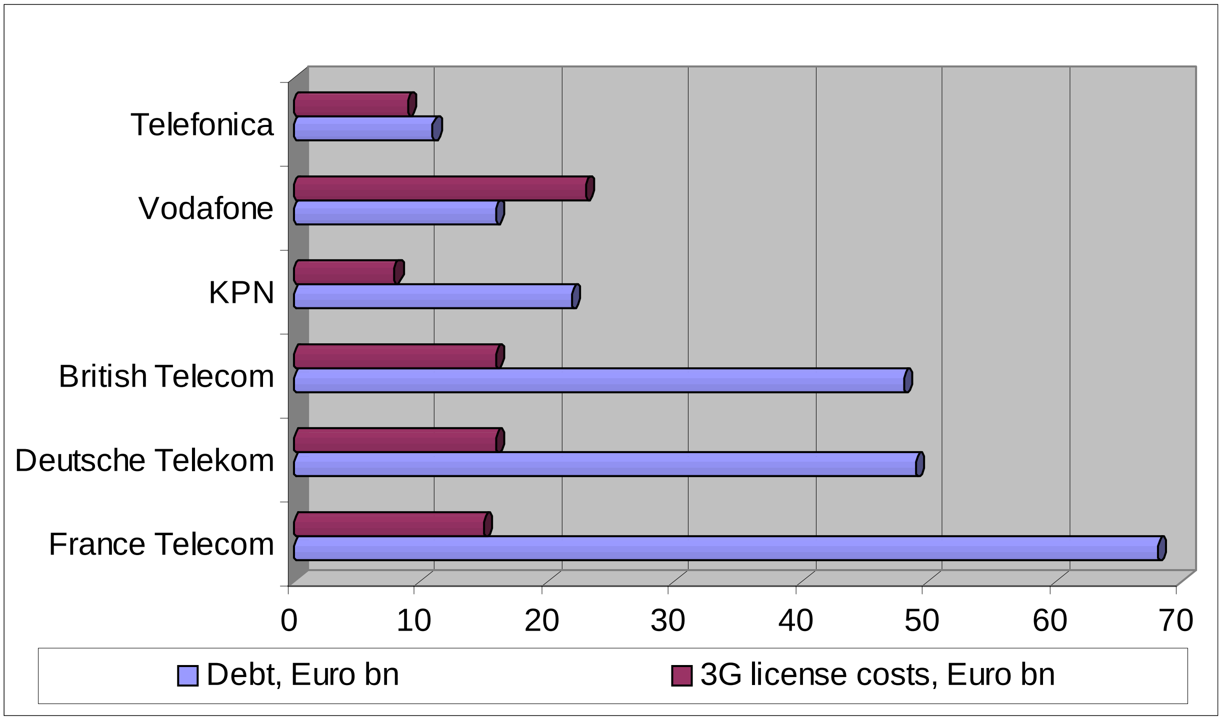

Fig.1: THE DEBTS OF EUROPEAN TELECOMS AND UMTS LICENSE COSTS, 2001 [5]

Multimedia message system (MMS) is another innovation, running on the 2.5G. It could be seem as an upgrade of the popular text messages (SMS). With MMS, customer can send pictures, animated pictures, sounds - ringing, music between phones and also from phone to WEB. Hungarian Matav, daughter of T-Mobile of Deutsche Telekom was the first operator, who started to operate the first full-fledged commercial MMS in April 2002. Currently, there are about 15 operators in Europe, who provide this service. The price of MMS is about 10 times higher, than of the normal SMS. However, there is only one available phone in Europe, supporting the MMS, other devices are expected to come till the end of 2002.

European Commission is due to announce its support for a deal by T-Mobile, a subsidiary of Deutsche Telekom, and mmO2, to share the cost of UMTS infrastructure. The Commission has already indicated it might support a similar deal by the two companies in Germany. This would open the doors for other companies in Europe to share the equipment, such as base stations and masts.

In august, Orange Sverige, a subsidiary of France Telekom asked Swedish regulators for permission to delay the rollout of UMTS services and to reduce their scope. Orange wants to push back the deadline from 2003 till 2006. Tele2 had asked the Norwegian government to ease its UMTS requirements recently.

Leading European operators also asked governments in Great Britain, France, Germany, and Italy to return them money and to start to sell the UMTS licenses from the beginning one more time. However, this does not seem to be a viable option.

Consolidation in the telecom industry is expected

The financial problems lead to massive round of consolidation in the telecom industry. Some companies might go bankrupt, others would be acquired. The former national monopolies in Europe like Deutsche Telekom, France

Telekom and Telefonica might get help from governments to solve their high debts. Vodafone is expected to buy SFR, a French mobile operator, from Vivendi, a struggling conglomerate. Vodafone played the acquisition game in the past clever, because it paid for over-inflated assets of telecoms with its own, slightly less inflated, shares. Other telecom companies usually paid cash. British mmo2 looks like an acquisition target, with its most likely partners being Spain's Telefonica Moviles or Italy's TIM.

References

[1] Faulhaber, Gerald R. *Wireless dreaming: Is 3G Dead?* [Public Information] Retrieved July 15, 2002 from World Wide Web: http://knowledge.wharton.upenn.edu/articles.cfm?catid=14&articleid=571

[2] Drucker, Peter F. (1986). Innovation and Entrepreneurship. Practice and Principles. London: Pan Books.

[3] Peters, Thomas J. (1987). Thriving on Chaos, Handbook for a Management Revolution. New York: Alfred A. Knopf.

[4] *3G in the U.S. - "The Whole World is Watching"* [Public Information]. Retrieved August 28, 2002 from World Wide Web: http://www.proberesearch.com/alerts/wholeworld.htm

[5] Pass the Painkillers. (2001, May). The Economist, 3559, 61-62.

Venture Capital in a Developing Country: The Case of the Philippines

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Abstract

In this paper we will present a summary of our initial research focusing on the development of the venture capital industry in the Philippines, which is a developing country that has recently been a recipient of significant venture capital investment. More specifically, we analyzed the impact of the lack of a fully developed institutional framework (primarily financial and legal) on the development of the venture capital industry in the Philippines. Fully developed institutions, which are characteristic of developed countries, are typically necessary for the efficient operations of Western venture capital firms. Yet recent venture capital investments have been flowing to developing countries in spite of the lack of fully developed institutions. We attempted to begin to identify unique characteristics and challenges facing venture capitalists operating in a developing country.

Introduction

Venture capital is professionally managed equity money used to finance high-growth, small- and medium-sized, privately held companies (investee companies). Venture capitalists raise and manage a fund, which is a pool of money raised from investors, to include institutions, pension funds and private investors. The objective is to generate significant long-term capital gains for the investors and the venture capitalists. "A rule of thumb is a return in five years of 7 times on the first venture capital (a compound rate of return of 48%)" (Bygrave and Timmons, 1992: 178).

According to Pacanins (2001) there are two recent trends in private capital activity (which includes venture capital) in developing countries: first, there has been a significant increase in activity, followed by a recent significant decline; second, there has been a trend towards investing in more early-stage investments. Pacanins believes that private equity investments increased in developing countries because many developing countries have implemented economic reforms, which have resulted in both economic progress and an easing in restrictions for foreign investors. Secondly, Pacanins believes that developed countries have experienced a recent decrease in investment opportunities because of "too much money chasing too few deals."

The result of economic restructuring and the diminishing appeal of developed countries to institutional investors has been a significant increase in venture capital investment in developing countries beginning in the early 1990s. More specifically to Asia, Aylward (1998) determined that since 1992, there has been a significant increase in new venture capital funds flowing to Asia compared to Central and Eastern Europe. However, the movement of venture capital from developed to developing countries is not without inherent risks. The lack of fully developed institutions in developing countries can lead to significant problems for investors and venture capitalists in terms of corruption (Hamori, 1999) and increased transaction costs (North, 1990). Thus, venture capitalists that are investing in developing countries are operating in a new environment characterized by unique risks and challenges. This new context may require a different type of venture capital model than what was successful in developed countries.

In this paper, we first present the theoretical framework that guided our research. We then explain our research methodology. Thirdly, we present the initial results of our exploratory study and, finally, we conclude with a discussion about the implications of our findings.

Theoretical Framework

Institutional theory attempts to explain the impact that contextual systems have on organizational behavior and economic performance (Hoskisson, Eden, Chung & Wright, 2000; North, 1990). Institutions, especially legal and financial institutions, tend to be more developed and transparent in developed economies compared to underdeveloped institutions in developing countries (Ramamurti, 2000; Passarides, 1999). Developing countries can be characterized by limited private savings, weak financial intermediaries, shallow stock markets, ambiguous property rights and underdeveloped legal systems (Ramamurti, 2000). In developing countries transactions costs for organizations will be higher than in organizations operating in developed countries because of a lack of a fully developed institutional framework (North, 1990). The lack of effective institutions can lead to the increasing likelihood of agency problems in developing countries (Dharwadkar, George, & Brandes, 2000), which can result in both increasing corruption and the role of organized crime (Hamori, 1999).

According to agency theory, agency problems arise because of goal conflict between a principal (e.g., venture capitalists) and agent (e.g., investee company) where it is difficult for the principal to verify agent performance (Eisenhardt, 1989). In general, agency theory attempts to explain the relationship between one who delegates work (principal) to another, who performs that work (agent) (Eisenhardt, 1989). This relationship can be negatively affected by a lack of effort by the agent (moral hazard) and/or misrepresentation of the agent's ability by the agent (adverse selection). In developing countries where institutions are underdeveloped, agency problems make corporate governance very difficult because of the lack of legal institutions (Dharwadkar et. al., 2000).

Both institutional and agency theory can be used to better understand organizational performance in developing countries (Hoskisson et. al., 2000). Organizations operating in developing countries face increasing bureaucratic and information-processing costs because of a lack of fully developed institutions; specifically, an inappropriate legal system, undeveloped and/or inefficient financial markets, and a lack of a stable political structure in terms of a transparent regulatory system (Peng & Heath, 1996).

Based upon our analysis of institutional and agency theory, we expect agency problems to be a significant challenge to organizational effectiveness in developing countries. In this study we analyzed strategies developed by Philippine venture capital firms to offset agency problems that are caused by the lack of fully developed institutions. Our general hypothesis is that the lack of fully developed institutions in the Philippines will lead to agency problems for venture capitalists and, consequently, the development of unique strategies to deal with these problems.

Research Methodology

The case study research methodology was selected as the most appropriate qualitative research strategy to conduct an exploratory in-depth analysis of the development of the venture capital industry in a developing country. More specifically, this strategy can be very effective when investigating "contemporary phenomena within its real-life context where the boundary between phenomenon and context are not clearly evident and multiple sources of data are used" (Yin, 1989: 17).

Structured interviews were conducted at the Top Four venture capital firms in Manila in January 2002. The Top Four had been identified by an individual who was recommended by academics in the Philippines as being very knowledgeable about the current state of the venture capital industry. This individual identified venture capital firms that are the most active in the Philippines. Our interviews indicated that these four firms were both very active investors in the Philippines and also networked and co-invested with each other. We interviewed five venture capitalists from the four firms. Each interview lasted approximately 1.5 hours. Each venture capitalists also provided in-house documents and/or information available from the firm's website. This information was used to further elaborate and/or corroborate interview data (triangulation).

The case study research methodology specifically recommends developing a framework based on the literature as the starting point in research design (Yin, 1989). The framework that was developed to analyze the development of the venture capital industry in the Philippines was both institutional and agency theories. In this paper we will use institutional and agency theory as a framework to analyze the development of the venture capital industry in the Philippines.

Venture Capital in the Philippines

Yin (1989) recommends pattern matching as a mode of analyzing data in case study research whereby researchers compare empirically based patterns with a predicted one. We will compare our empirical results with a literature-review profile of the characteristics of venture capital firms operating in developing countries (Aylward, 1998; Pacanins, 2001). We asked each venture capitalist to identify and explain the major characteristics and challenges relevant to the venture capital industry in the Philippines. In Tables 1 and 2, we summarized their responses in terms of the frequency that each specific characteristic or challenge was cited by the venture capitalists.

Table 1: CHARACTERISTICS OF THE PHILIPPINES' VENTURE CAPITAL INDUSTRY

Frequency (number of citations)	**Characteristics**
4	Relatively small venture capital funds and relatively small deals
4	Entrepreneurs are less wary of venture capitalists • Becoming more open to venture capitalists due to lack of bank support • Increasing visibility of venture capitalists because of the recent "dot.com boom"
3	Invest in family-controlled businesses • Lack experience to write a business plan • Venture Capitalists must help write the business plan
3	Entrepreneurs have a limited understanding of technology
2	Invest in entrepreneurs who have developed a regionally-focused (outside the Philippines) market strategy
2	Lack of financial transparency of investee companies
2	Networking and co-investing among the Top 4 venture capital firms
1	Minimal funding for early-stage ventures; high priority for funding expansion ventures.
1	Wide diversity of venture capital firms • Large global firms, medium-sized regional firms, small local firms
1	Invest in U.S. connections • Successful Filipino entrepreneurs in the U.S. who will transfer technology to the Philippines

Source: Interviews with venture capitalists (2002)

Table 2: CHALLENGES FOR THE PHILIPPINES' VENTURE CAPITAL INDUSTRY

Frequency (number of citations)	Challenges
8	Maintaining a venture capital presence in the Philippines • Perceived poor investment climate/lack of opportunities • High currency risk for Western investors • Political instability • Capital flight out of the Philippines
5	Initial public offerings are limited as an exit strategy
3	Lack of funds from institutional investors for a Philippine Fund
3	Few innovations address global markets
2	Entrepreneurs continue to over value their businesses in an economic downturn
2	Government problems of corruption and bureaucracy
1	Entrepreneurs do not want to share (sell) ownership with venture capitalists
1	Entrepreneurs represent a small percentage of the population and tend to be too easily satisfied
1	Developing networks to find new investment opportunities
1	The Philippine market for traditional products is small and over crowded
1	The venture capital industry is young and undeveloped • Small number of venture capital practitioners • Difficult to learn the venture capital business • Lack of women venture capitalists

Source: Interviews with venture capitalists (2002)

The venture capitalists describe the Philippines venture capital industry as being relatively small, investing primarily in family-run businesses that are still somewhat wary of venture capitalists but are increasingly open to consider venture capital investments. Typically, these family-run businesses are not technologically proficient and do not provide the financial transparency that venture capitalists desire in order to conduct the required due diligence needed before investing. These entrepreneurs also typically need significant help in writing their business plans, which are then used by venture capitalists in the due diligence process

The Top Four venture capital firms work closely together (described as a "cartel" by one venture capitalist) and prefer to invest in later-stage companies that are in need of funds for expansion. Three of the Top Four are foreign-owned, medium-sized, regional venture capital firms and one firm is local. . Because of the lack of technology investments available in the Philippines, one venture capitalist looks for high-technology ventures operating in the U.S., which are Philippine owned and the entrepreneur is interested to transfer technology to the Philippines.

Not surprisingly, many of the characteristics of the venture capital industry lead directly to significant challenges (Table 2) facing venture capitalists in the Philippines. Most challenging for venture capitalists is to continue to maintain a venture capital presence in the Philippines either in terms of a specific Philippine country fund or to maintain exposure within larger Asian regional funds. This is a challenge because of investor's perceptions about the poor investment climate, increasing currency and country risks (political instability), capital flight and the on-going problem of government corruption and bureaucracy, which can make doing business very difficult. These challenges are in spite of the fact that the venture capital pool in the Philippines increased very rapidly from 1991-1999 (*The Guide to Venture Capital in Asia*, 2001).

The major exit strategy for U.S. venture capitalists is an initial public offering by the investee company. This is very problematic in the Philippines because an IPO is not a viable option, which further exacerbates the challenge of generating institutional investor interest. Potential deals are difficult to find because of, first, a general lack of entrepreneurs and, second, the existing entrepreneurial pool continues to focus primarily on low-technology products in the domestic market. Entrepreneurs who are eligible for venture capital tend to over value their businesses and are reluctant to sell equity to venture capitalists. Thus, a key strategy for venture capitalists in the Philippines is to focus beyond the Philippines for investee companies that will potentially transfer technology to the Philippines.

The lack of fully developed institutions are clearly evident in the Philippines in terms of perceived political instability, lack of financial transparency and the inefficiency of capital markets to support initial public offerings. Agency problems are also present, but primarily in terms of government corruption. Venture capitalists did not directly identify agency problems with investee companies as either a major characteristic or challenge. However, the lack of attractive deals in the Philippines may be related to potential agency problems that are challenging to manage because of a lack of financial transparency and the resulting lack of substantive business plans. This make due diligence very difficult for venture capitalists before they can make an investment.

Because of the lack of an effective institutional framework and subsequent agency problems, venture capitalists in the Philippines have had to develop unique strategies. Initial public offerings in Manila are not feasible, a Philippine country fund is also no longer efficient, venture capitalists must be involved in the actual composition of business plans for potential investee companies, networking among venture capitalists is the norm and identifying potential investments in developed countries for technology transfer has become characteristic. Based upon the initial interviews, there appears to be support for our general hypothesis that the lack of fully developed institutions will lead to agency problems for Philippine venture capitalists resulting in unique strategies required by the venture capital firms to maintain effectiveness.

Conclusion

Many of the characteristics and challenges identified by Philippine venture capitalists may be because the venture capital industry is young and undeveloped. Using our literature review of venture capital firms in developing countries, we developed a developing country profile of venture capital firms, which is shown in Table 3. We can now use pattern matching to further validate and modify our findings by comparing empirical findings from Tables 1 (Characteristics) and 2 (Challenges) to the general characteristics (predicted) of developing country venture capital firms listed in Table 3. Both types of firms (Developing and Philippine) suffer from a low number of attractive deals, problems of currency and country risk, corruption, lack of transparency and a lack of a credible stock market as a viable exit strategy. Both types of venture capitalists are attempting to invest in the transfer of services (technology) from developed to developing countries and primarily use a non-IPO exit strategy. In many ways, the Philippine venture capital industry fits the predicted model of a developing country venture capital firm; especially in facing agency problems of corruption and a lack of financial and corporate transparency, all of which may be related to weak institutions.

However, the Philippines also differs from developing country venture capitalists in that Philippine venture capitalists tend to invest in mature, later-stage companies (similar to a recent trend of Developed venture capoitalists) while developing venture capitalists are increasingly investing in early-stage companies. Venture capitalists in the Philippines are also increasingly interested in international entrepreneurs who have developed a global or Asian regional strategy for their new ventures. Unlike developing country venture capitalists, and similar to developed country venture capitalists, venture capitalists in the Philippines prefer to invest in relatively high-technology investments.

Table 3: COMPARISON OF DEVELOPED COUNTRIES AND DEVELOPING COUNTRIES VENTURE CAPITAL FIRMS

Activity	**DEVELOPING Country VC Firm**	**DEVELOPED Country VC Firm**
Fund Structure	Corporation & Limited Partnership	Limited Partnership
Capital Sources	Pension Funds, Corporations, Insurance Companies, High Net Worth Individuals, Government & Non Governmental Organizations (USAID, IFC)	Pension Funds, Corporations, Insurance Companies, High Net Worth Individuals
Types of Investments: Traditionally	Privatizations, Corporate Restructuring, Strategic Alliances, Infrastructure Funds	High-technology, Early-stage, High growth firms
Types of Investments: Recently	Services expanding from Developed to Developing Labor-intensive industries Indigenous technology in Developing Countries	Trend towards Late-stage
Deal Origination	Low number of attractive investments, Focus on quality of management, Problems of country risk, Corruption, Exchange rate risk	Focus on quality of management
Deal Structuring	Common stock and debt	Common stock, several classes of preferred stock, debt and convertible preferred stock
Pricing the Deal	Difficulty in assessing the value of an investee company – lack of transparency	Higher level of transparency
Exit Strategy	Sale to third parties, co-investors, investee firm's management	Initial public offering (IPO)

Source: Aylward (1998) and Pacanins (2001)

Developing country venture capitalists, to include Philippine venture capitalists, clearly have developed strategies to deal with the lack of fully developed institutions. The lack of these institutions has not prevented the development of an active venture capital industry in the Philippines. However, venture capitalists have concluded that a country fund specifically focusing on the Philippines is no longer viable because of the relatively small market and the lack of attractive deals. Philippine venture capitalists must now compete for funding with Asian venture capitalists as part of a regional fund strategy.

This study is highly exploratory and represents only the first stage of an ongoing longitudinal study. With a cross-sectional, nonrandom purposive sample of only four venture capital firms, the results are highly tentative. More venture capital firms need to be included and follow-up interviews are necessary with the Top Four venture capital firms. More specifically, more in-depth information about the direct relationships between the venture capitalists and their investee companies in terms of potential agency problems needs to be gathered. It appears from the initial results, that an aggregate venture capital model that is characteristic of developing countries is superficial and not generally supported. It is more likely that venture capital strategies in developing countries will reflect both global venture capital trends along with significant country modifications. Cross-country research is especially critical to provide further depth in understanding the development of venture capital firms in developing countries.

References

[1] Aylware, A. (1998). Trends in venture capital finance in developing countries. (36). Washington, DC: International Finance Corporation.

[2] Bygrave, W.D. & Timmons, J.A. (1992). Venture capital at the crossroads. Boston, MA: Harvard Business School Press.

[3] Dharwadkar, R., George, G., & Brandes, P. (2000). Privatization in emerging economies: an agency theory perspective. Academy of Management Review, 25, 650-669.

[4] Eisenhardt, K. (1989). Agency theory: an assessment and review. Academy of Management Review, 14, 57-74.

[5] Hamori, B. (1999). Dog strategies in the transition economies. (Eastern Europe). Business Horizons, 42, (5), 47+.

[6] Hoskisson, R.E., Eden, L., Chung, M.L., & Wright, M. (2000). Strategy in emerging economies. Academy of Management Journal, 43, 249-267.

[7] North, D.C. (1990). Institutions, institutional change and economic performance. Cambridge, U.K.: Cambridge University Press.

[8] Pacanins, G. (2001). A note on private equity in developing countries. (9-297-039). Boston, MA: Harvard Business School.

[9] Peng, M. & Heath, P. (1996). The growth of the firm in planned economies in transition: institutions, organizations, and strategic choice. Academy of Management Review, 21, 492-528.

[10] Pissarides, F. (1999). Is lack of funds the main obstacle to growth?" EBRD's experience with small- and medium- sized businesses in Central and Eastern Europe. Journal of Business Venturing, 14, 519-539.

[11] Ramamurti, R. (2000). A multilevel model of privatization in emerging economies. Academy of Management Review, 25, 525-550.

[12] The 2001 guide to venture capital in Asia. (2000). Hong Kong: AVCJ Holdings, Ltd.

[13] Yin, R.K. (1989). Case study research: design and methods. London: Sage Publications

Section 7
E- Commerce

A Case Study of a "Stand Alone" Small and Medium-sized Enterprise Adopting E- Commerce
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Ly Fie Sugianto and Sen Sendjaya**,** *Monash University, Australia*

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Madhu Vij, *University of Delhi, India*

Effect of Learning and Information Technology Capability on Business Performance
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Internet B2B and the New Marketing Paradigm
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Internet Internationalization Strategies by US and EU Services Marketers
Victor V. Cordell, *Monterey Institute of International Studies, USA*

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Paul R. Prabhaker and Kamyar Jabbari, *Illinois Institute of Technology,USA*
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The Development of Electronic Services in Public Agencies: The Case Study of the Department of Commercial Registration
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The Differential Impact of Business Models on e-Commerce
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The Effect of Perceived Characteristics of Innovation on E-Commerce Adoption by SMEs in Thailand
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The Virtual University Across Cultural Boundaries: The Online Classroom – Is The World Ready For It?
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Web-based Customer Service and E-Commerce Success: A Malaysian Perspective
Kamarulzaman Ab. Aziz amd Lee Hoong Jon, *Multimedia University, Malaysia*

A Case Study of a "Stand Alone" Small and Medium-sized Enterprise Adopting E-Commerce

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Abstract

The paper describes an in-depth research study of a case company in Thailand which is selected according to the "Local Product, Global Market" concept for e-commerce applications. The company has had an opportunity to use the Internet successfully as a channel to promote its products to international markets. More e-commerce applications are being explored and tried out as better telecommunication infrastructure and security and legal protections are being put in place. Based on the findings from this particular case research study, recommendations are made to "stand alone" small and medium-sized enterprises (SMEs) considering the adoption of the Internet and e-commerce applications to enhance their competitiveness in conducting their businesses, and also to policy makers and planners.

Introduction

The emergence of the Internet in the business world has affected small and medium firms as much as it has large corporations. According to the International Data Group, there were about 100 million users of the World Wide Web by the end of 1998, with projections of 320 million users by 2002. The value of commerce on the Internet in 2002 is expected to exceed $400 billion, a compounded annual growth rate of 103 percent since 1998. Even these numbers reflect only the actual buying and selling over the Internet, not the money saved; efficiencies gained, or increased satisfaction. More than 2.5 million U.S. small businesses are estimated to have some form of Internet access. Of those firms, 900,000 have Websites, and nearly half are thought to be transacting sales on-line with consumers or other businesses. The Internet phenomenon has been driven by many factors, including growth opportunities in a global economy, faster product development cycles, and the increasing complexity of projects involving multiple industries. Businesses now can rent workspace on the Internet, where team members can meet, post documents, and share ideas in real time. Although such collaboration is not needed in every business situation, it has become increasingly common as entrepreneurs strive to build more flexibility into their firms. Businesses on the Internet can focus on what they do best and mix and match efforts with partners in way never before possible. They can reduce supply chain costs, create markets, empower customers, and, in turn, be empowered by them. In a networked economy, the key to competition will be not the size of a firm, but its ability to build strategic partnerships and find innovative ways to deliver products and services [5].

The so-called "stand alone" SMEs operates locally and market directly to the customers on a global basis. As the world moves to become more of an Internet-based society and global village, "stand alone" SMEs stand to benefit tremendously from effectively marketing their products and services directly to global buyers and customers. On the other hand, electronic commerce (e-commerce) where transactions take place over the Internet is creating unbound opportunities for businesses. It is the process of electronically buying and selling goods, services, and information. Of interest are the factors influencing the adoption of the Internet and e-commerce by "stand alone" SMEs in conducting their businesses. A study of Internet adoption behavior by this type of SMEs would be of particular value to policy makers and planners in their efforts to promote these SMEs to be competitive and sustainable in the volatile global market environment. The study could also be beneficial to the "stand alone" SMEs themselves to evaluate the feasibility and decide on the adoption of Internet usage and various e-commerce applications in their businesses.

The paper describes an in-depth research study of a case company in Thailand which is selected according to the "Local Product, Global Market" concept for e-commerce applications. The following sections describe respectively: the e-commerce development in Thailand, export promotion through e-commerce, SMEs in Thailand, SMEs and computer technology, the case company, its Internet and e-commerce adoption, benefits of having company websites and e-mail, users' attitudes about the Internet, and finally the last section on conclusions and recommendations.

E-Commerce Development in Thailand

The National Information Technology Committee (NITC) takes responsibility to oversee the overall integrated information technology development for Thailand. While the National Electronics and Computer Technology Center (NECTEC)'s responsibilities in e-commerce development are threefold: developing the policy framework, the legal aspects, and the technical guidelines and standards. There are five strategies for e-commerce development: (1) finance and banking strategy, (2) regulatory framework strategy, (3) basic infrastructure strategy, (4) e-business security and safety strategy, and (5) international strategy. In addition, the Royal Thai Government (RTG) has been actively promoting the concepts and implementations of e-Government, e-Industry, e-Services, and e-Education.

E-Commerce Policy Framework [7]

The e-commerce policy framework consists of:

1) Electronic commerce is a national trade strategy that should be included in the 9th and 10th National Plans for Social and Economic Development. Actually, there should be a plan starting from the middle of the 8th National Plan to support Thailand's Electronic Commerce development. The plan should be flexibly and timely adjusted to ever-changing situation in the long run in order to set plan for each private sector and implement facilitating export, trade in services and domestic consumption.
2) Government should support and proceed those measures facilitating private sector and consumers' Electronic Commerce activities, aiming to increase Thai entrepreneurs' competitiveness in international trade and to build up trust and confidence among entrepreneurs and consumers at both domestic and international levels. Government should give priority to address the legal infrastructure and security in Electronic Commerce by taking any necessary action to promote and initiate appropriate and update action plan.
3) Government should lessen and avoid any restrictions that would obstruct such development. At the same time, the government should support fair competition and consumer protection by existing mechanism. This is to contribute ultimate benefits to Thailand's economy as a whole.
4) Government should give priority to streamlining public administration by putting in place the electronic media and Information Technology to set up 'E-Government' in order to improve governmental administration and public services. Government should become more effective and efficient tool to promote and expand Electronic Commerce market in terms of Business-to-Government (B2G) transactions. Moreover, Government should provide trade facilitation for Business-to-Business (B2B) and Business-to-Consumer (B2C) transactions.
5) Government together with private sector should set up an Electronic Commerce database. They should study policies and guidelines for its development at both domestic and international scales. This is to proactively protect the country's rights and benefits in negotiations and on trade cooperation at regional and global levels, as well as at those bilateral and multilateral negotiations.

The Legal Aspects

To provide a legal basis for the electronic commerce community, NITC launched an IT Law Development Project in 1997 with the following objectives:

1) To facilitate the electronic commerce environment in Thailand. Because currently there are no fundamental laws, which support electronic business transactions, it is vital to announce IT Law as a crucial legal national infrastructure.

2) To create business incentives to attract foreign investment. Having fundamental laws such as the Electronic Data Interchange Law, the Digital Signature Law and the Electronic Funds Transfer Law will definitely attract foreign investors to Thailand.
3) To promote confidence from foreign investors. Foreign investors can be assured that their data and their fundamental rights will be protected under the Data Protection Law and the Computer Crime Law.
4) To promote and encourage the transfer of technology. It is necessary that there be legal mechanisms which enable the transfer of technology from foreigners.
5) To enhance fair competition. Fair competition, particularly in telecommunication businesses, would definitely attract foreign investment; increase employment and the inflow of foreign currencies.
6) To create potential competitiveness. In the tough competition in business and commerce, it is important that the state create legal mechanisms, which encourage competitiveness and fair competition in the private sector.
7) To diminish gaps between information haves and have not. Any individual shall have access to information at an affordable price irrespective of place of residence or place of work.

The Six IT Laws

Parallel to the development of the e-commerce framework, NECTEC has also drafted six IT laws. The six IT laws will serve as a legal infrastructure for conducting e-commerce and enhancing confidence among the members of the e-commerce transaction playground, while providing rules and propriety for fair play. They are:
1) Data Protection Law, to protect the right of privacy in the Information society.
2) Computer Crime Law, to criminalize new types of offences in the changing world.
3) Electronic Data Interchange Law, to set the legal framework in conclusion of electronic contracts.
4) Digital Signature Law, to provide security of electronic commerce transaction.
5) Electronic Funds Transfer Law, to promote consumer protection and allocate the liability incurred from the technological risk.
6) Universal Access Law, to create an equitable information society by promoting this law in the National Information Infrastructure (NII).

The Technical Guidelines and Standards

NITC and NECTEC have recognized the importance of interoperability among different parties in order to accelerate the widespread use of electronic commerce. The development of standards and technical guidelines is therefore a critical factor. Activities conducted include the development of the Thai character set TIS620, the development of Smart Card standards and the establishment of the national EDI service provider, “Trade Siam”.

Five strategies for development of electronic commerce:

1) Finance and Banking Strategy consists of Payment systems and Taxation.
2) Regulatory Framework Strategy consists of Laws concerning Electronic Transactions, Information Infrastructure, Data Protection, Consumer Protection, and Intellectual Property Rights.
3) Basic Infrastructure Strategy consists of Telecommunication, the Internet, Certification Authority, Human Resource Development, National Projects, Research and Development, Database, and Standard.
4) Electronic Commerce Security and Safety Strategy.
5) International Strategy consists of International Cooperation and International Initiatives.

NITC and NECTEC have paved the way for e-commerce development in Thailand by using the e-commerce policy framework as the roadmap. The Electronic Commerce Resource Center (ECRC) facilitates the domestic and international developments in all sectors for efficiency and economical purposes. In order to promote e-commerce within Thailand, NITC and NECTEC are working together to provide a legal and practical framework by collaborating with other organizations to develop appropriate laws, standards and infrastructures, and to create a favorable environment that will facilitate activities of the private sector, particularly SMEs.

Export Promotion through E-Commerce

The Department of Export Promotion (DEP) of the Ministry of Commerce is a government agency responsible for supporting and promoting the export of Thai goods and services. The DEP sets policies and develop plans of action for marketing and trade, and provides suggestions and guidance, establishes standards, and offers services to Thai manufacturers and exporters. The prime objectives of the DEP are to maintain the market share of Thai products and services in their main markets, to expand secondary markets, and to accomplish these two goals by raising Thai products and services standards to international levels. The DEP also aims to enhance the image of Thai products and services and their reputation for diversity, quality, and craftsmanship among importers, and to facilitate contacts between buyers and sellers of Thai goods through such means as product exhibitions, trade delegations, and export promotion activities both in Thailand and abroad.

DEP has implemented plans to motivate Thai exporters to use information and communications technology (ICT) to help them keep up with the latest developments in the world market. The DEP website [3] provides trade information services that are of direct and practical benefits to Thai exporters and foreign importers. In its effort to promote Thai exporters to adopt e-commerce applications via the Internet, DEP has appointed five portal website companies as the official e-business service providers for Thai exporters. The five portal websites are: (1) www.thaiexponet.com, (2) www.thailandexport.com, (3) www.thaiexport.com, (4) www.thailand.com, and (5) www.wethai.com.

Potential SMEs in Thailand

SMEs have many importance roles in the economy:
(1) As main players in economic activities, SMEs are the main players in the economic production, distribution and service sectors of countries,
(2) As players in the generation of attractive employment opportunities, SMEs provide employment opportunities, which make better use of ability and judgment, and enable self-realization. Also, the establishment and growth of SMEs bring about the majority of new employment opportunities,
(3) As players in the improvement of international balance of payment, SMEs provide goods and services to the domestic as well as overseas markets by utilizing local resources and structure of division of labor with large enterprises, and
(4) As players in the development of local economic societies, not only SMEs are closely rooted in economies, but also they form the core of the industrial agglomeration in rural areas, thus their strong activities would lead to generation of the provincial economy.

Definition in the Thai context was separated in two terms, SMIs and SMEs. The “SMIs” (Small and Medium Industries) refers to the manufacturing sector only, while “SMEs” (Small and Medium Enterprises) covers the manufacturing sector as well as the wholesale, retail and services sectors [1].

There are a number of terms used by the Royal Thai Government (RTG) and various development agencies, including the United Nations Development Program (UNDP) and International Labor Organization (ILO), when referring to the enterprise sector. The RTG applied the following definitions to enterprise activities: (1) “small-scale industry” (SSI), which is also referred to as a “small enterprise”, employs no more than 50 workers and has not more than 10 million Baht registered capital. (2) A “medium-scale industry” (MSI), which is also referred to as a “medium-sized enterprise”, employs between 50 and 200 workers and has a registered capital from 10 to 100 million Baht. (3) Thus, the terms “SMI”, “small and medium-scale industries”, “SME”, or “small and medium-sized enterprises” applies to establishments with less than 200 employees and less than 100 million Baht registered capital.

The “Local Product, Global Market” characteristics of potential SMEs should be the following:

(1) Export products; the business should generate an income in foreign currency such as in US dollar. Not only this will help the country economy, it also automatically controls the quality of the exported product base on global standard.

(2) Independent; the business must be self-sufficient in producing diversified products. Providing a raw material to a large factory creates much dependency on the product distribution.

(3) Flexibility; the business should consist of a small employee, which will be more flexible to change product lines and production process depending on market demand.

(4) Low investment; the business should require a minimal initial investment.

(5) Uses local material; the merchandise should be produced and use the material locally or it should be from a local or nearby resident. The usage of the imported material should be minimal and must be an important part that enhances the value of the product. The profit margin should be quite high.

(6) Local know-how; the product may be using the imported machinery but it should be the technology that is inexpensive. The machinery should not be the main factor in production. The skill and know-how, on the other hand, should be the heart of it. This way the company can release itself from requiring the dependency from foreign for the new product development in the long run.

(7) Uniqueness; the product must be unique and should not be produced in a mass volume.

(8) Global standard; the product should be in high quality standard and accept globally in its design and material used.

(9) Understand the nature of running the business; the owner or the management of the business must understand and know the failure and success factors of the business.

(10) Part of the community; the business should be an active part of the community where it locates. It should use the local staffs as a part of giving back to the local society.

SMEs and Computer Technology

Profitability for small and medium businesses today often depends on a commitment to technology. A firm that ignores technology is vulnerable to missing competitive moves that lower product costs or improve performance. A 1996 survey of owners of small and medium businesses in the US indicated that computers have been instrumental in enhancing firm’s effectiveness. The percentages of owners citing specific benefits of using computers are shown in Table 1 below.

Table 1: THE PERCENTAGES CITING BENEFITS OF USING COMPUTERS [8].

Benefit	Percentage Citing
Responding to customers more effectively	50%
Improving quality	44%
Becoming more flexible	36%
Becoming more innovative	35%
Speeding up the introduction of new products or services	34%

The Case Company

The case company has been operating for about 30 years at the sword-producing village in Ayutthaya province of Thailand. The company started as a family business beginning with the production of painted metal works including vases, candle-stands and many more hand-made items. The products served customers in the domestic market and were distributed abroad. The company’s products contested several exhibitions sponsored by the Handicrafts

Promotion Division, Department of Industrial Promotion (DIP), operating on behalf of the Ministry of Industry, and won many honorable awards helping the company's products to become widely known and recognized.

In 1975, the company launched its stainless steel cutlery line domestically, widely expanding it to supply worldwide markets shortly after. In 1990, the company registered itself as a company limited located in Ayutthaya province. Capitalizing on professional management and experienced staff, the company manufactures and markets its own products of superior quality that have become well known and recognized in the international market. Recently, the company expanded its production facility area to meet increased demand from the international market. The company is privately owned with les than US$ 1-million registered capital and 100 employees. Thus it is considered as an SME.

Its product range is a stainless steel household product with its own private label and design. The company exports its products directly. Its major export market is Western Europe. It has annual revenue of US$ 1-2 million, 95% of which is from export. The company operates a modern office and showroom in an upscale shopping plaza in the heart of Bangkok's business and retail district. The company is thus a "stand alone" SME and possesses characteristics of an SME according to the "Local Product, Global Market" concept with potential for adopting the Internet and e-commerce applications as follows:

(1) **Export products,** the company is manufacturer and exporter of locally made products.
(2) **Independent,** the company is privately own, has no percentage of shares belonging to a third party. Products are produced and sold directly to customers: the so-called "Stand Alone."
(3) **Local know-how,** the company uses the local know-how as its strength to distinguish its products from competitors.
(4) **Uniqueness,** every piece of its products has to pass the process of beating or bending by hand (handicrafts). The production capacity of the company is therefore limited, about 60,000 pieces/month.
(5) **Global standard,** the company has received "Thailand Brand" certification by the DEP of the Ministry of Commerce as the guarantee of the export quality standards of its products.
(6) **Part of the community,** the company utilizes the local know-how and local staffs, and thus becomes part of the community.

At present, the company has its own direct channels to promote its products to customers as follows:

1. Head Office – in Ayutthaya province where the head office and factory are located. Normally, customers contact the head office by fax, telephone, or e-mail to order the products.
2. Showroom – located at Geysorn Plaza (near the World Trade Center) in the central business area of Bangkok. Here the products are sold directly to customers buying small amounts of product items. Customers can see the real pieces of products before making the decision to buy or make an order for shipment. For foreign visitors to Bangkok, the location of the showroom is easy to find and convenient.
3. Internet (websites and e-mail) – the company uses websites for promoting the company and its products to international customers in addition to participating in trade exhibitions. For e-mail, the company uses it for communication with both existing and new customers.

Internet and E-Commerce Adoption

The company has joined the e-commerce project under the support program of DEP. It selects Thailand.com and Thaiexponet.com as its web hosting sites. According to the company owner, the company would like to use the new technology for expanding its markets and advertising the company's products worldwide. The company uses Internet access in its office both for promoting the company and its products via two websites: www.aranyik.thailand.com and www.aranyik.thaiexponet.com and for contacting with customers via its e-mail address: niwat@aranyik.com. The company signs contracts year by year with the two web hosting service providers. Thailand.com, the first provider, charges the cost of setting up the homepage and a monthly fee for web hosting and upgrading the website. The company has signed contract for the second year with this provider. For Thaiexponet.com, the service is free of charge for a limited number of web pages in the first year.

The ECRC [4], in early 2001, did its second e-commerce survey from a sample of 6,460 Thais' websites registered in the domain names of <.com> and <.co.th> and found that 88.58% were in their first stage of e-commerce applications; mainly for promotion/public relations and advertising only. The development of e-commerce applications in the case company is still in its first stage, as the company has had neither expertise nor experience in e-commerce applications. Therefore, they use the offered packages from government agencies. The company gives company information and catalog of products to the website service providers for creating contents. In terms of design, the company gives some requirements, comments and suggestions to the selected service providers. The main reasons for establishing websites and e-mail address could be identified from interviewing the company owner and its staff. There are three main reasons: Firstly, for advertising its products by establishing websites to help the company to reach customers more easily as the main customers are in Western Europe, Australia/New Zealand, other countries in Asia, and the US. Now, customers can access company's websites for information on company's profile and catalog of products. Secondly, enhancing the company's image and competitiveness in reaching customers, both inside and outside of Thailand. Thirdly, using the Internet could save the company considerable amounts of time and money in communicating with its existing and potential customers. The company uses e-mail to communicate with customers and other agencies both inside and outside of Thailand.

The first interview with the owner of the company took place in early 2002 and the second one six months later. The proportion of the Internet usage in both interviews can be illustrated as shown in Table 2 below.

Table 2: USING THE INTERNET [2, AND ADDITIONAL INTERVIEW]

Internet usage	First interview	Second interview	% Change
Introduce Company	20%	15%	-5%
Advertise and promote products	35%	20%	-15%
Contact customers (e-mail)	45%	65%	+20%
Take order and sell online	0%	0%	0%

There has been proportionately an increase use of e-mail to contact customers over the six-month period. The company does not take orders nor sell its products online. It is not yet ready for online order and payment. When the company has acquired more knowledge and experience about e-commerce applications, and can ensure the security and economic advantage of the online order and payment system, then the company may try selling its products online. However, the company has started to accept small orders from individual customers through the Internet via e-mail (business-to-customer or B2C e-commerce) since early 2002. Upon confirmation of the payment, the products are delivered using an international air delivery service. Six months later, this B2C portion represents about 10% of the total volume of orders through the Internet.

Benefits of having websites and e-mail

Before establishing websites and e-mail, the channels to reach customers are through participating in trade exhibitions, distributing company brochures and print media, establishing a showroom in Bangkok, and meeting directly with customers by the company owner and its agents. After establishing the company websites and e-mail address, the company has two additional channels to reach its customers.

The company now classifies the modes of communication between the company and its customers as shown in Fig. 1a and Fig. 1b. In early 2002, the main modes for communication with the customers are shown in Fig. 1a: telephone line (65%) e-mail (15%), fax (10%), salesman (8%) and others (2%). The Internet technology has generated benefits for the company by providing additional channels to communicate with its customers with less cost of international calls, more convenience, and faster responses to its international customers. Six months later, as shown in Fig. 2b, the percentage use of e-mail (30%) increases to replace the communication through the telephone (now 50%). There is no change in other communication modes.

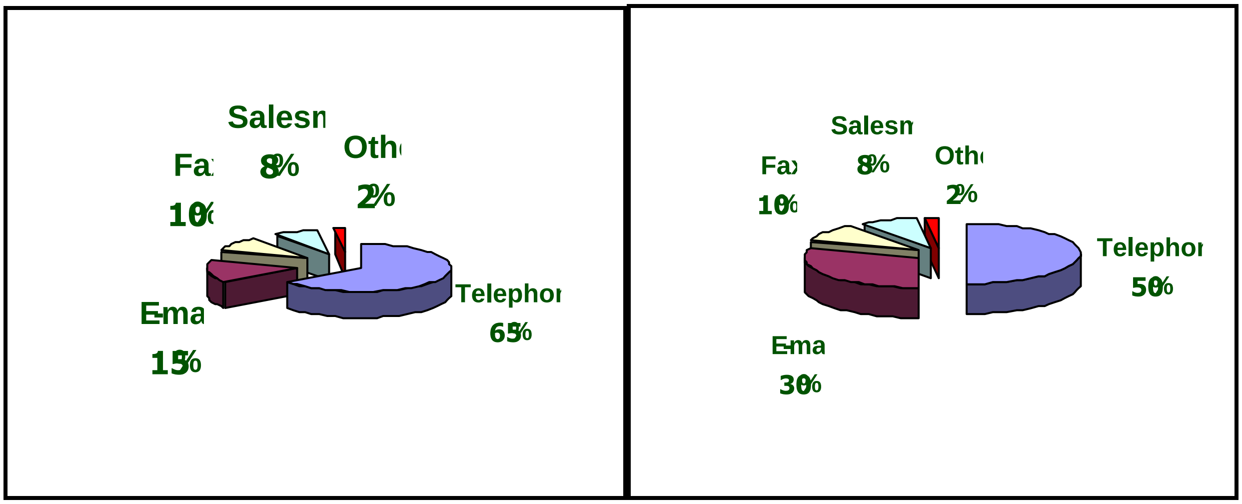

Fig.1A: COMMUNICATION MODES IN EARLY 2002[2] & FIG. 1B: SIX MONTHS LATER [ADDITIONAL INTERVIEW].

Fig.2 shows classification of information sources and corresponding percentage usage to access to and by the company's customers: Trade Exhibitions (40%), Brochures (25%), Company's agents (20%), Company's websites (10%), and DEP public relations (5%). There is no change in percentage use of information sources six months later. It is hoped that with the marketing efforts of the company's website and its portal (host) websites, they may become the dominant information sources for the company's existing and future customers.

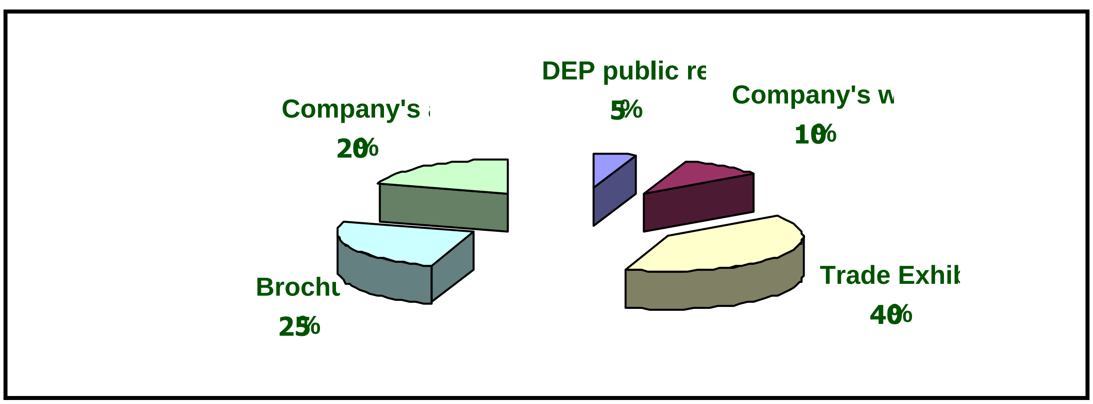

Fig. 2: INFORMATION SOURCES FOR THE COMPANY'S CUSTOMERS [2] *USERS' ATTITUDES ABOUT THE INTERNET*

The owner and staff, in early 2002, gave the opinions about using the Internet in the company as follows [2]:

(1) The advantage for the company in using the Internet was for advertising the company and its products through its websites.
(2) Reduction in the cost of communication using e-mail to contact with the customers. Moreover, it was easy to use and saved time in communication, resulting in better and faster response to customers' needs.

(3) From the point of view of the owner, he found that international buyers and customers mostly use the Internet as a search tool for new products and services from all over the world. The owner therefore wanted to reach this target group by adopting the Internet in his company.
(4) The owner and staff evaluated that the company obtained "less" benefit from using other e-commerce applications. The company used the Internet only as one of the channels for advertisement. The company still had some limitations of using e-business applications such as the online order-taking and payment system, and the delivery process of the products to the customers. The company had no one with the technical and professional know-how of the e-commerce system.
(5) Only one or two staff members took responsibility to check e-mail and update information on the websites. They were trained in basic courses about the Internet and web development. Most other staff members mentioned that it was not easy for them to use the Internet because they did not have the necessary background.
(6) The owner and staff agreed that the costs of establishing and maintaining websites and the Internet package were not too high for their small operations.

Conclusion

Currently, the objectives of adopting the Internet and e-commerce applications in the case company are: to advertise and promote the company and its products, and to use the e-mail as one of the channels of communication with customers. There is no online transaction because the related e-commerce infrastructures and the security of payment system are not yet quite ready. Other limitations of using the Internet and e-commerce applications are the following [2]:

(1) Shortage of professional and technical manpower.
(2) Lack of technical expertise.
(3) The traditional (brick and mortar) method of conducting business operations.

Recommendations for other "stand alone" SMEs

The Internet and e-commerce applications can really enhance a "stand alone" SME's competitiveness in the global markets. Access to new markets, closer customer relationships, better and faster response to customer's needs, and larger market share of products and services can have a profound effect on the way a company conducts its business. At the same time, the ability to reduce the cost of communication via e-mail can help reduce the cost of operations.

From the in-depth study of the use of the Internet and e-commerce applications in the case company, recommendations for other SMEs, who aspire to adopt the Internet and e-commerce applications for their business operations, are summarized as follows [2]:

(1) Careful considerations of the objectives to adopt the Internet and e-commerce applications.
(2) Analyze, review and redesign existing business process to maximize the benefits of adopting the Internet and e-commerce applications.
(3) Seek independent advice on best practices and global standards for the e-commerce system.
(4) Consider what e-commerce applications are available to best suit their needs.

Recommendations for policy makers and planners

There are a large number of "stand alone" SMEs in the Gems and Jewelry, Gifts and Handicrafts, and Tourism Industry Sectors in Thailand with potential to export their products and services directly to global markets through the adoption of the Internet and e-commerce applications. If they fit in the "Local Product, Global Market" concept they can benefit tremendously from adopting the Internet and e-commerce applications as in the case company under study. Policy makers and planners in the DEP of the Ministry of Commerce and the DIP of the Ministry of Industry of the RTG could use the findings from this in-depth case research study to develop promotion plans and assistance programs and measures for these SMEs.

References

[1] Allal, Maurice, July 1999. "Micro and Small Enterprises in Thailand: Definitions and Contributions," Working

[2] Paper No. 6, Series Editor: Gerry Finnegan, *Micro and Small Enterprise Development and Poverty Alleviation in Thailand Project*, ILO/UNDP: THA/99/003, Bangkok, Thailand.

[3] Art-Erm Kesinee, April 2002. *"E-Commerce Opportunities for Small and Medium-sized Enterprises in Thailand: Analyze Case of N. V. Aranyik Co., Ltd.,"* MBA Research Study, School of Management, Asian Institute of Technology, Bangkok.

[4] Department of Export Promotion, Ministry of Commerce, 2002. http://www.depthai.go.th.

[5] Electronic Commerce Resource Center, 2002. *"e-Commerce Thailand: Statistics & Analysis,"* National Electronics and Computer Technology Center, National Science and Technology Development Agency, Ministry of Science Technology and Environment, Bangkok, Thailand.

[6] McCollum, Tim, October 1998. "E-Commerce Takes Off," *Nation's Business*, Vol. 86, No 10, p 34.

[7] Mizutani, Shiro, 2001. *"Support for SMEs Promotion in Asian Countries,"* JETRO Policy Paper, Bangkok.

[8] National Electronic and Computer Technology Center, 2000. "*National Electronic Commerce Policy Framework*," Electronic Commerce Resource Center, http://www.ecommerce.or.th.

[9] Weeks, Julie R., Fall 1996. "Technology Can Not Only Help Small Business, for Many It Is Essential to Continued Growth," *Small Business Forum*, Vol. 14, No 2, p79.

Business Models in the Digital Economy

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Abstract

The internet and the wireless technology have become more than just communication media. They are important business supporting tools, if not the business drivers. E-commerce and wireless e-commerce (or mobile commerce) have become the features in the global economy. They enable free flow of information among business players, increasing the speed and accuracy with which businesses exchange information. They not only reduce costs of transactions, but also increase supply chain efficiency. This paper discusses the implication of e-commerce business models. It also highlights the deployment of wireless technology as the m-commerce vehicle. A taxonomy of business models is also presented in the paper. These emerging business models are models that are extended from the e-commerce realms, as well as those which take advantage of the mobile network architecture.

Introduction

The mainstream acceptance of the Internet brought upon the information age. Businesses of various sizes quickly adapted the technology to support their operations, hence the emergence of the term e-commerce. Businesses can reduce the costs of handling sales inquiries, displaying product catalogues online, providing price quotes and determining product availability by using e-commerce in its sales support and order-taking processes. Businesses can also use e-commerce in their purchasing processes to identify suppliers and business partners and to negotiate prices and delivery terms. E-commerce increases the speed and accuracy with which businesses can exchange information, thus reducing costs on both sides of transactions. E-commerce also removes barriers to reach the whole target market due to geographical distance.

Alongside with the development of the Internet is the phenomenal growth of mobile communications industry. In 1999, there were more mobile phones sold than automobiles and PCs combined. It is anticipated that the trend in e-commerce, which has affected the economy and lifestyle of today's culture, will extend to wireless e-commerce or Mobile Commerce (M-commerce) enabled by the wireless technology and the Wireless Application Protocol (WAP). The Wireless Web can be seen as the next generation enabling technology to support many commercial applications. It tags and extends the popularity of e-commerce to m-commerce. It should be emphasised that m-commerce is not supplementing, but rather complementing e-commerce. Interface to the World Wide Web has been implemented in the form of voice-enabled websites. Wireless web configuration and WAP services are indeed attractive. Mobile phone manufacturers have included WAP-enabled feature in today's handsets. It is expected that by the year 2006, there will be 923 million internet users, whereas 543 million will be mobile (wireless) users [1]. Currently, there are almost 8.5 million mobile services in Australia after 13 years of operation, compared with approximately 10.64 million fixed lines after over 100 years of operation [1]. The number of mobile phones sold in Europe has also grown rapidly. In the UK, there are approximately 30 million subscribers. In both Italy and Finland, 70 percent of the population own a mobile phone [2]. Consequently, this global trend has motivated businesses to adjust themselves with the change.

The concept of wireless connection is not new to disciplines, such as engineering communications, sensor and control equipment, and home entertainment unit. However, the idea of wired network for commercial application is indeed attractive. It allows consumers to be mobile when making business transactions: from sending (Short Message Service) SMS to accessing financial services. Certainly, there are still some hurdles to overcome before smooth and real time m-commerce become applicable; for example, issues regarding speed verses performance, roaming across subnet, and security problem. Despite those issues, the wireless web has gained larger acceptance due to telecommunication infrastructure, government policy, economics, and local culture, in some countries. In Japan, the mobile phone carrier NTT DoCoMo had to restrict sales of the internet phone because its popularity is a potential problem to cause congestion to the company's network. The NTT DoCoMo has become Japan's largest internet access platform with over 34 million subscribers who can access the internet directly using their iPhone [3]. Users can exchange email, do online banking and navigate more than 7000 web sites compatible with the iMode service.

Current m-commerce applications seem to be limited to specific information services, such as paging, timetables, flight details, news, weather forecast, sports results, stock prices and ticketing. This is because the information flow through the medium is fairly restricted. Integrated services have been built on the web for both wireless and internet users to allow email, instant messaging, multiplayer gaming and gambling. Wireless portals, such as Yahoo (www.yahoo.com), CNET (www.cnet.com) and Telstra (telstra.com), are also available for mobile phone users.

The free flow of information on the international marketplace as well as on the local market has been made possible by the electronic and the wireless technology. In view of this, the paper discusses the opportunities and challenges brought forward by the electronic and wireless technology. It seeks to examine current business models since the emergence of the internet and the wireless web as commercial channels. As the point of departure of the discussion, the outlines a frame of reference in which conventional business, e-commerce and m-commerce are defined.

Frame of Reference: Physical vs Virtual Marketplace

Business transactions can be defined using three basic elements: the players, the product and the process. Conventional business happens in the physical marketplace. With the use of other communication media as business vehicle, e-commerce and m-commerce are made possible, that is when the business transactions take place through electronic and wireless media. A frame of reference [4] for the discussion is as follows:

- Conventional business – when the three elements are all physical and interact in the physical world
- E-commerce – when the three elements are all virtual and interact on the internet
- M-commerce – when the three elements are all virtual and interact through the wireless network.

Further, e-commerce activities can be classified into:

- Business to Business (B2B) market or e-procure – in which suppliers focus to streamline the procurement using integrated and automated electronic medium
- Business to Consumer (B2C) market – in which sellers focus on how to interact with their customers, provide real time customer service and establish their e-CRM
- E-marketplace – in which both buyers and sellers interact dynamically, such as auction sites and portals.

The scope of this paper limits the discussion on business models that are relevant to B2C and e-marketplace.

Marketplace is where business transactions take place, independent of technology. As the internet allows global participation, more and more businesses will meet across this medium. Two important implications are the definition of the interface, that is whether or not common standards should be developed, and its implementation cost. Drummond [5] has outlined three possible architectures:

1. *pair-wise implementation* (adopted by the EDI model) - this model devices pair wise communication between business partners. But when the scope of global business is much wider, the model will collapse as the communication interface becomes too expensive and complicated.
2. The *hub method* - in this model, players communicate using the same standard. Still, this is a problem for smaller companies with limited resources.
3. The *portal model* - this promising model solves the problem by integrating multiple hubs (buyers) with multiple trading partner (sellers). This reduces the complexity of interface connection.

These architectures explain why the portal model becomes so popular for e-commerce and m-commerce, and why new business models emerge using the portal architecture. Business players must choose the right business model around the technology. In fact, with the right business model, new players with no brand name can compete with and outplay established players.

Taxonomy of Business Models

Intermediaries have played important roles in conventional businesses prior to the emergence of e-commerce and m-commerce. In the conventional business practice, companies depend heavily on the presence of multiple intermediaries between the producer and consumer. As part of the supply chain, intermediaries serve as essential conduits: getting products to the market, and as informational conduits: educating and advising the consumers on products features. Producers typically have little or no direct contact with end user customers and must rely almost entirely on intermediaries for information pertaining to those customers.

When producers were reluctant to enter the online marketplace due to fear of channel conflict, e-tailers have taken the opportunity to establish brand names and find their niche. A classic example is the success of Amazon (www.amazon.com). Yet another e-commerce move by enterprises is streamlining their business operation and leverage their online existence to interact directly with their customers. An example of such a move is the web presence of airline and computer companies. This move is well known as the turning of "bricks and mortars" to "bricks and clicks". Reengineering the business practice is indeed costly. In addition, the companies also need to educate their employees and persuade their customers to use their online establishment. At present, we could observe several categories of e-tailing:

- Multi-channel retailing [6] – the establishment of "bricks and clicks" companies in both the physical and virtual "world".
- Hyper-mediation [7] - the situation where an Internet Service Provider (ISP), the portal, the actual supplier, the payment system operator and the delivery partner claim some portions of revenue associated with each transaction.
- Business partnership with intermediaries becomes a business advantage, especially in accessing the market.

The popularity of information commerce as business model was pioneered by Value Chain Providers, such as Yahoo! (www.yahoo.com) and e-Bays (www.ebay.com). Realizing that most online users browse the internet to seek information, these dotcoms provide powerful facilities, such as search engine and virtual market, which allow online users find the information they are looking for easily. The online facilities have been used as the instruments to attract visits to the websites. In turn, the number of visits is translated into advertising revenues. Several types of Information Commerce players or information e-tailers include [4]:

- information providers, such as portals with search engines
- facilitators, such as auction sites, and
- virtual intermediaries, such as education brokers.

To sum up, we can distinguish two primary roles of intermediaries in the e-commerce realm. These form the basis for the grouping of the business models. The first group of intermediaries can be addressed as general e-tailers. They use the internet as business supporting tool to interact with their customers. Internet is used as part of the supply chain to market the product and communicate with customers. The second group of intermediaries serve as information providers. They provide services to customers who seek for information on the internet. They make profit by attracting visits, trading for information, or charging for the use of the online services.

The following list summarises the taxonomy of current e-commerce business models:

- Brokerage - E-tailers that exercise this model introduce a direct buyer-supplier relationship and charge fee for the transaction. Examples of dotcoms with brokerage model are auction sites, such as eBay, and virtual malls, such as Yahoo! Store. These dotcoms bring together online merchants, offering them with web hosting services.
- Transaction - Traditional retailers or companies establish their presence online by embracing the transaction model. They cut costs by adapting product catalogues into HTML, streamline purchase, order and sales operation using the media. By having their presence online, customers are not limited to shop during trading hours.
- Advertising Support – Dotcoms that embrace advertising support model adopt the way network television, radio and printed publications generate their revenue. They rely heavily on advertising revenues of their frequently visited websites. Thus, their main focus is to develop a website and/or provide services so that their sites attract visits.

• Subscription – Online companies set charges for downloadable material available from their sites. These information e-tailers can charge the users based on membership or subscription fee.
• Infomediary – The infomediary model works by gathering information about customers who visit the website. Information e-tailers collect, compile and build consumers profiles to be sold to other companies.
• Affiliate – Information e-tailers realise that collaboration and setting networks with other companies is important to expand target market. Thus, there are e-tailers that set up their sites to channel customers to other companies.
• Community - Some e-tailers build community loyalty and treat the online community as the target consumer. They generate revenue by specialised advertising or specialised portal service. Two types of community model are voluntary contributor and knowledge networks. Non profit organisations generally adopt the voluntary contributor model whereby users can contribute content and funds to the operation. Knowledge networks capitalise on providing information about a particular topic. They are usually forum based and provide users with the opportunity to exchange views and get advice.
• Web-catalogue - Information e-tailers aggregate information from various companies and use their websites as the online product catalogue to allow customers to compare products and services.

Current and Potential Applications of M-Commerce

In essence, m-commerce is the convergence of wireless communication technology and internet based e-commerce. It can be expected that m-commerce will be more attractive to customers (or online users). M-Commerce has two distinctive advantages over e-commerce, namely flexibility and ubiquity. Through wired networks, consumers with mobile handsets can conduct business transactions without being fixed at a computer terminal. And as the number of mobile phone users is much more compared to the number of internet users, businesses can expect to reach larger market. For information commerce sector, m-commerce also offers personalization and real time speed. While the internet provides huge amount of information on virtually any topic, mobile devices can disseminate information. Thus, users will be able to customise and personalise their mobile devices to retrieve information specific to their needs. The speed in which m-commerce transactions can take place is also worth noting. Consumers typically receive almost instant response for information related services.

Compared to wireless voice or the internet alone, the wireless web offers its users more convenience. For example, its users do not have to waste their time looking up phone numbers whenever they want to place business orders. Database access for company listings, product availability and order information can be readily available on the wireless phone [8]. Searching for competitive prices when shopping can be more conveniently done through the web.

M-commerce is still at its infancy. The most popular applications so far have been for entertainment and information related services, such as the instant messaging service. Although wireless billing is a promising practical application, security issue must be tackled carefully for this application to be viable. Early implementations of m-commerce have been extensions of e-commerce sites. Technologies such as WAP and Wireless Mark-Up Language (WML) enable just that. For businesses, this would translate into better communication with their customers: unlimited by trading hours and geographical distance. Although m-commerce merely serves as extensions to e-commerce sites, it has been regarded as value-added services: offering specific information, entertainment or transaction over public or private mobile telecommunications networks. Industry estimates [9] suggested that between 2002 and 2005, 600 million internet-enabled mobile phones will be sold. As for revenue, it anticipates that the European m-commerce market will be a $24 billion market by 2003, while end-users' spending on mobile e-commerce services will reach more than $200 billion in 2005. These figures show that m-commerce has many positive value-added services to offer in a huge market. Given the high likelihood of m-commerce in reaching more than 600 million by the end of 2006, businesses cannot afford not to pay attention to this new medium.

Short Messaging Service (SMS) has taken off successfully in many parts of the world. In 1999, the European network operators began inter-network SMS resulting in the escalating number of SMS messages sent to approximately two billion in a month [10]. In Australia last year, the telecommunication giant formerly known as Cable & Wireless Optus introduced a value added service called Infor2You. Infor2You allowed subscribers to the

Optus mobile phone network to customize preferences on their website for SMS messages to be sent to their mobile phone about weather forecasts, stock prices, horoscopes and sports results. Businesses seeking to capitalise on early m-commerce initiatives can learn from this example. By creating or adopting a business model that take advantage of SMS, businesses are creating in-roads to m-commerce.

Real time access to database used to be feasible only for high-value customers and data, but technologies such as the WAP has now enabled such database access for just in time retrieval. WAP portals become the main gateway for WAP users into the realm of wireless internet to enhance customer access. From these portals, users can retrieve information about sports scores, weather forecasts and traffic reports.

Marketing and promotion using mobile networks technology can take in the form of location based sales promotion. Using location technology, businesses can target customers to deliver targeted time sensitive messages direct to the customer in the vicinity of the outlet. For example, a customer driving past a supermarket can be alerted on items on sale. In the US, a particular StarBucks store transmits special coupons to customers' mobile device giving them a discount on beverages if they stop over to make a purchase.

Financial institutions like banks are adopting m-commerce by introducing special payment protocols for mobile users. In the future, when m-commerce security is more robust, the use of mobile devices as digital wallets will become more popular. This would enable consumers to shop and pay using mobile devices much like a credit card, as the credit information is stored in those mobile devices.

Future and potential applications of m-commerce that involve "information rich" products and multimedia capability have been outlined in [11].

M-Commerce Business Models

From the foregoing, it can be concluded that the convergence of mobile networks and e-commerce creates a promising outlook for current e-commerce implementations. To some extent, several of the e-commerce business models can be adapted to suit the wireless medium.

Technical limitations of mobile devices, such as display capability and speed of downloading large amount of information, would inhibit the consumer retail model. This is especially true for general e-tailers. When it comes to consumer retail, it is difficult to gauge how m-commerce can succeed with current technological infrastructure. For the Brokerage and the Transaction models, m-commerce initiatives can be a value added service. For example, an online grocery can use the SMS to inform its customer that the order has been processed and that the grocery is ready to be picked up; an auction site can provide bidders to check their bidding status as well as to update or place last minute bids.

A majority of m-commerce initiatives has taken place in the information commerce sector. This is because the technology lends itself to facilitate the exchange of information. With the use of WAP portals and 3G networks, businesses can take advantage of the technology by implementing the Subscription, Advertising Support, Brokerage, Infomediary, Affiliate and Community models.

Subscription model works well with m-commerce. The concept has an extremely high rate of acceptance among youth, starting in Japan with NTT DoCoMo's iMode services. DoCoMo charges iMode users a flat rate of Y300 or US$2.50 a month for access to basic services. Most of the content on the iMode network is free. However, specialised content like stock quotes from the Dow Jones and CNN requires subscription fee.

With the faster Generation (2.5G or 3G) networks, mobile operators can structure their business model by introducing content providers. They can gain revenue by using multiple billing models. Rather than serving as an access point to mobile networks, just like ISPs are to the internet users, mobile operators become the intermediaries that connect the users to the content providers. They charge subscription, transaction and usage fees from the users, in addition to advertising, security and access fee from the content and application providers. In turn, content and application providers can also charge subscription and transaction fee from mobile operator.

The combination of Community, Affiliate and Advertising support model can work well for businesses and network providers. For example, mobile providers can attract subscribers by offering free calls during certain period of time. The revenue may be from advertising and affiliation fees paid by content and application providers that wish to be linked to the network. When attractive plans are offered, community loyalty will build up as a result and more advertising revenue can be generated. As an example, iMode was so popular in Japan that it had a customer base of 13 million subscribers at the end of October 2000 and 34 million subscribers in 2001 [3].

Future Outlook

Newer networks and technology (3G and beyond) open up opportunities to extend the current e-commerce business models into m-commerce. Older business models will continue to be redefined – as how Amazon has evolved from an online bookshop with Transaction model to a shopping mall with auction sites with a hybrid model. New business models will continue to be created and it depends on innovative minds to discover models that can fully capitalise on the features of wireless technology.

A report by Accenture [12] outlined a four step process to identify m-commerce opportunities for financial institutions. The procedure includes: the assessment of value chain components to identify problem areas, determining suitable business model, economic drivers and costs of such initiative, identifying changes in business operation once the wireless technology is adopted as business vehicle, and studying business case that is feasible, profitable and possible for deployment.

In fact, such procedure can be applied to other sectors. For network providers, they should continue charging subscribers with service fees; unlike Internet Service Providers that compete to sell bandwidth to customers.

In Asia and Europe, many implementations are being developed as well as being used. In Singapore, the three major network providers: SingTel, MobileOne and Starhub are already collaborating to create a payment model to be applied over all three networks. The coalition intends to establish a convenient payment model to allow m-commerce. Current mobile telecommunication is still largely based on voice transmission. In the future, high speed data communication over Internet Protocol would be a norm for billing strategy. Businesses would then be able to allow their consumers to make payment securely using mobile devices.

It should be noted that the deployment of m-commerce is not that straight forward as extensive work needs to be done before an e-commerce site can accommodate m-commerce. Stripping of trivial information should be done by intelligent processors and use of effective protocols will enable only meaningful information to be sent and displayed to the mobile device. It should also be pointed out that manufacturers of mobile device still need to improve the microprocessor performance, memory space, screen design, keypad user interface and security features of the device.

Conclusion

This paper has outlined the taxonomy of business models currently adopted by e-commerce and m-commerce players. It can be concluded that new business models emerge mainly in the information commerce. This is because both the internet infrastructure and the wireless technology are primarily designed for data communication. Although early implementations of m-commerce mainly extend the use of mobile communication for e-commerce, mobile operators, content and applications providers can gain profit by applying billing model and portal model for the entertainment industry, information and messaging services. Subscription, Affiliate and Advertising Support models would be widely embraced by m-commerce players.

Reference

[1] Commonwealth Department of Communications, Information Technology and The Arts. 2000. "CONNECTING AUSTRALIA, Report of the Telecommunications Service Inquiry", Chapter 6: Data and Mobile Services, September. Retrieved on 23 November 2000 from http://www.teleinquiry.gov.au.

[2] ________. 2000. "WAPpy Races", Mobile Computer User.

[3] ________, NTT DoCoMo. 2001. NTT DoCoMo, SEGA Corporation to Jointly Develop Network Service Combining i-mode, SEGA's Arcade Game Technologies. Retrieved on 10 April 2001 from http://www.nttdocomo.com/new/contents/01/whatnew0220.html

[4] Sugianto, L. F. and Sendjaya, S. 2000. E-Retailing: New Opportunities in Internet Commerce, in Electronic Commerce: Opportunities and Challenges, pp.202-217, S. M. Rahman, M. S. Raisinghani (ed), Idea Group Publishing, USA: Dallas.

[5] Drummond, R. 2000. "Are Portals just Another Integration Problem?", e-Business Advisor, pp.40-48.

[6] Withers, S., 2000, Next in ebusiness, Marketing & eBusiness, Aug, pp.52-53.

[7] __________, AMR Research, E-Retailing – A Giant Industry Virtual Awakens, in Fortune: A Special Advertising Section, September 2000. Retrieved from the World Wide Web URL: http://ebusinessisbusiness.com/pdf/e_retailing_advertorial.pdf on 16 December 2000.

[8] Redman, P. 2000. "Access Corporate Data on Your Wireless Phone", eBusiness Advisor, March, pp.16-19.

[9] Shetty, V. 1999. Paving the way of WAP. *Communication International*, Vol. 26, No.10.

[10] May, P. 2001. Mobile Commerce: Opportunities, applications and technologies of wireless business, Cambridge University Press.

[11] Sugianto, L. F., Sangchai, N., Sendjaya, S. 2001. "Facilitating Mobile Commerce: A Proposed Framework", Proceedings of the International Conference on Intelligent Multimedia and Distance Education, ICIMADE '01, Eds. M R. Syed and O. R. Baiocchi, Fargo, North Dakota, John Wiley & Sons, Inc., 212-221.

[12] Giometti, M., Whitehead, M. 2001. "Create mobile commerce models for financial services industry" Serverworld August 2001, v15, p24-26.

E-Banking: An Emerging Perspective of the Regulatory and Taxation Issues

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Abstract

Technological innovations witnessed by the corporate sector during the nineties have changed the way business needs to be conducted. I.T. has introduced new business paradigms and is increasingly playing a significant role in improving the services in the banking industry. E-banking is becoming more and more popular today, as is banking via digital television. Beyond doubt, a substantial part of the future of banking business lies in a banking environment that is less and less branch-based and where customers are able to access banking services remotely. In the context of the above perspective, the paper will make an attempt to charter the evolving sphere of E-banking and the innovations both technological and conceptual which are sweeping the financial services industry in India in the context of the changes that are taking place in this sector across the world The regulatory and taxation issues of E-banking presents formidable problems and the paper attempts to get an insight into these two important issues. The paper concludes with an Indian perspective of E-banking with the help of a case study on ICICI.

The field of banking has made considerable progress and the use of Internet technology has become a very powerful force changing the very core of traditional banking. Without doubt, technology is the single biggest strategic issue in banking that has also created challenges for the regulatory framework of E- banking. Cyberspace cannot remain free from regulation and taxation and the issue of how to regulate transactions in cyberspace is central to the future of international electronic commerce (Kobrin 2001). It is important in the present environment for governments to keep their regulatory system under review. Many countries are responding to the changes in financial markets by rationalizing their regulatory systems. In today's highly mobile financial markets, countries, which do not ensure that their regulatory systems remain up to date, may pay a serious cost in the form of lost business (Howard Davies).

Taxation of E-commerce transactions has been one of the most debated issues, which is yet to be resolved by most countries. The Internet era has posed serious challenges for the tax authorities as the Internet may make it hard to pinpoint at the identity or location of people who are carrying out potentially taxable activities. A domain name used on the web may give no clue to the location of its originator. The tax authorities generally rely on paper – based transaction and tax obligations have been enforced based on physical presence. OECD is working out guidelines in the area of Internet taxation so that there is international consensus.

In this paper we first examine the issues and challenges offered by the growth of E-banking with a special focus on the regulatory and taxation issues. The paper then provides an Indian outlook of E-banking with the help of a case study of the Indian banking sector.

Issues and Challenges

E-banking utilizes technology to allow a bank's customers and other stakeholders to interact and transact with the bank seamlessly through a variety of channels such as the Internet, wireless devices, ATMS and physical branches. Internet banking is one component of a comprehensive E-banking offering.

E-banking has exploded onto the web and the Internet is a powerful and cost effective medium for business to interact with and service their customers. The number of online banking services to customers continues to grow and the Internet offers enormous opportunities for banks, and other financial services to fundamentally reshape their organizations (US web corporation). Banks can generate revenue through increased account, access fees and benefit from promotional opportunity to cross-sell products such as credit cards and loans (Yerkes, 1988).

Jeevan (2000) observes that the Internet enables banks to offer low cost, high value added financial services. US web-corporation argues that finally banks are finding that a comprehensive online banking strategy is essential for success in the increasingly competitive financial services market. Competition and changes in technology and lifestyles have changed the face of banking and banks in the present environment are seeking alternative way to provide and differentiate their services.

For enabling either information access or transactions, banks have to put up a web site. There is data to suggest that most hacking activity that happens is targeted at breaking into web-side security (Infosys).

Banks as well as consumers view the security threat as perhaps the most serious threat; Denny (2000) observes that the security of Internet access to client account is the biggest challenge facing banks. For success in the increasingly competitive financial services market, banks are finding that a comprehensive online banking strategy is essential which also provides the essential security requirements. Security policy should include management commitment, technological support and effective disseminations of the policy and the security awareness of all users. Cronin (1998) observes that the implementation of SET, the standard for secure electronic transactions on the Internet and its widespread adoption including security measures like encryption, digital authentication, and verification of on-line identity, increase consumer confidence. Stamoulis (2000) adds that the advances in Internet security and the advent of relevant protocols such as Integrion, SET, etc, put banks in perspective again as financial intermediaries and facilitators of complete commercial transaction via electronic networks.

To compete in a market transformed by globalization and technological revolution, banks have been forced to seek alliance and establish joint ventures to maintain their competitiveness and efficiency (Denny, 2000). Banks are engaged in a battle to maintain their supremacy and consolidation offers the banks a chance to create organizations that are both larger and more streamlined. Also, consumers are increasingly looking for services they can access from a singly entry point.

The urges to merge mainly arise from cost reduction through elimination of overlaps or through greater reach at more economic costs. Banking mergers like Chase, Chemical NationsBank, Million Bank and Bank of America were largely driven by the abolition of the antiquated inter state barriers to banking in the US. Mergers in Europe have been driven more by the trend towards universal banking whereas the recent merger in Japan is more a strategy of survival in a mounting NPA scenario.

The opportunities for banks in the Internet arena are varied (Stamoulis) as they can become technology providers by spinning off technology resources to start up new business stream, become content providers for information regarding products, indices, etc and enablers by providing back bone systems to support multiple payment system alternative.

Also, banks examining the cost and maintenance of conventional bricks and mortar facilities see tremendous value in an international web presence whose globalization costs seem minuscule by comparison. (Quelch and Klein,1996; Hamel and Sampler,1998). Thus, E-banking will offer a transparent environment to compare the cost and quality of services offered by a variety of financial institutions. As a result the focus is going to shift from generic banking service to customized banking services.

Regulation and Cyberspace

Given the exponential growth of the Internet in the past few years, it is apparent that banks and financial services will have to adjust to a rapidly changing competitive situation in which the Internet, Extranet and the Intranet infrastructure will be a key differentiator.

The Internet has become a new major communication medium and has been transformed beyond what anyone would have foreseen 30 years age. Security is a major issue in internet banking, but more than security the legal and regulatory hurdles, like those relating to taxes, levies and associated paper work which bedevil business transaction and movements of goods are posing a more serious threat to the growth of E-banking among countries. The Internet "has no concept of locality in a geographic or geopolitical sense. It raises challenges to laws and practices that are premised on knowing the location of parties to a transaction." (National Academy of Science, 2000,).

As Cohen, Delong and Zysman (2000) argue, ' The World Wide Web is getting inextricably entangled in the webs of law, custom and commerce- the tissue of our daily lives.' The Internet affects too many interests and raises too many social questions to continue as a policy free–zone.

Development of regulation is not yet in step with other developments in the E-banking world. Many organizations are still uncertain about the regulatory framework for conducting E-banking and whether there are additional regulations which they need to comply with. David Carse [1999] observes that the development of regulation and supervision of E-banking is still at an early stage and is still evolving.

As institutions have become more global and complex, two issues have become important here:

- Regulators have to build skills and should pay attention to the qualitative aspects of risk management.
- Regulators should realize that market is the best regulator and confidence in the regulatory framework is especially important for E-banking.

The important question in this context is 'Does E-banking make it necessary to have a global regulating body.

The point to take into account here is that regulations based on national boundaries are of little value for business trading globally on the Internet. The Internet affects too many interests and raises too many social questions and business need to be aware of regulations in other countries and how these might apply to them.

As Cyberspace is inherently international there are some aspects that will be globally regulated – but the primary part of regulations will be country specific. (Dick Kovacevich). Issues like capital adequacy ratios, accounting standards need to be globally regulated. For example, the European and American standards of accounting are very different and even today, Europe does not want to adopt the American standards.

In Hong Kong, their regulating approach is less specific in nature. The Hong Kong Monetary Authority expect their banks to undertake a rigorous analysis of the security aspects of their system by getting it reviewed by qualified independent experts. They also expect that the risk management system and internal controls will be reviewed and evaluated on a regular basis e.g. by external or internal auditors.

David LI, Chairman, Bank of East Asia Ltd., thinks that Asia swill tends to adopt American Standards of regulation. The Chinese banking system is very much modeled on the Federal Reserve System and the Chinese regulatory system is modeled on the American regulatory system. In the case of India, the legal infrastructure for promoting E-banking in not yet in place. India does not have a licensed certifying authority appointed by the controller of certifying authorities to issue digital signature certificates. Until digital signatures come into effective use, E-business will continue to run into trouble.

Also, India is not yet a signatory to the International Cyber Crime Treaty. The Treaty, the first of its kind, has been adopted to regulate and prevent Cyber Crime. United States, Canada, South Africa, Japan and 30 members of the European Union have already signed the treaty. The International Cyber Crime Convention is probably the first inter national benchmark for controlling and regulating cyber crime and for ensuring co-operation among different signatory nations for exchanging information concerning crime and cyber criminals.

Taxation and E-Banking

An increasing number of countries are now realizing the problems posed by taxation and E-business transactions. Tax laws of most countries have not kept pace with the increasing trade in digital products. The problem here is that the tax systems of most countries were developed when international trade and capital movements were limited and are thus ill suited for an integrated world economy (Tanzi, 1996)

Electronic commerce and globalization will exacerbate markedly and will pose a challenge to tax collectors throughout the world. It will make the tracing of transactions and thus the taxing of goods and service sold and distributed via the Internet almost impossible. As a result, it will make it difficult to locate income streams and transaction in physical space and for governments to realize that a transaction has taken place. Thus, the aim should be to develop a taxation system for cyberspace that ensures that the full potential of electronic networks is realized.

This will require tax authorities from around the globe to fluently develop globally accepted principles of taxation. Industry will also play an important role in developing technically feasible solutions to tax electronic commerce.

Challenges in Governing Cyberspace

There is no doubt that E-banking will pose the biggest challenge to the tax authorities. The point to emphasize here is the fact that the problems posed by taxation of E-banking are still at an early stage and are still evolving. The issues involved in the governance of cyberspace are complex and income taxes, both corporate and individual will be more problematic in the digital age.

Various reasons can be cited here- First, a shift from paper transactions to virtual transactions leaves less identifiable traces. Cyberspace is inherently non-geographic and Rosenau (1999) explains it as "distant proximities, non–territorial spaces that to some extent are subjective." The technological shift from the production and sale of physical products to digital ones is the second reason here. Products like photographs, music, financial advice and educational service- are now downloaded directly over the Internet which makes it difficult to define a permanent establishment for tax purposes. In a situation like this it becomes difficult to identify the concept of tax jurisdiction and accordingly the issue of who should pay the tax or collect the money.

In the world of cyberspace it is becoming increasingly difficult to apply traditional source concepts to link an item of income with a specific geographical location. This will make the concept of source-based taxation lose some of its importance in the age of E-banking.

Framework

The OECD has been working on principles to guide Internet taxation so that there is international consensus in the area of taxation and e-commerce. The report describes the extensive work that is currently under way by the Committee of Fiscal Affairs (CFA) to implement the Ottawa Taxation Framework Conditions (1998) "A Borderless World – Realizing the potential of Electronic Commerce". The important principles suggested in this regard are:

(1) Neutrality; (2) Efficiency –compliance cost to business and administration costs for governments should be minimized as far as possible; (3) Certainty and simplicity – tax rules should be clear and simple to understand so that taxpayer know where they stand; (4) Effectiveness and fairness – taxation should produce the right amount of tax at the right time and potential for evasion and avoidance should be minimized (5) Flexibility- taxation system should be flexible and dynamic so that they keep pace with technological and commercial developments.

Thus, it is too early to speculate as to how successfully the tax administrators will come to grips with the myriad complexities of the international regulatory global governance. The most critical problems faced in taxation of e-banking transaction are, who to tax, when to tax, where to tax, and who has the jurisdiction to tax. Even well developed countries like the U.S. have thrown up issues without providing any concrete solutions. Tax issues have been discussed through OECD codes, inter governmental cooperation, and bi-and multilateral treaties (Fiscal affairs, 2000). International cooperation is absolutely critical if we are to adapt tax policy to the new world of E-commerce.

Tanzi (1996) has called for a World Tax organization to identify trends, help facilitate harmonization of national codes and collection activities, develop basic norms and the like. It is use- full to suggest 4 principles as possible guidelines to taxing cyberspace.

- Avoid undue restrictions by the government on Electronic Commerce.
- Governments should be supportive and predictable and they should recognize the unique qualities of the Internet.
- Encourage Self – regulatory codes or norms and formalize them.
- Certain aspects of taxation of E-banking should be facilitated on a global basis.

The Indian Experience

India is still in the early stages of E-banking growth and development. Competition and changes in technology and lifestyle in the last five years have changed the face of banking. The changes that have taken place impose on banks tough standards of competition and compliance. The issue here is – 'Where does India stand in the scheme of E-banking.' E-banking is likely to bring a host of opportunities as well as unprecedented risks to the fundamental nature of banking in India.

The impact of E- Banking in India is not yet apparent. Many global research companies believe that E-banking adoption in India in the near future would be slow compared to other major Asian countries (E-business, June, 2002). Nair (1999) observes that Indian E-banking is still nascent, although it is fast becoming a strategic necessity for most commercial banks, as competition increases from private banks and non banking financial institutions.

According to Nasscom's Internet survey in 2001 on the Internet usage trends, the number of active Internet subscribers in India is expected to increase to over 18 million and the user base to over 30 million by 2004 – 05. It also found that more than 200 cities and towns in India have Internet connectivity. The Nasscom - McKinsey study in 2002 revealed that despite the global economic challenges facing the IT software and services sector, the outlook for the Indian industry remains optimistic.

The Reserve Bank of India has also set up a "Working Group on E-banking to examine different aspects of E-banking. The group focused on three major areas of E-banking i.e. (1) Technology and Security issues (2) Legal issues and (3) Regulatory and Supervisory issues. RBI has accepted the guidelines of the group and they provide a good insight into the security requirements of E-banking.

The importance of the impact of technology and information security cannot be doubted. Technological developments have been one of the key drivers of the global economy and represent an instrument that if exploited well can boost the efficiency and competitivity of the banking sector. However, the rapid growth of the Internet has introduced a completely new level of security related problems. The problem here is that since the Internet is not a regulated technology and it is readily accessible to millions of people, there will always be people who want to use it to make illicit gains. The security issue can be addressed at three levels. The first is the security of customer information as it is sent from the customer's PC to the Web server. The second is the security of the environment in which the Internet banking server and customer information database reside. Third, security measures must be in place to prevent unauthorized users from attempting to long into the online banking section of the website.

From a legal perspective, security procedure adopted by banks for authenticating users needs to be recognized by law as a substitute for signature. In India, the Information Technology Act, 2000, in section 3(2) provides for a particular technology (viz., the asymmetric crypto system and hash function) as a means of authenticating electronic record. Any other method used by banks for authentication should be recognized as a source of legal risk.

Regarding the regulatory and supervisory issues, only such banks which are licensed and supervised and have a physical presence in India will be permitted to offer E-banking products to residents of India. With institutions becoming more and more global and complex, the nature of risks in the international financial system has changed. The Regulators themselves who will now be paying much more attention to the qualitative aspects of risk management have recognized this.

Though the Indian Government has announced cyber laws, most corporate are not clear about them, and feel they are insufficient for the growth of E-commerce. Lack of consumer protection laws is another issue that needs to be tackled, if people have to feel more comfortable about transacting online.

Taxation of E-commerce transaction has been one of the most debated issues that are yet to be resolved by India and most other countries. The explosive growth of e-commerce has led many executives to question how their companies can properly administer taxes on Internet sales. Without sales tax, online sellers get a price advantage over brick and mortar companies. While e-commerce has been causing loss of tax revenues to the Government, many politicians continue to insist that the Net must remain tax-free to ensure continued growth, and that collecting sales taxes on Net commerce could restrict its expansion.

Nasscomm survey 2001 has suggested that India should support a permanent ban on taxes on Internet access, a permanent ban on custom duties on electronic transmissions, international tax rules that are neutral, simple and certain and simplification of state and local sales taxes. The Central Board of Direct Taxes, which submitted its report in September 2001, recommended that e-commerce transaction should be taxed just like traditional commerce.

Also RBI is about to become the first Government owned digital signature Certifying Authority (CA) in India. The move is expected to initiate the electronic transaction process in the banking sector and will have far-reaching results in terms of cost and speed of transactions between government- owned banks.

Thus efficiency, growth and the need to satisfy a growing tech-survey consumer base are three clear rationales for implementing E-banking in India. The four forces-customers, technology, convergence and globalization have the most important effect on the Indian financial sector and these changes are forcing banks to redefine their business models and integrate technology into all aspect of operation.

Case Study – ICICI

ICICI is one of the leading private sector banks in India, which combines financial strength with a reputation for innovation and a universal culture that embraces change. On March 31, 2002 ICICI formally merged with ICICI bank and emerged as India's first Universal Bank. ICICI banks retail distribution network continues to expand and it now has 409 branches and extension counters and 1,066 ATMS across about 240 locations (ICICI, 2002 a).

The strategy of ICICI bank after the merger with ICICI Ltd. is that of building a diversified portfolio. The merged entity will continue to be into project finance and the focus will be to tap the potential in retail financing. (Business line, April 1, 2002).

ICICI bank offers a wide spectrum of domestic and international banking services to facilitate trade, investment, cross border business, treasury and foreign exchange services (Unnithan and Swatman). ICICI bank has been quick to realize that E- banking has changed from a somewhat experimental delivery vehicle into an increasingly mainstream one for delivery of broad spectrum of banking products and services. Basic E- banking services are rapidly changing from competitive differentiator to competitive necessity.

The group has leveraged on a number of tie-ups to come up with its various offering. For its Internet banking offering the ICICI bank uses Infinity from Infosys, for its credit card business its uses Vision Plus from Pay Sys, USA, for WAP services the tie-up with cellular service providers Orange and Airtel helps reach out to these users, while the WAP technology is being implemented by the in-house ICICI Infotech service. To leverage the Net for its marketing initiatives ICICI bank and Satyam Info way have jointly set up a "COM" company to promote banking products on the Net. The bank has also entered into agreements with leading corporate like BPL, Rediff.com., Usha Martin and Tata Communications for B to C solutions in a bid to further strengthen its Internet banking product offering and services. Also ICICI has joined hands with a consortium led by Compaq to take the lead in offering a solution to the Indian e-commerce community. This consortium offers a B2B and B2C e-commerce payment gateway within India.

The Bank has been offering phone banking free of charge and was first to launch an Internet Banking service in the country named Infinity. (ICICI, 2000). Infinity now provides a host of online banking solutions to retail as well as corporate customers. ICICI's constant endeavour in providing more value to the customers has resulted in Infinity being the front-runner amongst online banking offerings in the country. Also, in keeping with the customers need for increased security, Corporate Infinity now provides multiple levels of authentication besides user ID/ password and includes security tokens (ICICI, 2000 – 01, Annual Report).

ICICI also strives to be a center for leading research on financial engineering in India, particularly in the area of valuation of securities, risk management and derivatives. By leveraging on the groups resources ICICI provides custom tailored solution that can support even the most complex business strategy (ICICI 2000(b)).

ICICI is now moving all its operations into the era of 'virtual integration'. Not only has this drastically reduced costs, but it has also increased and improved its services to customers.

Money 2 India offers a unique facility by ICICI of transferring funds to India. Additional modules were added-gifting and reminders to broaden its scope and enhance ICICI's relationship with customers (ICICI, Annual report 2000 –01).

The table below gives the SWOT analysis of ICICI.

SWOT ANALYSIS OF ICICI

Strengths	**Weaknesses**
➢ Advanced Technology ➢ Providing innovative products & Services ➢ Leverage technology to satisfy customer demands. ➢ Add value to the shareholders	➢ Too many subsidiaries ➢ High cost of funds
Opportunities	**Threats**
➢ Higher capital base ➢ First mover advantages	➢ Competition from other industry rivals like HDFC. ➢ Concern over NPA despite provisioning

Thus, ICICI has been able to use technology to provide value-added service to its customers during the last few years. For ICICI, technology is an integral part of their business. However, their overall progress could have been smoother but for certain internal and extraneous factors and also a pressure on spreads due to a competitive market (Annual report, 2000 –01).

Conclusion

E-banking has become a necessary survival weapon and is fundamentally changing the banking industry worldwide. To day, the click of the mouse offers customers banking services at a much lower cost and also empowers them with unprecedented freedom in choosing vendors for their financial service needs. No country today has a choice-whether to implement E-banking or not given the global and competitive nature of the economy. Banks have to upgrade and constantly think of new innovative customized packages and services to remain competitive. The invasion of banking by technology has created an information age and commoditization of banking services.

Banks have come to realize that survival in the new e-economy depends on delivering some or all of their banking services on the Internet while continuing to support their traditional infrastructure. The rise of E-banking is redefining business relationships and the most successful banks will be those that can truly strengthen their relationship with their customers. Without any doubt, the international scope of E-banking provides new growth perspectives and Internet business is a catalyst for new technologies and new business processes.

With rapid advances in telecommunication systems and digital technology, E-banking has become a strategic weapon for banks to remain profitable. It has been transformed beyond what anyone could have foreseen 25 years ago. However, banks are uncertain about the regulatory framework for conducting E-business and the regulatory and taxation issues for governing cyberspace presents formidable problems. Developing such a system is not easy as the Internet is not organized geographically and it is almost meaningless to refer to a website as national or local. Any successful attempt at governing cyberspace will involve significant international cooperation. Tax issues are being dealt with through O.E.C.D codes along with intergovernmental cooperation. The Indian experience of E-banking is gradually merging with its international counterparts. While the private sector and foreign banks have been fast in adopting Internet technology in client servicing, there is a gradual trend for the major public sectors and numerous cooperative units to move in the same direction. A mix of policy support and security assurance should propel further E-banking adoption in India.

References

[1] Business Line, April 1, 2002, Accessed online.

[2] Cohen, Stephen S., J Bardford DeLong & John Zysman. (2000). Tools for Thought: What is New and Important about the E-economy? BRID working Paper # 138, Berkely, CA.

[3] Committee of Fiscal Affairs. (1998) Electronic Commerce: Taxation Frame work Conditions. Paris : OECD, Directorate for Financial, Fiscal and Enterprise Affairs, October 8.

[4] Cornin, Mary J (1998) Defining Net Impact: The Realignment of banking and Finance on the Web, Banking and Finance on the Internet, John Wiley and Sons, New York.

[5] David Carse (1999) The regulatory Framework of E-banking Available (online) http;//www.e-banking.

[6] David LT (Interview) in 'The Future of Banking' by Engler, H and Essinger, J. Reuters Ltd. 2000.

[7] Davies, Howard. The uncertain but exciting future for banking, Vol. 8, No.6, Balance Sheet: pages 11-16.

[8] Denny, Stephanie (2000) The Electronic Commerce Challenge, Journal of Internet Banking and Commerce, November, vol .3 no.3

[9] E-business, June 2002.

[10] E- business, August 2002.

[11] Fiscal Affairs 2000. Fiscal Affairs. Paris OECD.

[12] ICICI (2002a) http;//www.icici.com/icicibank Available [online).

[13] ICICI (2000b) Available [online] http://www.icici.com/icicibank

[14] ICICI Annual Report 2000-01, Page 28.

[15] Infosys, In an edited book, Electronic Banking by SCN Education B.V. (Eds) 2001.

[16] Jeevan MT (2000) Only Banks – No Bricks, Voice and Data, November 11th Available [Online] http://www.voicendata.com/ content/convergence/trends/ 10011102.asp

[17] Kobrin, Stephen J., (2001). Territoriality and the Governance of Cyberspace, Journal of International Business Studies, 32,4: Page 687-704.

[18] Kovacevich, Dick (Interview) The Future of Banking by Engler, H & Essinger, J, Reuters Ltd, (2000).

[19] Nair A. (1999) Indian Internet banking still nascent, Asia Internet news. December 5th. Available (online).

[20] National Academy of Science. 2000. The Internet's Coming of Age. Washington, DC: National Academy Press.

[21] NUA Internet Surveys. 2000.

[22] Nasscom – McKinsey report (2002), Available online.

[23] OECD Tax Statistics. 2000. A World of Taxes.' http:/// www.oecd.org/daf/fa/stats/stats.htm,

[24] Rossenau (1999). The Information Revolution : Both Powerful and Neutral. "George Washington University, Working paper, December 7.

[25] Stamoulis DS (2000) 'How Banks Fit in an Internet Commerce Business Activities Model, Journal of Internet Banking and Commerce, June, Vol. 5, no.1 Available [online] http//www.arraydev.com/commerce/JIBC/articles.htm.

[26] Tanzi, Vito. (1996). Is There a Need for a World Tax Organization. Paper presented at the International Institute of Public Finance, Tel Aviv, August 1996.

[27] Unnithan, C.R., and Swatman, Paula M.C. (2001)E-business adaptation – a comparison of Australian and Indian experience in Internet banking. Accessed online.

[28] US Web-corporation In an edited book Electronic Banking by SCN Education B.V. (Eds) (2001).

[29] Yerkes, Lesha (1998) Growing with technology –the Benefits of Internet Banking; Available [online]www.bankinfo.com

Interviews

A questionnaire was prepared on E-banking that was administered to individuals in banks to get their views on various dimensions on E-banking in India.

Effect of Learning and Information Technology Capability on Business Performance

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Abstract

The concept of organizational learning has recently enjoyed a renaissance among both academics and practitioners seeking to improve organizations. Although a large body of research theoretically asserts a positive relationship between organizational learning and information technology and a strong relationship between information technology and business performance, the seemingly positive relationship between organizational learning and business performance has yet not been fully explored. This paper examines the mediating role of information technology capability (IT capability) in the relationship between organizational learning and business performance. The basic research question is how does organizational learning increase business performance via IT capability.

Introduction

The relationship between learning and performance has been investigated for years. It can be concluded that learning and action are related, but the result from organizational learning can be either negative or positive. In other words, learning does not always imply enhanced effectiveness or better performance. Organizations may learn inappropriate behaviors from other organizations and develop the so called "competency traps," in which knowledge gained from past success is incorrectly applied to present problems (e.g., [17] [18]). In order to explain this phenomenon, researchers argue that the inconsistent relationship between organizational learning and business performance must be mediated by some ignored factors. They argue that organizational learning can improve business performance via some important mediators such as customer satisfaction, new product success (e.g., [26]) or innovativeness (e.g., [12]).

Recently, information technology is being addressed together with organizational learning. Although the link between information technology and organizational learning has only begun to be explored, two related streams of research can be identified [24]. The first stream adopts organizational learning as a tool to explain and resolve the problems encountered by firms when they implement new information technologies. This can be traced back to Argyris [3] who argued that organizational learning would be instrument in overcoming implementation problems in organizations.

The other stream of studies examines the design of information technology applications to support organizational learning. The advocates of work argue that information technology can be an important ingredient in the design of "learning organizations" by providing an infrastructure for storing, accessing, and revising some of the elements of organizational memory. However, there are two conflicting tributaries. One group of researchers found information technology is an enabler of organizational learning (e.g., [1] [10]); while another group found information technology is a disabler of organizational learning because information technology may disable organizational learning by supporting rigid systems that are not adaptable to changing conditions of use (e.g., [11][22])

This study is designed to address the conflicting explanations of the function of information technology in organizational learning by incorporating a construct called information technology capability. It has been suggested that every business needs to develop distinctive capabilities that enable it to undertake the activities necessary to move products and services through the value chain and support a competitive market position. Distinctive capability functions as a key success factor [7].

Information technology capability (IT capability), defined by Bharadwaj [4] as "a firm's ability to mobilize and deploy IT-based resources in combination or copresent with other resources and capabilities", can be classified as this kind of distinctive capability and has been experientially shown to have positive relationship with performance[4]. Unfortunately, IT capability does not happen serendipitously or randomly. It must be managed with special care through the focused commitment of resources, assignment of dedicated people, supported by dramatic goals for improvement and most importantly, continued effort to learn [7]. Thus to develop such a capability, firms need to put continuous efforts in learning because learning can facilitate behavior change that leads to improved performance (e.g. [27] [28]). In this study, we adopt Slater and Narver's [26] definition of learning as the "development of new knowledge or insights that have the potential to influence behavior." It seems that IT capability can serve as a mediator between learning and business performance, but unfortunately, the seemingly reasonable relationships between learning, IT capability and performance are left undressed.

This study examines this relationship. This view of learning, IT capability and business performance should provide insights for researchers in conceptual, operational, and methodological issues. This relationship is tested using data from businesses in Vietnam.

Organizational Learning, Information Technology Capability, and Business Performance

Organizational Learning

The reason why organizational learning is currently so fashionable is three-fold according to Dodgson [9]. First, the concept of the "learning organization" is gaining popularity among large organizations as they try to develop structures and systems that are more adaptable to environmental changes. Second, The changing environment increases uncertainties facing firms thus increases the need for firms to learn to do things in different ways. Third, learning has a broad analytical value [9]. Learning is a dynamic concept and its use in theory emphasizes the continually changing nature of organizations. It is also an integrative concept and can unify various levels of analysis.

Reviewing the literature, we have found that different researchers have classified learning into different types. Argyris and Schon [2] develop a three-fold typology of learning, namely single-loop, double-loop and deutero-learning; Dodgson [8] distinguishes strategic from tactical learning; Later, Slater and Narver [26] divides learning into adaptive and generative learning.

Due to these different understanding of learning, there is rarely agreement within disciplines as to the definition of "learning". Different researchers conceptualize "learning" in different ways. In their seminal work of organizational learning, Argyris and Schon ([2], p23) argue that "Organizational learning occurs when members of the organization act as learning agents for the organization, responding to changes in the internal and external environments of the organization by detecting and correcting errors in organizational theory in use, and embedding the results of their inquiry in private images and shared maps of organization. " Derived from Argyris and Schon [2] but taking a different perspective, Robey, Boudreau, and Rose [25] define it as " an organizational process, both intentional and unintentional, enabling the acquisition of, access to, and revision of organizational memory, thereby providing direction to organizational action." In this definition, the author view organizational learning as an organizational process to distinguish it from learning that might occur at other levels of social analysis. They also concluded that learning does not always imply enhanced effectiveness. Organizations may learn superstitiously, or they may learn inappropriately behaviors vicariously from other organizations. In order to provide a more complete understanding of organizational learning, Huber [13] elaborates four constructs integrally linked to organizational learning. These four constructs are knowledge acquisition, information distribution, information interpretation, and organizational memory. Huber ([13], p.90) describes the four organizational learning-related constructs: "Knowledge acquisition is the process by which knowledge is obtained. Information distribution is the process by which information from different sources is shared and thereby leads to new information or understanding. Information interpretation is the process by which distributed information is given one or more commonly understood interpretations. Organizational memory is the means by which knowledge is stored for future use." Derived from Huber [13] and Sinkula, Slater and Narver [26] argue that organizational learning is a three-stage process that includes information acquisition, information dissemination, and shared interpretation.

Based on the above literature review, we adopt Slater and Narver's [26] definition of organizational learning as " The development of new knowledge or insights that have the potential to influence behavior," and understand that organizational learning is a dynamic construct and embodies a three stage process.

Information Technology Capability

Organizational theorists view change management as a critical competency for successful organization in the future. In a rapidly changing business environment, uncertainty and equivocality become major obstacles for firms. Information technology is needed to reduce uncertainty and equivocality.

IT as a powerful competitive weapon has been strongly emphasized in the literature, yet the sustainability of the competitive advantage provided by IT applications remains debatable. Resource based analysts [19] argue that IT as a high order resource, if harnessed, will lead to competitive advantage. Additional research (e.g., [25][4]) argues that IT as a resource could be easily duplicated thus could not lead to sustainable competitive advantage. Rather it is the IT capability that will distinguish firms applying IT from each other.

IT capability was first defined by Ross, Beath and Goodhue ([25], p31) as " the ability to control IT-related costs, deliver systems when needed, and effect business objectives through IT implementations." They argued that a firm was not successful because of any particular leading edge IT application, but because it has developed a capability for applying IT to ever-changing business opportunities. This capability grew from the persistent development of an IT staff that was trained to provide rapid solutions to the most pressing business needs (Human Asset); a cost-effective, well managed IT infrastructure that complemented organizational information needs (Technology Asset); trust and mutual respect between IT and clients and an ability to communicate, coordinate, or negotiate quickly and effectively (Relationship Asset) [25]. In the same vein, Bharadwaj ([4], p171) took the resource-based perspective again and defined IT capability as "a firm's ability to mobilize and deploy IT-based resources in combination or copresent with other resources and capabilities." Bharadwaj divided IT-based resources into three categories which are It infrastructure, human IT resource and IT-enabled intangibles. The overall IT infrastructure comprises the computer and communication technologies and the shareable technical platforms and databases [25]. The critical dimensions of human IT resources include: technical IT skills and the managerial skills [6]. While IT-enabled intangibles here means customer orientation, knowledge assets, and synergy. The two most influential definitions are basically the same. Since Bharadwaj's definition is more generable, this study will adopt her definition.

Business Performance

Interests in defining and measuring business performance have been fascinated researchers for centuries. One stream of research views business performance as an outcome of business process in an organization. Voss and Voss [31] argue that there is a positive link between strategic orientation and firm's performance. Menon, Bharadwaj, Aidam, and Edison [21] postulate that marketing strategy making, whose focus is on strategic implementation, will also lead to better business performance. Another stream of research emphasizes the relationship between market share and profitability. Past studies show inconclusive results on the market share-profitability relationship [30]. The inconsistencies in the results can be attributed to the incomplete set of variables in the studies, the characteristics of the samples used, and the variance in measurements employed [30].

This seemingly simple variable actually posses many problems. The difficulties of performance measurement are persistent because of the lack of consensus on the definition of performance. Different researchers conceptualize performance in different ways, and thus, reflected in variety of measurements. Researchers have tried to use both subjective and objective measures to evaluate firm's performance but both of these two methods have been criticized for their validity. Using objective measures may pose some difficulties to researchers in making causal inference from the historical data [20]. On the other hand, using subjective measures are likely tied to the comparison of actual outcomes with the expected results. Most of the subjective measures tend to question how managers perceive their organizational performance in relation to their expectations or goals. Here, performance can be defined as how well an organization meets its expectation. For this reason, the level of aspiration and goal setting of the managers will greatly affect performance. As a result, past performance can affect future performance, and must be considered as one of many factors that cause future outcomes.

In order to avoid the problems of measures mentioned above, this study adopts both subjective and objective measures in order to get a more comprehensive evaluation of firm performance.

Conceptual Framework and Hypotheses

The review of previous research provides a foundation for developing a conceptual model shown as follow in Fig 1:

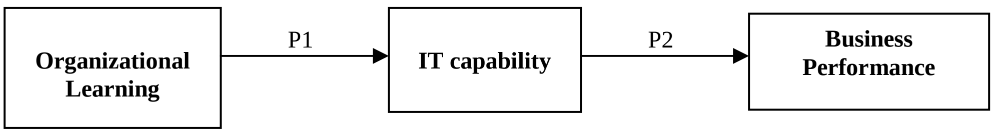

Fig.1: CONCEPTUAL MODEL ORGANIZATIONAL LEARNING, IT CAPABILITY, AND BUSINESS PERFORMANCE

Organizational Learning and IT capability

Organizational learning is a dynamic construct and is a three-stage process. While IT capability is viewed as a three-dimension construct including IT infrastructure, Human IT resources, and IT-enabled intangibles. According to Bharadwaj [4], the so-called IT infrastructure here doesn't simply mean the physical IT assets. The individual component of the physical IT assets can be purchased or duplicated easily by competitors, thus it is argued that physical IT resources are unlikely to serve as sources of competitive advantage [19]. Even though, the individual components that go into the infrastructure are commodity-like, the architecture that removes the barriers of system incompatibilities and makes it possible to build a corporate platform for launching business applications is not a commodity at all. The process of integrating the components to develop an infrastructure tailored to a firm's strategic context takes time and effort and involves experiential learning.

The dimensions of human IT resources include technical IT skills and managerial skills. IT skills include programming, systems analysis and design and competencies in emerging technologies; Managerial IT skills comprise the ability of effective management of IS functions, coordination and interaction with user community, and project management and leadership skills. Both of the technical and managerial skills evolve over long periods of time through the accumulation of experience. Moreover, managerial skills are often tacit, dependent on other interpersonal relationships, which may take years to develop [19]. As we already know knowledge accumulation needs learning [15]. Thus, we argue that effective learning will lead to superior human IT resources.

The IT enabled intangibles includes customer orientation, knowledge assets, and synergy. A key capability for superior customer orientation is the ability to track and predict changing customer preferences, especially in volatile markets. Knowledge assets are embedded in the skills and experience of its employees and its processes, policies, and information repositories. Synergy here refers to the sharing of resources and capabilities across organizational divisions. To develop superior customer orientation, knowledge assts and synergy, firms also need to take time and effort to learn. Since all the three components of IT capability are related to learning based on the aforementioned discussion, it can be argued that:

H1: Learning is positively related to IT Capability

IT capability and business performance

Even though the relationship between IT and performance was widely studied (e.g. [14] [5] [19]). The result is not consistent. Some researchers found positive relationship between IT and performance; the others found negative relationship between them. Addressing to this inconsistency, Bharadwaj [4] empirically tested that it is IT capability rather than IT that leads to better business performance. His study supported his argument. By the way, since the sample he used in his study are all larger firms such as Wal-Mart, Fed Ex etc. The study itself lacks generalizability. This study takes small and medium business as sample and tries to generalize his findings. Based on Bharadwaj [4], we argue the relationship between IT capability and business performance still hold for SMEs, thus, the second hypothesis:

H2: IT capability is positively related to Business Performance

Method

Data and Measurements

A convenience sample of firms with varying levels of IT activity in Vietnam was surveyed using personal interviews with a structured questionnaire. 54 interviews were conducted resulting in 49 completed and valid questionnaire. The sample firms are all small and medium business, which conduct different kind of business including children garment, optical product, ceramic product, insecticide, construction etc. Among the 49 companies, about 27% of them have been exporting; 22% of them have been importing; 10% of them are doing both. The rest conduct domestic business. All of the firms have some IT usage, which provide us valid basis for studying their IT capability. The interviewed firms ranged in age from several years to as old as 50 years with a mean of approximately 12 years of age. All of the firms are located in Vietnam.

The data were analyzed using linear regression. The software used for data analysis is STATA. The instrument is composed of items that have been used in past research on organizational learning and information technology capability. The measure of the concept of organizational learning is derived from Sinkula, Baker, Noordewier [29], who tried to assess the learning orientation of the organizations. Three components are included in their questionnaire, but since in the present study organizational learning is what they called commitment to learning, only the first part of their questionnaire was used. We adopted King and Teo's [16] measure of IT capability, and for business performance, we adopt Zou, Taylor and Osland's [32] EXPERT scale because this scale is cross-culturally consistent. It includes three dimensions: 1)economic/financial outcomes of exporting, 2) strategic outcomes of exporting and, 3) satisfaction with outcomes of exporting. Appendix A shows the items of the measures in the study.

Results

Table 1 shows the OLS regression estimates testing H1 And H2. In H1, we expected that organizational learning would positively affect information technology capability. As shown in Table 1, the estimate of 1.15 is statistically significant (t=3.31, p=0.002), suggesting strong support for H1. H2 involved the effect of information technology capability on business performance. The estimate of 0.49 is also statistically significant (t=3.74, p=0.001), suggesting fully support for H2.

Table 1: OLS REGRESSION RESULTS

Dependent variables	**Independent variables**	**Estimates**	**t-value**	**Significance***
Information Technology Capability F (1,44)=10.95 R^2=0.1992	Organizational Learning	1.15	3.31	0.002
Business Performance F(1,44)=14.01 R^2=0.3113	Information Technology Capability	0.49	3.74	0.001

Note: * Significant at 0.05 level; ** Significant at 0.01 level; ***Significant at 0.001 level

Conclusion

Limitations and Research Implications

Even though the results are positive, there are still many things need to be concerned. First, the sample size is quite small and the data are collected from a developing country, Vietnam. The result might be different if the study were conducted in a more developed country. Thus the conclusion might still lack of generalizability. Second, the R squares for both of the two-regression model are very low. For the organizational learning and IT capability relationship, the R^2 is 0.1992, which means only 19.19% of the variance is explained. For the IT capability and business performance relationship, the R^2 is about 0.3113 meaning the explained variance is 31.13%. The low R^2 indicates that there are some other factors missed in this study to explain the total variance. These factors could be organizational structures, environmental change, culture etc. Future study could include these factors. Third, the two main constructs, namely organizational learning and IT capability are both multi-dimensional constructs, in the future study, the components' effect on dependent variables might also be considered so that more insight can be gained from the study.

Managerial contributions

From a practical and managerial standpoint, many important insights can be gained from this research. First, with the full understanding of how important organizational learning and IT capability is in the contemporary competitive environment, our study demonstrates to managers that information technology cannot assure business success. Only getting some computers hooked up doesn't mean they can do business successfully. They need to develop IT capability. This means that firms need to know how to mobilize and deploy IT-based resources in combination or co present with other resources and capabilities in the firms. To develop such a capability is not easy; firms also need to invest in learning. Only the fastest learner can be gain the competitive advantage and stay as a winner [23].

References

[1] Anand, V., Manz, C.C.,& Glick, W. H. (1998). An organizational memory approach to information management. Academy of Management Review, 23(4),796-809.

[2] Argyris, C. & Schon, D.A. (1978). Organizational learning: a theory of action perspective. Reading, MA: Addison-Wesley Publishing Co.

[3] Argyris,C. (1977). Organizational learning and management information system. Accounting , Organizations and Society, 2(2),113-123.

[4] Bharadwaj, A. S. (2000). A resource-based perspective on information technology capability and firm performance: An empirical investigation. MIS Quarterly, 24 (1),169-196.

[5] Bharadwaj, A. S., Bharadwaj, S.G., & Konsynski, B.R. (1999). Information technology effects on firm performance as measured by Tobin's q. Management Science, 45(6),1008-1024.

[6] Capon, N., & Glazer.R. (1987). Marketing and technology: A strategic coalignment. Journal of Marketing. 51(3),1-14.

[7] Day, G. S. (1994). The capability of market-driven organizations. Journal of Marketing, 58 (October), 37-52.

[8] Dodgeson, M. (1991). Technology learning, technology strategy and competitive pressures. British Journal of Management. 2/3, 132-149.

[9] Dodgson, M. (1993). Organizational learning: A review of some literatures. Organization Studies. 14(3), 375-394.

[10] Davenport, T.H., De Long, D.W., & Beers, M.C. (1998). Successful knowledge management projects. Sloan Management Review, 39(2), 43-57.

[11] Gill, T.G. (1995). High-tech hidebound: case studies of information technologies that inhibited organizational learning. Accounting Management and Information Technologies, 5(1), 41-60.

[12] Hurley, R. F. & Tomas M. H. (1998). Innovation, market orientation, and organizational learning: An integration and empirical examination. Journal of Marketing, 62 (July), 42-54.

[13] Huber, G. (1991). Organizational Learning: the contributing processes and the literatures. Organization Science. 2(1), 88-115.

[14] Hitt, L.M., & Brynjolfsson, E. (1996). Productivity, business profitability, and consumer surplus: three different measures of information technology value. MIS quarterly. June,121-142

[15] Johanson, J.,& Vahlne, J.E. (1977). The internationalization process of the firm: a model of knowledge development and increasing foreign market commitments. Journal of International Business Studies, 8(1), 23-32.

[16] King, W. & Teo, T. (1996). Key dimensions of facilitors and inhibitors for the strategic use of information technology. Journal of management of information systems,12(4),35-53.

[17] Levitt, B., & March, J.G. (1988). Organizational Learning. Annual Review of Sociology. 319-340.

[18] Miller, D. (1993). The architecture of simplicity. Academy of Management Review. 18(1), 116-138.

[19] Mata, F. J., Fuerst, W.L., & Barney, J.B. (1995). Information technology and sustained competitive advantage: a resource-based analysis. MIS Quarterly, December, 487-505.

[20] March, J.G. & Sutton, R.I. (1997). Organizational performance as a dependent variable. Organization Science, 8, (November-December), 698-706.

[21] Menon,A., Bharadwaj. S.G. Adidam P. T.& Edison,S.W.(1999). Antecedents and consequences of marketing strategy making: A model and a test. Journal of Marketing, 63(2),18-40

[22] Orlikowski, W.J. (1992). The duality of technology: rethinking the concept of technology in organizations. Organization science, 3(3), 398-427.

[23] Parkhe, A. (1997). Interfirm diversity, organizational learning, and longevity in global strategic alliances. Strategic Management in Global Economy,276-290.

[24] Robey, D., Boudreau, M. C., & Rose. G.M. (2000). Information Technology and organizational Learning: a review and assessment of research. Accounting management and information technologies. 125-155.

[25] Ross, J.W., Beath, C.M., and Goodhue, D.L. (1996). Develop long-term competitiveness through it assets. Sloan Management Review, 38, 31-45.

[26] Slater, S. F., & Narver, J.C. (1995). Market orient and the learning organization. Journal of Marketing, 59 (July), 63-74.

[27] Senge, P. M. (1990). The Fifth Discipline. New York: Doubleday.

[28] Sinkula, J. M. (1994). Market information processing and organizational learning. Journal of Marketing, 58 (January), 35-45.

[29] Sinkula, J.M., Baker, W.E., & Noordewier, T. (1997). A framework for market-based organizational learning: linking values, knowledge and behavior. Journal of the Academy of Marketing Science.

[30] Szymanski, D.M., Bharadwaj, S.G., & Varadarajan P.R. (1993). An analysis of the market share-profitability relationship. Journal of Marketing, 57 (3),1-18.

[31] Voss,G. B. & Voss. Z.G. (2000). Strategic orientation and firm performance in an artistic environment. Journal of Marketing. 64 (January), 67-83.

[32] Zou, S.M., Taylor, C.R., & Osland, G.E. (1998). The expert scale: A cross-national generalized measure. Journal of International Marketing. 6(3),37-58.

Appendix A—Measures of Central Constructs

Organizational Learning-- In general, in my firm…

1. Managers basically agree that our organization's ability to learn is the key to our competitive advantage.
2. The basic values of this organization include learning as key to improvement
3. The sense around here is that employee learning is an investment, not an expense
   Learning in my organization is seen as key commodity necessary to guarantee organizational survival

IT Capability-- Our firm currently has …

1 Strong IT leadership
2 Strong IT planning capability
3 Experience with IT
4 Perceived importance of strategic use of IT
5 Strong technical support staff
6 Tangible benefits of IT application
7 Willingness to explore new ideas
8 Adequate knowledge about information assets/opportunities

Business Performance

Our firms' financial performance…

1 Has been very profitable
2 Has generated a high volume of sales
3 Has achieved rapid growth

Our firms' strategic performance…

4 Has improved our global competitiveness
5 Has strengthened our strategic position
6 Has significantly increased our global market share

Satisfaction with this Venture…

7 The performance of this (export) venture has been very satisfactory
8 This (export) venture has been very successful
9 This (export) venture has fully met our expectations

Internet B2B and the New Marketing Paradigm

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Abstract

Business to business (B2B) firms have been among the first organizations to integrate usage of the internet to management processes, systems, and procedures. Initial uses among B2B firms were to improve industrial sourcing and supply chain practices. Currently, however, the internet provides B2B marketers with a variety of opportunities that are largely driven by improving marketing functions, procedures, and processes.

Many of these changes are now being talked about under the rubric of "customer relationship management" or "CRM". While some of the current issues involving CRM may be a something of a fad, there is, nevertheless, a fundamental shift in adopting more effective customer-centric marketing practices. The implications of these practices need to be better explored, particularly in the B2B sector of the economy. Firms can achieve additional advantages from closer inter-firm relationships by harnessing the web's interactivity.

Introduction

Attitudes toward the internet have rapidly evolved. Though the business press was initially dominated by stories of new business to consumer (B2C) or "e-tailing" firms on the web, the more important global development was the migration of large B2B revenues to web-enabled systems. As internet-based purchase transactions replaced paper, telephone, fax, and even private EDI systems, the reported figures on industrial procurement via the internet grew exponentially. Several credible industry studies [2] [9] predicted that electronic B2B revenue would grow to at least six times that of electronic B2C by 2003, or about $2.8 trillion.

New attention was given to B2B firms, due to the apparently vast opportunities that the internet provided. Software manufacturers could develop web-based integrated software systems by utilizing experience gained from earlier generations of EDI systems. The capabilities provided by computerized enterprise resource planning (ERP) systems that have been installed over the past twenty years have made it much easier for customers to plan production and control inventories.

An effective supply chain makes it easier to reduce various internal costs that are associated with placing orders, making transactions, and tracking delivery. This was an especially important consideration as firms attempt to reduce cycle times and lower inventory, associated with adopting just-in-time production methods. Moreover, better managing the supply chain can lead to higher productivity, can shorten new product development time, and allows firms to react to customers with greater speed and accuracy.

The notable success of Wal-mart, today the largest existing firm, has clearly demonstrated that significant business gains are achievable by information sharing and supplier coordination. While initially expensive to implement with EDI systems, the same advantages are now achievable on tools that utilize the web. Better software tools and improved supply chain management practices are widely diffusing and regularly implemented.

The move of software systems to the web to enhance the goal of improving supply chains was nothing surprising. At least the utility of the web in assisting these goals could be reasonably foretold. The internet simply provides a better infrastructure for software products to aid in managing procurement, inventory, logistics, and other supply chain processes. Not only has the move to the internet lowered the costs of some of the existing EDI systems, but new software and lower implementation costs allows many smaller and medium sized enterprises (SMEs) to access these benefits. Further cost savings and advances are possible for SMEs as firms streamline their supply chains and continue to reap incremental cost savings. But as firm share information and build trust, new issues are becoming salient.

Predictions of B2B and the Internet

Secondary to supply chain activities moving to the web, it was thought that the internet would create some new possibilities for commerce –the process of buying, selling, promoting, pricing, and otherwise arranging transactions. Web theorists projected some important changes ahead. For example, Sarkar, Butler, and Steinfield [11] [12] forecast that electronic tools would substantially affect competitive opportunities in the distribution sector. The idea was that as firms rapidly became internet-enabled, the web would "dis-intermediate" the players in the supply chain. In other words, the internet would provide the means for companies to more directly interact, without the need of distributors or other third parties getting between them. This could reduce transaction costs and increase industry efficiencies. The increased flow of information was predicted to have new and beneficial effects as well.

The problem with this prediction, however, is that it ignored the value-adding functions that intermediaries perform. Not only do intermediary players aid in distribution, but they also have an important role in diffusing market information and matching products to customer needs. They can be important partners in helping firms to target markets and this better serves end-use customers.

In the consumer sector, the web has instead offered new channels to reach customers. In fact, many of the so-called "pure play" firms have been the most successful ventures. Most notable among these is Ebay, which has created new means for individuals to buy and sell merchandise in a way that was not possible before. The internet created new markets **–**it did not destroy or displace the established ones.

Market Failure?

As the century turned, a round of venture capital speedily put development funds into B2B companies. In the year 2000 alone, Silicon Valley venture capitalists invested $23 billion in more than 1,200 companies [1]. B2B marketplaces, also called B2B exchanges, were supposed to have a transformative effect on the B2B market by enabling firms to have better access to suppliers and by making transactions more visible and transparent. B2B marketplaces could also provide further means of reducing organizational costs, mainly by making procurement easier, transparent, and more accessible.

For a time, the B2B sector looked quite interesting, important changes seemed to be ahead. The *Financial Times* reported that were more than 3,000 announcements of electronic marketplaces in the year 2000 [5]. However, few of these electronic marketplaces were launched. An even a smaller number have, as yet, significantly affected industry structure.

B2B exchanges provided firms new channels in which to market their products. The problem is that each channel opportunity that a firm pursues can create costly technical problems. The most costly technical challenge is managing catalog content—the publishing, reconciliation, and frequent updating of product data is time consuming. And if this data needs to be managed across many different exchanges that have different formats and information requirements, then problems multiply [10].

Nevertheless, there were some successful B2B exchanges that have been developed. For example, after various delays, a consortium of established automotive companies and software firms created a global automotive marketplace, Covisint. Participating firms included Ford, General Motors, Nissan, Renault DaimlerChrysler, and later Peugeot Citroën on the automotive side, and Oracle and Commerce One on the software side. The Covisint venture provided the software tools to enhance the submission of bids by suppliers to some of the major automotive manufacturers. Since the automotive companies had a major role in designing the service and an incentive to participate, the resulting venture provided immediate value to enhance transaction processes. As a result Covisint resulted in considerable cost savings. It has had an immediate payback to the investing automotive companies involved and is considered a major success [5].

Explaining Limited B2B Success

In retrospect, the attention given to B2B marketplaces on the internet was inordinate. The B2B marketplaces that were successful tended to add value to existing supply chain processes, rather than displace the intermediaries. The fact is that B2B marketplaces have done little to displace established relationships or radically alter industry power. In fact, some may have done the reverse –solidify the dominance of established companies and restrict the possibility of new channel arrangements from developing.

There are many reasons to explain these developments. Arguably the most important is the fact that the most important industrial procurement decisions involve products and services that require cooperative behavior. Many specialty product and service providers work on a contract basis, making products to order. In fact, B2B firms strategically place more emphasis and management attention on its uniquely branded and manufactured, or customized products –especially those parts and services that are more closely tied to a firm's competitive advantages. These are not commodity products that can be readily traded on exchanges. They are more often products that involve key design efforts, specific or particularized skills, and specialized manufacturing.

More often than not, these specialized product and services are subject to "modified rebuy" or "new task" purchasing situations that are subject to negotiated pricing decisions. The sticking point is that it takes time and considerable effort to set prices, especially when this includes specifying options on delivery and related service terms. The costs of such custom produced parts vary in complex ways, depending on the resources that firms have dedicated to their production, their manufacturing flexibility, and other factors.

More importantly, however, firms enter into strategic relationships with key suppliers to more effectively produce and develop many of the parts that critically affect the quality or value of their end-use products. The relationship among such firms is cooperative and can be very close, not distanced. Firms also co-partner with suppliers in activities such as product development to better advance technologically.

Key suppliers can use the internet to provide important services to their customers, but also to the end-use customers down the supply chain. OEM suppliers may cooperate with manufacturers to provide customer service arrangements, product information, or even parts replacement information to end use customers. For example, Sony provided information on its disk drives to Apple computer customers.

There are many business reasons to cooperate –B2B marketplaces can be used to encourage and support important cooperative arrangements of this kind. Apart from the goals of selling and promoting products, information transfer and support services are an important part of B2B business. To understand the evolution of the internet or what web-based systems that are mostly likely to be successful, it is necessary to consider power relationships in the supply chain and cooperative partnership arrangements of many kinds.

Looking Beyond Cost Savings

The crash in internet stocks has persuaded many firms to retreat from further investments in B2B marketplaces. As tough economic conditions strangle IT budgets, businesses are looking to simply better leverage their existing technology investments. These developments may have curtailed further development or continued experimentation on exchanges as a viable B2B business model. Nevertheless, firms continue adapting to the new electronic tools and many are finding further ways of adding value. The B2B firms that do the best tend to be highly focused upon bringing value to specific business processes, often limiting themselves to particular industries. They may focus, not upon multiple transactions and selling their products to entire industries, but rather upon individual enterprises.

Individual firms have been able to achieve various sorts of cost advantages through utilizing electronic tools, but many of the obvious cost saving have quickly been achieved –most of the low hanging fruit have already been harvested. For example the electronic parts supplier, Amp Corporation, utilized the internet by creating a searchable catalogue of the huge number of electronic parts that it produces. This saved Amp millions of dollars in catalogue printing and mailing costs.

The real advantage for many Amp customers, however, was not the simple change from a catalogue format for its products to an on-line format. Establishing an on-line catalogue enabled Amp to provide continual product quantity and pricing updates. Amp customers valued quick access information on new products and regular updates from their important parts supplier. Thus while companies such as Amp used the net to lower costs, yielding immediate savings by putting their catalogue on-line, what their customers valued was its currency, the faster reactions to meeting their needs, and doing this in close to immediate or "real time" terms.

Strategic Advantage

On-line catalogues are also selling and promotion tools. These catalogues now appear to be an obvious growth in internet software technology, having proven effective in different instances. Efforts of firms to offer on-line transaction systems have now been renamed and glorified as "private exchanges" by McKinsey consultants who advise firms on their internet marketing efforts. McKinsey notes that fifteen percent of all Fortune 2000 companies have set up private exchanges, and an additional 28 percent plan to have one by the end of 2003 [6].

Establishing on-line capabilities can serve various types of strategies. McKinsey explains, however, that only a handful of suppliers have the value chain power and the interaction capabilities to draw customers to their own exchanges [6]. The ones that do include established firms such as Cummins, GE, Dow, and Honeywell. Firm that can start their own exchanges tend to have a "privileged position in its customers' supply chains" as well as well-integrated IT systems and data-management skills.

Once on-line procurement and supply systems are established, they can continue to create opportunities for interaction that aid the firm's marketing capabilities. On-line systems need not be simply limited to order taking or coordinating product flow. For example, B2B firms are now quickly moving on the goal of exchanging inventory information with their partners in real time; they are developing the software and systems to enable managers to follow up on purchase orders with even faster confirmations, making the process of providing product specifications, prices, and availability of products less time consuming.

Fast order systems serve strategic marketing purposes. Fast confirmation tends to lock in purchases, particularly if customers have little time to seek better prices or little motivation to test another supplier's quality. Continually reducing transaction time generally reduces the customer's total cost; hence customers have an incentive to continue their relationship. Hence, private on-line systems of this sort create a secondary effect to enable better marketing through facilitating interaction.

Increased Data Capacity

In spite of the shakeout among internet stocks that has been occurring for the last few years, usage of the internet among B2B firms continues unabated. This is apparent, first in the huge volume of email, but also in the increased usage of intranets and expanding internal corporate communication systems. Firms strive to consistently deliver measurable and dependable supply chain results, and this requires better internal integration.

Better information sharing brings about improved capabilities to avoid the "bullwhip effect" –the tendency of orders and inventories to shift to extremes of oversupply and undersupply in the supply chain due to shifting order cycles rather than "real" needs. To avoid the bullwhip effect, suppliers and distributors need to share information throughout the supply chain [8]. And as firm share information, efficiencies from better supply chain management practices have taken root in many industries –this realized level of cooperation among partnering B2B firms brings new opportunities.

More effectively managing the supply chain processes through information sharing builds trust among supply chain partners. Improving partner "interactions" (i.e., the process) are much more important than making individual "transactions" (i.e., getting a short term end result). Firms are looking beyond the management of the supply chain and are creating new uses of electronic tools. Internet tools continue to be developed in a way that provides further value added features, but these are now being directed at enhancing customer relationships and fall under the rubric of "CRM" –customer relationship management (or continuous relationship management).

Continuing advances in computing power, communication technology, software systems, data gathering, and the lowered costs of storage have brought about new capabilities that have changed fundamentally how firms go about their marketing activities.

Data Gathering Enables CRM

The focus and purpose of CRM systems differ fundamentally from supply management tools and systems. Unlike the operational decisions and procedures that form the basis for supply chain management systems, the primary focus behind data gathering is to better understand customers. When a firm has better data on the products and services that customers value, managers are equipped to be much more selective in the way that it competes. Managers can choose market segments and tailor its offerings accordingly.

Having more targeted and satisfied customers is a strategic goal that is recognized to create sustainable competitive advantage, hence the principles of CRM are based upon sound strategy and marketing principles. Many CRM projects have the potential to transform marketing practices within the firm, but many hurdles remain. Both large and small companies now have the capability to routinely collect and store huge volumes of information about their customers. These multi-tier data collecting capabilities need to be coordinated and developed.

To facilitate this process of information gathering, technology providers have developed a variety of new software, systems, and services to link and store data. Software providers have created sophisticated tools to facilitate the collection of data on customer activity, but the increased abilities to gather data has completely outpaced the capability of marketing staffs to absorb, analyze, evaluate, and apply the information.

CRM software products can offer little real value if the underlying values and needs driving the market are not understood. Defining the critical product and service market variables for numerous customer segments is often extremely difficult. Firms may create software support systems to achieve better capture of customer data, but analyzing the data and assimilating new knowledge within the firm also makes the task doubly complex.

B2B CRM: Conditions for Successful Implementation

Effective CRM programs focus on building customer relationships, not just creating databases about customers. In the B2B area, however, firms have developed the systems and have motivation to share information. CRM serve to improve this knowledge about their partners. New levels of customer knowledge can allow gains in marketing decision-making. There are conditions that must be met to achieve these gains; some of the issues are spelled out below.

1. As noted above, intra-organizational co-ordination matters. Because of new modes of communication (including email, bulletin boards, and even cellular phones), the ability to collaborate and share information within the firm has increased dramatically. The front-end of the organization (e.g., sales, service, and marketing) can more effectively communicate with the back-end (product management, development, and supply). In fact, this internal capacity is a requirement for effective CRM systems.

2. Better information flow can be used to bring about better inter-firm relationships as managers customize information to their counterparts in partner firms. Information needs vary as managers within an organization go through their decision-making process. For example, a buyer might need detailed pricing information; engineering teams are most interested in performance and product specifications; logistics need to coordinate transport modes; and senior management might be more concerned about supplier financial stability. End-use customers might need different types of information at different times during the buying process. The internet gives the various parties more ways and opportunities to communicate, allowing much richer, multi-party, and interconnected relationships to develop.

3. On-line sales or procurement channels do not necessarily lower costs. Though the on-line channel is generally held up as a lower cost way of serving customers, this is true only if costs are eliminated in some area of the organization. Unless a firm integrates it processes and procedures, costs are unlikely to be eliminated simply by setting up an online system.

4. CRM in industrial firms are not about loyalty programs. In consumer industries like retailing and credit cards, customers generally deal with more than one company, hence developing loyalty and managing migration can be vital. Though it is true that loyalty programs can substantially benefit B2B marketers, information sharing needs are much more important. B2B firms strategically need to advance key technology and better coordinate product flow, and CRM is much more focused upon these goals.

5. Successful CRM programs vary considerably across different industries. The utility of actual application software sold under the name of CRM or CRM implementation vary considerably. Needs vary across regions, across different industries, and across different business segments, so stories of both success and failure of new CRM systems are likely to multiply in the years ahead.

Conclusion

The internet has enabled fundamental changes to occur in B2B marketing practices. Many firms are now regularly tracking satisfaction and defection rates, and key product and service decisions are based upon these metrics rather than simple segmentation and targeting practices of the past. As firms become interconnected, the effort to apply the new principles of marketing that are based upon relationship management are slowly changing marketing and promotion activities in industrial firms.

CRM involves both new software and new management practices and attitudes. Certainly the software to support these new developments is at an early stage of development. Electronic procurement, on-line inventories among suppliers, and other electronic supply chain enhancements need to be accompanied by management practices such as strategic sourcing and process streamlining. This prepares the way for new advances.

Suppliers may be persuaded to work with their large customers on B2B marketplaces, electronic procurement, and other similar projects mostly by promises of reductions in their transaction costs, but this is only the beginning. Today managers need further training to help them better apply the newer internet technologies and integrate them into their systems, and the education to conceptually understand the strategies guiding the process. Implementation is likely to be slowed by these education and training needs more than any other factor.

Unlike the rather rigid EDI systems that have linked firms in the past several decades, information systems utilizing the internet can provide a more robust means for firms to form closer inter-firm relationships. This is primarily due to the inherent accessibility and interactivity of the internet. Increasingly, this interactivity will aid the marketing transformation to bring about more effective organizations.

References

[1] Boslet, Mark, 2001, May 14, "After the B-to-B Revolution", accessed on Dec. 2001 at http://www.thestandard.com/article/0,1902,24176,00.html

[2] Cane, Alan, 2000, report dated Feb.11, accessed on March 20, 2000 at www.netb2b/com.

[3] Dorien, J. and Wolf, W. 2000. A second wind for ERP. *The McKinsey Quarterly*. 2, pp. 100—107.

[4] Grande, C., 2001, " "Ford recoups investment in Covisint web exchange," *Financial Times*, July 1, p.20.

[5] Grande, T. and A. Hill, 2001, "Big Business Get to Grips with Net Savings" *Financial Times*, March 6, p. 20.

[6] Hoffman, W., J. Keedy, and K. Roberts, 2002, "The Unexpected Return of B2B," *The McKinsey Quarterly*, 2002 Number 3.

[7] Holmstom, J. et al., 2000, The other end of the supply chain. *The McKinsey Quarterly*, 1, 62—71.

[8] Lee, Hua, V Padmanabhan, and S. Whang, 1997, "The Bullwhip Effect in Supply Chains," Sloan Management Review, Spring, pp. 93-102.

[9] Reuters Online. March 4, 2000. "The impact of e-commerce on business to business", and Believe all the hype about B-2-B.

[10] Rheault, Dennis and Steve Sheridan, 2002, "Reconstruct your business around customers", Journal of Business Strategy, March, v23, i2, p. 38(5).

[11] Sarkar, M. B., Butler, B., and Steinfield, C. 1995, "Cybermediaries in the Electronic Marketplace," *Journal of Business Research*, 31 (3) 215-222.

[12] Sarkar, M. B., Butler, B., and Steinfield, C., 1998, "Intermediaries and Cybermediaries: A Continuing Role for Mediating Players in the Electronic Marketplace," *Journal of Computer Mediated Communication*, 1 (3) (http://jcmc.huji.ac.il/vol1/issue3/vol1no3.html).

Internet Internationalization Strategies by US and EU Services Marketers

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Abstract

E-commerce is a potent force worldwide, though little attention has been addressed to conducting such business across borders. This paper reports exploratory research on the internationalization of websites to accommodate and encourage cross-border sales. A comparison between US and European service providers' websites indicates Europeans are more attuned to these factors by offering more user-friendly facilitators including more languages, credit card alternatives and currency converters, as well as more adaptable addressing formats for the purchaser.

The advent of electronic commerce is changing the very nature of market exchange. Communication modes and messages; distribution channels and logistics; and segmentation processes and relationship strategies, to name a few aspects, are all undergoing transformation. Chronicles of these changes are generally considered in the domestic context, however, the Internet provides ease of access to cross-border markets unlike any other market mechanism. This paper will examine some of the challenges that confront Internet marketers as they enter international markets and demonstrate differences in European Union and United States' firms' efforts to reduce impediments to completing international services transactions. Its goals are applied and normative. Revealed practice should offer guidance to those marketers seeking to leverage their website for international business development.

Literature

Marketing scholars have recognized that available theories may be inadequate to fully describe impacts of Internet marketing. Mahajan and Venkatesh (2000) have summarized essential literature which identifies material changes in markets as a result of the Internet, perhaps the most profound of which is the Internet product, which may be in the form of intermediary information or may be end product, such as music or magazines published on the web. Channels are affected by the ease of disintermediation, competitiveness by the ease of comparison shopping, and segmenting by the richness of information that can be captured from the e-consumer. In many respects, e-commerce is merely a variant of traditional non-store shopping. Sindhav and Balazs (1999) discuss similarities and differences. Using value chain modeling, they identify factors that contribute added benefits to the consumer, such as convenience and selection, which make e-commerce a viable alternative to pre-existing retail formats.

Since the Internet can be accessed worldwide, the application of the web to international business development is apparent, and many of the issues specific to international marketing have been discussed. Quelch and Klein (1996) suggested that the reach of the Internet will lead to more rapid internationalization of business. Global advertising costs and other current scale economies as barriers to entry will be reduced.

Hamill (1997) proposed that access to information will force pricing toward standardization across borders and value added by channels players will shift from simple physical distribution to information management. Barriers to internationalization will fall as the Internet provides an efficient platform for expansion to companies formerly excluded. Psychological barriers will be eased by access to international information and inquiries and feedback from abroad. Operations will be simplified by electronic processes and payments; organizational barriers will fall due to reduced reliance on traditional foreign partners; and product/market decisions will be eased by access to market data.

Services are characterized by four traits - intangibility, simultaneity, heterogeneity, and perishability - and the challenges of these traits are exacerbated in international delivery because of the increased distances between producer and consumer - physical, economic, cultural, legal, political, and technological (Berthon, Pitt, Katsikeas, and Berthon1999). However, the authors argue that the Internet overcomes many of these impediments, and they detail techniques for managing service traits through websites to meet the needs of international customers. Nonetheless, some argue that the fit of the Internet to international marketing has limitations. Samiee (1998) developed a model of Internet applications in international marketing in which he identifies structural and functional impediments. The former include overseas market limitations such as penetration of PC ownership, access to the Internet, cultural and regulatory restraints. The latter are the additional challenges largely associated with managing the marketing mix.

Notwithstanding the growing importance of the Internet to international marketing, little empirical literature exists in the area. One exploratory survey of UK exporters measured perceived benefits of the Internet to export marketing by firms that maintain websites and perceived drawbacks by firms that do not maintain websites. Insights gained were that websites were believed to generate international awareness of the business, ease foreign customers' ordering, and lower the cost of international marketing (Bennett 1997). Another exploratory piece examined respondents' evaluations of a small sample of websites of US and foreign purveyors of food online. US sites were generally rated more highly, and specifically on items concerning product, company, and shipping information. The authors do report anecdotal comments made by respondents that criticize some foreign sites for poor English, lack of currency equivalencies, and absence of shipping options to the US (White 1997). No research has been identified by this author that has explored website design elements specific to cross-border marketing.

Study

A qualitative study was conducted on 100 websites of service providers that have potential to engage in business with customers outside their home market. The methodology used was content analysis in which the five characteristics under study were coded by research assistants and corroborated by the researcher. Because the rate of change in Internet practices is so rapid, the data collection for the exploration was conducted over a brief six-week period in early 2001.

This study examines how companies use websites to facilitate business transactions across borders. A pilot study of 40 US firms in five manufacturing, retailing, and service industries had identified five characteristics of websites that evidence the company's commitment to developing international clients by reducing impediments to cross-border purchase of services. Characteristics identified that facilitate international business through a website were 1) multiple languages; 2) foreign mirror websites (i.e., replication of the site in a foreign language, with a site often hosted in a target market of the foreign language); 3) currency converters; 4) acceptance of non-American-based credit cards for purchase; and 5) flexible address format.

This exploration looks at these five traits across international geographies - the United States (US) versus the European Union (EU) - and across industries. These geographies were chosen because they represent the two of the largest and most technologically advanced economies in the world. The pilot study surfaced operational differences among industries that dictate parameters of website content, so multiple industries were chosen for sampling to avoid the idiosyncrasies of one. Although product industries routinely present more international logistics challenges than services, service industries were found to differ more in their dimensionality. The particular mix of traits that a service possesses - intangibility, simultaneity, heterogeneity, and perishability - distinguishes the delivery systems available to that service provider. Five service industries were chosen, to include location-bound and unbound industries.

The n = 100 sample comprised 10 United States and 10 European Union firms in each of five business-to-consumer services industries. In order to reduce confounding, firms located in countries with more than one official language (e.g., Belgium) or with English as an official language (e.g., United Kingdom) were excluded from the EU sampling.

Four service industries researched represent the four primary categories of Kostecki's (1994) typology of determinant characteristics in internationalizing services. Exemplar industries and their respective categories are: international passenger airlines (transportable service with mobile production), education (transportable service which is exportable), international hotel chains (location-bound service with transferable concept), and ski resorts (location-bound service with non-transferable concept). A fifth industry chosen is wireless application protocol (wap) portals, specialized websites that provide Internet connectivity for cell phones. This service transcends pre-Internet typologies in that it is a uniquely Internet-delivered service. This breadth of service industries types ensures trait heterogeneity for identification of across-industry differences.

The sampling frame was firms in the respective industries maintaining websites. Subjects were drawn from the highest ordered website listings from Internet keyword searches targeted at the respective industries. Because of trait differences, additional sampling considerations applied to each industry. Wap portals are unbound locationally and are by their nature internationally accessible. On-line education is also unbound and is capable of complete Internet delivery in synchronous or asynchronous mode and with complete interactivity. It is an efficient, if impersonal, variation of the traditional delivery form. Wap portals and education providers in the sample were physically located in only one country.

The other three industries possess important operational distinctions, but each is travel related - ski resorts, international passenger airlines, and international hotel chains. Each can inform, book business, and provide collateral services over the Internet, but unlike online education and wap portals, these industries can only deliver their essential service through physical contact. Ski resorts typically sell access to ski lifts and provide equipment rentals; slope maintenance; and food, beverage, and accessories sales. The operator has strong interdependencies with local hotels, restaurants and other sports and entertainment activities. In this sample, ski resorts are stand-alone, unaffiliated properties that draw clients to a single operational center. International airlines are operator-owned networks of interdependent nodes in which each client must travel between nodes in the airline's network. Hotel properties in international chains are characteristically owned by local investors but managed by the hotel brand's management company. Hotels thus share much common marketing presence and cross selling, but in many ways individual properties operate autonomously from other chain members. Hotels, like ski resorts, serve clientele internationally by communicating with a prospect in a foreign market and attracting the prospect to the physical site to consume the service. With respect to airlines and hotels, the sample was limited to firms with service delivery nodes in at least three countries.

Across-Industry Findings and Discussion

The main objective of the study was to examine whether there are differences between US and EU service providers in using the Internet to internationalize their market offerings. Certain Internet marketing practices demonstrate responsiveness to needs outside one's own country, therefore a more international orientation. Results of the counts from the content analysis on these traits, with a maximum possible of 10 per cell and 50 per trait per geographical entity, are given in Table 1.

Table 1
INTERNATIONALIZATION TRAITS OF SERVICES WEBSITES: OBSERVED FREQUENCIES OF OCCURRENCE

Trait	Origin	Wap Portals	Education	Ski Resorts	Airlines	Hotels	Total
More than one language	US	2	3	2	2	1	10
	EU	7	6	10	9	8	40
Foreign mirror sites	US	2	1	0	1	1	5
	EU	8	3	1	10	6	28
Currency converter	US	0	0	0	0	7	7
	EU	3	0	5	1	7	16
Foreign-based credit cards	US	N/A	2	1	2	7	12
	EU	N/A	4	4	8	10	26
Flexible address format	US	1	2	1	4	3	11

EU	4	4	4	10	10	32

The first two website traits of internationalization relate to communicating with a foreign audience. The first is the availability of multiple languages through the marketer's websites. EU firms excel in this dimension with 40 sites offering multiple languages as opposed to 10 for US firms. In addition, of those sites with more than one language, the Europeans have a much higher number of languages per site. Related to this measure is the use of complete mirror sites targeted at foreign segments. This action usually suggests corresponding use of a foreign language, but sometimes it involves only localization of content, vocabulary and spelling preferences in the same language. Twenty-eight EU firms had mirror sites for foreign markets, while five US firms did.

The other three important internationalization traits relate to consummating the transaction. Most pricing on the web is denominated in the currency of the country of the vendor, but many consumers want to know the value in their home currency. Some sites have currency converters whose rates are updated daily or even in real time. Of EU firms, 16 had currency converters, but only seven US firms did.

Another transaction facilitator is offering a payment mechanism suited to the foreign consumer. For this category, wap portals are excluded because while most facilitate purchases for other vendors, wap portals do not charge for access to their own basic services. Some hotel chains and ski resorts did not provide any web-based payment mechanism. Otherwise, results show that many American vendors accept payment from among Visa, Mastercard, American Express, Discover or Diner's Club cards, all of US origin. Only 12 US firms accept payment or bookings by non-American based cards such as Eurocard, Switch/Solo, Carte Blanche, or JBC. Twenty-six EU firms accepted both American and non-American cards.

A final impediment to transacting a sale on the web is the inability of the prospective customer to provide an accurate mailing address. Most American websites contain address software that requires a US state and zip code, or a corresponding Canadian province and mail code. This prohibits anyone outside those countries entering an address that will be accepted by the system, thereby defeating the transaction. In all, 32 EU websites had flexible (i.e., international) address-entry formats, while only 11 American firms did.

It is abundantly clear that relative to American competitors, EU firms' websites excel in multilingual communication and facilitating cross-border transactions. This is true not only across these services industries studied in aggregate, but within each industry-by-trait contrast. Why is there such divergence? The underlying characteristics of the geographies contrasted lead to the inference. EU countries are physically closer to many more countries with different languages and cultures than is the US. Relative to the US, their students study languages extensively, and their people vacation internationally. A higher percentage of businesses engage in international business, and a higher percentage of their economies are involved in international trade. Conversely, the US economy is huge and distant from major markets other than the highly compatible, predominately English-speaking, Canadian market. Its isolation and superpower status may contribute to ethnocentrism and a sense of not having to be accommodating internationally. With respect to language sensitivity, not only has English become the universal language, but when American firms do go international, they often follow an English-language expansion pattern, so perceived need for using foreign languages is diminished.

Two other interesting findings emerged unrelated to industry or origin of the vendor. First is the implication of using a second language on a main site or for a mirror. An inference drawn from the analysis is that the first foreign language used on a website is often not the language of the vendor's largest foreign market. English is overwhelmingly the second language on European sites in which the home language is not English, whereas Japanese is the most common single foreign language found on US-based sites.

The reason for English as a second language is its universalism. An Italian website might communicate with more prospects in English, even though the firm's largest foreign markets may be France and Germany. The reason for Japanese as a second language on sites whose primary language is English may be to capture the largest language segment that is not expected to function adequately in English. Whereas speakers of European languages, especially Spanish, may constitute a larger actual or potential customer base for a US service provider, the Spanish-speaking target audience may be assumed to be sufficient in English.

The other finding concerns the challenge of how the website operator organizes foreign links or mirror sites. Some sites allow selection of a country mirror site, while others allow selection by language. For instance, a Spain mirror site will be in Spanish, but it will have information and a currency converter specific to Spain. For a Mexican or an Argentinian who wants a price equivalent in their own currency, this is not useful. Nor is it for a Dane who wants information on Mexico or Argentina. On the other hand, when mirror sites are organized by language rather than country, they tend not to have local information of the respective countries. A corollary exists with English and other languages as well. An additional marketing issue is language variation such as American or British English. The obvious solution is to have sites for all countries in their own languages, but that could be an extremely expensive solution.

Within-Industry Findings and Discussion

A second objective of the study was to verify that industry usage of the web for international business development varies across industries, and further, that there are differences in trait usage between US and EU providers. Because there were only 10 subjects from each geography within each industry, counts on any trait would be too small to draw conclusions. This discussion will focus on tendencies observed that would be the basis for more detailed future study.

Wap portals are the window to the Internet for mobile telephony. Because navigating the web is difficult on a mobile phone with a small screen and limited keypad, the home portal is a more important feature than on a computer. EU wap portals have more extensive national content and contacts offered for more countries than US providers. EU providers also have better special support for languages such as letter variations not used in English, for example, umlauts and tildes.

On-line education is characterized by service delivery on the web in a cost-efficient, interactive mode. Web programs are generally partnered with bricks and mortar operations, and accreditation was an obvious concern on both sides of the Atlantic. There are no special differences observed between US and EU firms.

Ski resorts usually have tourism information and provide directions to the site by road. They often have joint promotion with complementary services. Many sites are not informative and do not allow purchasing services over the net. A possible explanation is that resorts serve two major segments. The weekenders are local and are well informed, needing little support. The vacationers are likely to organize their holiday through a value-added intermediary, travel agents or airlines, who provide necessary marketing communication. Differences between US and EU sites are that hardly any US ski resorts give any recognition of an international market, while EU resorts do. Also, Europeans more often co-market with competitors at nearby sites. This industry was the only one studied in which URLs were difficult to find by trial-and-error. Europeans were sometimes included in a regional tourism site, and Americans sometimes had the resort name preceded by the word ski.

Airlines have many distinctive features which appear in the majority of sites. They are the only industry studied in which many competitors require membership to access reservation software. The reservation systems are interactive and effective. Their marketing usually includes alliance partnerships, frequency programs, and route maps. They characteristically have links to complementary travel services. Differences are that European airlines have more mirror sites, and while most EU and US airlines have some travel information, EU airlines tend to focus much more on national promotion. However, many EU airlines are flagship carriers, whether public or private, and their business is more international.

Finally, hotels, like airlines, have alliances and frequency programs, but unlike airlines, payment is not exacted over the web. Also, because of their greater physical distinctiveness than airlines, hotels often offer virtual tours of public areas and rooms to enhance credibility. US and EU chains differ in two significant web uses. US hotels accept credit-card-hold reservations, without payment, which occurs only on completion of stay. Several EU chains required reservations to be conducted off line. The other difference is that US systems tend to connect to central reservations of the chain, while European tend to connect to individual sites.

Managerial Implications

The Internet is primed to become increasingly important in marketing communication, marketing research, and transaction facilitation. Because website reach is inherently cross-border, international imperatives should drive the website design of any cross-border, e-commerce aspirant. Much attention has been given to the notion that the web is a size equalizer - that with nominal expenditure, small companies can establish a credible web presence to compete with larger rivals. A corollary exists on the cultural dimension. At relatively little cost, a firm of substance can create a web presence with the same cultural and cross-border elements as its more culture-savvy competitors.

In the context of this study, European Union firms have demonstrated far greater sensitivities to communication and transactional closure with customer prospects outside their home markets than have US firms. The advice to EU firms is to continue to improve their web offerings to foreign markets to protect their lead. However, because the costs to internationalize a website are mostly fixed, and for global firms of any origin, the costs are relatively small, the prognosis is inexorable erosion of the European advantage. The advice to internationally-competitive American firms on internationalizing their websites is captured in the slogan of one of their number - "Just do it!"

References

[1] Bennett, Roger (1997), "Export marketing and the Internet: experiences of web site use and perceptions of export barriers among UK businesses," *International Marketing Review*, 14(5): 324-344.

[2] Berthon, Pierre, Leyland Pitt, Constantine S. Katsikeas, and Jean Paul Berthon (1999), "Virtual services go international: International services in the marketspace," *Journal of International Marketing*, 7(3): 84-105.

[3] Hamill, Jim (1997), "The Internet and international marketing," *International Marketing Review*, 14(5): 300-323.

[4] Kostecki, Michel (1994), *Marketing Strategies for Services:Globalization, Client-orientation, Deregulation*. Oxford: Permagon Press.

[5] Mahajan, Vijay and R. Venkatesh (2000), "Marketing modeling for e-business," *International Journal of Research in Marketing*, 17: 215-225.

[6] Quelch, John A. and Lisa R. Klein (1996), "The Internet and international marketing," *Sloan Management Review*, 37 (Spring) 60-75.

[7] Samiee, Saeed (1998), "The Internet and international marketing: Is there a fit?" *Journal of Interactive Marketing*, 12(4): 4-16.

[8] Sindhav, Birud and Anne L. Balazs (1999), "A model of factors affecting the growth of retailing on the Internet," *Journal of Market Focused Management*, 4:319-339.

[9] White, Gregory K. (1997), "International online marketing of foods to US consumers," *International Marketing Review*, 14(5): 376-384.

Next Challenge for Global Online Companies: Rethink Metrics for Success

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Abstract

In the last decade, the pure-play Internet companies - dot.coms – have been able to cover a lot of sins of omission and commission with explosive or extra-ordinary growth, which have been rewarded by the stock market. The recent drop in the value of dot.coms has shown that the prospects of extraordinary growth seem to have dimmed. Such businesses have to consider the operating efficiencies that could be the only source of cash to reinvest and grow the business. The traditional financial analytical metrics of businesses are useful methods of arriving at the level of sustainable growth for companies that either do not want to or are unable to raise external capital from debt or equity markets. This so-called sustainable growth is a function of the profitability level and the asset turnover of the businesses, which have not been the focus of online businesses heretofore. It is time to consider such traditional views to examine their application to the pure-play Internet companies.

Introduction

In the last decade, the pure-play Internet companies - dot.coms – have been able to cover a lot of sins of omission and commission with extra-ordinary growth that has been rewarded by the stock market. The recent drop in the value of dot.coms has shown that the prospects of extraordinary growth seem to have dimmed. Such businesses have to consider adopting significantly different metrics, emphasizing operating efficiencies.

The key aspect to rethinking metrics for online companies is to clearly separate operating efficiency type measures from performance measures. Confounding the two categories of metrics can lead to unexpected results in the marketplace, as can be seen in the following situations:

1. Measures of performance created recently for the online world have suddenly found disfavor, partly because such measures are not proving to be good proxies for financial performance. For instance, *click-through rates* for banner ads were - and, in many cases, continue to be – commonly used metrics for evaluating the effectiveness of such ads. However, the recent trend is to look beyond just the click-through performance of such ads and evaluate the ads based more on performance-oriented metrics such as *additional revenue* or *lowered cost of customer acquisition*. The key requirement here is to separate *operational* and *performance* metrics.
2. Metrics reflect the underlying economic structure of firms. Traditional metrics such as ROI (return on investment) and ROA (return on assets) are not sufficient for global online firms as such internet enabled firms require more human capital than technology or material assets, thus requiring different sets of *operational* and *performance* metrics.
3. From a shareholder's perspective, the worth of a business is the net present value of its future cash flows discounted by the cost of capital appropriate for the business. A business driven by shareholder-value concentrates on cash flows rather than profits. Several dot.com companies pushed shareholder-value as an exclusive corporate goal without separating *operational* and *performance* metrics. Such online firms that consistently fail to show a profit by satisfying their customers are acting against the long run interests of shareholders.

The purpose of this research is to develop a framework for global online companies to rethink the metrics they utilize to achieve success. Specifically, the contributions of this research are to: (a) demonstrate the application of traditional financial analytics to pure-play Internet companies and other hybrid online companies and (b) separate *strategic operational* metrics from *performance* metrics for global online companies.

Understanding the *proper* way to measure performance is critical. This is particularly important for companies that enter into strategic alliances [3]. Business models based on strategic alliances have become very popular in the networked, online, world marketplace. Thus, developing and utilizing good metrics is critical for today's e-businesses. In a recent survey of purchasing professionals, 40% said that their companies lack the metrics needed to drive continuous improvement or to change market behavior. Moreover, many feel that the measurements now in place don't measure the tings that count in competition [6]. The primary complaint is that the metrics used record business transactions – not performance. Thus, commonly used metrics generally push *conformance* over *performance*.

Traditional measures of financial metrics have been directed from three points of views:

1. Managerial view for Efficiency
2. Creditor view for liquidity
3. Owners view for profitability

These points of view may be in conflict with each other from time to time; for example, creditors would like a lot of liquidity while the owners and managers would find that to be wasteful. Stewart-Allen [7] emphasizes that businesses need to understand where their corporate wealth comes from – the market. Thus, it is important in choosing appropriate metrics to pick those that are not just customer-oriented but also explicitly connected with financial performance.

Nevertheless, there are acceptable methods of examining the metrics with the specific point of view that may shed some light on the challenges that dot.coms will have once they are viewed not as the latest and the most exciting businesses, but maturing and sustainable ones.

Managerial view for Efficiency

The following measures are traditional areas of focus on efficiency factors. Later in this paper we will examine the application to the dot.coms of each of the criteria.

- Cash management
- Accounts receivable management
    - Cost of obtaining customers versus retaining customers
    - Collection period and average days sales outstanding.
- Inventory management
- Fixed Assets management
    - Traditional trade off of economies of scale versus the flexibility of variable cost.
    - The degree of dependence on volume as the direct result of higher fixed costs.
- Accounts Payable Management
    - Speed of payment to vendors
    - Billing cycle versus earning cycle.

Creditor's view for Liquidity

The creditors generally are focused on liquidity measure to judge the collect-ability of the financial obligations of a firm. While in dot.coms the bank lending is fairly rare, the vendors, and employees are still a large target area for providing working capital for the businesses.

- Total debt (or debt equivalent) to operating Cash Flow
- Operating cash flow to fixed costs

Owners view for profitability

The owners expect a risk-adjusted rate of return on their investment. Traditionally, the returns were a combination of dividends and capital gains. In the dot.com world it is quite likely that no dividends have been paid or likely to be paid in the near future. Therefore, the return to owners is through capital gains (increase in stock price), which is correlated to growth levels likely to occur for the business in its revenues, profitability, and dividends if any.

- Return on Investment or Asset (ROI or ROA)
- Return on Equity
- Sustainability of Growth Rate in Sales and Earnings

Application of the traditional measures to dot.coms

Before we look at each of the items above, it may serve to check on a few definitions that would serve as the corner stone of the applicability of the concepts and the measurements of traditional financial analysis to the dot.coms.

What is an asset? An asset is a future benefit.

What is an investment? An expenditure of cash in creating an asset.

What is an expense? An expenditure of cash without creating an asset.

What is a customer? An asset … maybe! It could be a short-lived asset and an eventual expense!

The purpose of focusing on the definition is to point out the major difference between the traditional businesses and dot.coms. In most traditional business, the level of investment is cumulative. When an old plant is modernized, the value of the old plant investment is enhanced by the new investment. In other words, the old plant would have retained some value in itself, but modernization increases the base value. Hence, the assets structure is maintained or improved and fairly infrequently damaged.

By contrast, in the high technology driven world of the dot.coms, the investment in a new server, web page, or process is frequently at the expense of the complete abandonment of the old asset, which remains, functioning but technologically obsolete. Other than the list of customers, the dot.com may very well have to write off the old investment without a full chance to recover a measure of profitability. In that sense, the measures above should not be the historic investment added together, but only the asset values currently in use and potentially able to produce future benefits.

With these few definitions, let us examine the traditional metrics in the field of e-commerce.

Managerial View of Efficiency

Cash Management

Most of the companies in dot.com world are perennially short of cash and therefore are very efficient users of cash! However, it is possible that with the slow down in their growth prospects, the surviving firms would have additional cash on balance sheet. Microsoft, arguably a company without much parallel, has been a cash hoarder with ten to twenty billion of dollars on its balance sheet. It seems to be an inefficient use of funds, but it may be justifiable for the need for cash in both offensive (takeover) and defensive (price wars) purposes of the company.

Accounts Receivable Management

Many pure-play Internet companies never reached the level of generating revenue streams. Investors, impatient of waiting for business models to realize value in the marketplace, simply pulled their investments or refused to pump in additional funds. From the perspective of collections on sales, those dot.coms that do get to the point of generating viable revenue streams, are probably good in collecting from B2B or B2C customers as most of their sales is in credit card charges or transactional fees and therefore immediate. However, many dot.coms' are based on complex business models where the revenues are from sources other than their customers, such as advertisers. The speed of collection is therefore a measure of efficiency that may have applications to our targeted sector.

Another aspect of the issue is the traditional marketing/financial framework of cost of acquisition of a customer and cost of servicing one. The dot.coms with trouble tend to show significant cost of acquisition and high turnover (WingSpan, the internet bank, was alleged to have spent $50,000 per customer and had an annual turnover rate of customers of 67%). The surviving dot.coms may have to learn or re-learn the traditional formulas in this regard!

Inventory Management

This is an interesting issue facing the surviving pure-play Internet companies. The business concept underlying many dot.coms was the capability to provide superior navigation services to customers in search of products without the need to maintain physical inventory. This, they achieved by leveraging the digital properties of the Internet. However, a number of the online businesses have realized that some level of inventory is important for them as well: Amazon is establishing warehouses in multiple locations in the US to fulfill customer orders quickly and effectively. So, we have a partial migration of "clicks" to "bricks". Meanwhile, some "bricks' have migrated to "clicks". So we have Barnes and Noble establishing its own web-based bookstore in addition to its physical locations. The interesting question in this context is which one of the partial migratory patterns has a higher competitive advantage relative to the other. Barnes and Noble's existing level of geographically fragmented inventory in all of its individual stores could be an advantage if they could be pulled off the shelf to fulfill the click orders. If not, there would be no comparative advantage for Barnes and Nobles over Amazon in the inventory area.

In any case, it is likely that surviving dot.coms and other online companies are going to have to learn and practice the inventory management art (such as turnover management, just in time, etc.) to a much larger degree than initially thought or practiced.

Fixed Assets and Costs (versus Variable Costs)

The traditional review of efficiency here is examined through the asset turnover ratios, and to the extent possible, the choice of the level of fixed assets and costs versus variable ones.

Generally firms with high level of fixed assets and costs (high operating leverage businesses) have significantly higher dependence on volume. Generally, one or both of the nature of the business and the economies of scale drive the choice in favor of fixed costs. It is also normal to see fairly low marginal (variable) costs for businesses with high operating leverage. Since, in competitive markets, the price is lowered to the point of the variable costs, the contribution margins to pay for the fixed cost and profits is small. Therefore, the break-even point for the business occurs at fairly large volumes.

$$\text{Break-even Volume} = \text{Fixed costs} \div (\text{Price per unit} - \text{Variable Cost per unit})$$

Therefore, all other things being the same, any business, including online ones, would like to reduce the level of fixed costs and assets unless the economies of scale prevail in the choice.

Most dot.coms and other online companies have exhibited a dependence on large levels of fixed assets and costs in servers, Internet technologies and full time employees. The need to manage these costs have also given birth to "e-business aggregators" who pool a number of e-businesses together in amortizing the costs of servers, technologies and other expensive capital items. These "cooperative" approaches, however, do not eliminate the need for fixed cost; they only lower the fixed costs to each user. The aggregator would try to keep as much of the benefits of the economies of scale for himself as possible. So it is possible to have only a reduction in the cost and not a passing of the economies of scale to any individual member of a cooperative.

The other aspect of the fixed charges is the fact that they increase the riskiness to the owners and shareholders. As revenues fluctuate, the fixed charges do not decrease and therefore the return to owners would have higher fluctuations and therefore higher degree of risk.

Accounts Payable Management

Since many online companies such as the dot.coms do not have third party debt from banks and other financial lenders, their payables are to a number of vendors and employees-owners. Their ability to delay the payments may have a higher risk to damaging the morale of the work force or willingness of a vendor to extend credit, and therefore it is pretty limited.

Creditor's View as to Liquidity

The general approach of creditors - banks or vendors- is the ability of the firm to generate cash and the "capacity" to borrow money. The capacity is generally calculated through two ratios:

a. Debt to Cash Flow (Debt/EBITDA): The lower the ratio, the better for the creditor.
b. Cash Flow to Interest or fixed payments. The higher the ratio, the better for the creditor.

We will briefly discuss the first ratio. Earnings before interest, taxes, depreciation, and amortization (EBITDA) is generally viewed as an acceptable way of calculating the operating cash flow of the firm before financing charges, taxes, and any distribution to owners. However, many dot.coms do not have forma "debt" in the numerator of the ratio. The businesses do have a number of fixed payment obligations, however. Such as the lease payments for e-commerce technologies, space and salary cost that are expected to be fixed and not fluctuating. Financial analysts can obtain the fixed charges related to operating leases and other contractual language from the notes to the financial statements that the businesses would have to disclose publicly (if they are publicly held) or privately (to their vendors or creditors that demand them). Once the annual level is known, some assumptions could apply to "capitalize" the annual costs to debt equivalent amounts and apply the traditional ratio analysis.

Owners View as to Profitability

The two most commonly used ratios for profitability measurements are (a) return on asset/investment (ROA or ROI) and (b) return on equity (ROE). The latter is applicable only if there is debt in the capital structure of the firm that allows for levering the returns to owners by putting less equity and getting the benefits of dollars of investment financed by debt over the cost of debt. In case of the dot.coms, their lack of access to debt may make the two measures somewhat equivalent, so long as the capitalized value of the operating leases and vendors' claim is not high.

(a) The ROA measure can be adjusted as follows:

$$\text{ROA} = \frac{NetIncome}{AverageTotalAsset \quad / \, Investment}$$

If we multiply both the numerator and denominator by *sales* and rearrange the formula, we have:

ROA = [Net Income ÷ Sales]*[Sales ÷ Average Assets]

ROA = Profit Margin * Asset Turnover Ratio (I)

Therefore, the return on the investment is a function of (a) the profitability of the activity and (b) the volume of business. In strategic terms, the path to success is either through product superiority (higher profit margins) or through distribution channel dominance (higher asset turnover ratio). Generally, a firm can strategize to increase one at the expense of the other. So to continue to survive, the dot.com pure-play Internet companies and other online companies need to specifically pick one strategic path over the other and limit their cash expenditures in furtherance of that particular strategic goal.

(b) ROI, return on equity, can be written as:

ROE = Net Income ÷ Equity

If we multiply both the numerator and denominator by *sales* and *average assets* we have:

ROE = [Net Income ÷ Sales]*[Sale ÷ Average Assets]*[Average Assets ÷ Equity]

ROE = Profit Margin * Asset Turnover Ratio * Leverage (II)

ROE = ROA * Leverage (III)

Therefore, the return to owners could increase with a positive change in one or more of the three ratios in (II): improvement in profit margin, increase in asset turnover efficiency, and increasing leveraging by using more debt and less equity.

While the last strategy, increase in leverage, would accomplish the increase in ROE, it does not provide a free lunch. Added borrowing increases the risk to owners as it imposes a higher level of fixed costs (debt service) to the business. Therefore, it should be used with caution. There may be an optimal level of debt for a dot.com at which point the return to owners, on a risk-adjusted basis, could increase. Determining the optimum level of debt for any business is a bit of an art; it will probably be even more complex for an online company.

Variations of the traditional Return-On-Investment (ROI) model are being developed for a wide variety of users and uses in the Internet-driven markets. Traditional ROI measurements address revenue and cost reduction opportunities based on firms' internal efficiencies and their ability to penetrate new markets. However, the Internet allows firms to penetrate second and third-tier marketplaces that, in the "brick" domain, would have required a substantial increase in infrastructure investments. Moozakis [5] describes the makeup of a KPMG product, eValuation that attempts to take into account traditional ROI variables, such as upfront business development costs, as well as more Internet-based variables, such as additional sales generated due to leveraging the Internet. Products such as eValuation provide a much more realistic way of measuring ROI of firms competing in Internet-enabled markets. Such tools are extremely valuable as firms increasingly rush to implement e-business initiatives without going through an ROI valuation….only to find that investors are calling for a return to business fundamentals.

Shareholder Value

From a shareholder's perspective, the worth of a business is the net present value of its future cash flows – over a known time period – discounted by the cost of capital appropriate for the business. As Clarke [2] suggests, a business driven by shareholder-value concentrates on cash flows rather than profits. This means, shareholders come first as a corporate goal, even ahead of customer satisfaction. However, firms that consistently fail to satisfy their customers are acting against the long run interests of shareholders. Wall Street measures and reacts overtly to shareholder value – corporate earnings reports - formally every quarter. Whereas, customer satisfaction is measured at different times and the marketplace sends a continual stream of feedback signals to the firm.

Figure 1 provides an overview of the shareholder value creation process. Applying this chart to the recent dot.com fallout scenario provides some interesting food for thought: investors in failed dot.coms were primarily betting on purely on speculative, non-financial, technology-based metrics.

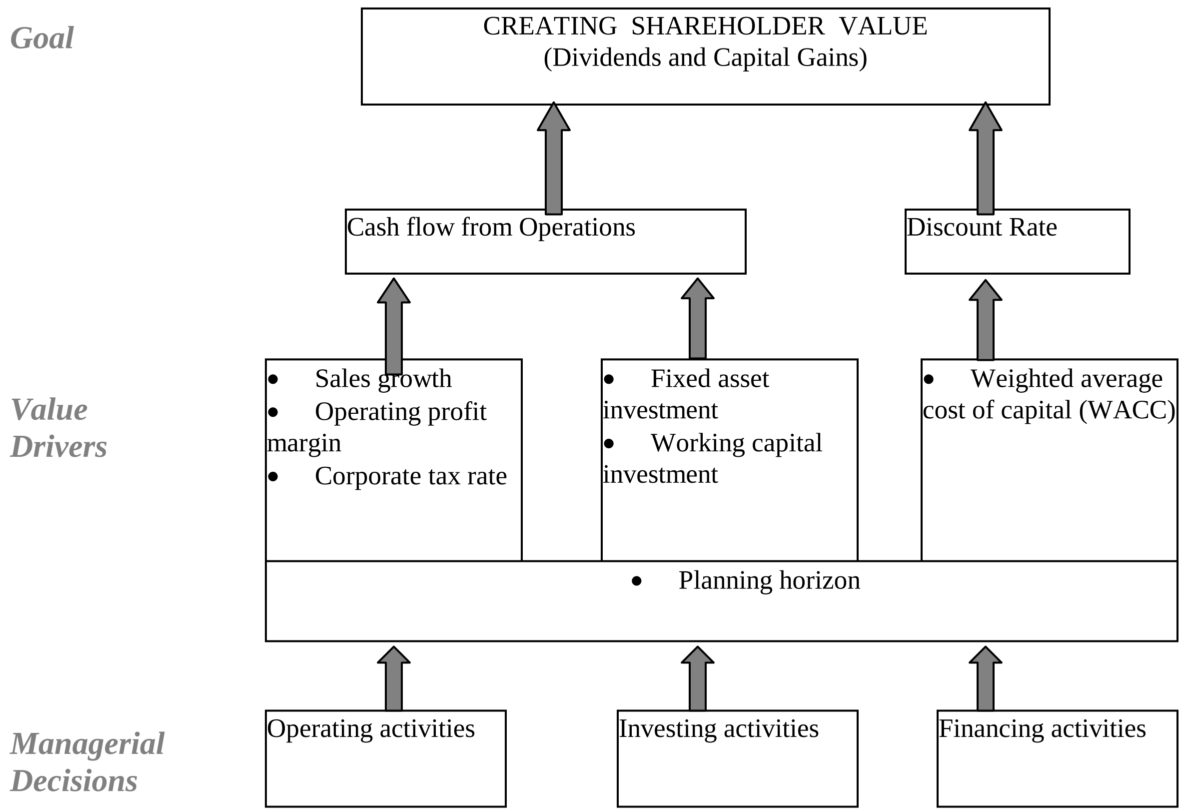

Fig 1: CREATING SHAREHOLDER VALUE

Fig.1 above is Table 1 from Clarke[2].Clearly, firms can create shareholder value only if they generate returns that exceed their cost of capital. Investments that are based on a presumed technology advantage, without a rational understanding of the potential for *sales growth*, *operating profit margins* or the real *cost of capital*, are speculative indeed. An important lesson for online companies, based on Figure 2, is that managerial decisions that seem very successful may in act be destroying shareholder value simultaneously. For instance, managerial strategies that accelerate potential (future) *sales growth* may destroy (current) value because of the necessary additional (current) *working capital requirements* and (current) *fixed asset investments*. In fact, according to Clarke [2], shareholder value can be lowered even though a firm reports increased accounting profits or Earnings-Per-Share (EPS).

Sustainable Growth Rate

Probably the most significant change to the surviving dot comes is that they may have to curtail their extraordinary growth rates and settle for what the financial analysts call “sustainable growth rates”. The sustainable growth rate is what the company may achieve without external financing raised in equity or debt. Therefore, the only remaining source of funds for reinvestment and growth would be the earnings of the company from its operations. If the firm's access were limited to what it is earned, therefore, its growth rate (in sales and earnings) would be limited to the retention rate of such earnings (that is 100% if there is no dividends) and the rate of return achieved on the equity invested (ROE).

Growth = g = Retention rate of Earnings * ROE
g = Retention Rate * Profit Margin * Asset Turnover Ratio* Leverage

Since we have assumed that no additional leverage would be achieved, and the full retention of the earnings continues, then the sustainable growth rate is a function of profitability of operation and the efficiency of the operation.

Also, sustainability is a function of talent. Chowdhury [1] suggests that metrics such as ROI (return on investment) and ROA (return on assets) are not sufficient for the Internet enabled firms. Return-on-talent (ROT) is suggested as a more appropriate measure of performance for businesses. It is true that e-business initiatives require more human capital than technology or material assets. However, traditional financial statements do not permit easy calculation of return on human capital. Thus, ROT as a measure seems applicable to Internet-driven investments.

Variety of e-business metrics

InternetWeek magazine reported the results of their annual survey of several hundred IT managers. Less than half of the IT managers responded positively when asked if their firms had developed a return-on-investment model to measure the success of their firms' Internet strategies [4]. When asked how their companies justified Internet initiatives, the common responses were: (a) "directed by corporate management", and (b) the companies had established an Internet presence in response to a competitive threat. Thus, while there are anti-ROI justifications of Internet initiatives as the above, there is also a growing pressure on online businesses from Wall Street and venture capital communities to produce profits.

As Lewis [4] suggests, corporate Internet goals differ according to overall corporate strategy. For instance, for some companies the Internet is a new advertising medium, for others it is a new distribution channel, for yet others it represents new marketplaces or a new way of providing customer-support. So there seems to be no one-size-fits-all approach to ROI measurement.

Measures of performance created very recently for the online world have suddenly found disfavor, partly because such measures are not proving to be good proxies for financial performance. For instance, *click-through rates* for banner ads were - and, in many cases, continue to be – commonly used metrics for evaluating the effectiveness of such ads. However, the recent trend is to look beyond just the click-through performance of such ads and evaluate the ads based more on traditional metrics such as *additional revenue* or *lowered cost of customer acquisition*. It is well documented that overall spending on online advertising is skyrocketing even though click-through rates for banner ads are declining.

Businesses apply discounted cash flow analyses according to their needs. The following illustrations support the widely varying incorporation of the Internet in corporate strategy and the correspondingly different ways of valuing e-business initiatives:

- Christus Health, a hospital network in Houston, uses its Website to foster a sense of community among patients and staff. They are focusing on initiatives to bring a Web presence into the practices of health professionals. More importantly, they are less concerned with financial performance of the Internet initiatives and stress more the overall IT performance of their organization.
- Alaska Airline's website produces $200 million in revenue, amounting to ten percent of total revenue. However, unusually, they go beyond measuring web-based revenues. They use a ROI metric that measures the savings-in-distribution-costs on the revenue side minus the cost-to-sell-tickets over the web. Other advantages created due to a web presence, such as increased brand awareness, are simply not measurable.

- Midwestock company, a stock photography vendor, utilizes ROI in their management philosophy by tracking source of sales…which customer contributes how much.
- Kraft Foods Inc. is a classic case of why it is difficult to apply traditional ROI measures to online initiatives. Their website provides *content* but does not allow for *commerce*. Without generating direct online sales revenue, it is meaningless to apply direct ROI measures to Kraft's Internet efforts. However, they have an indirect, ROI-precursor measure: through a sophisticated software tool they are able to monitor where their online visitors make purchases and what they buy, thus providing a measure of returns.
- In contrast to the above companies, Verizon, a $31 billion telecommunications company, utilizes a clear set of ROI measures:
  - Returns on short and medium-term e-business investments measured by:
    - Cost savings from conducting B2C and B2B business online
    - Operational cost savings by moving paper-based processes online
    - Operational cost savings by moving traditional vendor relationships online
    - Increased revenues due to the Internet's 24x7 availability
    - Customer Satisfaction measured by standard surveys
  - Returns on long-term e-business initiatives measured by:
    - Increase in long-term equity measured by transactions, revenue volume and number of unique online visitors.

Verizon uses advanced ROI measures, incorporating the above, specific to their industry.

- Kodak.com utilizes revenue-based ROI measures. The company's online store generates sales from delivering hard-copy prints of digital photographs and Eastman Kodak Company also realizes revenue from licensing its online applications.

While the above illustrations show different companies measuring ROI of e-businesses differently, there are several online businesses that do not believe in measuring the ROI of their e-business initiatives. IBM teamed up with Hackett Benchmarking to conduct a comprehensive study of fifty dot.com and brick-and-click retailers. Their conclusion: leading retailers are de-emphasizing traditional ROI measurements and unearthing "best practices" to redefine business success [4]. The survey also indicates that companies are fighting Wall Street's pressure to turn short-term profits on the Internet and are choosing longer-term strategic paths profitability.

Prescription for the Survivors

In the less exiting world of the future, how could a dot.com show promising but sustainable growth? By focusing on the profitability and efficiency of its business. From the competitive standpoint, however, the major impact is likely to be in area of efficiency of operations.

How would we increase the efficiency? A basic review of the traditional financial measures such as cash management, speeding up collections, improving customer retention, inventory management skill heretofore un-necessary, and reducing asset intensity may be warranted.

The last one, however, maybe hard to achieve. Intensity of assets is both an offensive and defensive phenomena. In an asset intensive operation, the lower level of variable costs allows keener offensive price wars, and the higher level of investment creates a barrier to entry for the potential new competition. Nevertheless, higher fixed charges also increase the dependence on volume and increase the risk of the business.

Conclusion

e-Business initiatives transform enterprises. Companies that invest appropriately in these initiatives and manage them effectively will acquire new market competencies. These new Internet-enabled capabilities include the ability to (a) dramatically reduce time-to-market (b) provide a higher level of customer support (c) develop and introduce many more new products (d) understand customer needs at a much deeper level (e) significantly improve human collaboration across and within enterprises (f) reduce procurement costs, and many other capabilities.

The key here is that e-business initiatives don't just improve business efficiency and effectiveness. They transform businesses. Traditional business metrics were designed for a business environment where efficiency and effectiveness were the pillars of business performance. Today, Internet-enabled businesses attempt to reach much higher levels of performance through transforming themselves. Traditional metrics are generally inadequate to track the progress of firms in this newer environment. As can be seen from this research, firms are slowly adapting by developing customized metrics. Savvy businesses have figured out that they *have* to link operational business metrics with overall performance.

Finally, it must be emphasized that technologies will continue to evolve. Correspondingly, enterprises will continue to adapt to newer environments by designing newer metrics and measurements. However, the bottom-line financial valuation of firms has not changed for over a hundred years: investors will continue to look for financial returns on their investments, no matter the technology. Thus, the burden is on firms to deliberately and strategically link their business metrics with overall financial performance. Winners and losers in the Internet-based markets will be increasingly decided by the use of performance-linked metrics that are market-driven and applicable to technology-enabled strategies.

References

[1] Chowdhury, Subir. 2000. Return on talent. *Executive Excellence*, 17(11):19-20

[2] Clarke, Peter. 2000. Shareholder Value. *Accountancy Ireland*, 32(5):10-11

[3] Cravens, Karen, Nigel Piercy and David Cravens. 2000. Assessing the performance of strategic alliances: Matching metrics to strategies. *European Management Journal*, 18(5).

[4] Lewis, David. 2000. Pressure Mounts to Gauge E-Biz ROI. *InternetWeek*, (835):147-148

[5] Moozakis, Chuck. 2000.Services Calculate Net ROI – Consulting firms update traditional business metrics for Internet. *Internetweek*, (826):62-64.

[6] Morgan, Jim. 2000. How effective are your measurement systems ? *Purchasing*, 129(10):26-28.

[7] Stewart-Allen, Allyson L. 2000. Marketing metrics for corporate boards. *Marketing News*, 34(25):14

Predicting GDP Growth Using Knowledge Based Economy Indicators: A Comparison Between Neural Network and Econometric Approaches

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Abstract

Knowledge economy (K-Economy) is emerging from two defining forces: the rise in knowledge intensity of economic activities, and the increasing globalization of economic affairs. The rise in knowledge intensity is being driven by combining forces of the IT revolution and the increasing pace of technological change. On the other hand, globalization is being driven by national and international deregulation, by the IT related communications revolution. Knowledge economy is in which the generation and exploitation of knowledge play the predominant part in the creation of wealth (United Kingdom Department of Trade and Industry, 1999). Forecasting researchers have noticed the similarity between neural networks techniques and conventional forecasting model for K-Economy. Neural networks are being applied to problems such as chemical process control, seismic signals interpretation, machines diagnostic, target marketing, economic forecasting, financial modelling, market share prediction, stock market prediction, and risk management. Whereas econometric approaches have been used for prediction model in almost all the above areas. The advantage of using neural network is that it does not require any assumptions about underlying population distributions. They are especially valuable where input is highly correlated, missing, or the systems are non-linear. This paper presents the comparison between neural networks and econometric approaches for predicting GDP growth using Knowledge Based Economy indicators based on time series data collected from 1995-2000. The result indicates that neural networks have a potential to predict the GDP growth based on knowledge based economy indicators compared to traditional econometric approach.

Introduction

Knowledge economy refers to the overall economic structure that is emerging from two defining forces: the rise in knowledge intensity of economic activities, and the increasing globalization of economic affairs (Houghton and Sheehan, 2000). The rise in knowledge intensity is being driven by combined forces of the IT revolution and the increasing pace of technological change. On the other hand, globalization is being driven by national and international deregulation, by the IT related communications revolution. Knowledge economy is in which the generation and exploitation of knowledge play the predominant part in the creation of wealth (United Kingdom Department of Trade and Industry, 1998).

In recent years the neural networks have been used for a wide variety of applications where statistical methods are traditionally employed. The use of neural networks in economics is still in its relative youth. Neural networks techniques with its forecasting ability have been used successfully in various economic studies, including investment, economic and financial forecast (Hsieh, 1993; Swales and Yoon, 1992; Hutchinson, 1994) export growth as the source of economic growth (Shaaf and Ahmadi, 1999; Shaaf, 2000) and others.

Initially, neural networks were developed as simulation models of the brains. The terminology used is still a reminder of this origin. This physiological context, and the fame to handle complex data may have contributed considerably to the diffusion and implementation of neural network models, as well as in economics and econometrics (see e.g. Hecht-Nielson, 1990; Krogh and Palmer, 1991; Gallant and White, 1989; White, 1989; Swanson and White, 1997).

This paper presents the comparison between neural networks and econometric approaches for predicting GDP growth using Knowledge Based Economy indicators in Malaysia based on time series data collected from 1995-2000. In addition, the paper proposed to future enhancements to produce prediction accuracy.

Knowledge Based Economy

Knowledge plays an important role in the economy. As mentioned earlier, the main driver of the emerging knowledge economy are the knowledge intensity and the rapid globalisation of economic activities. The K-economy is being shaped not only by the development and diffusion of computer hardware and software, but also by much cheaper and rapidly increasing electronic connectivity (Daley, 2000). The use of open systems, the development of software and supporting technology, particularly the use of Internet accelerates the information technology (IT) revolution. In economic terms, the main feature of IT revolution is the ability to manipulate, store and transmit large quantities of information at very low cost (Houghton and Sheehan, 2000). Due to its low cost of manipulating, storing and transmitting information across Internet, the application of knowledge to all aspects of the economy is being greatly facilitated, and hence the knowledge intensity of economic activities greatly increased. The knowledge intensity involves both the increasing knowledge of innovative goods and services, as well as their growing importance in the economy.

The globalisation of economic activities has been accompanied by the reduction of tariff and non-tariff barriers, the floating of currencies, the reduction of barriers to the foreign direct investment policies and the deregulation of product markets in many countries. Various observers describe today's global economy as one in transition to a '***knowledge economy***', or an 'information society'. But the rules and practices that determined success in the industrial economy of the 20th century need rewriting in an interconnected world where resources such as know-how are more critical than other economic resources.

Productivity growth is one of most important indicators of economic health (Montes, 2000). Advances in IT are the driving force behind this acceleration in productivity. Due to faster productivity growth, the U.S economy for example, can now sustain a higher growth rate of Gross Domestic Product. In order to boost productivity growth, Blinder (2000) suggested doing one or more three things; 1) Improve the quality of the workforce through education and training. 2) Equip the workers with more and better capital such as computer. 3) Improve the technology, so that given input produce more output.

The declining prices of IT goods and services have work, directly and indirectly to reduce overall inflation in U.S Economy. Nevertheless, between 1995 and 1999 because of IT industries' extraordinary growth falling prices, they accounted for an average 30 percent of total real U.S. economic growth (Dalton, 2000). Dumagan (2000) also confirmed that based on macroeconomic and firm level evidence, IT does contribute significantly to productivity growth.

Haltiwanger and Jarmin (1999) suggested 5 major areas for measuring digital economy. These major areas include IT infrastructure, e-commerce, firm and Industry market structure, demographic and worker characteristic and price behavior. However, more than 50 percent of Gross Domestic Product (GDP) in the major OECD economies is now based on the production and distribution of knowledge (Ernst & Young, 1999). The gross of the internet and other related new technology have become the catalyst for the creation of knowledge economy. Due to these facts, the exploratory studies proposed to focus on the IT infrastructures as the inputs to our neural network model.

The Case Of Malaysia

In Malaysia, the knowledge-based economy will provide the platform to sustain a rapid rate of economic growth. The Malaysia economic moves towards increase positively the GDP growth after the financial crisis recovery. The expected GDP growth in 2003 will increase between 6.0 to 6.5 per cent compared to 2002, only 4.0 to 5.0 per cent (Post-Budget 2003 Report). The K-Economy is one where the generation and utilization of the knowledge contribute to a significant part in economic growth and wealth creation. Thus, the economy will be characterized by knowledge-based activities and high-tech industries accounting for a significant share of GDP growth. Malaysia has spent in ICT about US/RM 5.3 Billion and 5.3 per cent of GDP and relatively better position for ICT spending, personal computers and phone lines per 1,000 population within Asian countries (See Table 1 and 2). In terms of the ICT market, Malaysia emphasises more on system development and application for local content (See Table 3).

The component of the Knowledge Based Economy indicators were selected based on Knowledge Based Economy Development Index (KDI) (See Table 4) includes five independent variables, namely (1) Mobile telephone subscribers (MP) (2) Internet Subscribers (IS) (3) Number of Computer per Population ('000) (NPC) (4) Personal Computer Install (PCI) and 5) Telephone Lines in Use ('000) (TLS). Finally, the real GDP growth as a dependent variables (output target) .In addition, the interactions between these variables were explored to determine whether there is uncertainty regarding the proper functional relationship between the input and output variables (Delurgio, 1998).

Table 1: INFORMATION & COMMUNICATION TECHNOLOGY SPENDING, 2001

Countries	% of GDP	(Billion)
New Zealand	10.5	6.5
United States	8.9	761.9
Australia	8.9	36.8
Hong Kong	8.3	12.8
Singapore	7.7	8.0
Vietnam	7.4	1.7
Japan	7.1	362.0
Malaysia	**5.2**	**5.3**
China	4.9	47.9
Taiwan	4.8	16.0
South Korea	4.4	24.4
India	3.5	15.5
Philippines	2.7	2.5
Thailand	2.1	3.9
Indonesia	1.4	2.9

Source: ASIAWEEK, June 29, 2001

Table 2: PERSONAL COMPUTERS AND PHONE LINES
(Per 1, 000 People)

Countries	Personal Computers per 1, 000 people	Telephone Lines per 1, 000 people
Singapore	485.3	486.6
Hong Kong	346.1	578.7
Malaysia	**104.7**	**210.3**
Thailand	23.5	83.2
Philippines	19.6	39.7
China	16.1	121.1
India	4.6	32.3

Source: ASIAWEEK, June 29, 2001

Table 3: MALAYSIA: IT MARKET BY CATEGORY 1998 – 2003

IT Market	**Years Percentage (%)**	
	1998	**2003**
Systems	**55.2**	**58.2**
IT Services	**14.6**	**14.8**
Package Software	**18.2**	**20.7**
Data Communication Equipment	**9.0**	**9.3**

Source: Computerworld, Malaysia, Issue No. 8, Jun 1999, page 1.

Table 4: COMPONENT OF THE KNOWLEDGE BASED ECONOMY DEVELOPMENT INDEX (KDI)

Computer Infrastructure

- *Share of worldwide computer in use*
- *Computers per 1,000 population*
- *Share of total worldwide millions of Instructions per second (MIPS)*
- *Computer power per capita*
- *Connections to the Internet*

Infostructure

- *Investment in telecommunications*
- *Main telephones in use per 1,000 population*
- *Cellular mobile telephone subscribers per 1,000 population*
- *Television sets per 1,000 population*
- *Radios per 1,000 population*
- *Fax machines per 1,000 population*
- *International call cost*
- *Newspaper circulation*

Education and Training

- *Total expenditure on education per capita*
- *Literacy rate*
- *Student-teacher ratio (primary)*
- *Student teacher ratio (Secondary)*
- *Secondary enrolment*
- *Higher education enrolment*

Research & Development (R & D) and Technology

- *High-technology exports as a proportion of manufacturing exports*
- *Number of scientists and engineers in R&D*
- *Total expenditure on R&D personnel nationwide per capita*
- *Total expenditure on R&D as a per cent of GDP*
- *Average annual number of patents granted to residents*
- *Business expenditure on R&D per capita*

Source: Malaysia, Third Outline Perspective Plan Report (OPPT3, 2001-2010)

Prediction Models

For our exploratory studies, two forecasting models were employed to forecast the GDP growth using Knowledge Based Economy Indicators (K-Economy). First, neural network model is briefly presented. Second, the econometric model that has similar characteristics, as neural network model would be explained. The conventional forecasting and neural network forecasting methods process are shown in Figure 1.

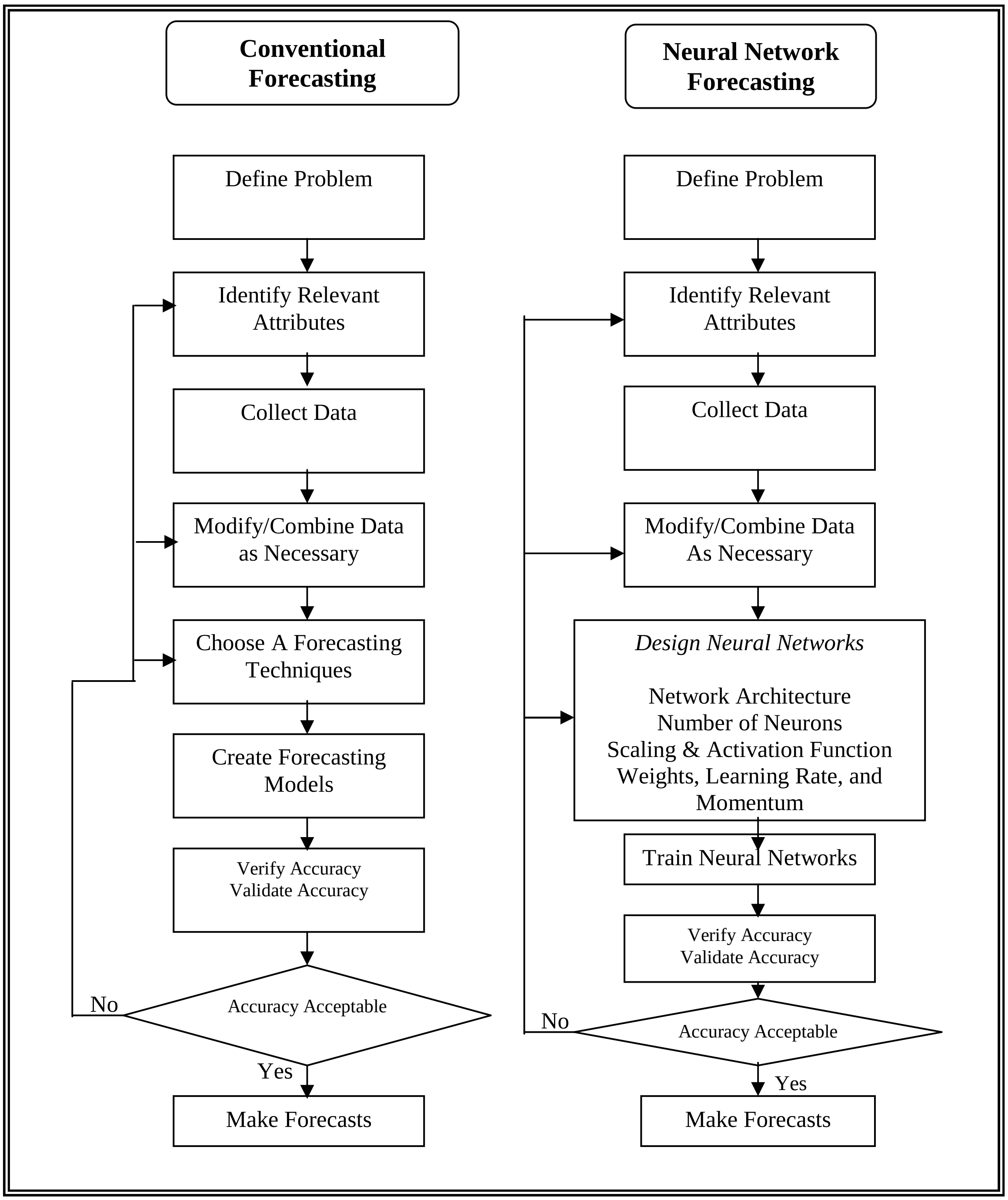

Figure 1: Conventional Process VS. Neural Networks Forecasting Process

Neural Network Model

Neural network system consists of neurons (cells), neural interconnections (internal links) and connections with the outer world (see Figure 2). The network is connected to the outer world by the first or input layer and by the last or output layer. Between input and output layer, one can have a hidden layer that is used to solve non-linear problems. The network is "fully connected". That is, all the nodes are linked in adjacent layers. These links are the weights that can be strong or weak, depending on their values. The weights are adjusted for the minimization of the mean square error as the objective function.

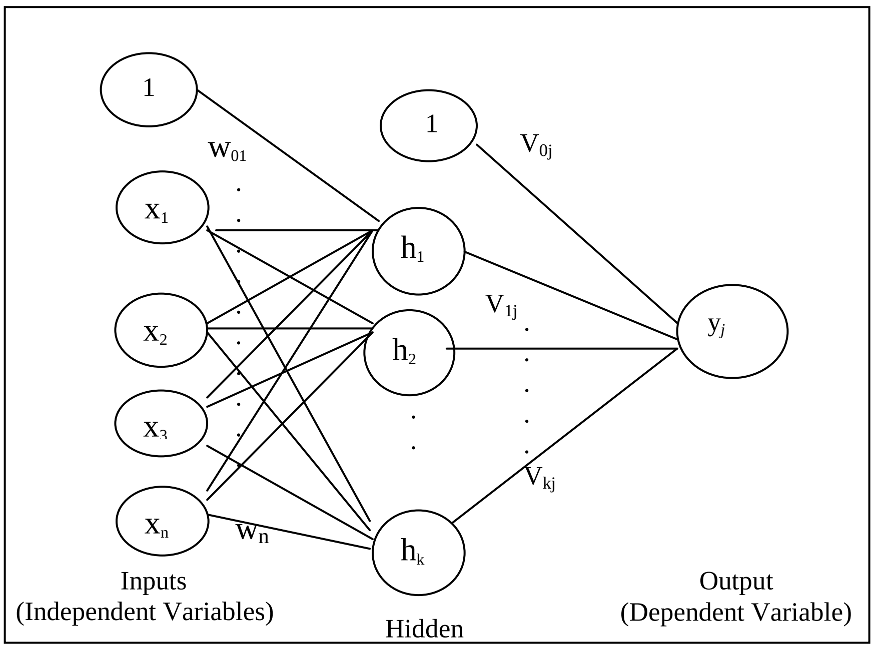

Fig 2: A NEURAL NETWORK APPROACH TO PREDICT GDP GROWTH USING KNOWLEDGE BASED ECONOMY INDICATORS.

This study utilizes the most widely used neural network model termed "back propagation". Back Propagation is a learning algorithm by which the multilayer layer networks are set for pattern recognition utilizing time series data as the external teacher. Like econometric method, the back propagation employs an optimization technique for finding optimum values of the weights as parameters.

To explain the mathematical equation of the neural networks, assume that ***x*** represents the number of independent variables, *h* represents hidden nodes in the hidden layer, and *y* represents output nodes in the output layer. Accordingly, back propagation computes the summation of multiplication of independent variables (x_i), with their corresponding weights (input to hidden layer), and adds bias weights (intercept) to produce a signal that goes into h_k (Figure 2):

In Neural Network, the signal that goes into h_k can be calculated as

$$h_{k\_in} = w_0 + \sum_{\substack{i=1\\k=1}}^{\substack{m\\n}} x_i w_{ik} \;\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots [\,1\,]$$

By considering $x_0 = 1$, equation [1] can be simplified as the following:

$$h_{k\_in} = \sum_{\substack{i=0\\k=1}}^{\substack{m\\n}} x_i w_{ik} \;\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots [\,2\,]$$

In words, equation [1] states that h_{k_in} is a weight sum of the x_i. This relationship is shown in Figure 1 with i = n, where each x_i is linked to h_k by the input weights w_{ik} is the bias weight k, and w_{ik} are the weights from the input i to hidden node k.

Now, equation [2] is generalized by the introduction of non-linearities into relationship. The weight summations, y_j , in equation [2] are then transformed by a transfer function in the hidden layer. In this study, the sigmoid transfer function such as logistic function is defined as

$$g(u) = \frac{1}{1+e^{-u}} \;\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots [\,3\,]$$

where e is the base of natural logarithms.

Hence, to allow for non-linear relationship between the weighted inputs and the output, the equation [3] can be applied to equation [2], yielding:

$$h_k = g(h_{k\_in})$$

The values of h_k is determined by the following condition.

More generally, the hidden units (intermediate variable) in neural networks need not be identified in order to forecast y_j ; they can simply be considered as unknown. Tkacz (1999) explain that proceeding with the hypothetical example, if an intermediate variable can be thought of as representing investment, then the neural network model can allocate larger weights for investment levels that have proportionately larger effects on output growth.

The connection link v_{kj} , links the hidden neuron k to output neuron y_j. The neural networks computation can be represented as

$$y_{j\_in} = v_{0j} + \sum_{\substack{k=1\\j=1}}^{\substack{p\\m}} h_k v_{kj} \;\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots [\,5\,]$$

or

$$y_{j\_in} = \sum_{\substack{k=0\\j=1}}^{\substack{p\\m}} h_k v_{kj} \;\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots [\,6\,]$$

Consequently, it is seen that the connection link v_{kj} are accumulated and filtered through activation function h(r) viz:

$$h(r) = \frac{1}{1+e^{-r}} \quad \text{[7]}$$

The output from neural network model can be calculated as

$$y_j = h(y_{j\_in}) \quad \text{[8]}$$

If there are sufficient number of hidden neurons, equation (6) can approximate any non-linear function to an arbitrary degree of accuracy. According to White (1992), this is known as the universal approximation property of neural networks, and such approximation is not possible in the absence of the hidden layer.

The error (a function of the weights to be minimized is

$$E = \frac{1}{2}\sum\left[t_j - y_j\right]^2 \quad \text{[9]}$$

This is succeeded by adjusting the weight v_k and β_{ik} until the desired pre-specified level of convergence is achieved. The neural network (6) be practicable for most economic applications.

Econometric Model

An econometric model can be configured as a perceptron to predict Knowledge Economy (see Figure 3). However, the activation function utilized with Multilayer Perceptron (MLP) is a sigmoid function. Therefore, the similar econometric model would be a regression model (Sarle, 1994).

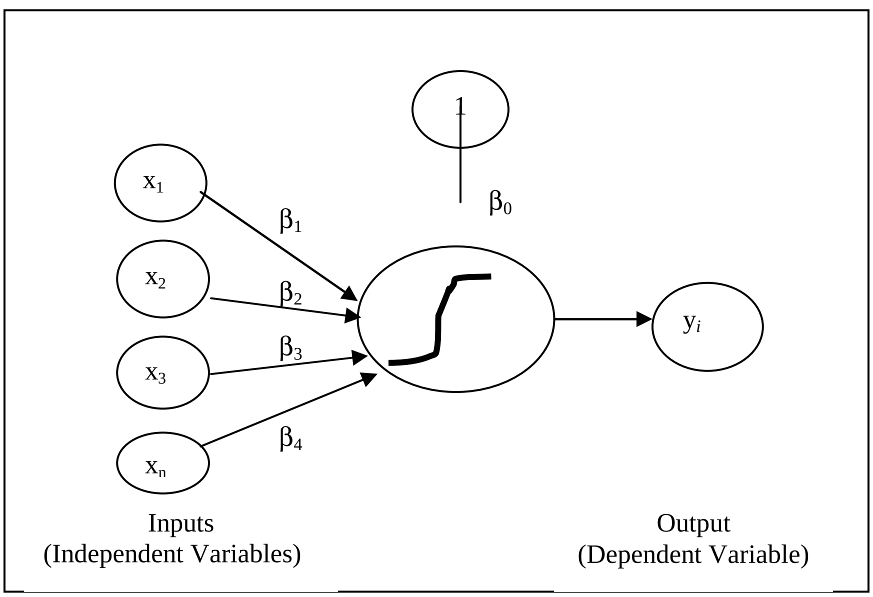

Fig 3: ECONOMETRIC MODEL CONFIGURED AS A NEURAL NETWORK MODEL

The mathematical equation that represents econometrics model is

$y_i = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \ldots + \beta_i x_i + e_i$ ……………………………………………...[10]

We assume that the random component has a normal distribution with mean zero and variance σ^2.

Equation [1] can be simplified as

$$y_{i\,(X)} = \beta_0 + \sum_{i=1}^{n} \beta_i x_i + e_i \quad \text{……………..……………………….…….…..……[11]}$$

where $e_i \sim N(0, \sigma^2)$.

The objective of this regression problem is to find the coefficients β_i that minimizes the sum of squared errors,

$$\text{Min SSE} = \frac{1}{2} \sum_{i=1}^{I} \left[y_i - \sum_{i-0}^{N} \beta_i x_i \right]^2 \quad \text{………………..……………………..……….[12]}$$

To find the coefficients for the model, we must have a dataset that includes the independent variable and associated known values of the dependent variable. This research used y data that collected from the 1995 to 2000. All the data were obtained from the economic report 1999/2000 and the eight Malaysian Plan 2001-2010.

Results

The forecasting performance obtained by neural network and multiple regression model are exhibited in Table 1. The results indicate that the neural network model achieved higher performance than multiple regression model

Table 1 : PERFORMANCE OF NEURAL NETWORK MODEL AND MULTIPLE REGRESSION MODEL

	Neural Network Model	**Multiple Regression Model**
Percentage Of Correctness (%)	**83.33 %**	**62.47 %**

The results imply that neural network model is a better alternative approach for predicting GDP growth using knowledge based economy indicators. The actual and predicted knowledge based economy on GDP growth is illustrated in Figure 4.

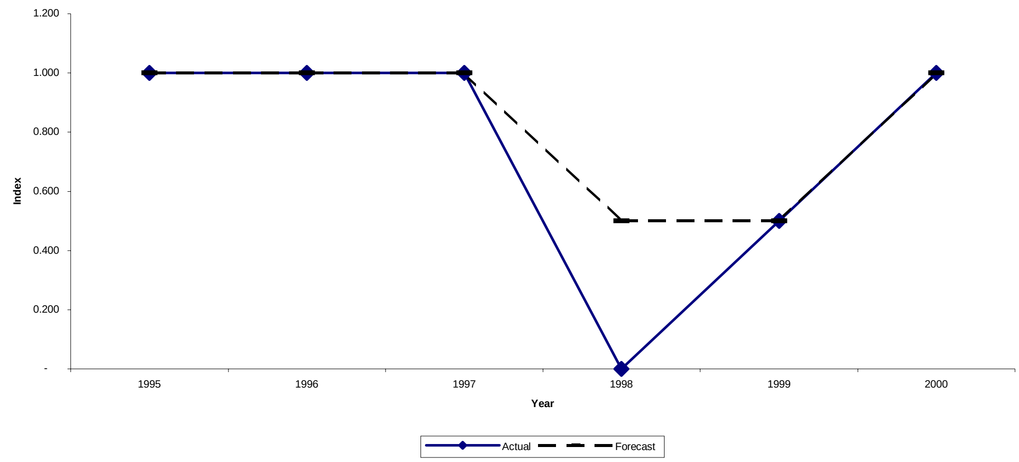

Fig 4: KNOWLEDGE BASED ECONOMY ON GDP GROWTH.

The prediction perform by Neural network is the same with the actual GDP growth from the year 1995 to 1997 and 1999 to 2000. Neural network forecast slightly higher than the actual GDP growth. The different with actual and forecast was due the recession with affect the global economy. Generally, neural network has shown to have great potential in predicting GDP growth using knowledge based economy indicators.

Conclusion

The experimental results show that it is possible to use neural network to predict the GDP growth using knowledge based economy indicators. To improve the prediction accuracy, one possible way is to include other factors such as firm and industry market structure, demography and worker characteristic, and price behaviour as suggested by Haltiwanger and Jarmin (1999).

The extensive use of other microeconomic and macroeconomic variables could also improve the findings in these exploratory studies. In addition, longer time series and even higher-frequency data might improve the prediction result. The power of this approach can be tested on other micro and macro variable impact. Finally, the neural network developed for this research can be modified in terms of neural network type, topology, and learning rule. Integrating (on an adequate basis) the neural network with the statistical techniques, genetic algorithms (Goldberg 1989), fuzzy logic (Cox 1992), and expert systems (Watkins 1993) is a research direction where high payoffs can be expected.

References

[1] Blinder, A.S. (2000). “The Internet and The New Economy, http://www.internetpolicy.org/briefing/1_00.html.

[2] Cox, E. (1992). “Fuzzy Fundamentals.” *IEEE Spectrum* 29 (10): 58–61.

[3] Ernst & Young, (1999). “The Knowledge Economy Report”. http: // www.knowledge.gen.nz

[4] Daley, W.M. (2000). “Digital Economy 2000”. http://www.esa.doc.gov/de2k.htm

[5] Delurgio, S.A. (1998). “ Forecasting Principles and Applications, *MaGraw Hill, International Edition*

[6] Dalton, D.H. D. (2000). “Information Technology Industries, In Collection, In Collection of Digital Economy 2000” U.S. Department of Commerce.

[7] Dumagan, G.G.J. (2000). “Contribution of Information Technology to U.S Productivity Growth, , In Collection of Digital Economy 2000” U.S. Department of Commerce. http://www.esa.doc.gov/de2k.htm

[8] Gallant, A. R. and White, H., (1989). “There exists a neural network that does not make available mistakes”, in *Proc. of International Conference on Neural Networks, San Diego, IEEE Press*, New York.

[9] Goldberg, D.E. (1989). “Genetic Algorithms in Search, Optimization and Machine Learning”. Reading,MA: *Addison-Wesley Publishing Co*.

[10] Hecht-Nielson, R., (1990). Neurocomputing, *Addison-Wesley Publ*. Co., Menlo Park, CA.

[11] Hercht, J.; Krogh, A. and Palmer, R. G., (1991). “Introduction to the theory of Neural Computation”, *Addision Wesley Publishing Company*, Reading, Massachusetts.

[12] Houghton, J. and Sheehan, P., (2000). “A Primer on the Knowledge Economy”, http://www.cfses.com/primer.htm.

[13] Hsieh, C., (1993). “Some Potential Applications of Artificial Neural System in Financial Management”, *Journal of System Management*, April, 12-15.

[14] Hutchinson, J., Lo, A. and Poggio, T., (1994). “A Nonparametric Approach to the Pricing and Hedging of Derivative Securities via Learning Networks”, *Journal of Financial*, 49, 851-99.

[15] Montes, P. B. S. (2000). " Information Technology and the New Economy, In Collection of Digital Economy 2000" U.S. Department of Commerce. http://www.esa.doc.gov/de2k.htm

[16] Sarle W.S., (1994). "Neural Network and Statistical Models", *Proceedings of the Nineteenth Annual SAS UsersGroup International Conference*, April .pp.1-13.

[17] Shaaf, M. and Ahmadi, A., (1999). "An Artificial Intelligence Approach to the Role of Exports in Economic Development of Malaysia", *Atlantic Economic Journal*, December, 363-75.

[18] Shaaf, M., (2000). "Predicting Recession Using The Yield Curve: An Artificial Intelligence and Econometric Comparison", *Eastern Economic Journal*, 26(2), Spring.

[19] Swales, G. S. and Yoon, Y., (1992). "Applying Artificial Neural Networks to Investment Analysis", *Financial Analyst Journal*, September-October , 70-80.

[20] Swanson, N. R. and Halbert, W., (1997). "A Model Selection Approach to Real-time Macroeconomic forecasting using Linear Model and Artificial Neural Networks", *Review of Economics & Statistics*, 79(4), 540 573.

[21] United Kingdom Department of Trade and Industry, Secretary of State for Trade and industry, (1998) *Our Competitive Future: Building the Knowledge Economy, Vol.Cm 4176. London*

[22] Watkins, P. and L.B. Eliot. (1993). "Expert Systems in Business & Finance: Issues & Applications". Chichester: John Wiley & Sons Canada, Limited.

[23] White, H., (1992). "Artificial Neural Networks: Approximation and Learning", Cambridge: Blackwell.

[24] White, H., (1999). "Some Asymtotic Results for Learning on Single Hidden Layer Feedforward Network Model", *Journal of American Statistical Association*, 84(408).

Strategies and Models for E–Retailing: Attempted Retrospection in the Indian Context

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Abstract

Thanks to e-commerce, shopping has changed. Though the Internet has brought the convenience of shopping to the doorstep, an ordinary Indian consumer would not prefer this type of shopping for durable goods. The experience of buying durables by touching them physically cannot be substituted by the Internet shopping and also preferences is given to multi-brand outlets. The demographic results of the 'E-Retailing survey' conducted in India by IIITM, Gwalior show that a majority of the consumers prefer conventional way of shopping. So, companies trying to target consumers on the Internet should identify the niche segments before building brands on the Net. Marketers in order to develop their market in India on the Internet should innovate ideas by which they can sell their products and devise strategies for customer satisfaction, as this will ensure greater loyalty towards their products. Shopping on the Net has its own advantages as it reduces time and physical effort and hence firms should ensure that distribution channels should be properly planned and trial periods can be offered to the customers at least during the developmental phase of the Internet marketing.

E-Business presents one of the greatest opportunities and challenges for the retail. The nature of retailing is changing. Years of fierce competition on the high street means that to be successful, retailers have to examine every aspect of their business to ensure a profitable return on investment. The new battleground is electronic retailing. New technology means that unified, on-line supply chains are becoming the norm, together with home shopping either on the Internet or Digital TV. To compete effectively retailers must invest aggressively, and at speed, to exploit the staggering growth potential of these new channels, yet the routes to profitability remain unclear. To succeed in electronic retail requires an effective strategy for both B2C and B2B operations, seamlessly integrating existing channels to market with new complementary channels, and whatever the future holds. The cost effective and well-managed integration of existing systems with new systems and new technologies is one of the major challenges that retailers face today in moving towards the future. In this paper a model is proposed and this model is going to put more stress on customer satisfaction and the time needed to deliver the goods to the customers home. The potential of electronic retail is indisputable, however businesses do not live by potential but by delivering results is one of the findings of our survey.

On-line shopping has not caught the fancy of the people in India. Issues of security, transaction fulfillment and genuineness are still the major stumbling blocks in the way of the on-line shopping's popularity. Another reason being touted is that the concept is relatively new and it is going to take time for the industry, which is still in its infancy to build secure payment gateways and logistics of fulfillment. Electronic retailing must be defined as more than on-line home shopping. General retailers in India use their expertise in a few core categories to attract customers, but over the Web they must offer more. The paper describes the genesis of E-tailing, the role of online category manager and lays a road map with Critical Success Factors from the dream to the reality. The paper is thus an attempt to introspect the past, retrospect the present and prospect the future of E-Retailing in India.

Introduction

E-tailing: What exactly does it mean?

Internet Retailing or 'e-tailing' as is usually referred to as covers retailing using a variety of different technologies or media. It may be broadly be a combination of two elements.

a. Combining new technologies with elements of traditional stores and direct mail models

b. Using new technologies to replace elements of store or direct mail retail.

Internet retail also has some elements in common with direct mail retailing. For eg, e-mail messages can replace mail messages and the telephone, that are used in the direct mail model as means of providing information, communication and transactions while on-line catalogues can replace printed catalogues. As with direct mail businesses, critical success factors include:

a. Use of customer databases
b. Easy ordering
c. Quick Delivery

Operational elements that the Internet retail model shares with both the retail store and direct mail models include:

a. Billing of customers
b. Relationships with suppliers

There are, therefore, many elements that Internet retail and more traditional retail models have in common. Indeed many of the most successful Internet retailers have been those that have been able to successfully transfer critical elements from traditional retailing to the Internet, such as customer service and product displays.

The four challenges of E - Retailing

Every on-line fulfillment operation, large or small, faces four main challenges:
Controlling customer data, integrating on- and off-line orders, delivering the goods cost-effectively, and handling returns.

Controlling customer data

As outsourcing arrangements proliferate and delivery services become more expert in using information technology, retailers risk losing their lock on consumer data. This knowledge, ranging from the socioeconomic status of customers to their buying patterns and preferences, helps intermediaries and shippers reduce costs, but they can also use it to compete with retailers.

Integrating on- and off-line orders

From an operations perspective, the easiest route for companies with a foot in both the real and the virtual worlds might be to enter electronic orders manually into the off-line order management system. This option makes most sense when the volume of on-line orders is higher, companies must decide how much integration they need.
In a totally integrated system, Internet orders would be automatically transmitted through a processing center and transferred to the shipper’s manifest. Savings up to 30 percent are possible if the cost of long-distance telephone calls, data entry, teleserve operations, and error correction is reduced or eliminated and the cycle time between order and delivery is cut significantly. An integrated system with full ERP (enterprise resource planning) capabilities, for eg, can ensure that surges in demand don’t retard key fulfillment operations such as data entry, inventory, and packing.

Delivering the goods cost-effectively

At present, every single transaction challenges e-tailers to deliver the goods quickly, cheaply and conveniently. The existing model for home delivery works well for letters and flat packages but not for e-tailing’s high volumes and wide variety of package shapes and sizes. But this is largely a technical and logistical problem, and it will be possible (though perhaps expensive) to solve it by developing new sorting and scanning equipment and by deploying larger delivery vehicles.

Handling returns

The problem of returns is encapsulated in an old saying in the book business: “gone today, here tomorrow.” Nordstrom, Bloomingdale’s, L.L. Bear, and other companies have built their sterling reputations partly on the ease with which customers can return defective or unwanted merchandise and the graciousness with which it is received. E-commerce retailers, with their emphasis on convenience and customization, must match this standard of service. At present, they do not.

The Process of Customer Relationship Management

"Retail companies have two important elements: products and customers! These two elements have to form the focus of strategic developments."

- IT Director, Coop Switzerland

The Strategic Foundation of Customer Relationship Management

"If we were to assume that ‘the customer' does not exist, it would be ideal to have a category management procedure
for every main target group that matches their specific requirements!"

- IT Director, GIB Group

As is the case with category management, customer relationship management is highly dependent on the type of strategy used by the individual retailer and on the conditions prevalent on the individual market. Retailers first have to ask themselves what the company stands for, what the target markets are, how the company operates within these markets and what the relevant customer requirements in its specific industry segment are.

These factors determine:

1. The degree of differentiation a retailer uses to look at his customers and the way he approaches these differences.
2. The criteria used to group customers.
3. The criteria used to analyze customer groups.
4. The form of customer care and the necessary level and nature of individualizing the contact between the company and its customers.

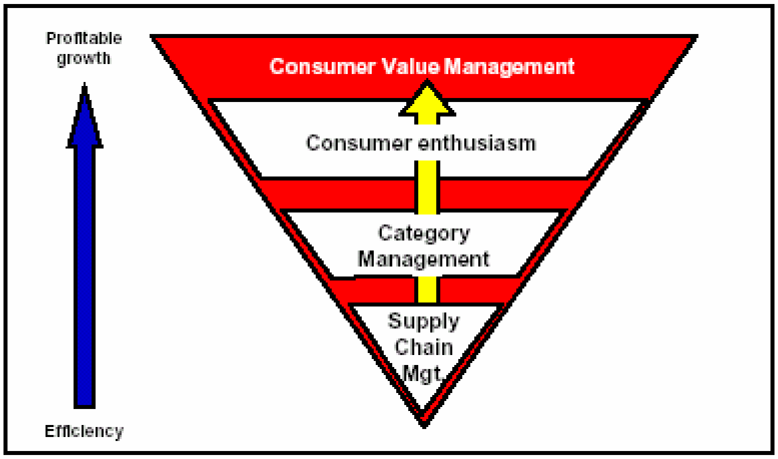
Based on these strategic issues, companies with innovative, marketing-oriented approaches to retailing will take a more systematic approach to customer relationship management and put it on a strategic level. A move in this direction is already evident.

The paper provides an example of how best to approach customer relationship management. The overall process described was developed from the results of the interviews and covers all relevant areas and aspects from a strategic and tactical perspective.

This process is not intended for widespread industry implementation: it is a best-practice scenario that can be tailored to each company’s specific requirements.

We, the authors, believe that strategic customer management processes can be structured in a similar manner to category management.

Figure below clearly underpins the importance of strategically orienting retail for customers in the future:



Strategies for Consumer Integration

Supply Chain Management and the efficient management of "back-end" processes form the basis for strategic retail marketing. If these processes suffer from insufficient merchandise flow and poor merchandise availability, thus preventing retailers from reacting quickly to market conditions, this will inhibit strategic, customer-oriented retail marketing from the outset.

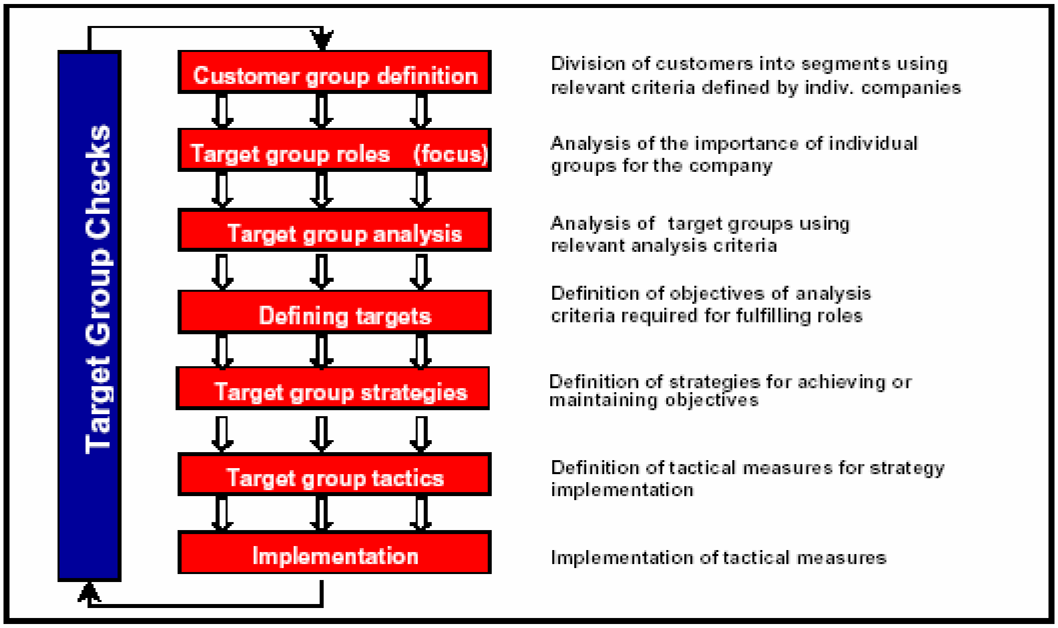
Category Management represents the first step towards shaping a retail company that is capable of fulfilling customer requirements. However, category management alone will only allow retailers moderate success in achieving a clearer profile that distinguishes them from their competitors and in increasing growth. After all, it is still the product and the assortment that are at the center of their attention.

Category management enables retailers to plan their product and assortment management strategically. The authors as well as numerous retail managers believe that customer relationship management has been, and in part still is, lacking this clear strategic direction.

When we consider the current retailing situation, we can see that a certain potential for differentiation does exist thanks to private labels and assortment bundling, yet it is still the same A grade brand names that are to be found on the shelves next to the private labels.

Thus, retail managers believe that having a strategic focus for customers and their requirements will be a decisive factor in ensuring growth, even in saturated markets. The interviews clearly showed that **focusing on customer requirements** will be the key factor for success in the future.

Business Planning Procedure for Strategic Customer Group Management



This analogy can only be applied to process steps and the basic questions to which they relate. Implementation of the individual steps, however, in particular the strategy measures, will differ greatly from company to company.

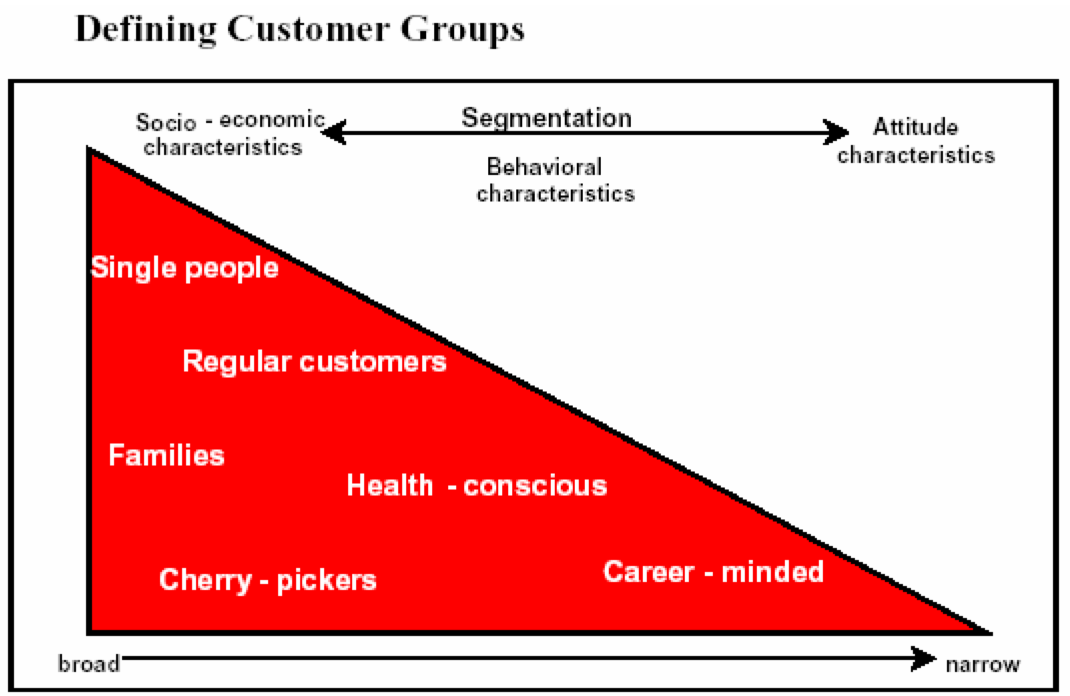
Target Group Checks

Defining Customer Groups

Before systematic customer relationship management can be implemented, the following questions must be posed: who are my customers and which characteristics can be used to describe them?

First of all, it is important that customers are grouped according to criteria considered relevant to the company in question and that the defined groups have different requirements according to the various merchandise categories of the company, as only in this case can a differentiated discussion of these groups reap real gains for the company concerned.

Secondly, a step-by-step segmentation process should be used, starting with a relatively small number of broad customer clusters and with segmentation criteria that are easy to evaluate.



Common practice shows that socio-economic criteria normally allow retailers to group (segment) customers more easily early in the process. The segmentation scale can be 'personalized' to fulfill individual company criteria by adding or removing certain criteria. A gradual transition from socio-economic characteristics to behavioral or attitude characteristics can then take place, depending on sector requirements and the company in question. While apparel retailers may aim to group customers using attitude or lifestyle criteria, grocery retailers can, for example, restrict selections to basic socio-economic characteristics.

Purchases can also be grouped according to the circumstances under which customers shop and the intended use of the chosen merchandise:

regular purchases (for example, milk and fresh bread), everyday-use bulk purchases (for example, monthly shopping trip for groceries), additional purchases (for example, buying gift-wrap when purchasing a greetings card), same-day purchases (for example, food bought in the morning for the evening meal), and entertainment shopping.

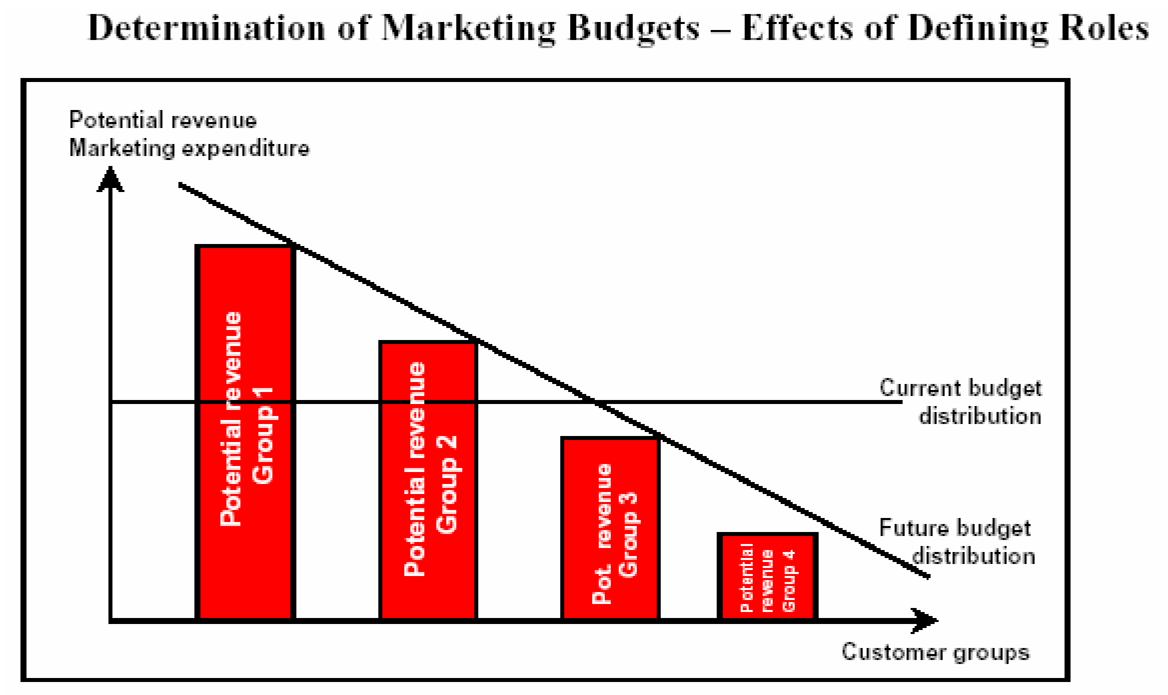
Naturally, customer behavior and expectations differ according to the purchases that are made.

Target Group Roles

The next stage in systematic customer relationship management is analyzing the importance of individual customer segments and focusing on customer segments that are significant or critical for the success of the company.

The criteria used to define importance can be based on company strategies (What market position should be adopted? How will this be achieved?) as well as external market conditions (How important is the customer group in general? Which volume does it represent?).

These criteria can be used to rank customer segments according to their strategic importance in the future. One possible segmentation method would be to use **core target groups**, **additional target groups** and **other customer segments**.



Most companies believe that defining customer groups and then analyzing the importance of the resulting segments for them can considerably increase the efficiency of retail marketing in general.

Departing from the normal procedure of defining standard marketing measures for all customers, focusing on customer groups leads to a reallocation of marketing budgets in favor of those measures that are especially attractive to the core customer groups.

Target Group Evaluation

Having identified target groups, the current relationship between the groups and the company can be analyzed in detail. The aim is to examine the general purchasing behavior of the target groups in the retailer's merchandise categories in general, as well as the purchasing behavior of the target group within the company itself.

Internal key figures are not, however, sufficient for this analysis. In particular, if a retailer believes that an important customer group is not frequenting its stores regularly enough, the use of external data is also essential.

It becomes even more apparent here that it is not enough to simply identify the companies' own customers and their purchasing behavior. Companies also need to know which customer groups are *not* shopping in their stores and why in order to improve the strategic direction of their marketing measures.

Target Group Analysis

Once the current status has been determined, the next step is to define the objectives in terms of a particular customer group.

These objectives must build on previously defined roles and the importance of target groups, while also illustrating what can be gained by including external factors (for example, the impact of target groups on competitors, competitor behavior, the company image within the target group) as well as external and internal restrictions (for example, budgetary restrictions, store loyalty amongst target groups).

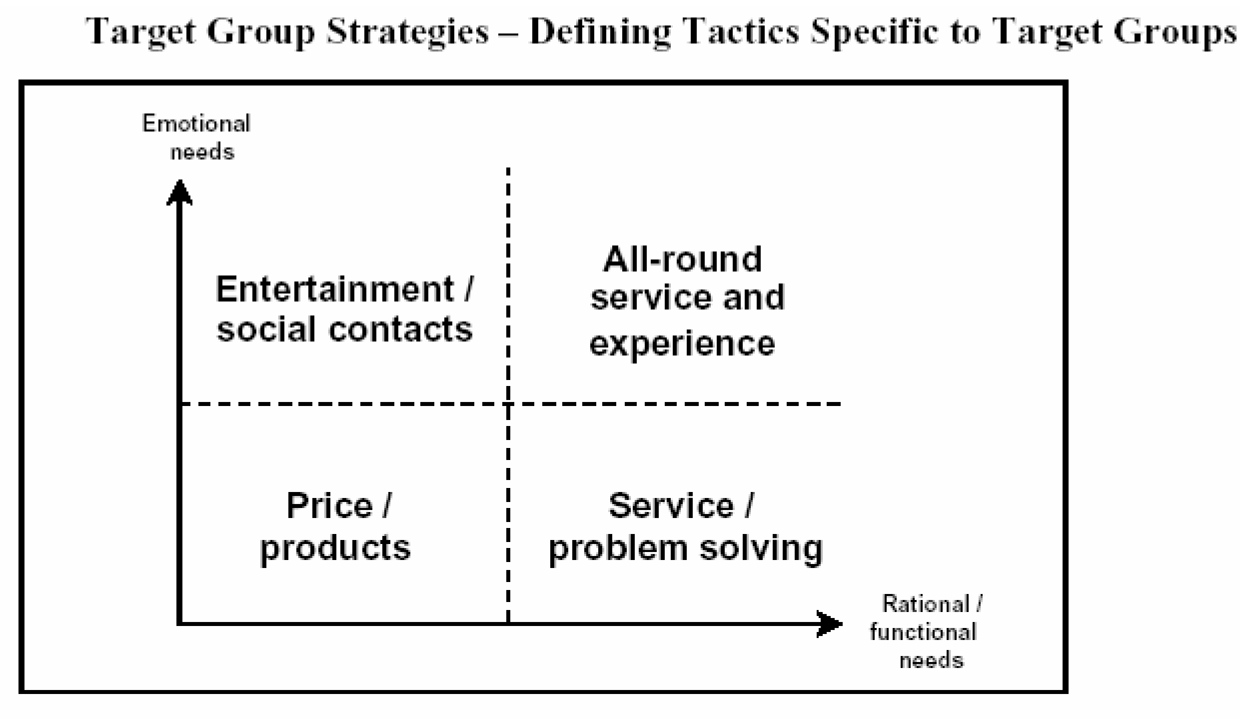
Target Group Strategies

Strategies can be defined for particular target groups, depending on the results of the analysis of the preceding steps. These strategies relate to the manner in which individual groups are handled and the manner in which they are implemented. It is becoming increasingly important for strategy tactics for specific target groups to be developed.

The following points represent a selection of possible strategy options for achieving the objectives defined during the analysis phase:

a) Increase and maintain customer loyalty
b) Increase the frequency of visits
c) Influence shopping behavior

After having selected basic strategy options, the next paper looks at their implementation.



Consequently, before defining tactics, an exact knowledge of customer behavior within the target groups as well as the requirements of the target groups is necessary. This knowledge enables the different target groups to be positioned in a portfolio according to their basic emotional and rational needs. Predefined basic strategies for each section of the matrix can then be used to determine the fundamental direction of the specific marketing measures that are targeted to specific customer groups.

Companies then have to ascertain which target group requirements have already been fulfilled using the marketing tools that are currently employed. By comparing the total requirements with those already fulfilled, the companies can estimate the degree to which they have to reconfigure their marketing measures in order to meet the requirements of their target customers in a more accurate way.

Target Group Tactics

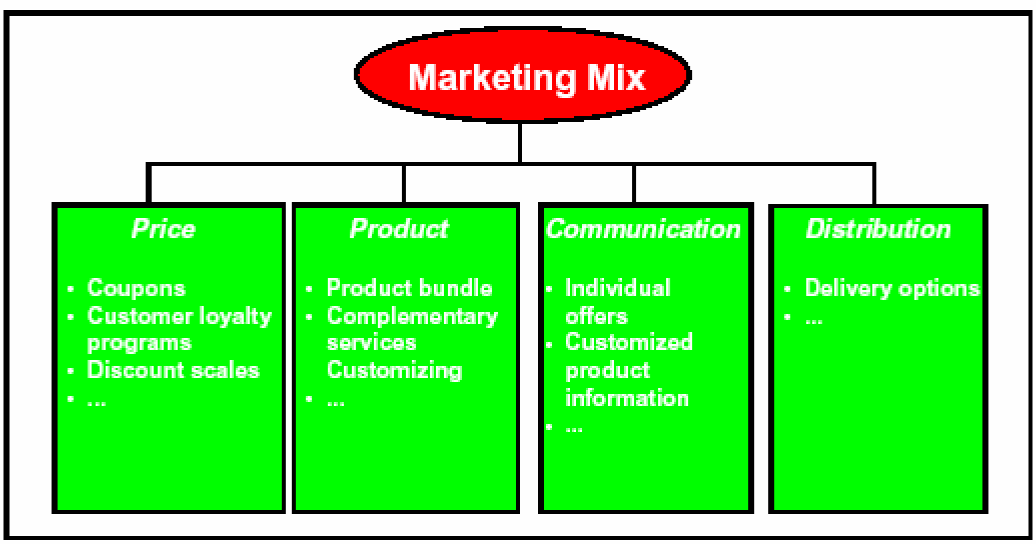
Tactical customer relationship management can take a number of approaches in meeting the requirements of the target group. This step represents the implementation phase of the customer relationship management process. In addition to this, customer loyalty programs will be introduced as a specific tool used in the relationship management process, as the interviews revealed that retail managers still anticipate a great potential in this field. Moreover, these loyalty schemes represent a measure for comprehensive targeted marketing as an individualized customer approach that cannot be realized to a comparable extent through classic marketing measures.

Target group management activities can therefore be divided into three core areas: **marketing mix activities**, **buying phase integration**, and **customer loyalty programs**.

Marketing Mix Activities

Target group-oriented relationship management can be implemented in all areas of the marketing mix. Interviews with retailing managers have shown that retailers already use a variety of approaches. In all marketing-mix-areas there are tendencies towards focusing on target groups and on individuals. Figure below shows a few of the possibilities for focusing on target groups from a marketing mix perspective:

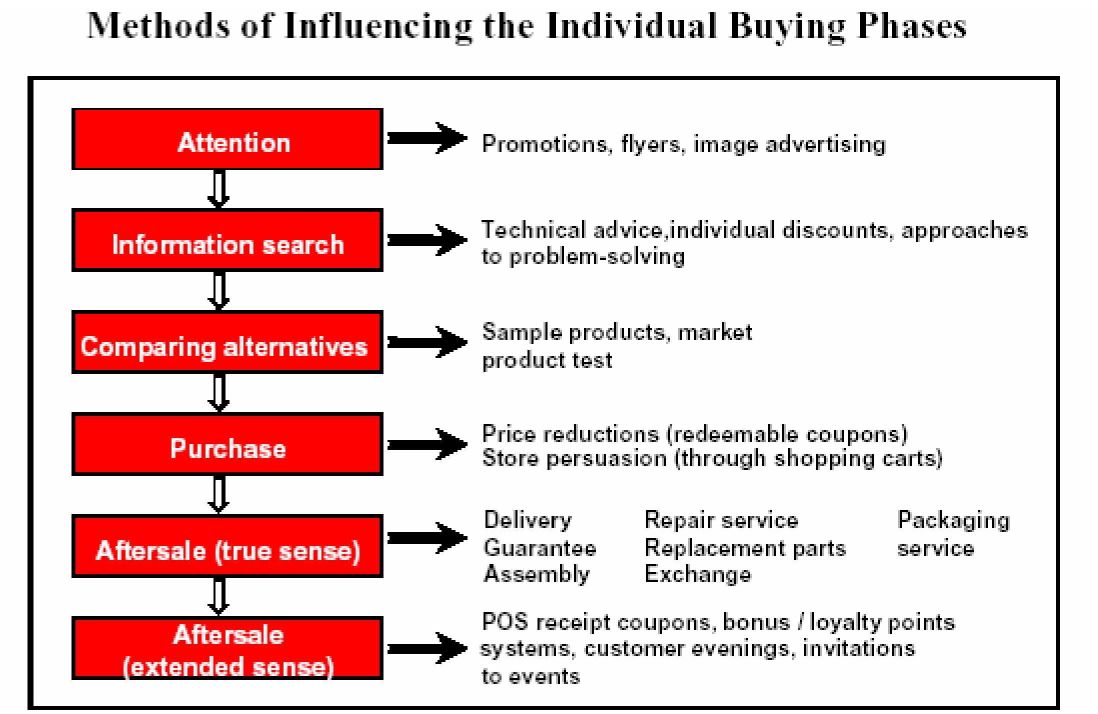
Target Group-Specific Influences Using Customized Marketing Mix Techniques



Integrating Buying Phases

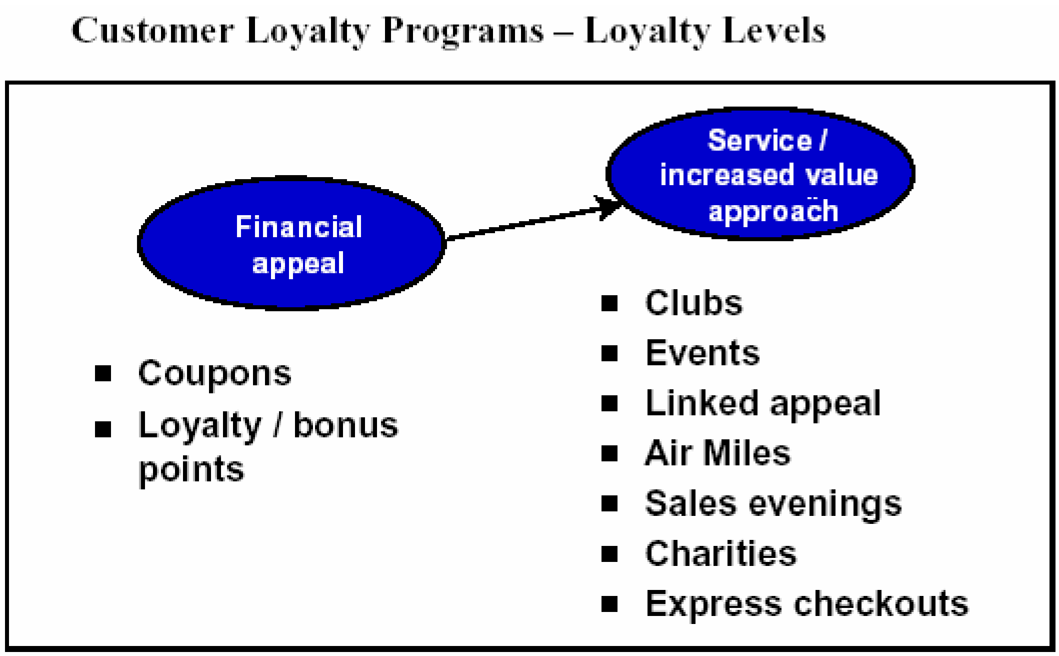
The second basic strategy for tactical customer relationship management is focusing on comprehensively satisfying customer requirements at all stages of their buying processes. This means that the marketing mix activities that come into play when a product is purchased are insufficient. Retail experts would therefore welcome more intense contact with customers in all phases of the buying process. Customers have an increasing number of possibilities to buy merchandise without actually entering "brick and mortar" stores and, therefore, retailers can no longer rely on in-store customer contact. The traditional, store-based perspective, where all buying activities take place in stores, must be called into question.

As a result of this development, after-sales marketing in its broadest sense is increasing in importance. This includes customer loyalty programs that - according to retail managers - become extremely significant when considering the situation of saturated markets in many retail segments and also – as a consequence of this situation - the increasing importance of securing the loyalty of existing customers. The various loyalty programs, customer card systems, customer clubs, and other after-sales marketing activities that already exist are indicative of this increasing trend. Loyalty programs are one of the most widely-discussed aspects of customer relationship management in recent times.



Customer Loyalty Programs

Figure below illustrates possible approaches to customer loyalty programs:



As mentioned before, customer cards in association with loyalty programs are becoming an increasingly popular retail marketing tool.

Today's customer loyalty programs mostly involve financial benefits for customers. Interviews have also shown that 'personalized' services, where customers can decide how to best redeem loyalty benefits, only play a minor role. Widespread immediate discount systems, for example coupons, offer the customer standard benefits and offer individual customers no possibility of 'personalizing' their benefits. This situation is, however, showing signs of change. Companies are increasingly beginning to use non-financial customer incentives in customer loyalty card systems. There is also a move towards implementing customer loyalty point systems in which customers can choose the incentives that best match their requirements. Consequently, a shift towards the individualization of customer relationships is starting to become more and more apparent in this area. In India, there is increasing support for a general overhaul of customer relationship management strategies connected to customer loyalty cards, as it is believed that existing programs concentrate too greatly on pricing. They are also too rigid and unimaginative, and are so homogeneous that the competitive nature and advantages related to market positioning which such systems are intended to enhance are in fact reduced. There is a clear trend towards more value and service-oriented concepts, rather than pure financial benefits.

Target Group Monitoring

Monitoring customer groups is of utmost importance, as this means measuring the success and efficiency of customer management processes and the effectiveness of the marketing tools involved in these processes. Current and historic customer data plays a key role in analyzing the efficiency of marketing tools. Targets can also be examined by comparing the target and actual values of criteria in the evaluation and analysis phases. This feedback, based on current sales and customer data, is then integrated in the customer management process which is introduced and provides an impetus for possible improvements at all levels of the process.

Analysis

Most sectors of the retail business are now clearly moving towards target group-oriented marketing. In many service sectors this trend is not new. However, it is also being introduced increasingly in traditional market areas. In grocery retailing, in particular, new approaches for achieving differentiated marketing can be seen. Tactical approaches to systemizing customer relationship management in retailing already exist in many companies. Many areas - customer loyalty programs in particular - have experienced a marked move from financial to service-oriented benefits. This move is a very welcome one, as up until now these tools have rarely been integrated in a strategic customer relationship management process and they are thus rarely included in global concepts for professional customer group management. The interviews showed that customer relationship management will certainly gain in importance in the future, though how it will be implemented still remains somewhat unclear. The customer relationship management process discussed in this research paper document therefore represents a comprehensive basic concept rather than a specific strategy that can be implemented uniformly.

E -Retailing – Why does it stand apart?

A basic fact of e-Tailing is that all web sites are created equal as far as the "location, location, and location" imperative for success in retailing is considered. No sites are closer to its customers. This makes it vital that business makes customer to come back to their stores. The key to this goal is to optimize factors such as efficiency, personalization, socialization, the look and the feel of the site, offering incentives to purchase and security.

Performance and Services

The site must be efficiently designed for ease of access, shopping, buying, with sufficient server power and telecom capacity coupled with marketing, ordering and customer service.

Personalization

It should personalize your shopping experiences encouraging you to make repeated visits. Many sites register their customer and personalize according to them.

Socialization

Giving online customer with similar interests a feeling of belonging to unique group of like minded people helps to build customer loyalty and value.

Look and fee

Websites can offer attractive virtual sore front and may provide multimedia experience.

Incentives

Web stores must offer visitors to buy and return coupons, discounts, special offers and vouchers for reimbursement on purchases made online/

At this point of time, E - Retailing is a not-so-profitable proposition for three major reasons

- Too many web-sites. One estimate puts the number at a mind-boggling 250 million, of which at least a quarter is eTailing in one form or the other. Not many sites are sticky enough. Even for those that are, there isn't enough to go around.

- Most eTailers have not been successful in building strong back-end systems. Accenture's worldwide research has demonstrated that 1 in 4 attempted purchases over internet fails. Would you go back to a grocer who ditches you 25 percent of the time?

- Integration of eTailing websites with the associated Supply Chain processes has been poor. Accenture research indicates that the most common complaint of on-line shoppers is: "Items ordered are out of stock." Many eTailers are stand-alone eBusinesses with poor (if any) linkages with supply chains that deliver the promised product.

There are two primary cost-related forces that drive profitability in the eWorld

- Cost of customer acquisition

- Cost of servicing customers (both existing and newly acquired)

Conveniences looked for by consumers in E - Retailing

At a basic level, the motivational pattern of prospective Internet shoppers will have to be analyzed. There are five basic types of convenience, which may be perceived by Internet shoppers. They are

Reduction in the time spent on shopping

For instance, nuclear families in urban cities, with both spouses having a busy schedule, may want to reduce shopping time.

Flexibility in shopping time

Apart from the segment mentioned in the earlier point, senior-level corporate executives may be interested in this type of convenience.

Saving the physical effort of visiting stores

This aspect has to be analyzed with great care, as a cross-section of the upper economic strata, (does not include the earlier segments which have been stated) such as housewives, may perceive shopping as a recreational activity. The physical effort of visiting stores has to be viewed in relation to the product category shopped for. The effort may not be worth it for FMCGs or commodities but consumers may perceive that it is useful for products such as ready-mades or furniture.

Search effort

Research indicates that Internet shoppers are likely to be less price or brand conscious as they are exposed to a lot of information on the net. "Deal prone" consumers may look for value, rather than just the price factor. Mahindra and Mahindra recently launched Quadro, which can be ordered over the net. Consumers can have a customized product with accessories and attachments.

Impulsive buying behaviour

This may be of interest to marketers of CDs and books. Consumers may indulge in impulse buying in response to advertisements and this segment can place orders over the net. A database of these consumers would help the marketer develop a relationship with consumer by monitoring the preferences and variety sought by them. Categories such as confectionery and fashion apparel may also qualify for impulsive buying over the Internet. The marketer should keep the excitement alive by introducing a number of variants in these categories (some of them could be exclusive to the net).

Another area of research being attempted by marketers in developed countries seeks to look for differences between the profile of the Internet shopper and the Internet user. The profile could provide information on psychographics – such as attitude towards buying products on the Internet, risk taking and lifestyle orientation.

Critical Success Factors for E- Retail

- Information – easy access to information on a wide range of products
- Communication – personalize service
- Transaction processing - ensure simplicity and security
- Supply – winning confidence of suppliers
- Distribution – ability to deliver worldwide and on time
- Integration of old and new systems

Lets Sum up – The Indian Scenario!

Advantages of E-Retailing

- Sheer convenience
- Wider choice
- Better value
- Unique gifting opportunity
- Saves time and strain
- Micro targeting
- Mass personalization
- Know customer preferences
- Integrated source of information

Bottlenecks in E-Retailing

- Lack of trust
- Payment gateways not clear
- Security concerns
- Transaction fulfillment is questioned
- No integration between online and offline stores
- Physical large shopping malls themselves are a new concept in India

Conclusion

There's little doubt that eTailing is the future. But, that's just the point: it is the future. The present clearly belongs to B2B. Realising that future will require research, introspection, learning and educated effort. Let's then conclude by compiling a 'recipe for success' for eTailers the world over:

- Get your back-end systems into shape. Customers keep coming back only if earlier shopping experiences have been pleasant and successful. Quit gloating over the 75% success rate of on-line purchases.

Remember, you are competing with the neighborhood store, which, more often than not, has a close-to-100% record, and a smiling, friendly shop-keeper thrown in for good measure.

- Integrate! Integrate! Integrate! Treat your eTailing site as the customer-facing end of a supply chain, not as a stand-alone antenna for attracting Web-travelers. Focus on building strong bonds between every link in the supply chain (order processing, order status tracking, payment status, inventory level reporting, procurement) and build your B2C store-front.

- Build alliances. Many traditional brick-and-mortar firms have well-established supply chains (a case in point is our very own 'Apna Bazar' chain of supermarkets in Mumbai, Warana Bazar in Warananagar), but lack the eSaviness that you can bring in. You, in all probability, have neither the inclination nor the resources to build a successful supply chain. It's a win-win situation!

- Get help. You've heard this before, but its worth repeating: eTailing isn't just about building a pretty web-site. An established management consulting firm will bring in the requisite skills to evaluate your business plan, check out revenue models, help identify potential alliances and integrate supply chain processes with your eCommerce initiatives.
  Go out there and create your efuture!

References

[1] Computers Today, January 2001 published as ‘Wayward in Virtual Malls’, K. Jaydev

[2] Business World, December 18, 2000, Shoppers’ Stop: Adding New Colors, M. Rajshekar

[3] www.retailadvisors.net, The Ultimate Business on the Web, Rosemary Chancellor

[4] Services Marketing, Tata Mc GrawHill, Zeitmall

[5] www.etailing.com

[6] Business Line, August 3, 2000, What Makes E-tailing Tick?, S. Ramesh Kumar, Associate Professor, IIM Bangalore

[7] www. ac.in, Accenture (formerly Anderson Consulting), personal interaction with Mr. Riaz M. Raihan, Management consultant e-mail: riaz.m.raihan@ac.com

[8] www.ksa-techopack.com, personal interaction and e-mail interview with Mr. Arvind Singhal, CEO, KSA Technopack India Ltd.

[9] European Management Journal, Vol 18 No 5, October 2000, The Converging Business Models of Internet and Bricks-and-Mortar Retailers, Albrecht Enders, Taefik Jelassi.

[10] European Management Journal, Vol 18 No 5, October 2000, Get Real! Managing the Next Stage of Internet Reatail, Stephen Chen, Fiona Leteney

[11] California Management Review, Vol 42, No. 3, Spring 2000, E-Retail: Gold Rush or Fool’s Gold?

[12] The Hindu, Stat Talk, Feb 15, 2001, N. Nagaraj, Krishnan Thiagarajan, pg 19.

[13] http://www.gartner.com/public/static/hotc/00093369.html, E-Tailers:’Tis the season for E-Service Availability, D. Scott, C. Ferrara

[14] A & M, 15 Nov 2000, Online Retailing, Click And Mortal, Micheal Tchong

The Development of Electronic Services in Public Agencies: The Case Study of the Department of Commercial Registration

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Abstract

A new challenge of the next generation Electronic Government (e-Government) leader in public sectors is the need to understand and realize how information technology (IT) impacts the way government works and provides better service opportunities to citizens. The ability to transform its own internal work processes and prepare public officers to support the use electronic services (e-Services) is critical to the success of e-Government project development and implementation. These involve with many tasks such as leadership role, involvement of officers and new IT technology.

This paper examines the electronic services development in a public agency using the Department of Commercial Registration (DCR) as a case study. The DCR had successfully transformed its own department through the electronic department (e-Department) initiative and provided e-Services to citizens via the website "www.thairegistration.com".

This case study examines the IT development process and brings out the various success factors that may be relevant and act as a reference for other public sectors facing similar e-government development.

Introduction

Electronic government (e-Government) refers to the use of information technologies (such as Wide Area Networks, the Internet, and mobile computing) that have the ability to transform relations with citizens, businesses, and other arms of government. These technologies can serve a variety of different ends: better delivery of government services to citizens, improved interactions with business and industry, citizen empowerment through access to information, or more efficient government management. The resulting benefits can be less corruption, increased transparency, greater convenience, revenue growth, and/or cost reductions [5]. It can be considered as a tool for government to provide better government administration and public services [2]. E-Government can increase efficiency, decentralize the level of decision-making, increase accountability, improve resource management, and increase the use of market forces to cover relationship between citizens and the public sector [3].

In a developing country like Thailand, e-Government development in public agencies is inevitable. The reasons are not only to increase efficiency and effectiveness, but also to solve the problem of the manpower shortage in the Thai's bureaucratic systems. Since the economic downturn of Thailand in 1997, the Thai government had issued a clear policy that the manpower in public sectors must be frozen or reduced. However, it doesn't mean that by reducing the number of officers, it would automatically reduce the government's workload. On the contrary, the efforts to recover from the economic downturn demand more results from the government and civil servants. The public agencies are struggling to maintain their own productivity. How should the government cope with this problem? The public agencies need to utilize information technologies (IT) as a tool to increase productivity in spite of the manpower scarcity.

However the e-Government development in Thailand has not always been a success story. In 1992 the World Bank signed a loan agreement with the Thai government to carry out a large and complex IT project in the Revenue Department of Thailand. The project was to be completed by the end of 1996. However, the software contractor defaulted on the contract in 1993, forfeiting his bond. Subsequent evaluations acknowledged the project as a failure. The reason was the lack of an appropriate and well-specified objective for the project from the beginning. The project's proponents were overly eager to purchase and install hardware and devoted inadequate attention and patience to project preparation. There was little emphasis on developing the Revenue Department as an institution, in increasing the efficiency of collection and improving the quality of auditing [4].

To illustrate the difficulty of the e-Government development in Thailand, Chutimaskul [1], [2] had described problems related to e-Government as follows:

a. Lack of conciseness in the national IT master plan, strategy tools and performance evaluation and monitoring.
b. Insufficient and inefficient human resource development in information technology. Unskilled information technology management.
c. Inactive bureaucracy, non-consensus plan, budget misuse, insecurity, various data formats, and project redundancy. Project base resource planning with respects to enterprise resource planning.
d. Lack of correct information and knowledge for solving serious problems such as drug, political conflict, crime, corruption, and lost income. Lack of complete primary data and knowledge based approach.
e. Superfluous Pride on small things, delight on small project success but less success in big issues.
f. Lack of true transparency in e-Government projects. A trend of individual e-Government development, no pilot projects or building on other's knowledge. Imprecise information technology procurement.
g. Unclear security, privacy and access policy.

The e-Government problems as described above have tremendously affected the development of IT in Thai public agencies. Also most importantly, the leadership role of public agencies is a vital factor in the success of e-Government initiatives. Leaders need to understand that information systems are rooted in a context of people and social structures and themselves are composed, partly of people and social structure [3]. Heeks [3] had constructed the idea of conception-reality gap or the gap that exists in an organization between the conceptions and public sector realities that determine success or failure in the information age reform. He argued that the success or failure of information age reform is dependent on the degree of mismatch between the conceptions of that reform and the realities into which it is introduced. The mismatch can be addressed in seven main dimensions viz., **I**nformation, **T**echnology, **P**rocesses, **O**bjective, values and motivations, **S**taffing and skills, **M**anagement and structure and **O**ther resources such as time and money. These are described in the ITPOSMO dimensions of change model (see Fig 1). The ITPOSMO model is a useful framework to analyze the success and failure factors and to study how leaders practically deal with them.

The ITPOSMO model is applied here to a case study examining the successful adoption of IT in the Department of Commercial Registration (DCR).

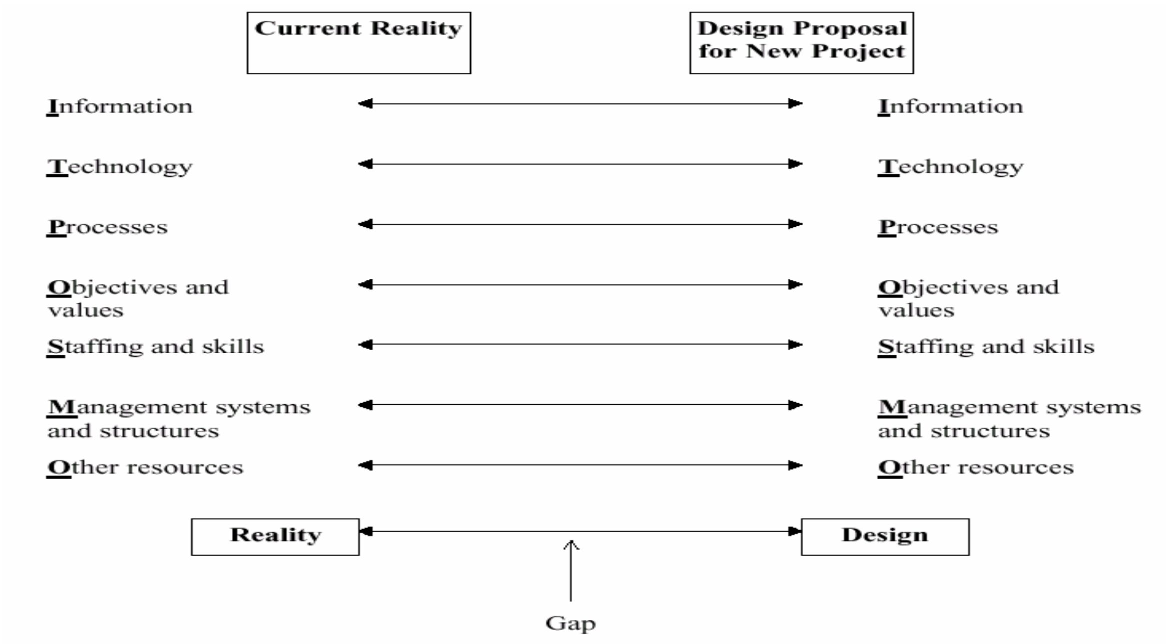

Fig 1: THE ITPOSMO DIMENSIONS OF CHANGE BY HEEKS [3]

Background of DCR

The main responsibilities of the DCR are to provide services for a juristic person (a company) registration and maintain business records and information for public usage. The e-Government initiative within the DCR started in October 2000 when Mr. Adul Vinaiphat, the Director-General (DG) of Department of Commercial Registration, Ministry of Commerce, introduced the concept of electronic department (e-Department). The e-Department initiative is a bold concept, which aims to utilize IT systematically as a tool to increase productivity of an officer both at the head office and the regional offices and to provide an electronic service (e-Services) to citizens and other public agencies. Within a year of introducing the e-Department initiative, the DCR had successfully launched its website (www.thairegistration.com) to provide basic information to the citizens. In August 2001, the DCR website started providing e-Services such as the intended juristic person name inquiry and reservation service, juristic person registration service, juristic person document inquiry service, financial statements inquiry and fee payment via bank. Since then, the www.thairegistration.com website has become one of the most successful e-Government website in Thailand. The number of visitors has been increasing dramatically (see table 1). When first launched in March 2001, there were only 35,280 hits compared with a total of 329,140 hits in March 2002. Moreover, in between January 2002 to June 2002, there were a total of 241 transactions from citizens and businesses that participated in the juristic person registration electronic service.

Table 1: THE NUMBER OF VISITORS AND E-SERVICES BETWEEN MARCH 2001 TO JUNE 2002

Year	Month	Number of Visitors / Hits	Number of e-Services Transactions		
			Juristic Person Document Inquiry Service	Name Reservation Service	Juristic Person Registration Service
2001	Mar	35,280	-	-	-
	Apr	57,555	-	-	-

Year	Month	Number of Visitors / Hits	Number of e-Services Transactions		
			Juristic Person Document Inquiry Service	Name Reservation Service	Juristic Person Registration Service
	May	108,362	-	-	-
	June	981,166	-	-	-
	July	121,333	-	-	-
	Aug	155,490	29,744	1,711	-
	Sep	186,396	75,850	1,659	-
	Oct	258,932	130,175	2,316	-
	Nov	316,038	172,628	2,149	-
	Dec	245,205	118,316	2,365	-
2002	Jan	317,955	136,052	4,744	34
	Feb	327,720	154,605	5,110	52
	Mar	329,140	186,159	6,096	43
	Apr	217,940	119,940	5,032	46
	May	508,891	241,695	3,608	24
	June	622,791	317,524	3,987	42
Total		**3,907,194**	**1,682,688**	**38,777**	**241**

Source: the Department of Commercial Registration, 2002

Methodology

The case study of the DCR was conducted through individual in-depth interviews with the total of twelve officers in various key positions ranging from: Director-General, Deputy of the Director-General, Head of Information and Communication Technology Division, Commercial Registration Analysts, Legal Officers, Technical Computer Officers, Project Manager, and Webmaster. The aim is the investigation of the factors and rationale behind the success in adopting electronic services within the department during 2000 to 2002.

The Success Factors in Adopting Electronic Services in DCR

The case study reveals and establishes the vital role of the DG as the top management in DCR whose pioneering efforts to bridge the gaps between organizational reality and the reforms concepts led to the successful e-Department initiative. This case study illustrates and examines the various factors and the role of management according to the seven dimensions as described in the ITPOSMO model.

The Information Dimension

- *Utilized the Internet to provide information service to citizens*

One of the main responsibilities of the DCR is to provide business information satisfying general public interests such as providing a business registration directory, a searching service on business name for registration. During 2000, the DCR had provided certain business information to private sector and most of the data had already been stored in their computer systems. However, the information dissemination method at that time was based on paper documents or via third party entities. Being fully aware of the potential of the Internet then, the DG had established the www.thairegistration.com with the aim to utilize it as an alternative medium for citizens and businesses. The information dissemination through the net became one of the successful e-Services primarily due to two factors: the selection of the growing and cheap medium of Internet and the development of the information dissemination service based on a solid existing database without having to develop new database systems.

The Technology Dimension

- *Moving existing information technology to the Internet*

The DCR had developed its own computer systems since 1994. In 2000, the internal use of IT was well established in certain type of work processes such as business registration. The network system in DCR mainly utilized LAN and WAN. During 2000, the DCR installed a leased-line connection to eight branch offices in Bangkok, three other departments in the same office complex and the Department of Business Economics. The DCR also connected its branch offices in sixty provinces with the centralized computer systems at the head office via the dial-up network. The DCR has a DEC4000/620 AXP server, which provides registration information for internal services and the Silicon Graphics systems which functions as the image document server.

The DG's progressive vision in utilizing the Internet to provide services to citizens necessitated the implementation of many new types of hardware and software at the DCR. The DCR installed WEB, MAIL, DATABASE and PROXY servers, which are located on the 5th floor of the DCR's central office in Nontaburi, and are linked with Inet (ISP) for access to the Internet where www.thairegistration.com is located. The DCR was also connected to the net via the Department of Business Economics (www.moc.go.th). The moving of the original technology to the Internet did not cause many problems, as it was only an extension of the existing information systems.

- *Outsourcing of IT work*

In year 2000, the DCR had its own IT section with many IT staff but all of them were civil servants who rarely updated their IT knowledge and were accustomed to think conservatively. This prompted the DG to realize that the e-Department initiatives cannot rely on the DCR's own IT section alone. Therefore, the management took full responsibility in building up the e-Department initiative concept and brought in outside software companies to participate in the development. This move brought professional inputs into the DCR project as in the private sector business, IT personnel are more technologically advanced and at the same time are more experienced due to the their intense competition. As a result, much new and innovative technology know-how including many creative ideas came into the DCR such as the Internet technology, security technology, hardware and software technologies, etc. Also outsourcing the IT work to private companies expedited the development of IT projects and made them more cost effective.

- *Controlling and efficient management of the outsourcing companies*

Here, the DG and his management team intelligently managed the software companies and increased their net productivity. Some software companies view public agencies as cash cows giving huge profits because most of their officers lack IT knowledge and tend to believe in everything they sold. Hence, the management carefully screened the software companies by reviewing both their technical competency background and financial strength. A software company that participated with the e-Department project was made to understand that the e-government budget came from the taxpayer's money and the profit that the company made based on an unreasonable pricing or a poor quality product would not benefit the society as a whole. The logic was that the software companies should consider a long-term relationship with the DCR instead of short-term profits. This led to the successful identification of genuinely competent firms and a close relationship was established between the IT companies and the DCR, which was one of the success factors in the e-Department initiative.

The Processes Dimension

- *Re-design service processes via the www.thairegistration.com*

The e-Department initiative was aimed to utilize the Internet as a channel to provide services to citizens and businesses. Most of the services in 2000 were based on manual procedures in which citizens have to physically interact at the DCR office. With the proliferation of the Internet in Thailand, the DG had foreseen an opportunity to re-design the DCR's existing services to digital virtual services. The website www.thairegistration.com (see Fig 2) was established to fulfill these objectives. It applies IT in work processes such as registration services, commercial document inquiry, DCR's procurement online announcement, online payment (with Siam Commercial Bank, Krung Thai Bank, and Bank of Asia), etc.

The e-Service applications served via the www.thairegistraton.com are:

a. General information about the DCR such as organization chart, laws and regulations, news, announcements, training and seminars, registration process etc.

b. E-Services applications.
   - o Intended juristic person name inquiry and reservation service (Since March 1, 2001)
   - o Juristic person registration service (Bangkok only: since January 16, 2002)
   - o Juristic person document inquiry
   - o Financial statements inquiry
   - o Fee payment via banks (with Siam Commercial Bank, Krung Thai Bank, and Bank of Asia)
   - o Forms download services from their web site as well as other interactive transactions such as commercial registration inquiry, etc.

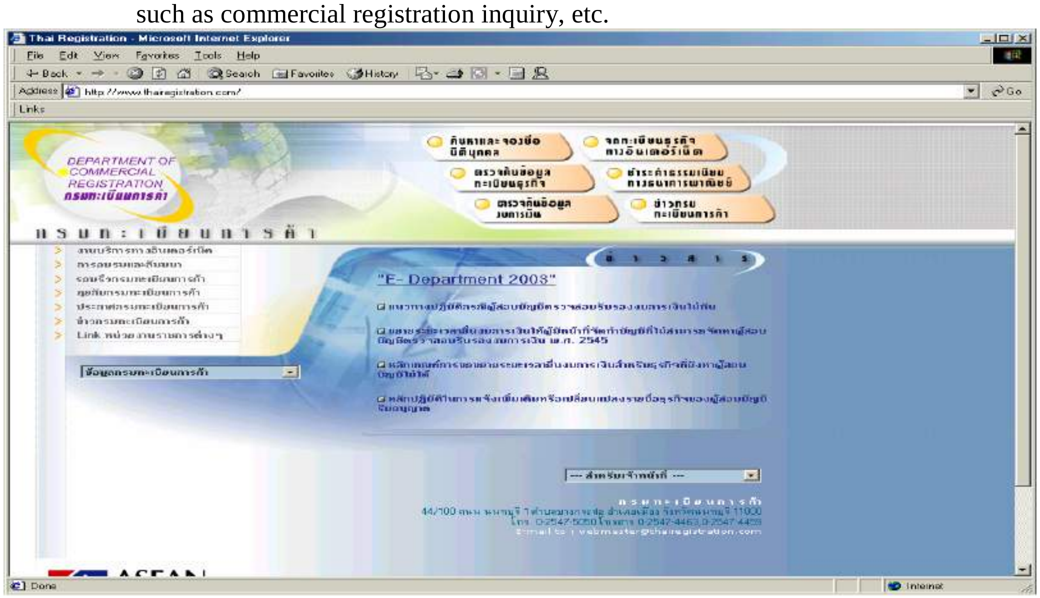

Fig 2. THE DCR WEBSITE: WWW.THAIREGISTRATION.COM

- *Adapting to the existing related laws, regulations and processes*.

The basic requirements for the development of information technology in governmental agencies are the government stipulated laws, regulations and guidelines. Those laws and regulations determine the responsibilities, work processes and eventually a boundary of the IT systems. Some laws and regulations do not support the use of electronic or digital medium. They specify that electronic medium documents cannot be used as evidence in the legal context. However, changing / updating those laws and regulations to comply with new digital technology or waiting for a such a digital supporting law such as digital signature laws would require tremendous time and effort. This might cause high risk to the project resulting in possible failure. Therefore, the DCR took the IT adaptive approach when operating within the existing laws and regulations. By analyzing the existing services and adapting the work processes using IT and the Internet, the DCR innovatively transformed certain work processes to the e-Services framework and, at the same time, avoided conflict with the existing laws and regulations. However, this approach is not sufficient to transform all the work processes and services of DCR to the e-services framework. This is only effective for the transformation of the work processes on an incremental basis.

The Objective, Values Dimensions

- *Applied business experiences to public agencies*

While pursuing the e-Department initiative, the DG and his management team utilized a business-like mindset with many intuitive approaches. For example, although in 2001, the digital signature law in Thailand was not yet enforced, the DCR was one of the first public agencies that explored the use of digital signature technology. The rational behind such an innovative action was that if private sectors were willing to use digital signature technology then why couldn't the public agencies adopt the same platform? In other words, if the public agencies always keep playing safe and maintain low profile in IT development, then progress is impossible.

Another example of the business like mindset is the setup of the DCR website with the ".com" instead of ".go.th" which is conventional for most government websites. With the ".com" suffix, the DCR gave a first impression to citizens that it had transformed itself to a new digital framework and could provide electronic services to citizens the same way as companies do. This created an immediate acceptance amongst citizens and businesses. And also, the design of the web page was very stylish and attractive unlike most of the conservative style government websites in Thailand.

- *Act as a pioneer in the e-Services development in public agencies*

The development of the DCR e-Services was not based on a market survey or an absolute idea about whether citizens would be capable to utilize the Internet. Instead, the DCR acted as a pioneer of the e-Services development and promoted the services through its website www.thairegistration.com. The rationale was that in developing countries, the government must act as a leader in the use of IT in the society. It is not always essential or necessary to ascertain the citizens' acceptance in advance. The government can use its e-Services to stimulate and induce the use of IT or specifically the Internet amongst citizens and businesses. This pioneer mind-set attitude is very important for the leader in developing countries. It is proved that the public will eventually accept the efficient and effective e-Services framework provided by the public agencies.

The Staffing and Skills Dimension.

- *Building the IT skills amongst DCR's officers.*

The IT literacy and acceptance amongst the DCR officers is one of the key success factors in the development of e-Services in the DCR. The gaps are not only in the area of IT knowledge and skills but also in term of personal attitude toward the use of IT in government work processes. Some civil servants in public agencies might view IT as a fad, things that come and go and as a result, they tend to ignore the use of information technology and hesitate to learn them. In fact, an officer who wants to utilize IT in her workplace doesn't necessarily need to acquire sophisticated knowledge like a computer scientist has. Only a basic knowledge and understanding of the IT should be enough for an officer to appreciate the use of IT.

When the DG started the e-Department initiatives in 2000, he found that the lack of IT skills was evident not only in low-level officers but also in the management level. The lack of knowledge in management level can cause serious obstruction in IT development; for example, a manager might reject a new IT-related project, neglect the necessity of an IT budgetary plan or make a wrong decision on the IT project proposed by his subordinates. In some cases, the managers might either delay the IT related project or ignore the project by letting subordinates work alone without any supervision.

In order to make the DCR's officers competent with IT, the DG had issued a formal order instructing every officer to attend computer-training courses provided for a 3 months period. The basic training courses were word processing, spreadsheet, e-mail and the Internet. Every officer was to undertake the training and was also required to pass the examination and obtain training certificates.

To ensure the success of the training programs, the DG had announced a computer training policy insisting on full attendance and no excuses as having other urgent matters to do. The DG and his management team paid full attention to the attendance percentage. In the beginning stage, some officers complained that the management was too fanatic about IT, but after finishing the training, they started to realize its potential. And officers close to their retirement age even mentioned that they would plan to learn more IT after they retire. Most officers started to appreciate the use of IT and comfortably accepted IT as a new tool in their workplace.

- *Retaining the IT skills*

The DG and his management team had also realized that, if an officer didn't practice or use a computer after the training, all her IT skills would eventually fade away. During 2000, the ratio of personal computer to officer in the DCR was around 1:7 due to the lack of budget in IT. The management had initiated two action plans to solve this problem. Firstly, they set up the central Internet room, which offered the officers a place to practice and improve their IT skills during their free time. Secondly, the officers could purchase a personal computer (PC) by borrowing money from the DCR with an interest free loan through the PC loaning program. The PC loaning program was very successful because its implementation provided a win-win situation not only to the DCR but also to the family of an officer. Normally, with a heavy workload, an officer must stay late in the evening to complete her work without an overtime payment added with the risk of going home late at night, encountering unhappy family and exhaustion. But with a PC at home, an officer could store data in a diskette and take home to work at night. She could go home, have family dinner and work at night or work in the morning at her own pleasure. Furthermore, her children can gain benefits from learning IT and the Internet by using the same PC.

The Management and Structure Dimension.

- *Objectives and plans must be communicated*

The most important step in starting the e-Department initiative is that every officer must understand the objectives and plans of the e-Department initiative. Therefore, the management had pursued the total participation from officers by announcing the objectives and plans to everyone. The management level officers knew the plan and had issued instructions so that every low level officer understood the plan as well. The plan's details such as schedule, steps, milestone, budget, deadline, responsible personnel, etc., must be disclosed so that everyone knows what is to be achieved. With a complete understanding of the e-Department objectives and plans, every officer had committed and contributed her efforts to the initiative. The management also fully participated in the e-Department initiatives by being personally involved with the development process and helping solve problems at hand such as lack of budget, lack of IT personnel, resistance to change, etc.

- *Aim big but start from a small scale IT project*

In the past, some of the IT projects in Thailand failed because the initial size of project was too big, too complicated and so, too difficult to control. The DG was fully aware of this fatality and understood the digital divide amongst officers between each division; as a result, the DCR's IT project approach was small scale. They started developing IT projects in the most IT readiness division and let the success story from those small projects speak for itself. The experiences gained from the small projects created confidence and proliferation of other IT projects in the DCR.

- *Set up the Steering Committee*

A steering committee was established, headed by DG, which comprised of directors and representatives from each unit in the DCR. The objective of the steering committee was to pursue the e-Department initiatives through 2003. It is certainly a great challenge for them to achieve that goal of providing a comprehensive network of services - which is easily accessible to public and which facilitates businessmen to conduct business transactions in a better fashion and to their administer the business strategies more efficiently. The DCR had stood at that threshold of the important development stage and is still in the process of further development. Thus, it is very important for the top management to support strategic IT planning and management for sustainable development. The vital role of the steering committee was to involve everyone in the organization in pursuing the initiative. The steering committee had become the prime moving force in the organization in various ways such as encouraging, promoting, and supporting the DCR's infrastructure, applications & content, and human resources. The steering committee was responsible for removing various critical obstacles and brought about possible solutions to make full use of IT. For instance, more rational work routines and new ways of working have been designed and introduced in their online registration project. The steering committee also acts as a think-tank that initiates new type of programs and projects within the DCR. This committee facilitates the e-services initiative and development and without it success would be hard to get.

The Other Resources Dimension.

- *IT Budget*

As Thailand is still facing the economic crisis, the budget for IT development is generally considered as a secondary criterion in the survival of the country. This lack of focus on budget for IT development could impede the development of IT in public agencies. Normally, public agencies must prepare the IT budget for the project, one year in advance. This requires paperwork describing a project objective, a comprehensive information technology specification and budget required. In some case, the Bureau of the Budget or other government agencies has to cut or reduce the requested budget. This may cause delay and obstruct the pace of IT development in public agencies. So, it is vital for the public agencies management to solve this problem and present their budgetary needs very carefully before the government. The DG as a top management of the DCR had to communicate and fight with the concerned parties in order to obtain the IT budget as originally planned. So, the understanding of the budgeting procedures and constraints is an important factor of success for the leaders in the e-Government project development.

Conclusion

This paper has examined the success factors and the practical roles of the Department of Commercial Registration's top management in the implementation of e-Department and e-Services initiative. It is obvious that the leadership role in public agencies is the most vital factor contributing to the success of the IT development. The risk involved in an organization must be sorted out and managed by reducing the gap between the reality and the design proposal of the new project. The top management must understand that the success of IT project is not dependent on the information technology alone but it has to be considered in the social, organizational and human orientation context.

The lack of IT skills amongst public officers should be given the top priority. With an appropriate IT training, officers can utilize IT as a tool to enhance their own work processes and reduce resistance to IT. It should be emphasized that the IT training should be undertaken not only for the low level officers but also for the management level. On the information and technology front, the pre-existing IT development in the department before the implementation of the e-Department initiative could be considered as a success factor. With solid back office systems, the chances of success in developing e-Services via the Internet are high. The lack of new IT innovative idea in public agencies can impede the development, so the top management should use the outsourcing approach to bring in new idea and expedite the development of IT projects. Managing and controlling the outside IT company is also another skill that the top management should acquire. On the process factors, it is imperative for public agencies to realize that the Internet can create a huge opportunity to provide new services to citizens and businesses. Many government work processes can be transformed and implemented through the website such as information dissemination services or transaction services. In public agencies, the greatest constraint in applying IT to the government work processes is the incompatibility with the existing laws and regulations when applied to the scope of digital services. So, the top management must carefully adapt IT to the existing laws and regulations to avoid possible risks. Another factor that contributes to the success of e-Services is the leadership role of the government in the use of the Internet. The public agencies must pioneer the new type of e-service using new technology even without a confirmation data on the electronic readiness of citizens. The public agencies should also establish a steering committee comprising of the top management and high level officers to lead, manage and solve problems that might occur such as re-engineering of work processes, incompatible laws and regulation, lack of budget, IT project management, etc. The steering committee is the father figure that guides the entire department through the electronic transformation process.

References

[1] Chutimaskul, W. (2001). E-Government: Can It Solve Serious Problem? Workshop on Knowledge Management and e-Government, International Federation for Information Processing, 39-44.

[2] Chutimaskul, W. (2002). E-Government Analysis and Modeling, Knowledge Management in e-Government KMGov-2002 proceeding, Schriftenreihe Informatik, volume 7, 113-124.

[3] Heeks, R. (2001). Reinventing Government in the Information Age. London, Routledge.

[4] Schware, R. & Bhatnagar, S. (2001). *Thailand's Troubled Tax Computerization Project*, The World Bank Group, and Retrieved June 19,2002 from the World Wide Web: http://www1.worldbank.org/.

[5] World Bank. *The definitions of e-Government*, Retrieved June 19, 2002 from the World Wide Web.

The Differential Impact of Business Models on e-Commerce

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Abstract

The shift from doing business in the traditional brick-and-mortar environment to the Internet caused major re-thinking of business strategies. This fact, combined with the rapidly growing world of electronic commerce, forced companies to investigate the opportunities to market directly to the customer in a highly personalised manner, with improved value-chain possibilities.

This study uses conventional business model theory to develop a framework to test the impact of business model decisions for successful e-commerce endeavours. Lohse and Spiller proposed in 1998 that website functionality impacts on sales revenue and further suggested that it has an apparent effect on share price performance.

This research further investigates potential relationships in choice of business model, website architecture and general design aims for optimum business returns.

Introduction

As the electronic marketplace becomes more competitive, customers are becoming empowered with a large array of choices and methods of shopping. A business model for an e-commerce application is therefore a highly significant component of the overall planning and development cycle. Such business models offer consumers flexible solutions that more closely meet their current needs and interests. Examples of methods to create value streams on the Internet are plentiful. Amazon.com used disintermediation of the supply stream to create value. Other companies offer free products to attract visitors and eventually turn some of them into customers. Examples of such models are AOL and Yahoo, for instance.

Unfortunately, as with many new technologies, there are still few clear-cut and uniform theoretical structures that can serve as a tool to evaluate e-business models. This research aims to build a structure based on research conducted by a team of fourth year students at Information Systems at the University of Cape Town.

Business models are structures that ensure successful commercial practices to take place. This obviously cannot be a fixed blueprint for all types of businesses, but rather an algorithmic black box that ensures optimum customer satisfaction and participation. Some businesses are quite easy to describe in such an algorithm. The inputs (purchases of raw materials) are enhanced to the final products, which are then sold (output) to make profit. If the business performs well, advertisement is usually simple. As the word spreads and the site is being used, more customers are generated automatically. Unfortunately, as we know so well, things are normally not so easy and a lot of planning and thought need to go into developing and structuring a viable business model.

The increase in available options in conducting e-commerce, resulted in a rise in experimentation with e-business models. Unfortunately little research [Amit and Zott, 2000] has been conducted to evaluate the success of such models. This can be attributed to the relative youth of the field, or may be to the absence of acceptable measures for success [Watson, Berthon, Pitt, Zinkhan, 2000].

For the purposes of this paper only B2C (Business to Consumer) companies are investigated and shareholder returns are used as a measure of success.

Business models

Mahadevan's (2000) suggestion that there has been no attempt to provide a constant definition for a business model in the Internet context is indicative of the underdeveloped nature of e-commerce as a research area. There are however several authoritative authors [Rappa 1998, Timmers 1998, Amit and Zott 2000] who have done extensive work in providing clarity on this issue.

For the purpose of this paper Mahadevan's (2000) interpretation of Timmers' (1998) business model will be used, however much of the research stems from the Timmers' model which is more descriptive as to the components of the *business model streams*:

Value Streams, **Revenue Streams** and **Logistical streams**

Obviously online sales revenues are further affected by *sales channel decisions*, such as customer service, purchase processes, website performance, etc. If business model [Pentilä, 1999] and sales channel elements [Chan, Jegadeesh, Lakonishok, 1996] are held to impact on share price performance and returns, the research model can be represented as in Fig.1.

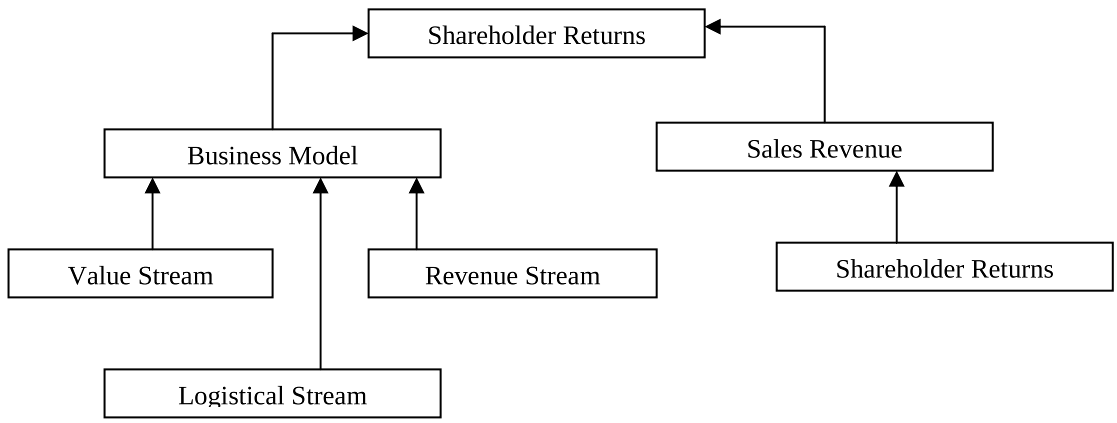


Fig 1: RESEARCH MODEL

It is well known that particular goods and services are better suited to e-commerce. The value offering that subsequently builds the *value stream* can be considered as the manner in which a product or service is offered to the consumer. This however only constitutes two of the five senses, namely sight and sound that are available on the Internet.

The *revenue stream* will be influenced by business type and pricing strategy, according to Timmers (1998). Business types are typically derived by observation and varies from author to author. The collection of models adopted by Geoffrion (1998) was chosen for the purpose of this research. Pricing strategy is normally set by sellers, although e-auctions and on-line space in general is creating new business models in this arena. Prices set by buyer or seller, such as in reverse auction and general negotiation, are additional examples.

The Timmers' model further dictates that the *logistical stream* be composed of an architecture for the product, service and information flows. It so often happens that orders cannot be fulfilled because of the lack of processes to complete a global sale. If the lack of faith in security of Internet purchases is considered, it is obvious that it is necessary to nurture a trust between trading partners to enable e-commerce to grow even more effectively.

Griffith and Krampf (1998) suggested that the ability to enhance a company's overall sales is a significant factor in the decision as to whether or not to establish a Web presence. The fact that the physical 'brick and mortar' shop floor is replaced by a user interface to an e-commerce platform, emphasises the importance of proper Web design features. The *sales channel* features can thus be grouped into two categories:

- Customer service
- Sales channel interface design

Many authors have emphasised the importance of customer service to achieve good financial performance in the physical world [Johnston, 1995, Grönroos, 1984]. It can similarly be shown that *customer* *service* is an important component of a successful e-business [Cox and Dale, 2001]. Often e-commerce systems have no interpersonal services, relying totally on automated self-service systems, help devices and systems that reduce intensive human interaction. This obviously leaves room for problems to occur with customer satisfaction. It is therefore clear that a great amount of research can be predicted in this area [Zhuang, 2000, Lohse and Spiller, 1998].

Sales Channel Interface Design includes the design features of menu bars, search facilities, and other navigational features. These features, combined with a homogeneous design of the website, will often play a determining role in the effectiveness of the site and whether the visitor will buy or not. It is also important that the sales facilitation process is quick and efficient in order to secure maximum potential sales revenue. Dead links and slow loading times are other obstacles that might deter an online client from making another transaction.

Research findings 1: e-Commerce Companies

Given that the business model and sales channel elements, as defined above, are held to impact on share price performance the following sample set of 'pure' e-commerce companies (see TABLE 1) were chosen to measure the performance objectives for the rationale of this research [Frankental, Myers, Wallis, 2001].

Shareholder returns are used as the definitive measure of success, which will allow a basis for comparison between the companies in the sample [Stewart, 1994]. The shareholder returns can therefore be calculated as follows:

Each company's share price and dividend information over an eighteen-month period (starting on 30 April 2000) was collected using the Reuters system. For this sample of e-commerce companies no dividends were paid, so the shareholder returns can be expressed as a simple function of capital gains versus the share price:

$$\textit{Percentage shareholder returns} = \frac{\text{Capital gains/losses}}{\text{Start share price}} \times 100$$

The results in Table 1 clearly indicate that B-to-C e-commerce companies are generating poor returns for their shareholders during the time period specified. It is however not clear to what extent the returns are the result of poor industry fundamentals as opposed to negative investor perception of pure B-2-C e-commerce companies.

Similar analyses of the business model and sales channel elements were performed using an objective measurement instrument as reported in Frankental et al (2001). This data, which is not reported here due to space restriction, further explains the low shareholder returns in general and the high returns posted by Expedia in most of the categories tested.

Table 1: PURE E-COMMERCE SAMPLE COMPANIES

Sample companies	Returns %
EXPEDIA.COM	140.7
TICKETMASTER.COM	-19.0
E-BAY.COM	-31.4
E-TRADE.COM	-72.1
AMAZON.COM	-84.4
BLUEFLY.COM	-87.0
DRUGSTORE.COM	-89.6
PRICELINE.COM	-92.1
BARNES&NOBLE.COM	-92.4
SPORTSLINE.COM	-93.0
ASHFORD.COM	-95.3
BUY.COM	-97.8
HEALTHCENTRAL.COM	-99.6

Research findings 2: The Banking Sector

In this example the effect of business model choice was measured in the South African banking sector [Kotze, Obree, Warnke, 2002]. A service quality hypothesis was tested by evaluating whether there was a difference in the service quality that the banks have been aiming to achieve for customers, compared to the service quality *perceived to be received* by customers. A further financial analysis included a test of whether the implementation of e-commerce business models increased shareholder returns (Fig.6) significantly in the banking sector as compared to the alternative hypothesis that e-commerce business models failed to increase shareholder returns significantly with business in the banking sector.

By analysing the 'big four' banks (ABSA, First National, Nedbank, Standard Bank) in South Africa, with respect to the total service perceived to be offered by them, it was observed that all of the banks had some form of e-commerce business model currently implemented. The success of these models was evaluated by using a research framework as summarised in appendix A. It was hence observed that all four banks were statistically similar in respect to the services that they were perceived to be offering.

By breaking up the services that the banks have to offer in terms of quality attributes, a bank could go as far as determining its specific areas of weakness. These areas include attributes regarding tangibles, reliability, responsiveness, competence, courtesy, credibility, security, access, communication and understanding the customer. The research framework developed these attributes into those that are either Customer Relationship Management (CRM) focused or those that are non-CRM focused. However, when evaluating the Customer Relationship Management issues with respect to the same banks, a different scenario emerged, and First National Bank was perceived to be offering considerably (18%) less with respect to Customer Relationship Management than the others, Fig.5 in the appendix. This is unfortunate as FNB has employed all the correct technology and infrastructure to have a great platform to achieve success.

Fig.2 compares the costs of Internet banking between the biggest banks in South Africa. Fig.3 indicates the costs between an individual who makes use of traditional banking methods and an individual who performs Internet banking. These graphs are based on an individual who performs the same amount of transactions using each banking method at two well-established banks (ABSA and FNB). It can be seen that there is not much money being saved by an individual who performs Internet banking transactions on a small scale. The situation is however quite different when the same comparison is performed with an individual who is using Internet banking on a scale similar to that seen by many small businesses, Fig. 4.

Some recommendations to banks came forward from this study:

- Banks must improve their levels of service, so as to meet the high demand in customer expectations. By the correct implementation of strategy and policy in the organisation, the bank has the ability to improve the expected levels of customer satisfaction.
- Banks must raise levels of Customer Relationship Management to gain competitive advantage. This result indicates the need for improvements in this area by banking institutions, to gain competitive advantage.
- Banks must use a framework such as suggested by Thompson and Strickland (2001) in conjunction with business models to achieve success. A proven framework in conjunction with the correct choice of business model should be implemented based on the findings of this report.

Conclusion

If the limitations of the small sample size and the lack of hybrid business models are taken into consideration in the first example, this research still indicates the significant impact the choice of business model can have on organisational success. Success must be seen as a multidimensional concept and it is therefore important to investigate the effect of market share, management teams and organisational structure as further variables that could impact on business model execution.

The second example concludes that the implementation of e-commerce business models in the banking sector did not succeed in meeting customer expectations. Further, there is a difference in the perceived service quality that customers have been receiving between the different banks and there is a significant difference in the perceived customer relationship management that customers have been receiving between the different banks. Also, the implementation of e-commerce business models increased shareholder returns significantly with businesses in the banking sector.

The implementation of e-commerce business models is not solely a factor for the success of an e-business. A structured framework and e-commerce business model aids the success of businesses. Success is determined by an array of factors implemented in conjunction with the business model.

New e-business models are frequently reported in the literature. This is due to the phenomenal growth and liquidity of Internet based business. There are no boundaries on innovation and degrees of functional integration experienced in e-commerce. A good model should therefore include all the characteristics mentioned in the introductory paragraphs of this paper, but ultimately ensure comprehensiveness in dealing with e-customers.

References

[1] Amit R, Zott C, (2000). Value Drivers of e-Commerce Business Models, Wharton School University of California.

[2] Chan K C, Jegadeesh N, Lakonishok J, Momentum Strategies. Journal of Finance (Electronic), Vol. 51, No.5, December !996.

[3] Cox J, Dale B G, Service Quality and eCommerce: An Exploratory Analysis. Managing Service Quality (Electronic), Vol. 11, No 2, pp121-131, 2001.

[4] Frankental R, Myers D, Wallis P, (2001). An Explorative Study of the Effects of e-Commerce Business Models and Sale Channel Design on Shareholder Wealth Creation. Empirical Research Project, Department of Information Systems, UCT.

[5] Geoffrion A, (1998). Business Models for Electronic Commerce. Online: available: http://www.andersen.ucla.edu/faculty/art.geoffrion/home/ec1/businessmodels1198.htm (Accessed April 2001)

[6] Griffith D A, Krampf R F, An Examination of the Web-based Strategies of the Top 100 US Retailers. Journal of Marketing: Theory and Practice, (Electronic), p12-22, 1998.

[7] Grönroos C, (!984). Strategic Management and Marketing in the Service Sector. Chartwell-Bratt, London.

[8] Hope B G, Hermanek M, Schlemmer C, Huff S L. Critical Success Factors in the Development of Business-to-Business Electronic Commerce. Journal of Information Technology Cases and Applications, Vol. 3, No. 3, 2001.

[9] Johnston R. The Determinants of Service Quality: Satisfiers and Dissatisfiers' (Electronic), International Journal of Service Industry Management, Vol. 6, No. 5, pp53-71, 1995.

[10] Kotze N, Obree R, Warnke N, (2002). An Evaluation of e-Commerce Business Models in the South African Banking Sector. Empirical Research Project, Department of Information Systems, UCT.

[11] Lohse G, Spiller P. Electronic Shopping, Communications of the ACM, Vol. 41, No. 7, April 1998.

[12] Mahadevan B, Business Models for Internet Based eCommerce: An Anatomy (Electronic). California Management Review, Vol. 42, Issue 4, p55, 2000.

[13] Molla A, Licker P S. e-Commerce Systems Success: An Attempt to Extend and Respecify the Delone and Maclean Model of IS Success. Journal of Electronic Commerce Research, Vol. 2, No. 4, 2001.

[14] MoneyMax, Share Evaluations, [Online], Available: http://www.moneymax.co.za/banking/compare_costs.asp?Nav=ban , (Accessed:2002, August 5)

[15] Pentillä V, (1999). New Business Models in the US, (Online). Available: www.finlandla.org, (Accessed: 2001, August 14).

[16] Rappa M. Business Models on the Web, (Online). Available: http://ecommerce.ncsu.edu/topics/models/models_text.html, (Accessed: 2001, April 7)

[17] Stewart G B. Eva: Fact and Fantasy, Journal of Applied Corporate Finance, Vol. 7, p 71-84, 1994.

[18] Tabor S W. Success Factors in e-Commerce Adoption: An Analysis of an Early Adopter Airline. Journal of Information Technology Cases and Applications, Vol. 3, No. 3, 2001.

[19] Timmers P, (1998). Business Models for Electronic Markets, (Online). Available: www.electronicmarkets.org/netacademy/publications.nsf/all_pk/949, (Accessed: 2001,April 21)

[20] Thompson A A Jr., Strickland III A J. Strategic Management Concepts and Case, Twelfth Edition, pp 48, 233-243, 2001.

[21] Watson R T, Berthon P, Pitt LF, Zinkhan G M, (2000). Electronic Commerce: The Strategic Perspective, Harcourt.

[22] Zhuang L, (2000). A Resource Based View of Electronic Commerce. The Graduate School of Kentucky.

Appendix: Selected research data for Case Study 2

This section was compiled using the relevant banking costs obtained via MoneyMax (2000), the M-Web's financial subsidiary. To give a clearer picture of cost analysis, examples are given of an individual who performs both heavy and light amounts of transactions a month.

FIGURE 2: A COMPARISON OF INTERNET BANKING COSTS BETWEEN SOUTH AFRICAN BANKS

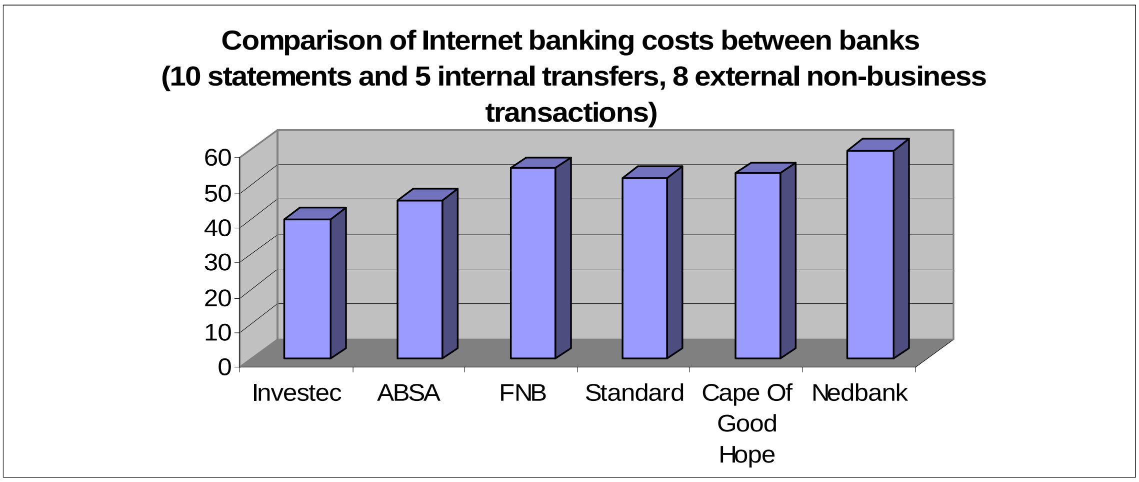


FIGURE 3: TRADITIONAL VS INTERNET BANKING COSTS (LIGHT USAGE)

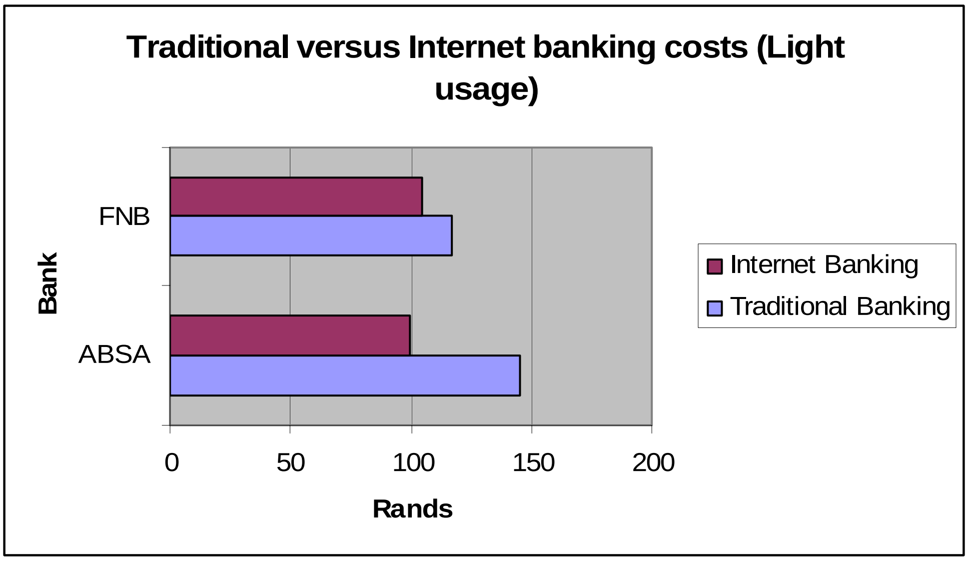


FIGURE 4: TRADITIONAL VS INTERNET BANKING COSTS (HEAVY USAGE)

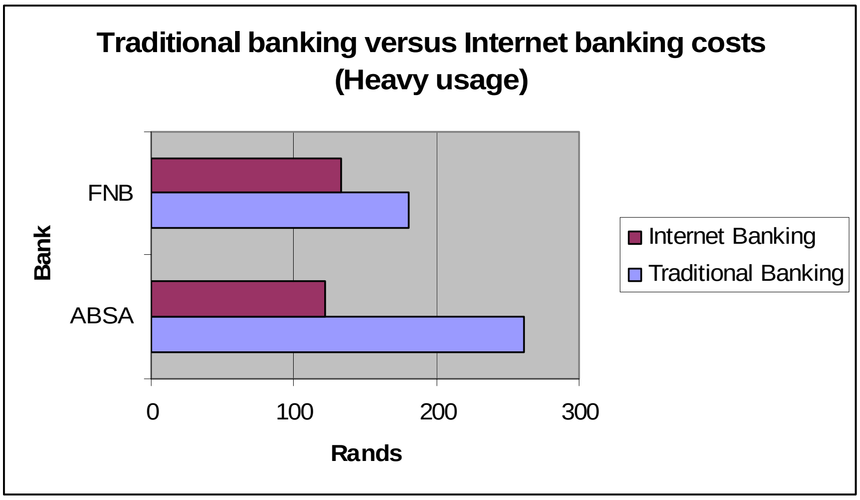


FIGURE 5: OVERALL TOTAL MEANS DIVIDED CRM AND NON-CRM MEASURES

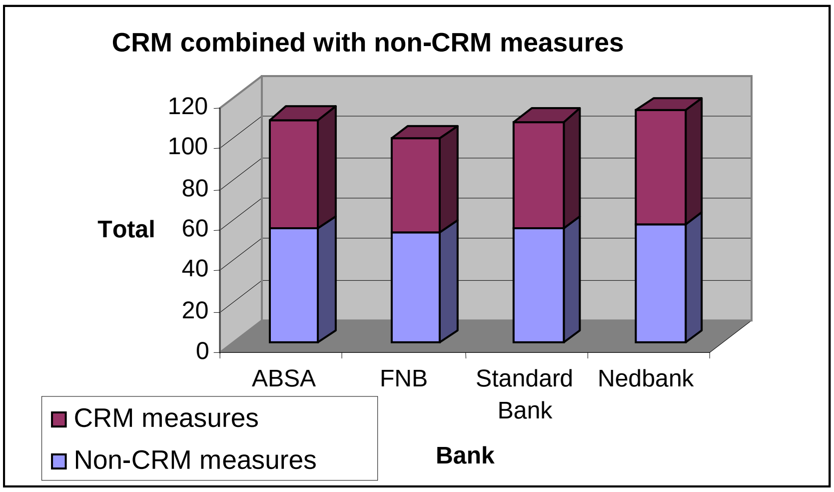
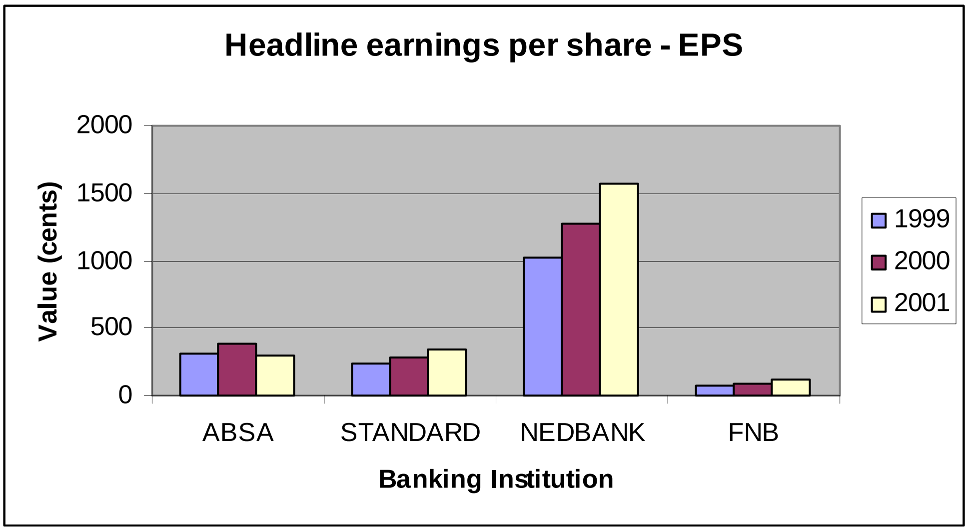


FIGURE 6: HEADLINE EARNINGS PER SHARE (EPS) , 1999-2001



The Effect of Perceived Characteristics of Innovation on E-Commerce Adoption by SMEs in Thailand

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Abstract

The study investigates factors that effect E-commerce adoption rate by Small and Medium-sized Enterprises (SMEs) in Thailand. Based on Rogers' Innovation Diffusion theoretical framework, five perceived characteristics of innovation are considered as factors affect E-commerce adoption rate. Security and Confidentiality is additional variable investigated this research. A multiple regression was conducted and the result shows that four characteristics of innovation – relative advantage, compatibility, security/confidentiality and observability – were positively related to the rate of E-commerce adoption by Thai SMEs.

Introduction

In today's business world, the Internet has come to play an important role. Since the early 1990s, the Internet has brought remarkable changes to nearly every aspect in our society. The Internet has created new industry structures and transformed the rules of competition in the marketplace, changing such things as intensity of rivalry, threats of new entrants, bargaining power of suppliers and buyers, and threats of substitutes (Hooft and Stegwee, 2001; Porter, 2001). The market therefore demands an entirely new business culture and set of processes for organization (Means and Faulkner, 2000). Among those changes is the emergence of electronic commerce.

Electronic commerce, E-commerce or EC has become a source for organizational competitive advantage for today's marketplace participants (Peffers and Santos, 1998). E-commerce is used as a new innovation strategy within many business sectors in order to increase business competitiveness. According to Watson et al. (1998), E-commerce involves the used of information technology to enhance communications and transactions with all of an organization's stakeholders such as customers, suppliers, government regulators, financial institutions, managers, employees, and the public at large. E-commerce has changed and is still changing the way business is conducted around the world. One source estimates that by the year 2004, the value of worldwide E-commerce will reach $US 6.8 trillion (Forrester Research, 2000), while the Asia Pacific region will have E-commerce revenues of $US 992 billion (Gartner Group, 2000).

E-commerce not only serves large businesses, but also can also serve small and medium-sized enterprises (SMEs). In today's economy, SMEs have become an important sector of the economy as they contribute to economic growth, social cohesion, employment, as well as regional and local development (Scupola, 2001). Globalization and rapid technology change, including the Internet and E-commerce, can bring new opportunities for SMEs (Scupola, 2001).

Technological innovations such as E-commerce are becoming more and more diffused among SMEs. Many authors mention various advantages of E-commerce relevant to SMEs, such as "leveling of the playing field" with big business (Longenecker, Moore, and Petty, 1997); location independence (Longenecker, Moore, and Petty, 1997; Purao and Campbell, 1998); time independence (Purao and Campbell, 1998); ease of communication (Iacovou, Benbasat, and Dexter, 1995); ability to achieve competitive advantages (Whiteley, 1998); and improvement of company innovation, production, sales and services (Esichaikul, and Thampanitchawong, 1998; Gosh, 1998; Hsieh, Lin, and Coveny, 1998). Additionally, barriers are substantially lowered by the advent of lower cost, open standards and more ubiquitous Internet-based technology. In particular, some believe that E-commerce can contribute to increased competitiveness and relative market power of SMEs, for example, through new kinds of specialized portals offering size hosting, promotion (OECD, 1999).

In Thailand, the development of E-commerce is one of the keystones of Thailand's IT-2000, supported by the Government. In January 1999, the government approved a proposal to set up an E-commerce Resource Center (ECRC) to provide E-commerce related information and training programs, particularly to SMEs. One goal of the center is to prepare SMEs to compete internally via E-commerce as well as to defend themselves against competition from outside the country (Nilles, 1999). Nonetheless, although E-commerce has already been implemented in many countries and the Internet has been used to improve efficiency and effectiveness in today's business environment, SMEs in Thailand have been slow to adopt the technology, and are still reluctant to go online with E-commerce on the Internet (Dos and Peffers, 1998). Therefore, this study is designed to determine what factors affect the adoption of E-commerce by SMEs in Thailand. Diffusion of Innovation (Rogers, 1983,1995) was used as the primary theoretical framework for the study. Five perceived characteristics of innovation taken from Rogers' Diffusion of Innovation framework were investigated.

Security is introduced as an additional variable to the perceived characteristics of innovation. Security and the ability of the organization to ensure confidentiality (and privacy), integrity, and availability of information assets is the major barrier to wider adoption of E-commerce (ECRC, 1999; Rose, Khoo, and Straub, 1999). Companies my face security problems in many forms, such as the security in payment systems (Light, 2001); the privacy and confidentiality of the information (Bird, 1997; Light, 2001); or viruses and denial-of-service attacks (Light, 2001). Nonetheless, whether Thai SMEs consider security a major barrier for the adoption of this new information technology is not known, as it has not yet been empirically studied.

Therefore, based on the conceptual foundation provided by Rogers (1995) and from past research, the main objective of this study is to investigate what perceived characteristics of innovation best predict the rate of E-commerce adoption by SMEs in Thailand.

Adoption Of Electronic Commerce

Wigand (1997) defines E-commerce as the "seamless application of information and communication technology from its point of origin to its end point along the entire value chain of business processes, conducted electronically and designed to enable the accomplishment of a business goal". Rapid growth and commercialization of the Internet and World Wide Web (WWW) – which makes E-commerce much more accessible – has driven E-commerce to become one of the most used media for sharing of business information within organizations and between business partners.

E-commerce is being adopted by businesses all over the world and Asian businesses are not an exception. However, E-commerce has penetrated into Asian business at a very slow rate. Until now, only about three percent of the Asian population accesses the Internet and uses E-commerce today. However, IDC (2001) expects that there will be as many Asian Internet users as Western European Internet users in 2005 and there will be more Asian users than American users. Ten percent of E-commerce spending will come from the Asia/Pacific by 2004. E-commerce is one of the keystones of Thailand's IT-2000 and many organizations are set up to support E-commerce implementation. The Commerce Ministry predicted that Thailand E-commerce would grow to 23.04 billion baht in 2000, 24.17 billion baht in 2001 and 25.36 billion baht in 2002 (Kittikanya, 2000). It has been promoted to become an especially important issue for SMEs to compete in the market place locally and globally.

E-commerce Adoption and Innovation Diffusion

Rogers' innovation diffusion theory is widely used as a theoretical framework for various studies of adoption of technological innovation. The perceived characteristics of innovation are one most important explanation of the rate of innovation adoption. Rogers and Shoemaker (1971) constructed five innovation characteristics from the summary of previous research, consisting of relative advantage, compatibility, complexity, trialability, and observability. After additional work, Rogers (1983) further developed these five innovation characteristics, showing that across many studies, generally 49 to 87 percent of the variance in rate of adoption is explained by these five characteristics of innovation.

Rogers (1983) suggests that each characteristic is described as being "somewhat empirically interrelated with the other four, while remaining conceptually distinct". Those innovations which are perceived by individuals as having greater relative advantage, compatibility, trialability, observability will be adopted rapidly than other innovations, and innovations which are less complex will be adopted more rapidly than those which are perceived as more complex. Much research has been done regarding various other innovation characteristics or perceived characteristics of innovation (Moore and Benbasat, 1991; Spence, 1994; Taylor and Todd, 1995; Tornatzky and Klein, 1982). Nonetheless, relative advantage, compatibility, complexity, trialability, and observability, as identified by Rogers, still retains widespread acceptance in research on the characteristics of innovation and are most widely cited as factors influencing rate of adoption (Gatignon and Robertson, 1985)

To view the adoption of E-commerce by SMEs as an adoption of technological innovation, a research model was constructed using these five perceived characteristics of innovation by Rogers – relative advantage, compatibility, complexity, trialability, and observability – to explain adoption of E-commerce. An additional characteristic – security / confidentiality – was proposed for the E-commerce context.

Relative Advantage. Relative advantage is defined as “the degree to which an innovation is perceived as being better than the idea it supersedes”. Relative advantage is viewed as an advantage for the organization over previous ways of performing the same task (Agarwal and Prasad, 1997). Relative advantage has been found to be one of the best predictors and is positively related to an innovation’s rate of adoption (Premkumar, Ramamurthy, and Nilakanta, 1994; Rogers, 1983, 1995; Tan and Teo, 2000; Tornatzky and Klein, 1982).

As noted, there are potential opportunities and benefits of E-commerce for SMEs. These include strengthening customer relationships, reaching new markets, optimizing business processes, reducing costs, improving business knowledge, attracting investment, and creating new products and services. Also, E-commerce represents an opportunity for SMEs to compensate for their traditional weaknesses in areas such as access to new markets and gathering and diffusing information on an international scale ,which improve communication and creates greater job flexibility (Scupola, 2001). Therefore growing awareness and understanding of the advantages of E-commerce among SMEs can positively influence their desire and interest in adopting E-commerce in their businesses.

Compatibility. Compatibility is defined as “the degree to which an innovation is perceived as consistent with the existing values, past experiences, and needs of potential adopters”. Tornatzky and Klein (1982) find that an innovation is more likely to be adopted when it is compatible with individuals’ job responsibility and value system. It will be likely to be adopted not only if it is compatible with deeply held cultural values but also if it is compatible with previous ideas. Compatibility of an innovation with a preceding ideas can either speed up or retard its rate of adoption in the organization. The degree to which innovation meets client needa is another dimension of the compatibility of an innovation. Organizations should seek to determine the needs of their customers, and then to recommend innovations that fulfill these needs. When felt needs are met, a faster rate of adoption usually occurs (Rogers, 1995).

Scupola (2001) found that some SMEs feel their employees’ lack of frequent use of E-commerce is a major barrier. Lack of critical mass is another major reason. E-commerce requires other types of international systems such as electronic data interchange to reach a critical mass among business partners such as suppliers, customers, banks. The critical mass has been lacking over the last years, but recently it is getting better. Additionally, some companies have used E-commerce since the beginning but they cannot use it very much because their clients do not have it (Scupola, 2001).

Complexity. Complexity is defined as “the degree to which an innovation is perceived as relatively difficult to understand and use”. Complexity is similar in definition to several studies’ – Adams et al., 1992; Davis et al., 1989; Moore and Benbasat, 1991 – notion of perceived ease of use (Agarwal and Prasad, 1997). New ideas that are easy to understand will be adopted more rapidly than innovations that require the adopters to develop new knowledge, skills, and understanding (Premkumar et al., 1994). Systems that are perceived to be easier to use and less complex have a higher likelihood of being accepted and used by potential users (Agarwal and Prasad, 1997).

Based on the literature review, some SMEs found that since E-commerce is a high technology, they have limited resources to support it. For example, SMEs frequently feel that they have limited knowledge of technology in their organizations, especially knowledge of this new business model. It is difficult to attract employees and experienced in-house IT staff with the right skill sets for E-commerce. Forty percent of SMEs in UK felt they are not really sure how to make best use of technology that they currently have. In addition, some SME business owners also found that they lack appropriate education, information, and knowledge. They do not have the competencies to understand the full implications of E-commerce (Scupola, 2001).

Trialability. Trialability is defined as “the degree to which an innovation may be experimented with on a limited basis”. New ideas that can be tried on the installment plan are generally adopted more rapidly than innovations that are not divisible (Rogers, 1995). It becomes an important feature for an innovation because it provides a means for perspective adopters to reduce the uncertainty they feel toward an unfamiliar technology or product (Weiss and Dale, 1998). Rogers argues that potential adopters who have an opportunity to experiment with an innovation before committing to its usage will feel more comfortable with the innovation and are more likely to adopt it (Agarwal and Prasad, 1997; Tan and Teo, 2000).

To adopt E-commerce solutions, businesses must of course be concerned with the cost, which – like most services – varies depending on the size and needs of the business. An E-commerce solution can be bought off-the-shelf for as little as \$40 - \$60 per month, or a fully integrated site can be implemented for tens of thousands of dollars. A ready-to-use online package from a vendor that can provide the desired features at a specific rate is an alternative for SMEs, as opposed to investing in complete control of the system and integrating a new system into the existing system, which is very expensive (Mehta and Shah, 2000). Therefore, SMEs don't have to spend a lot of start-ups cost for implementing E-commerce. They can develop on the scale that matches their resources and capabilities, which should lead to their willingness to adopt E-commerce in their organization.

Observability. Observability is defined as "the degree to which the results of an innovation are visible to others". Most of the innovations studied in past diffusion research are technological ideas. (Rogers, 1995). Observability is difficult to establish in a market that is already dominated by an established technology. Therefore, it will be important to establish observability in a niche market or a new application of the technology before attempting to challenge the dominant technology in its native market and application (Weiss and Dale, 1998).

Right now observation of E-commerce is relatively easy for both consumers and industry adopters. E-commerce increases company visibility as the Website can be seen as a place where the homepage is a shopping window. Websites allow businesses to remain open 24 hours, 7 days a week to millions of potential customers and suppliers on the Internet (APEC, 1999; Blackwood, 1997). Customers and suppliers can visit the company Website to search for general information with a quick response anytime and anywhere they can access to the Internet. This creates convenience and flexibility for the organization to create relationships with both buyers and sellers.

Security / confidentiality. Many surveys of E-commerce issues, including by the Electronic Commerce Resource Center (ECRC), have found that one major barrier in developing E-commerce is the security of using E-commerce. To adopt E-commerce, Information safety is essential for the integrity of the entire system (Shim, Qureshi. Siegel, and Siegel, 2000).

In addition, a survey of SME E-commerce in 1999, conducted by Price Waterhouse Coopers, showed that concerns about security, legal issues and liability are perceived as the second and the third most important barriers to the use of E-commerce by SMEs. The fear of losing trade secrets will create reluctance for SMEs to consider entering the E-commerce business arena (Kittikanya, 2000). This can be explained in that the lower the perceived security for the use of E-commerce, the less likely it is that E-commerce will be adopted.

Research Question and Hypotheses

Based on Rogers' Innovation Diffusion Theory, there are five perceived characteristics of innovation that will lead organizations to higher rates of E-commerce adoption. Security / Confidentiality is another important factor that can lead to higher rates of E-commerce adoption. Therefore, based on the conceptual foundation provided by Rogers (1995) and from past research, the main research question of the study is "*What are the perceived characteristics of innovation that best predict the rate of E-commerce adoption by SMEs in Thailand?*"

Within the theoretical framework provided by Rogers (1995), it is hypothesized that positive perception of E-commerce will lead to early use of the innovation. At the same time, negative perception of E-commerce will lead to late use of the innovation.Therefore, the hypotheses would be:

Hypothesis 1 : The adoption of E-commerce by Thai SMEs will be positively related to the perceived relative advantage of using E-commerce

Hypothesis 2 : The adoption of E-commerce by Thai SMEs will be positively related to the perceived compatibility of using E-commerce

Hypothesis 3 : The adoption of E-commerce by Thai SMEs will be inversely related to the perceived complexity of using E-commerce

Hypothesis 4 : The adoption of E-commerce by Thai SMEs will be positively related to the perceived Security/Confidentiality of using E-commerce.

Hypothesis 5 : The adoption of E-commerce by Thai SMEs will be positively related to the perceived trialability of using E-commerce.

Hypothesis 6 : The adoption of E-commerce by Thai SMEs will be positively related to the perceived observability of using E-commerce.

Research Methodology

Data Collection and Sample

The study was conducted with companies that were randomly selected from the Department of Industrial Works, Ministry of Industry, according to the following criteria: 1) the organizations in the study must be Small and Medium Enterprises (SMEs) – 1-50 employees for small-sized and 51-200 employees for medium-sized; 2) they must be manufacturing companies; 3) they must be located in Greater Bangkok – Bangkok and environs, Thailand.

The questionnaires were distributed by mail to owners, presidents, or CEOs of 2000 SMEs. The respondents needed to fill out the questionnaire which was composed of three parts: E-commerce activities in the company, opinions on the use of E-commerce, and demographic information. The questionnaires were mailed back by using an enclosed self-addressed, postage-paid return envelope.

Within 5 weeks, 415 questionnaires returned (excluding 150 questionnaires that were returned because of unknown address). After we excluded some questionnaires that contained too much missing data or obvious error, in the end, only 400 of them were useable. Therefore, the total response rate was = twenty percent of the designated mailing (n = 400).

The average range of the respondents' ages was between 30-39 and 40-49 (36.0% for 30-39 years and 34.3% for 40-49 years). The respondents included 209 men and 163 women (56.2% for men and 43.8% for women). The most frequent educational level was bachelor degree which accounted for 60.2% (n = 198). For the firm characteristics, 182 were small-sized enterprises (45.5%) and 218 were medium-sized enterprises (54.5%).

Dependent Variable

E-commerce adoption rate. Four major levels of EC activities were used to measure the E-commerce adoption (ECRC, 2002) which composes of eight activities. The first level E-commerce activity is using basic services that come with the Internet package, e.g., sending e-mail to communicate with business partners, using the World Wide Web to access information such as information about markets, competitors, etc. The second level was to develop a simple Website for presenting company information and promoting company products/services. The third level of E-commerce activity was to put a business process online, e.g., having a business transaction over the Internet, such as having a Website with an ordering system, payment system, or delivery system. The final level was to link the back office with activities on the Website, linking business transactions on the Website with any or all of the company's operating systems such as accounting, inventory; and to create business value chain activities with business partners over the Internet, e.g., supply chain management.

To measure adoption rate of each activity, the scale ranged from 5 which indicates "currently user", 4 indicates "intention to adopt within 1 year", 3 indicates "intention to adopt between 1-3 years" , 2 indicates "intention to adopt 3-5 years, 1 indicates "intention to adopt after 5 years", and 0 indicates "no intention to use".

Independent Variables

Perceived characteristics of innovation. Each of the perceived characteristics of innovation was measured on a five-point Likert Scale in which 1 indicated "strongly disagree", 2 indicated "moderately disagree", 3 indicated "neutral", 4 indicated "moderately agree", and 5 indicated "strongly agree".

Relative advantage. This construct was measured by asking respondents about their perception towards EC, whether E-commerce will reduce the company's overall operating cost; help our company to expand market share and increase the customer base; increase company sales and revenues; reduce operating procedure (e.g., reduce the time to communicate across international boundaries, reduce the time to access resources / information); create a new channel for advertising and public relations to improve the company's image; increase the competitive advantage for our company.

Compatibility. This construct was measured by asking respondents about their perception towards EC on whether EC is compatible with the company's traditional operating procedures; with the company's current operations / processes; with existing values and mentality of the people in the company; with suppliers' and customers' ways of doing business; and with the culture of people in Thailand.

Complexity. To measure this construct, the respondents were asked whether it is difficult to access the Internet to use E-commerce; whether the company lacks adequate computer systems to support E-commerce activities; whether people in our company lack necessary knowledge and understanding of E-commerce and require a lot of training to start using E-commerce; whether E-commerce applications are too complicated to understand and use; and whether the company lacks the technical knowledge to install the new hardware / software needed for E-commerce

Security and confidentiality. The respondents were asked whether the company lacks confidence about the security of E-commerce transactions; is not confident about how to retrieve all information when the system is down; does not have confidence in the payment system of E-commerce; and whether using E-commerce may permit competitors to gain access to the company's important information

Trialability. This construct was measured by asking respondents whether they could access to a free trial before making a decision to adopt E-commerce; whether the company has the opportunity to try a number of E-commerce applications before making a decision and try out E-commerce software packages on a sufficiently large scale; whether the company is allowed to use E-commerce on a trial basis long enough to see its true capabilities; whether it is easy for to get out after testing an E-commerce package; and whether the start up cost for using E-commerce is low.

Observability. This construct was measured by asking respondents whether there are many computers that people in the company can access to use the Internet and E-commerce; whether many competitors and business partners in the market have started using E-commerce; whether using E-commerce helps our company to connect with both domestic and international business partners at anytime, and whether it shows improved results over doing business the traditional way.

Validity and Reliability of the Scales

To contain the validity of the scale, a critical evaluation of the definition of each construct was conducted by reviewing theories and research findings relevant to the construct under consideration. Then the item content for each construct was adapted either from exiting scales reported in the literature or from a panel of experts in the electronic commerce domain. These constructs were also subjected to various stages of pre-testing and pilot testing. Therefore, the measures are believed to have sufficient content validity.

To ensure consistency and reliability, standard definition of E-commerce used in the survey was provided before the questions in the questionnaire. Internal consistency and measurement reliability of the items was verified by computing the Cronbach's alpha (Nunnally, 1978). Nunnally (1978) suggested that a minimum alpha of 0.6 sufficed for early stages of research. The 33-item about perceived characteristics was composed of a 7-item relative advantage scale, a 5-item compatibility scale, a 6-item complexity scale, a 4-item security/confidentiality scale, a 6-item trialability scale, and a 5-item observability scale. The Cronbach's alpha estimated for relative advantage scale was .8663, for compatibility scale was .8763, for complexity scale was .8107, for security/confidentiality scale was .8288, for trialability scale was .8667, and for observability scale was .8131. The Cronbach's alpha for E-commerce adoption was .8835. As the Cronbach's alphas in this study were all much higher than 0.6, the constructs are therefore deemed to have adequate reliability.

Pearson Correlation was conducted to examine potential multicolinearity problems. The results in Table 1 indicate that none of the squared correlations was close to 0.80 to suggest a problem with multicollinearity among the research variables (Hair et al., 1995). Therefore, there was no evidence of significant multicollinearity among the research variables.

Table 1: CORRELATION MATRIX BETWEEN PERCEIVED CHARACTERISTICS OF INNOVATION

Perceived Characteristics of Innovation	Composite advantage	Composite compatibility	Composite complexity	Composite security	Composite trialability	Composite observability
Composite advantage	1.000	.579**	-.084	.081	.305**	.512**
Composite compatibility	.579**	1.000	-.178**	.209**	.291**	.517**

Composite complexity	-.084	-.178**	1.000	-.508**	.118**	-.180**
Composite security	.081	.209**	-.508**	1.000	-.058	.114*
Composite trialability	.305**	.291**	.118*	-.058	1.000	.380*
Composite observability	.512**	.517**	-.180**	.114*	.380**	1.000

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

Result And Analysis

An initial correlation analysis was conducted to analyze the relationship between perceived characteristics of innovation and E-commerce adoption. Table 2 shows the correlation of adoption rate and perceived characteristics. Five characteristics – relative advantage, compatibility, security, trialability, observability – were positively correlated with adoption rate and all were statistically significant. In addition, complexity negatively correlated with adoption rate and was also statistically significant. These correlations are all in the expected directions, and they provide support for the set of hypotheses noted above.

Table 2: CORRELATION MATRIX FOR ADOPTION RATE AND PERCEIVED CHARACTERISTICS

Adoption total	Composite advantage	Composite compatibility	Composite complexity	Composite security	Composite trialability	Composite observability
Pearson Correlation	.436**	.465**	-.205**	.220**	.134**	.376*
Sig. (2-tailed)	.000	.000	.000	.000	.007	.000
N	400	400	400	400	400	400

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

Multiple Regression Analysis

To examine the joint impact, a regression analysis was conducted to investigate which perceived characteristics of E-commerce best predicted the adoption rate. Taking a 5 % significance level (2-tailed), the results indicate that the six characteristics considered in the model account for 28 % for E-commerce adoption by SMEs in Thailand (Table 3). Relative advantage, compatibility, security / confidentiality, and observability were statistically significant. The beta weight indicated that compatibility was the strongest predictor followed by relative advantage, observability, and security/confidentiality. The smallest beta weight was found for trialability. Apparently, trialability such as trial anytime, trial without cost, etc. had too little to do with adoption rate of E-commerce in this study.

Table 3: MULTIPLE REGRESSION

Dependent Variable: Adoption total	R	R Square	Adjusted R Square	F	Sig.
	.539	.291	.280	26.882	.000
	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	t	Sig.
(Constant)	-5.400	3.680		-1.467	.143
Composite advantage	.449	.109	.228	4.140	.000
Composite compatibility	.575	.130	.248	4.418	.000
Composite complexity	-.121	.098	-.062	-1.231	.219
Composite security	.277	.137	.101	2.030	.043
Composite trialability	-7.833E-02	.089	-.042	-.885	.377
Composite observability	.292	.128	.125	2.292	.022

Notes. Independent variables : Perceived characteristics of innovation

Therefore, to summarize the hypothesis individually, our results show that

- Hypothesis 1 stating that the adoption of E-commerce by Thai SMEs will be positively related to the perceived relative advantage of using E-commerce was supported.
- Hypothesis 2 stating that the adoption of E-commerce will be positively related to the perceived compatibility of using E-commerce was supported.
- Hypothesis 3 stating that the adoption of E-commerce will be inversely related to the perceived complexity of using E-commerce was not supported.
- Hypothesis 4 stating that the adoption of E-commerce will be positively related to the perceived Security/Confidentiality of using E-commerce was supported.
- Hypothesis 5 stating that the adoption of E-commerce will be positively related to the perceived trialability of using E-commerce was not supported.
- Hypothesis 6 stating that the adoption of E-commerce by Thai SMEs will be positively related to the perceived observability of using E-commerce was supported.

Discussion

This study surveyed SMEs in Thailand about their E-commerce adoption and the factors affecting it. Out of 2000 questionnaires mailed out, 400 usable questionnaire were obtained. There were 89 non-adopters (22.3%), 260 light adopters (65%), and 51 heavy adopters (12.8%). Non-adopters were respondent who did not use any activities of E-commerce. Light adopters were respondents who used some 1-3 activities of E-commerce and heavy adopters were respondents who used 4-8 E-commerce activities.

The correlation analysis shows that there was a significant correlation between all perceived characteristics of innovation and E-commerce adoption. Relative advantage, compatibility, security, trialability, and observability all positively correlated with adoption rate, which means that the positive perception of these five characteristics led to higher adoption rates. On the other hand, complexity negatively correlated with adoption rate, which means that perceptions of more complexity led to lower adoption.

Regression analysis further investigated which characteristics of innovation best predict E-commerce adoption with significant level. The results show that compatibility emerged as the most important factor affecting SMEs E-commerce adoption. For SMEs, the compatibility issue is significant because it deals with their perception of the importance of E-commerce to their businesses now and in the future. If E-commerce is compatible with the company's traditional operating procedures, with the existing values and mentality of the people in the company, and is also compatible with suppliers' and customers' ways of doing business in the future, higher rates of E-commerce adoption occur. Relative advantage is also another important factor in explaining E-commerce adoption in SMEs. Perceived relative advantage in using E-commerce had the highest mean compared to other perceived characteristics (mean = 3.91, SD = .68). The mean represents that SMEs in Thailand positively perceived that E-commerce creates the advantages for the organization; e.g., reduces overall company operating cost, helps the company to expand market share and increase the customer base, increases company sales and revenues, reduce operating procedure, and creates a new channel for advertising and public relations. This positive perception influenced their intention to adopt E-commerce in which the higher relative advantage, the higher rate of E-commerce adoption.

Security and confidentiality had the lowest mean comparing to other perceived characteristics of E-commerce (mean = 2.17, SD = .85). This implies that respondents perceived that using E-commerce on the Internet is still insecure and lacks confidentiality. Most of them feel that that they do not have confidence about the security of E-commerce transaction / payment systems, they do not have confidence about how to retrieve all information when the system is down, or they believe that using E-commerce will allow competitors to access their important information. Security / confidentiality is positively related to the adoption of E-commerce, which inplies that the higher security / confidentiality of using E-commerce, the higher rate of E-commerce adoption. With respondents' negative perceptions about security / confidentiality, this relationship indicates a serious barrier to adoption.

Complexity and trialability were found to be insignificantly related to E-commerce adoption rate by SMEs in Thailand. Recently, there has been a dramatic increase in the number of business solution companies in Thailand, because of the promotion of E-commerce by the government. It has led to high competition in the markets, with companies providing many special services to attract customers. Customers have many options provided by those companies and users can choose what they want; including access to a free trial, trying various applications before making a decision, implementation at a certain scale, low start-up cost, or ability to get out anytime. These conditions can consequently lead to an unimportance of perceived trialability of E-commerce. By the same token, the intense competition provides extensive support for SMEs to develop E-commerce activities. When users have problems with the application, they can easily contact supplier companies, which usually have technical support 24 hours a day. Thus, maybe these elements of the model are not important because they are available very abundantly and potential adopters do not need to worry about them.

Limitations and Directions for Future Research

This study has some limitations that need to be addressed. First, this study made several cross-cultural references to US studies. This might not be completely appropriate but it was unavoidable because there have not been many previous studies of E-commerce adoption in Thailand. Differences in the results of this study and the US studies might be due to cross-cultural differences both in terms of socioeconomic settings and SMEs practices.

Secondly, in terms of methodology, the study was designed to be a survey of a large number of E-commerce adopters among SMEs in manufacturing industries in Bangkok and environs, Thailand. Though the researcher attempted to obtain as many returned questionnaires as possible, time constraints kept the researcher from extensive follow-up on non-returned questionnaires. Therefore, this is a self-selected sample. These who were willing to take part or had time to fill out the questionnaire were those included in this study. The data obtained from self-selected respondents raises the question of external validity. However, the respondent companies do seem to be typical of SMEs in Thailand, and it is not obvious how they would differ from non-responding ones.

Thirdly, the research design is this study was cross-sectional. This design, however, was not ideal for studying the continuing process of adoption which happens over time. A longitudinal design might be more appropriate, but such design requires more time and money to conduct. Therefore, the timeline of adoption was established from self-reports by the respondents elicited through the questionnaire.

Lastly, this study mainly focuses on the relationship between perceived characteristics of innovation and the rate of E-commerce adoption. Therefore the scope of this study is to study only perceived characteristics of innovation. For future research, other factors such as organizational characteristics, individual characteristics, environmental characteristics, etc. should be investigated. Those characteristics have also been hypothesized as influences on innovation adoption.

Conclusion

The propose of this study was to investigate how perceived characteristics of innovation affect E-commerce adoption rate by Thai SMEs. The research was done under diffusion of innovation theoretical framework, with security and confidentiality introduced as an additional variable. The correlational analysis and multiple regression analysis shows that Rogers' perceived characteristics of innovation – relative advantage, compatibility, and observability – were useful predictors. Compatibility and relative advantage are the factors that primarily influence adoption E-commerce. Complexity and trialability were not useful predictors of adoption by SMEs in Thailand. Additional characteristic – Security and confidentiality – turned out to be a significant predictor of adoption. All non-adopters, light adopters and heavy adopters appeared to be aware of this issue.

References

[1] Adams, D.A., Nelson, R.R., and Todd, P.A. 1992. Perceived usefulness, ease of use, and usage of information technology : A replication. *MIS Quarterly*, 16 (2) : 227-247.

[2] Agarwal, R., and Prasad, J. 1997. The role of innovation characteristics and perceived voluntariness in the acceptance of information technologies. *Decision Sciences*, 28 (3) : 557-582.

[3] Bird, J. 1997. E-commerce is safety. *Management Today*, December : 54-57.

[4] Blackwood, F. 1997. E-commerce benefits for small firms. *San Francisco Business Times*, 12 (12) : 25.

[5] Davis, F.D., Bagozzi, R.P., and Warshaw, P.R. 1989. User acceptance computer technology : A comparison of two theoretical models. *Management Science*, 35 (8) : 982-1003.

[6] Dos Santos, B., and Peffers, K. 1998. Competitor and vendor influence on the adoption of innovation applications of electronic commerce. *Information and Management*, 34 : 175-184.

[7] Esichaikul, V., and Thampanitchawong, P. 1998. Use of E-commerce on the Internet : The case of Thailand. *Paper Presented in Americas Conference on Information Systems*, Milwaukee, Wisconsin.

[8] Electronic Commerce Resource Center (ECRC). 2002. *E-commerce in Thailand : Statistical and Analysis in Each Business Sector*. Bangkok, Thailand : Se-Education.

[9] Forrester Research. 2000. E-marketplaces will lead US business E-commerce to $2.7 trillion in 2004. From the World Wide Web: http://www.forrester.com/ER/Press/Release/0.1769.243.FF.html

[10] Forrester Research. 2000. Worldwide E-commerce growth. From the World Wide Web : http://www.forrester.com/ER/Press/ForrFind/0.1768.0.FF.html

[11] Gartner Group. 2000. Gartner group forecasts regional B2B outlook through 2004. From the World Wide Web : http://gartner5.gartnerweb.com/public/static/aboutgg/pressrel/pr021600.html

[12] Gatignon, A., and Robertson, T.S. 1985. Integration of consumer diffusion theory and diffusion models : New research direction. In V. Mahajan, V., and Y. Wind (Eds.), *Innovation Diffusion Models of New Product Acceptance* : 37-59. Cambridge, MA : Ballenger Publishing Company.

[13] Ghosh, S. 1998. Making business sense of the Internet. *Harvard Business Review*, March-April : 126-135.

[14] Hair, J.F., Jr., Anderson, R.E., Tatham, R.L., and Black, W.C. 1995. *Multivariate Data Analysis with Readings.* (4th ed.). Englewood Cliffs, NJ : Prentice-Hall.

[15] Hooft, F P.C.V., and Stegwee, R.A. 2001. E-business strategy : How to benefit from a hype. *Logistics Information Management*, 14 (1/2) : 44-53.

[16] Hsieh, C., Lin, B., and Caveny, R. 1998. Internet commerce strategies for small business. *Preceedings of National Decision Sciences Institute*, Las Vegas, Nevada : 752-754.

[17] Iacovou, C.L., Benbasat, I., and Dexter, A.S. 1995. Electronic data interchange and small organizations : Adoption and impact of technology. *MIS Quarterly*, 19 (4) : 465-485.

[18] Emberley, D., Glasheen, C., and Gantz, J. 2001. E-commerc is here to stay : Worldwide Internet usage and commerce forecast and analysis, 2000-2005. *Internet and E-commerce Strategies Bulletin,* December 2001, IDC # 26113, Volume 1, Tab : Markets, p. 1-12.

[19] Kittikanya, C. 2000. E-commerce : Internet slow to make inroads. In Chantranontwong, P. (Eds.), *Bangkok post : 2000 Mid-year economic review* : 32-35.

[20] Light, D.A. 2001. Sure, you can trust us. *Sloan Management Review*, 43 (1) : 17-18.

[21] Longenecker, J., Moore, C., and Petty, J. 1997. *Small Business Management : An Entrepreneurial Emphasis.* (10^{th} ed.). SWC Publishing.

[22] Means, G.E., and Faulkner, M. 2000. Strategic innovation in the new economy. *Journal of Business Strategy*, pp. 24-29.

[23] Mehta, K.T., and Shah, V. 2001. E-commerce : The next global frontier for small businesses. *Journal of Applied Business Research*, 17 (1) : 87-94.

[24] Moore, G.C., and Benbasat, I. 1991. Development of an instrument to measure the perceptions of adopting an information technology innovation. *Information Systems Research*, 2 (3) : 192-223.

[25] Nilles, J.M. 1999. Electronic commerce and new way of working in Thailand. From the World Wide Web : http://www.ecatt.com/ecatt/country/thailand/inhalt_th.htm

[26] Nunnally, J.C. 1978. *Psychometric Theory*, New York : McGraw-Hill.

[27] OECD. 1999. *The Economic and Social Impact of Electronic Commerce : Preliminary Findings and Research Agenda.* MA : OECD.

[28] Peffers, K., and Santos, B.L.D. 1998. Competitor and vendor influence on the adoption of innovative applications in electronic commerce. *Information and Management*, 34 (3) : 175-184.

[29] Porao, S., and Campbell, S. 1998. Critical concerns for small business electronic commerce : Some reflections based on interviews of small business owners. *AIS Conference Proceedings*, Bultimore, Maryland.

[30] Porter, M.E. 2001. Strategy and Internet. *Harvard Business Review*, 79 (3) : 62-78.

[31] Premkumar, G., Ramamurthy, K., and Nilakanta, S. 1994. Implementation of Electronic Data Interchange : An innovation diffusion perspective. *Journal of Management Information Systems*, 11 (2) 157-179.

[32] Rogers, E.M. 1983. *Diffusion of innovations.* (3^{rd} ed.). New York : Free Press.

[33] Rogers, E.M. 1995. *Diffusion of innovations.* (4^{th} ed.). New York : Free Press.

[34] Rogers, E.M., and Shoemaker, F. F. 1971. *Communication of Innovation : Across-Cultural Approach.* New York : The Free Press.

[35] Rose, G., Khoo, H., and Straub, D. 1999. Current Technological Impediments to Business-to-Consumer Electronic Commerce. *Communications of the Association for Information Systems*, 1 (16).

[36] Scupola, A. 2001. Adoption of Internet-based electronic commerce in Southern Italian SMEs, *1^{st} Nordic Workshop on Electronic Commerce*, Halmstad, Sweden.

[37] Spence, W.R. 1994. *Innovation : The communication of change in ideas, practices and products.* London : Chapman & Hall.

[38] Tan, M., and Teo, T.S.H. 2000. Factors Influencing the adoption of Internet Banking. *Journal of the Association for Information Systems*, 1 (5) : 1-42.

[39] Taylor, S., and Todd, P.A. 1995. Understanding information technology usage : A test of competing models. *Information Systems Research*, 6 (2) : 144-177.

[40] Timmers, P. 1999. *Electronic commerce : Strategies and models for business-to-business trading.* New York : John Wiley & Sons

[41] Tornatzky, L., and Klein, K. 1982. Innovation characteristics and innovation adoption-implementation : A meta-analysis of findings. *IEEE Transactions on Engineering Management*, pp. 28-45.

[42] Watson, R., Berthon, P., Pitt, L., and Zinkhan, G. 1998. *Electronic Commerce : The Strategic Perspective.* USA : Harcourt Brace College Publishers

[43] Weiss, J.A., and Dale, B.C. 1998. Diffusing against mature technology : Issues and strategy. *Industrial Marketing Management*, 27 (4) : 293-304.

[44] Whiteley. D. 1998. Merging electronic commerce technologies for competitive advantage. *AIS Conference Proceedings*, Baltimore, Maryland.

[45] Wigand, R. 1997. Electronic commerce: Definition, theory, and context. *The Information Society, special issue : Theory and Practice of Electronic commerce*, 13 (1) : 1-16.

The Virtual University Across Cultural Boundaries: The Online Classroom – Is the World Ready for It?

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Abstract

The e-learning model is well suited for relationships between universities in developed countries and those in developing countries. Courses, especially in areas of science and technology can be designed and developed at mature institutions and then offered to students in countries with developing economies and technology.

And, the experience with offering e-learning courses on a large scale, to large student bodies, possibly at universities with many smaller campuses, in developing countries can be very useful for offerings of such courses in developed countries. The authors experience at designing and developing courses to be offered between two schools on different continents with differing populations, cultures and languages will be explored in this paper.

In designing dual university courses that cross cultural as well as geographic boundaries, aspects such as language of instruction, articulation agreements, credit transfer, and advanced standing need to be considered carefully. Marketing such programs to both sets of students and to the public is an important aspect. Marketing techniques, which are appropriate in one country, may not be in the other. Technical courses must provide the student with a complete body of current theory and practice, which is operative in their respective working environment. These courses must enable students to strengthen their interpersonal skills for productive work with colleagues, competitors, subordinates and supervisors. Technical courses must provide basic analytical tools and the accompanying skills so that problems in the student's working environment can be identified, possible solutions generated and/or implemented. The online curriculum must also address all the information and issues of classes, which are taught in a traditional face-to-face manner. Most importantly a high level of academic integrity must be maintained while at the same time providing the distant learner with accessibility, flexibility and convenience.

For working professionals, learning over the Internet now means that critical work schedules don't have to keep them from their educational goals. Computer-mediated distance education is at the cutting edge of instructional delivery and the future growth of technology will offer more opportunities than ever before. Interaction between student and teacher and between students is vital to the success of the distance student who sits alone instead of interacting in a classroom. Successful courses require faculty to respond to questions and comments at all times. This is enabled by the accessibility and convenience of e-mail. Yet despite all the benefits of cyberspace, distant students aren't able to meet face-to-face with professors and classmates, which might cause some concern for those registered in a fully asynchronous course.

With the development of inexpensive video conferencing, web casting and course management tools it has become possible to develop viable e-learning courses without requiring a lot of expensive technology. One-way video can be captured and transmitted via the Internet, and at the same time an instant messaging system can be used to convey the information to the students. This technology allows each campus to mimic as closely as possible a face-to-face environment. Students and faculty world-wide can communicate via e-mail and instant messaging. In the process of developing the interaction necessary for the mastery of technology courses we must take a close look at the way professors and students communicate when face to face (f2f). In the global classroom online communication encourages, indeed requires greater involvement from the student. Distance students must take greater responsibility for their education; they may no longer sit passively listening and taking notes. Of course, such passive learning should be discouraged when f2f also. The students must play as large a role in initiating interaction and class participation as the professor does. Participants in an online conversation can reflect about what they want to say before replying. This benefits shy people or those who like to think before speaking. Students who would ordinarily dominate classroom discussions can't readily do so when discussing topics on line. However, there is still a problem of the student who dominates an online discussion forum by multiple postings. See below for further discussion of this problem. On the other hand, a major advantage of online discussion forums over f2f classroom meetings is that the students on line benefit from being able to go back through a threaded discussion to digest what was said. Instead of repeating a classroom explanation, the professor may simply tell the student to study the forum more thoroughly.

In highly technical courses the role of the professor is more than just the disseminator of information from the text, but also the explainer of complex concepts. Unfortunately, in most traditional classrooms, modern technology has not progressed beyond the overhead projector. Instead of writing lecture notes on a chalkboard, the professor prepares transparencies ahead of time, copies, distributes and then explains them to the class, occasionally soliciting opinions from the students. This procedure has the advantage of alleviating the need for students to read the material before class, indeed for some students it means they don’t even have to listen in class. For many of today's students, reading and note taking is considered optional. It has gotten to the point where classroom students are often resentful when a professor attempts to generate class discussion without first telling the students what the text says--preferably in a condensed version that includes only the material that will appear on the next exam. On line courses have of necessity changed the culture of the classroom to one where students are once again responsible for their education.

Virtual online ‘Live lectures’, must be scheduled on a regular basis. In a science or technology course these meetings are necessary in order to cover the critical and complex material that can not be readily understood by reading or even interactive web pages alone. The challenge of every course is to move the student from the absorption of knowledge to real understanding and application. This challenge is even more difficult in an online course. During these online meetings, students can communicate with the faculty directly, or with one another via a virtual chalkboard or instant messaging. Questions can be read as they come in during the lecture and responded to immediately, much like a traditional f-2-f course. However, one of the authors has encountered serious problems with such virtual lectures. When a complex technical topic was being presented in the aforementioned database course, the virtual whiteboard was swamped with numerous questions – they came in so rapidly that it was impossible for the professor to respond in a coherent way. We are currently seeking a solution to this problem. At the time of this writing, we have determined that complex technical courses are best taught as hybrid courses. That is, with regular (weekly) f2f meetings with the students during which the technical misunderstandings can be corrected. For multiple campus courses this solution would require each campus to schedule regular meetings.

Considerations in developing a shared, two-campus course:

- Managing a two-campus course. These management issues are likely to be special and unique to the particular structures and needs of the two institutions. Thus this topic will not be further discussed in this paper.
- Faculty compensation may be an issue when the course is *taught* by faculty at one university and offered to students at both universities. Does the faculty get paid by both schools?
- Pedagogical changes necessitated by the online environment. The virtual classroom requires a different set of interpersonal skills than does the face-to-face classroom. Professors who think that they can teach on line by posting their lectures to the Web are in for a rude awakening. Professors are not merely providers of information, their role is to select and filter information for student consideration, to provide thought-provoking questions, and to facilitate well-considered discussion.
- Sufficient lead time is required to develop the online content
- Commitment by the university and the professor to schedule and teach the course at least twice within a reasonable period of time
- Ability of the university to evaluate online teaching for promotion and tenure

- Reduction of class size by the university in recognition of the time and effort which e-learning requires
- Ensuring the proper background of all students registering for the class
- Determining and sharing the revenue generated by these courses
- Determining how credit is to be awarded, and by which university or both for these courses
- Considerations of curriculum – are there areas, which may be useful for one student body but not the other?

We return now to the problems with teaching highly technical courses online, especially those with substantial theoretical component: One of the authors had this problem last semester while teaching a fully asynchronous database course at the College of Staten Island. Course syllabus includes both SQL and comprehensive theoretical material on databases such as database design principles requiring a thorough understanding of database normal forms.

One student in particular, accounted for almost half of the more than 600 postings to a forum on the SQL query language. His questions were frequently repetitions of questions, posted by another student, which the professor had already answered. Other postings were complaints about his grade on a particular programming assignment, wanting to know 'why is my program incorrect, since it gets the same answers as yours does'. He was never satisfied with the professor's analysis of the logic of his program, showing where it was incorrect, despite the coincidence of retrieving the same information from the database.

In our judgement this problem was caused by the lack of sufficient f2f – the asynchronous teaching was lacking in the instant feedback, the give and take of classroom contact and rapport. Missing is the glow of understanding, which an experienced teacher sees by the gleam in a students eyes when they finally 'get it'.
Also missing is the teacher's ability to adjust an explanation by:

- Incorporating student response to the presentation and classroom flow
- Fine tuning to get to the exact point of difficulty in understanding
- Clarifying and correcting misunderstandings
- Giving appropriate examples, which match student response and questions.
- Determining what parts of explanations are lacking and need more detail.
- In multicultural student bodies the lack of f2f makes it difficult for students to phrase meaningful questions due to differences in language and multiple meanings of words.
- It is difficult to fill in the gaps in students' background knowledge to avoid giving the entire lesson and then finding that the necessary foundation was insufficient. Or discovering that they already know the material being covered!

Why is all of this hard to do virtually?

- Discussion forums permit essentially total freedom to the participants. Hence, their content is very hard to control, resulting in topic switching and the lack of threads. The professor has some ability to control this by imposing topic restraints on the forums. In the database course, we had one forum for SQL, one for database normalization, etc. However, in practice it was still difficult to keep students within these constraints.
- Discussion forums also suffer from the enormous volume and repetition of almost identical questions due to lack of understanding.
- Students often fail to keep up-to-date with the discussion forums. This also adds to the problem of repeated postings.

- Students don't take notes – so they don't have way of explaining things in their own words – they don't subsume ideas and make them their own. This very essential part of the traditional classroom learning experience might be implemented with writing assignments. We have yet to experiment with this approach.

Possible solutions

- Hybrid courses. This semester, the database course will be taught with one required 2 hour f2f per week. We will report on the results at the conference.
- When this is impossible, then each segment must have a sequence of developmental exercises attached for students to complete prior to participating in the online discussion to insure the understanding of the material – but this may entail too much work for the professor!
- Restrict real time chats and discussion forums to specific single topics. As mentioned above, this was tried in the database course with moderate success.

Mechanics of a multi university course

We are planning to do develop a program of such courses between Shanghai Television University and the College of Staten Island. The initial offering will be the aforementioned database course. The initial step in this effort was to invite the STVU professor to CSI last year, where she taught the CSI course jointly with one of the authors. During the fall semester, it was offered as a traditional f2f course; during the spring it was given online. We are now working to enhance the web material and to produce a bilingual, Chinese and English, version.

Issues to be considered and resolved

- Tuition sharing
- Prerequisites, which may be different at the multiple institutions
- Course numbering and credits and transcripts. Course numbering is not as trivial an issue as it might seem, because of the difficulties of evaluating a course for transfer credit.
- Language problems – the presentations may be bilingual and this is what we are developing for the STVU-CSI courses, but there is still a problem with the discussion forums – how do we make these bilingual? Who will translate the numerous postings?
- How will students from participating institutions cooperate on joint projects?
- Will the time difference between the two schools inhibit the virtual discussions and response time?

Suggested solutions

- Courses may be owned by both universities simultaneously – students enroll in their home school and receive credit only from it
- Assign projects to be done by joint teams from both institutions. Of course, this will also entail the language difficulties mentioned.
- The ability to enroll anyone anywhere; students may select the home school, and choose where the credits will be awarded.

  e.g. Students in Shanghai are very eager to receive US credits for possible future study and improved employment opportunities.
- This applies in both directions: Credits from older established universities are good in underdeveloped countries and conversely, students from developed countries wishing employment in underdeveloped countries are more desirable employees when they have local credits and background. The traditional junior year abroad at many US universities might be enhanced by the opportunity for the student to take multi university online courses.
- Ease of access to graduate school admission.

Conclusion

The experiences with e-learning at many universities, including prestigious institutions such as Columbia and New York University [3], have amply demonstrated that online course programs are a potential financial minefield to the institutions offering them. We have attempted to address several of these problems and suggest that a possible solution is to build e-learning programs on a small scale at first, with no plan to make them profitable, but hopefully self-supporting. Faculty who want to develop online courses should be encouraged to do so, but no one should feel obligated to adopt the e-learning paradigm. Institutions should also ensure that core curriculum courses and electives are available f2f for students who prefer a traditional chalk-talk experience.

References

[1] Chi, E., Klibaner, R., "Designing and Developing Technology to Enhance Distance Education Environments", *Reforming the Universities for the 21st Century*, July 1999, Beijing, China

[2] Domanski, B. "On Distance Learning in Computer Science Using the Internet", Proceedings of ACM SIGCSE Conference, October 1999

[3] Hafner, K., (May 2002), Lessons Learned At Dot-Com U., New York Times, CIRCUITS, 1.

[4] Klibaner, R., Chi, E., "Adapting Traditional Courses to Fully Asynchronous E-Learning Models", *The 6th International Conference on Global Business & Economic Development States and Markets: Forging Partnerships for Sustainable Development*, November, 2001, Bratislava, Slovakia,

[5] Picciano, A. "Developing an Asynchronous Course Model at a Large, Urban University", *Journal of Asynchronous Learning Networks, Volume 2, Issue 1,* March 1998

Unlocking E-Business Potentials among Asian Dot coms: A case study of Malaysian SME's

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Abstract

E-commerce infrastructures and e-commerce related activities are highly concentrated in a few developed countries, especially the U.S. However economic forecasts have indicated that the Asian region will drop its hold on the worldwide e-commerce market from 25 percent in 2000 to 21 percent by 2003. This phenomenon could be caused by the various disparities among Asian countries. The best Asian web sites are as functional and sophisticated as their U.S counterparts and some business models in Asia are sophisticated and innovative. The objective of this paper was to analyze the managing of e-business strategies among existing and recent dot-com organizations in Asia with specific focus on the development of e-business process via a value-chain analysis among small medium enterprises in Malaysia. However one of the crucial challenges across Asian dot-coms is in applying the appropriate e-business strategies that will effectively enhance the delivery of products and services. The findings of the paper indicated that the main challenges even for the small medium enterprises in Malaysia was breaking out from traditional business processes and leveraging information symmetries amongst business stakeholders particularly with customers and suppliers.

Introduction

E-business is a new way of doing business that involves connectivity, transparency, sharing, and integration. It requires the integration and alignment of business processes, technology, and people with a continuously evolving E- business strategy. (Hackbarth and Kettinger, 2001). However regardless of these external business environments, the lure of the reaping profits on the Net proved to be too great to miss by the Asian entrepreneurs and marketers alike. Vast opportunities await managers who can harness these e-business potentials but their task is made more difficult by the fact that they are often breaking new ground. The transition from the 'brick and mortar' into a dot.com would not be an easy path. Part of the difficulty in understanding e-business lies in the fact that the growth of e-commerce is happening so rapidly and in robust directions that even experts are at loss to find any established business models for comparison. (Kalakota and Whinston, 1997).

Clearly in order to achieve success, a company must rethink corporate strategy in a way that capitalized on information asymmetries, leverage customer and partner relationships and tailors the right fit of 'co-opetition' in its business strategy. Co-opetition is a principle of game theory, which holds that businesses succeed by combining cooperative strategies with competitive strategies. (Brandenburg and Nalebuff, 1996). However this paper explores a different approach of analyzing the level of co-opetition among Malaysian small medium enterprises by developing its Internet portfolio and re-evaluating its value-chain. The value chain is an important concept developed by Michael Porter that views a company as a series, or chain that adds value to its products and services. (O/Brien, 2001). By using the value chain as a framework, a company can develop a variety of strategic uses of Internet and other networked technologies to achieve efficiency in both primary and support business processes such as human resource and marketing respectively.

E-Scenarios in Asia

E-business is heralding what is being called the "new economy" throughout the Asia-Pacific region. For example, poised to enter the World Trade Organization, China is sowing the seed of entrepreneurship in its state-owned enterprises; the Japanese government is challenging its own telecom monopolies; and the wireless technology in South Korea has leapfrogged its western counterpart advances. Whilst in the other Asian region (see Table 1), national commitments to infrastructure development and economic growth have helped launched e-business initiatives.

Table 1: AEA, CYBERNATION: INTERNET FOR DEVELOPMENT. (1999). IDC. ASIA ISSUE.NO:83.

Country	IT Investment as % of GDP (1998)	PCs per 1000 inhabitants (1998)	No of main Telephone lines (residential & business) per 100 inhabitants (1998)	Wireless Usage 2000 cellular/PCs penetration (%)	Internet Usage 1999 (% of population)	Internet hosts per 10,000 inhabitants	E-commerce revenue per capita 1999 ($US)
Japan	2.28	271.88	50.3	43.6	19	133.64	12
NIEs							
Hong Kong	1.23	310.59	55.8	57.7	26.9	356.67	5.9
South Korea	1.49	149.7	43.3	49.9	11.2	60.47	15.3
Taiwan	1.16	178.46	52.4	47.1	19.9	142.75	2.3
ASEAN-5							
Singapore	2.84	343.27	56.2	43.4	24.1	259.84	5.0
Indonesia	.26	10.61	2.7	1	0.5	1.97	0.0
Malaysia	1.70	78.21	19.8	13.7	5.3	30.21	0.5
Philippines	.79	16.26	3.7	3.7	0.8	3.00	0.1
Thailand	.61	33.14	8.4	1.6	1.6	7.25	0.2
China	.96	7.01	7	3	1.3	0.84	0.0
India	.53	3.78	2.2	0.2	0.3	0.78	0.0

The Boston Consulting Group (BGC) estimated that the value of goods sold over the Internet in the Asian market to increase to US $1.3 billion by 2003. The study had also reported that 66 million Asian are hooked up on the Internet either drawn by cheaper access charges and more interesting things to buy online. Collectively in Asian countries such as India, Indonesia, Malaysia, Philippines, Singapore and Thailand, there are approximately 400 web sites. Yet the IDC findings indicated that more Asians are spending money on non-local sites, which means that Asian web merchants lag behind their western counterparts, particularly the US-based sites. The fears are that Asian online merchants may be so far behind in terms of both products and support, that if they do not advance they will loose the market altogether. The threat from foreign players is very real with brand name e-commerce retailers such as Amazon.com and ebay.com offering customers better bargains. This market trend indicates to the IDC that there is demand but the supply side is not yet ready. Asian sites need to find the right products, deliver service and use the right business model. The advantage of knowing the local culture is one way of competing with overseas site. (Kubsch, 2000). The e-business strategies in Asia differ depending on the company, industry and country. However two reasons are often cited for becoming an e-business: **cost savings and revenue enhancement**. The first comes from squeezing inefficiencies out of the supply chain, from the purchase of materials to the processing of those materials into finished products to the delivery of those products to customers. Some companies target savings of as much as thirty percent of total costs. Many companies have high hopes for the Internet as a sales enhancement as well. While retailers do not expect droves of individual Asian consumers to buy online, companies that sell directly to businesses believe they will be able to broaden their customer base locally and abroad. (Bacani, 2001).

Literature Review

E-business involves fundamentally rethinking the business model to transform a company into a digitally networked enterprise. E-business has the potential to propel a company to "break out" of existing strategic constraints and radically alter business processes, strengthen customer relationships and open up new markets.

Maximizing on Government support

Whether or not developing countries will benefit or lose from the new business model and its competitive strength remains an open question. It depends largely on how the governments of these countries respond. (Oman, 2001). To date the Asian governments have shown strong deliberations and commitment to the development of information technologies in their respective countries. Nonetheless it is still the prerogative of the Asian business communities to maximize and utilizing government support. A case in point would be the Multimedia Super Corridor (MSC) initiative by the Malaysian government. Since its inception in 1996, the national project had received favorable response by Asian dot coms worldwide. Figure 1 below denotes the growth of local and foreign companies applying for the MSC status. Among the Asian companies that have listed for the MSC are from Hong Kong, Sri Lanka, Taiwan, Korea and Brunei. (MDC, 2001). With the MSC status the companies can gain various technological and financial support from the government to enhance their competitive advantage within the Asian region.

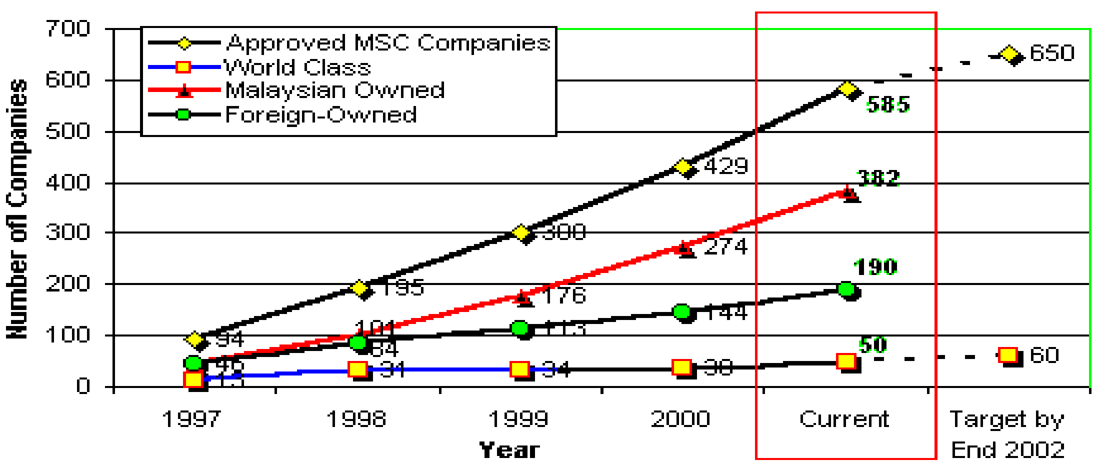

Fig 1: BREAKDOWN OF LISTED MSC COMPANIES IN MALAYSIA (2001), MDC

High Demands for New Technologies

According to the Telecom Asia User Survey (2000), the biggest technological challenges for Asian markets are limited bandwidth, low teledensity and older technologies. However the problems are showing signs of steady progress. Despite the digital divide, some of the strongest growth in Internet traffic last year has been in less-developed Asia with China and India leading. For example, Indian users nominated fixed data or Internet as their fastest growing area of expenditure (37%), followed by China (32%). Sixty one percent of Indian companies expect traffic to grow more than 40 percent, the highest of any other Asian countries surveyed. Chinese companies are anticipating a similar kind of growth. (Chan, 2000). Traditional Hong Kong businesses are also setting their own

Intranets and Extranets, especially those businesses with branch offices in China. (Bilan, 2000). In comparison to the Intranet, the Internet offers less in terms of security and reliability, but the public network serves its purpose for everyday applications such as email.

Finance

With the looming global recession, the best defense for Asian dot-coms and an established company is still a strong balance sheet. The crisis will test every company. Industries such as food, health care, power generation, petroleum are protected somewhat from a contracting economy. Regardless of the crisis, everyone relies on consumables. However even companies with steady consumer demands can be vulnerable. Indonesian's power utility PLN, increased sales by 41% to $2.7 billion last year. Yet the state-owned company lost approximately $2.9 billion because the government, fearful of social unrest, would not allow PLN to raise electricity rates. Inefficiency and mismanagement would make matters worse. (Bacani, 2001). In an evolving environment, value migrates towards companies that can adapt rapidly to change and companies that do not add measurable value find it more difficult to finance growth. As competition for capital increases and equity returns decline from their recent historic highs, the performance bar will be raised, and investors will likely lose their interest with executive teams whose performance falls consistently below average. (Stein, Porrino and Morrow, 2000)

Family Business Concept

As Asia slides into another economic crisis amid global war anxieties, Asia's traditional relationships-based business ethos could prove a liability. "How do you transfer the existing business model based on family, ethnic and personal ties to the new one without losing market share?" (Lee, 2001). Historically, family-owned conglomerates played a key role in lifting Asian economies out of poverty and transforming the region into a global force. In the early stages of Asia's development, family businesses proved to be very good at mobilizing scarce capital and displayed extraordinary entrepreneurship. But as they have grown larger and more complex, a different set of skills and a more structured decision-making process are required. Even a successful owner-manager needs to be challenged on his decisions and held up against an objective performance yardstick to avoid costly mistakes. Yet such new requirements are likely to be resisted as unacceptable checks against the owner's privileges. (Chan, 2001)

Outsourcing and Outlocation

Recent statistics has indicated that the global market for outsourcing is valued at more than $100 billion. Outsourcing is the term used for obtaining services from a third party or group outside the organization. Some services that are outsourced include credit card processing, payroll, financial-services transactions and information services such as data centers, networks, and business processes such as customer service, finance, logistics, and human resources. Vietnam and China are the more enthusiastic outsourcers within the Asian region. (Chan, 2000). In addition to outsourcing, outlocation is a new strategic concept that could provide the competitive edge needed by the Asian dot coms. Outlocation is the terms for locating an information technology help desk, a customer service support unit, or call center operations outside the national borders of a company. Outlocation allows companies to lower costs, achieve economies of scale by concentrating resources, and take advantage of a "follow-the-sun, off-hour strategy" - leveraging the time differences between Asia and the major markets in North America and Europe. (Lee, 2000).

Research Methodology

In order to illustrate the managing of e-business among Asian dot-coms, a survey has been conducted among 125 small medium enterprises registered under the Ministry of Industrial Development of Malaysia. The Malaysian SME's shared similar characteristics of most Asian dot-coms identified within the literature review with main concerns on cost savings and revenue enhancements. A questionnaire containing 30 statements relating to e-business processes was distributed to the sample population. However only 100 questionnaires were completely answered. The questionnaires were sent via e-mail over the Internet and snail mail. Along with the questionnaire, the respondents will receive an introduction letter that explains the objective of the survey and explained several concepts of the survey. Following the code of ethics, respondents were assured anonymity and confidentiality.

Research Analysis

The research analysis was based upon Tjan's (2001) portfolio strategy, similar to the Boston Consulting Group's matrix with its cash cows, starts, questionable projects and dogs to create an Internet portfolio. (Turban, 2002). The strategy is based on company fit and the projects viability, which could either, be low or high. These two elements combined create an Internet portfolio map. By creating the portfolio, the SME's would be able to identify and leverage its business process to invest in new e-commerce opportunities. Viability was assessed by four criteria: market value potential, time to positive cash flow, personal requirements and funding requirements. For fit, the following criteria were used: alignment with core capabilities, alignment with other company initiatives, fit with organizational structure, fit with company's cultures and values and ease of technical implementation.

With both elements, each EC initiatives are assessed on a scale of 1-5 (or on a qualitative scale of high, medium, low) and a weighted average score per criteria in percentages is computed. The various initiatives are then mapped on the Internet portfolio matrix, based on the two average scores. The Internet matrix is divided into four cells. If both viability and fit are low, the project is abandoned. If both are high, then the project is adopted. If fit is high, but viability is low, the project is sent to redesign. Finally if fit is low but the viability is high, the project should be considered for outsourcing or spun off.

Table 2: VIABILITY OF E-BUSINESS OF MALAYSIAN SME'S

EC Application	Market value potential	Time to positive cash flow	Personal requirements	Funding requirement	Average
E-marketplace	85	70	20	20	49
Sell side	70	70	60	50	63
Procurement	80	60	80	90	77

Table 3: CORE CAPABILITIES OF MALAYSIAN SME'S

EC Application	Alignment with core capabilities	Fit with organizational structure	Fit with company's culture and values	Ease of Technical Implementation	Average Overall Fit
E-marketplace Sell side Procurement	90 10 90	90 30 90	70 40 80	80 60 80	83 35 85

Table 4: AN ALIGNMENT OF VIABILITY & FIT CAPABILITIES OF MALAYSIAN SME'S

Averages	Fit (X-axis)	Viability (Y-axis)
E-marketplace	83	49
Sell side	35	63
Procurement	85	77

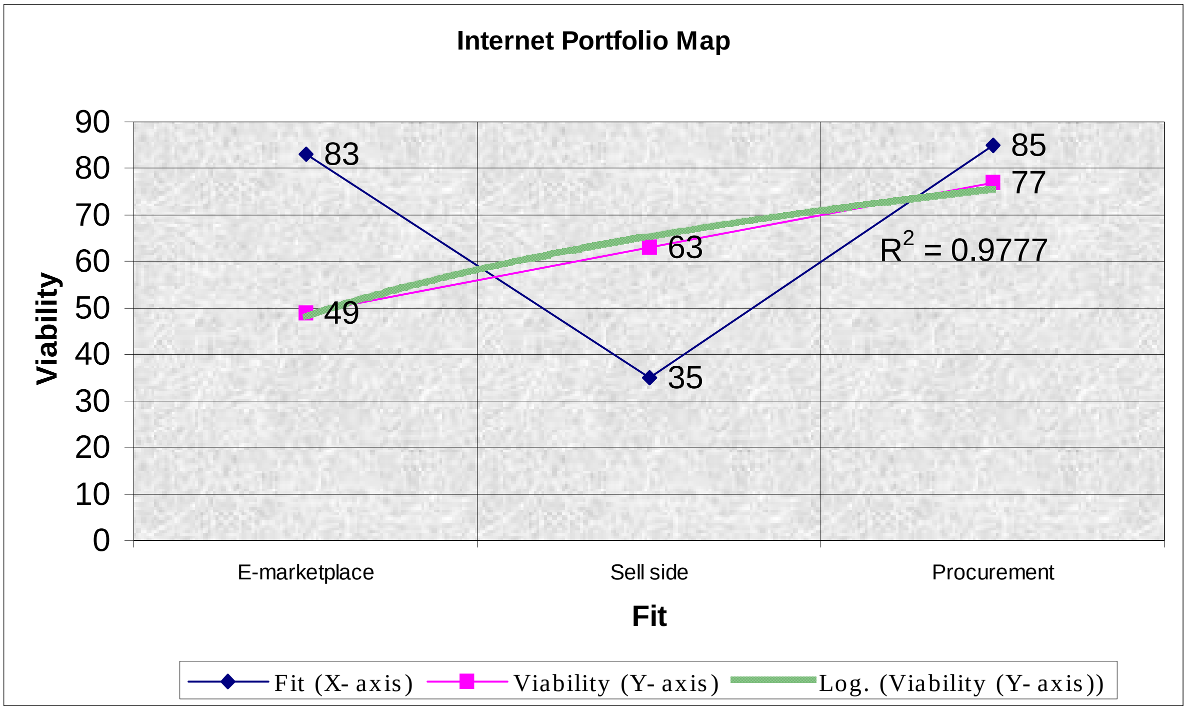

Fig 2: AN EC APPLICATION PORTFOLIO- THE CASE FOR MALAYSIAN SME'S

Global Market Penetration

From Figure 2 above, quadrant (a) illustrates a high scale on viability and medium scale on fit axis with regards to developing a global market penetration. Hence a redesign phase is recommended whereby the SME's must capitalize on a high degree of customer and competitor connectivity and use of information technology. The developments of Internet-based applications to optimize interaction with customers and build market-share are identified as critical success factors. A way in which the SME's could implement such a strategy is by creating an e-commerce web sites with value-added information services and extensive online customer support.

Cost and Efficiency Improvements

The (b) quadrant above (see Figure. 2) shows a medium scale on viability and low scale on the fit axis with regards to sales and distribution processes. This quadrant indicates a low amount of internal company, customer and competitor connectivity and use of information technology via the Internet and other networks. Therefore the recommended strategy is by outsourcing the business process which could improve efficiency and lower cost by using Internet and the Web as fast, low cost way to communicate with customers, suppliers and business partners. The use of e-mail, chat systems, discussion groups are some of the examples.

Performance Improvements in Business Effectiveness

With quadrant (c) in Figure 2, both the viability and fit axis illustrated a high scale. Therefore a continued investment in procuring technology is encouraged. This quadrant indicates that the SME's in Malaysia has high initiation for internal connectivity and pressures to substantially improve its business processes. However the SME's lacks the external connectivity to customers and business suppliers. The SME's must break out from the business family concept with regards to finance investment. In this scenario, the widespread of internal Internet-based technologies such as intranets and extranets can substantially improve information sharing and collaboration within the business and its trading partners.

Implications for SME's in Malaysia

Based upon the EC application portfolio of the SME's in Malaysia, Figure 3 below illustrates how the value chain model is being used to outline several ways that the SME's Internet connections with its customers and partners that could provide business benefits and opportunities for competitive advantage.

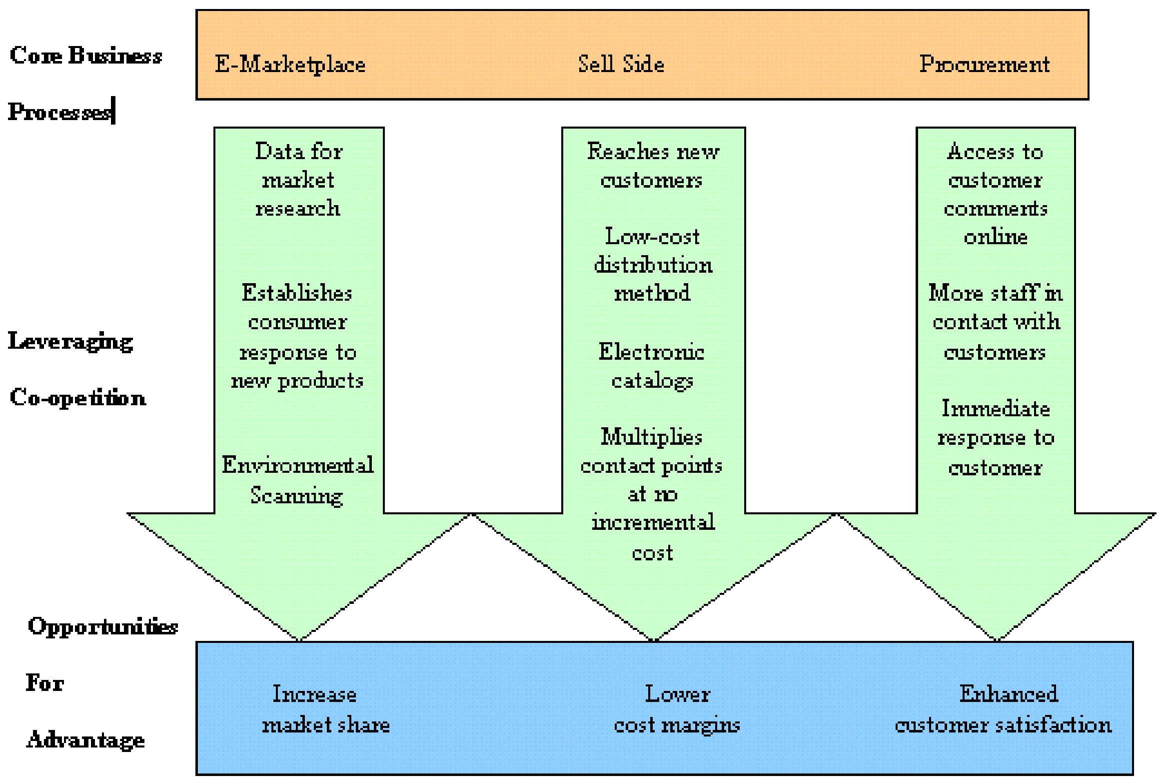

Fig 3: AN INTERNET VALUE CHAIN OF E-BUSINESS PROCESSES FOR SME'S IN MALAYSIA

Reevaluating Value-chain & Supply-chain

In the new digital economy, success or failures for most enterprises in the both the Asian and its western counterparts depends on their ability to incessantly question and adapt their business processes. The Internet value chain in Figure 3 can be used as reality checks of the company's way of doing business. This process is necessary to keep up with the sustained dynamic and radical change in the new business environment. The traditional business processes which relies on pre-determined rules and structures no longer holds. However the competitive survival and ongoing sustenance of Asian companies such as the SME's in Malaysia would depend primarily on their ability to continuously redefine and adapt organizational goals, purposes and the company's "way of doing things". As such it becomes imperative for the Asian dot-coms to reevaluate its value-chain and leverage the flow of information amongst its business partners in order to increase market share.

Develop e-business models

With regards to sales and distribution, there needs to be increase effort in creating new communication channels with customers. The critical success factor is to disseminating value-added information services such as electronic catalogs and extensive online customer support via e-commerce web sites. In comparison to other larger companies in Asia, the SME's in Malaysia should consider outsourcing their sales process to external third party companies that has the technical infrastructure and expertise to manage their sites more efficiently and could prove to lower cost margins in the long-run. The outsourcing trend had proven to be favorable in Asian counterparts such Vietnam and China. Alternatively, SME's in Malaysia could consider having joint ventures or form strategic alliances with larger Multimedia Super Corridor companies to achieve strategically significant objectives that are mutually beneficial.

Understanding the dynamics of e-business

The traditional information-processing model for traditional business processes assumes a problem as given, and the solution is based on pre-specified understanding of the business environment. (Malhotra, 2000). In contrast, the Internet value chain (see Figure 3) constructs the definition of the problem form the knowledge available at a certain point in time based on its context. In other words, its primary focus is on outcomes in terms of performance rather than on the specification of inputs. With rapid advancements and availability of technologies, there would be multiple choices in terms of technologies that could facilitate a specific e-business process such as customer relationship management (CRM) and supply chain management (SCM). Nonetheless Asian dot-coms need to be wary on the agility of the company in being able to integrate the evolving business process with technological and structural changes on an ongoing basis, which emphasize highly on creativity and innovation.

Conclusion

Based upon the deification of the analysis above, the dot-coms in Asia especially the SME's in Malaysia can attain the right level of co-opetition via lowering its business overhead through networked technologies, sharing research and development initiatives, sharing markets and develop collaborative exchange of information and resources amongst one another. The wave of the future is flexible production and flexible organizations. In that regard, many developing Asian countries should continue to improve the quality of their educational systems and their physical infrastructure (notably telecommunications and transportation), which will enable them to compete more effectively in local and regional markets and, in the case of some industries, in global markets. More importantly Asian managers need to balance between traditional cultural values and strategic business practices in order to use e-commerce as a competitive edge in the new digital economy. Hence developing an e-commerce value chain and understanding the dynamism of e-businesses can be identified as necessary diagnosis before embarking onto any e-commerce venture. In conclusion, paramount to breaking out from the traditional business process is by re-evaluating both their value and supply chain which can assist in deciding where and how to apply the strategic capabilities of information technology to specific business processes to increase competitive advantage in the highly competitive digital marketplace.

References

[1] Bacani, C. (2001). The e-revolution lives - and this time, Asia's largest corporations are leading the charge. Asia week.

[2] Bilan, R. (2000). Hooking Up Asia's Unwired. Telecom Asia, 11, 100-102.

[3] Brandenburg, A and Nalebuff, B. (1996). Co-opetition. Doubleday Broadway Books.

[4] Chan, T. (2000). Leased Lines Rule. Telecom Asia, 11, 88-90.

[5] Lee, C (2001). Open Up. Asiaweek.com.

[6] Malhotra, Y. (2000). Knowledge Management for E-Business Performance: Advancing Information Strategy to Internet Time. CRC Press.

[7] Shemwell. A. (1998). Understanding the External Business Environment. Wisconsin State University.

[8] Stein, B. Porrino, P and Morrow, B (2000). The State of the Industry: Adapting to the Winds of Change. Cross Current, Issue 4, December

[9] Turban, E. (2002). A Managerial Perspective of E-Commerce. Prentice Hall.

[10] Tweeney, D. (2001). Think Globally, Act Locally. Asia Week.

[11] O'Brien (2001). Essentials for the Internetworked E-Business Enterprise. USA: McGraw Hill.

[12] Oman, C. (2001). The Business Model of the New Economy. Economic Reform Today, 10, 95-98.

Web-based Customer Service and E-Commerce Success: A Malaysian Perspective

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Abstract

In a globalized and fast shrinking world, businesses today are faced with unprecedented opportunities as well as challenges. While markets are expanding due to globalisation and advances in technologies, at the same time companies are faced with more sophisticated and demanding customers both in the existing and new markets. It is no longer adequate to rely on traditional barriers of entry and differentiation, when product life cycles are shortened dramatically and barriers of entry eroded quickly. The traditional barriers of time, space and form will be eliminated in the process by the use of technology. With such development happening in the environment, it is undeniable that customer service has become the new battleground for business and Internet is now an important established business channel, which offers real ways to enhance customer relationships. Opportunity to provide highly personalised customer service is made possible by the advent of new Internet technologies. The impetus to look towards customer service as the competitive advantage is driven by the competitive imperatives to create and retain customer by providing world-class service and support. However, the rapid growth of e-commerce in more advanced countries is however not without it's pitfall. The industry is currently experiencing a shakeout, which sees many dot-com companies going out of business as well as numerous mergers and acquisitions taking place. The experiences from these countries should be used to rethink the strategies needed to venture into e-business. Many researches have highlighted the general lack of customer service in the e-commerce implementation. Are the Malaysian firms venturing into e-commerce falling into a similar trap?

This paper strives to establish the current outlook of the adoption of Web-based customer service in Malaysia and to look at ways in which businesses can use it to build competitive advantage. This paper also seeks to establish the expectations of the customers in order to develop a more effective Web-based customer service.

Introduction

The Malaysian government has since the middle 90s embarked on an ambitious plan to migrate the economy from an industrial based economy to a knowledge-based economy. One of the key initiatives is the setting up of the Multimedia Super Corridor (MSC). The MSC brings together an integrated environment with all the unique elements and attributes necessary to create a conducive global multimedia climate. In developing the MSC, there are seven primary areas for multimedia applications to be developed which comprises of Electronic Government, Multi-Purpose Card, Smart Schools, Telemedicine, R&D Cluster, World Wide Manufacturing Web and Borderless Marketing.

The Borderless Marketing application is developed on the premise that multimedia technology can be used by businesses to more efficiently and better serve their customers across different time zones, and effectively reach out to new customers. The traditional barriers of time, space and form are no longer limiting through the usage of technology. In this globalised and fast-shrinking world, businesses today are faced with unprecedented opportunities as well as challenges. While markets are expanding due to globalisation and advances in technologies, companies are faced with more sophisticated and demanding customers. It is no longer adequate economy to rely on traditional barriers of entry and differentiation, when product life cycles are shortened dramatically and barriers of entry eroded quickly. The current impetus to look towards customer service as the competitive advantage is driven by the competitive imperatives to create and retain customer by providing world-class service and support. Thus, it is undeniable that customer service has become the new battleground for business and the Internet is now an important established business channel, which offers real ways to enhance customer relationships.

Businesses in South Asia are currently about 18 to 24 months behind their North American counterparts in their e-business development [1]. A recent report by Research International has described e-commerce "as in comparative infancy in Malaysia". Security, cultural resistance and limited Internet penetration have been identified as three main barriers to e-commerce growth in Malaysia [2]. However, the rapid growth of e-commerce in more advanced countries is however not without it's pitfall. The industry is currently experiencing a shakeout, which sees many dot-com companies going out of business as well as numerous mergers and acquisitions taking place. In view of the infancy of the e-commerce in Malaysia, from a positive perspective, it could be seen as a blessing in disguise. The experiences from these countries should be used to rethink the strategies needed to venture into e-business.

Despite the current state of consolidation faced by the dot-com business, the e-commerce arena is expected to continue to have strong growth. Under the Eighth Malaysia Plan (2001-2005) the government has allocated a total of RM5.2 billion for information communications technology (ICT) programmes and projects. This includes the MSC flagship applications rollout and computerisation of several ministries. Focus will be given on strengthening the human resources capabilities for the further development of ICT in the country, while concerted efforts will be made to position Malaysia as a major ICT and multimedia hub. The Government implemented several programmes and projects as part of the efforts to increase ICT usage among the population. These included the "Gerakan Desa Wawasan" (Vision Village Movement) launched in 1996 to increase awareness among the rural population. Also contributors to the Employees Provident Fund were allowed to withdraw their savings for the purchase of computers. The distributive trade sector, which comprises wholesale and retail trade, under the Eight Malaysia Plan will be also strengthened and enhanced to meet the challenges of globalisation and liberalisation. The strategies to be implemented include measures in enhancing competitiveness, providing an enabling institutional and regulatory environment, forging stronger linkages and expanding e-commerce. With the continued focus in the development of ICT and the expansion of e-commerce, it is imperative for businesses to look for ways to ensure a more successful venture into e-commerce.

Today's customers are faced with a vast array of product and brand choices, prices, and suppliers. How do customers then make their choices? According to Kotler et al (1999) the premise is that buyers will buy from the firm that they perceive to offer the highest customer delivered value [3]. This value is the difference between total customer value and total customer cost. Total customer value is the bundle of benefits customers expect from a given product or service, while total customer cost is the bundle of costs customers expect to incur in evaluating, obtaining, and using the product or service. Whether the buyer is satisfied after purchase depends upon the offer's performance in relation to the buyer's expectation. Therefore satisfaction is the person's feelings of pleasure or disappointment resulting from comparing a product's perceived performance in relation to the person's expectations. Thus if performance matches expectations, the customer is satisfied.

In a recent survey conducted by Datamonitor, the failure to web-enable customer services cost European businesses US$1.44billion in 1999 [4]. In another research, Forrester Research estimated that 66% of online shoppers failed to complete in-progress transactions during the 1999 holiday buying season"… because they were either concerned about security, confused about shipping costs or had a product question that couldn't be answered online" [5]. These researches point to a startling weakness inherent amongst the Internet based business - lack of customer service.

A lot of focus has been placed in getting customers to visit the Web sites of these companies, with the hope that it will turn into an on-line customer. However, very little effort was made to assess the customers' needs and requirements apart from the product and services being offered. In other words the total customer experience has been ignored.

On the other hand, the conventional "brick-and-mortar" retailers have traditionally had strong customer service orientation. It is probably one of the more enduring components that provided the differentiation and competitive advantage that have sustained the conventional business over the years. Therefore, it has now the opportunity to diversify these strong customer service offerings into channel that are more suited to e-commerce. It is predicted that the "pure-play" Internet firm, especially in the business-to-consumer space, will continue to be replaced by the "clicks and mortar" hybrid, and by the old economy firms staking claims in cyberspace [6].

The concept of Web-based customer service as an integral part of the business strategy promises great potential in ensuring success. Internet based customer service adds another touch point to the whole customer relationship process in addition to the salesman, order processing personnel, technical support etc. It can create new ways of interaction that adds on or replace existing service offerings.

Web-based customer service moves services and support functions onto the Internet, away from high-cost environments where they are traditionally performed. The customers in Web-based customer service can be external or internal. External customers include individual, companies, or organisations that buy or use the products, services, or information. This category includes not only traditional customers or buyers, but also dealers, distributors, and business partners. But customers can also be people internal to the organisation such as customer service representatives, technical support representatives, employees, and sales representatives. They seek information and answers from the internal and external Web sites.

According to Russel, G. (1998) retailers everywhere have a vested interest in making sure that their customers are happy [7]. The old saying holds true, "Make a customer happy they'll tell one other person, make a customer unhappy and they'll tell 10 other people" except that maybe for the Internet we can multiply the negative results by a factor of 10. There are many ways to please a customer, which includes delivering products on time, as promised, in good working order and give the customer full access to company personnel who can answer questions and provide help in choosing products or fixing problems.

It takes a lot to promote and market a web presence. Getting people to your retail site is an important step but it is only a small piece of the cyber-marketing puzzle. Most retailers, in cyberspace and the real world, also act as if all responsibility ends once the customer has left the site. In reality this is not the case. Customer service should extend beyond the checkout and on-line payment windows, past delivery and well into the realm of installation or use of the product or service [8]. All too often we make the mistake of treating the "faceless customer" as if they don't really exist. It is as if Internet retailing removes the personal contact between customer and provider so that the value of the customer is somehow lessened.

In a recent study by Jupiter Communications LLC, an amazing 42% of top Web sites surveyed failed to provide adequate customer service [9]. PLAUT e-Returns Study ™ of 25 major UK e-commerce sites has revealed key flaws in areas such as difficulty to contact, cancellation of orders, poor return policy and handling [10]. Therefore Internet related business must improve their service level or perish.

It is clear that in today's highly competitive and global marketplace, a comprehensive Internet strategy is a business imperative. As many of the traditional influencers and differentiators are being removed, companies and organizations of all sizes must leverage the Internet's unique capabilities. As businesses move key functions and processes to the Web, a strategy that utilizes the Web for competitive advantage will be key for future success and, in many cases, survival [11].

Competitive differentiation is the driving force to leverage on the Internet to deliver customer service. Organisations will find it difficult to compete on the basis of product alone. Technological advancements have enabled the near-immediate replication of product features and functions. Pricing parity, promotion strategies being lessened as a means of differentiation and special offer becoming a norm means that none of them by itself can support the success of most businesses. Furthermore the place of distribution becomes less vital. Customer service therefore promises to be the means of differentiating to provide customers with a reason to frequent a particular business [12].

As such, Web-based customer service promises great expectation and potential, where service is fast, meaningful, compelling and customer driven. Success could bring increased sales, more repeat business, greater brand awareness and stronger customer relationship. The Web has become an intensively interactive medium and it's a great place to support customer and forge closer relationships with them. However, it is also a great place to loose customers too. A frustrated customer can just by the click of the mouse go elsewhere.

What is the situation in Malaysia? How do the Malaysian businesses fare in this new battleground? In view of the importance of Web-based customer service as one of the key component in the e-commerce success strategy, this research strive to establish the current outlook of its adoption in Malaysia and to look at ways in which businesses can use it to build competitive advantage. The research will look into the adoption amongst the large organisations namely the Public Listed Companies (PLC), the small and medium size industries (SMIs) as well as the pure-play dot-coms. This research also seeks to establish the expectations of the Malaysian consumers in order to develop a more effective Web-based customer service.

Research Framework

The Customer Service Life Cycle model as developed by Professor Jon Anton (2000) provides the framework for investigating the value adding strategies for harnessing the potential of the Internet for customer support [13]. The Customer Service Life Cycle breaks the relationship between the firm and customer into thirteen stages, which can be categorized into areas such as requirements, acquisition, ownership and retirement.

Based on the underlying Customer Service Life Cycle model, a theoretical framework is formed as illustrated in Fig. 1, in order to have a clearer overview of the various components at work in the Web-based customer service research. The framework comprises of, firstly the value-added areas of the Customer Service Life Cycle provided by the businesses. These variables are the customers' experiences in the dimensions such as requirements, acquisition, ownership and retirement.

The second component in the framework is the elements of Web-based customer service. These elements are the various techniques used to deliver value added service over the Internet, which includes static Web page information, e-mails, on-line data sharing, customer self-service etc.

Finally, the level of total customer service experience. This is the where the earlier components come together to influence the outcome as experience by the customer.

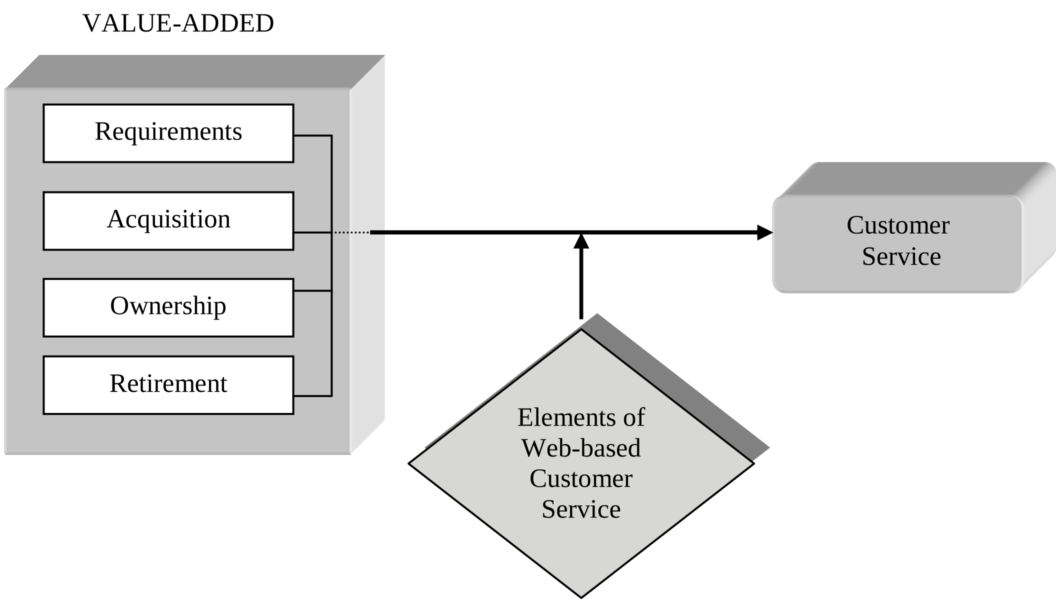

Figure 1: THEORETICAL FRAMEWORK

Table 1: CUSTOMER SERVICE LIFE CYCLE STAGES

Customer Service Life Cycle Stages	
Requirements	
1. Establish Requirements	Establish a need for the product
2. Specify Acquisition	Determine the products attributes
Acquisition	
3. Select Source	Determine where to obtain the product
4. Order	Order the product from a supplier
5. Authorize and Pay For	Transfer funds or extend credit
6. Acquire	Take possession of the product
7. Test and Accept	Ensure that the product meets specifications
Ownership	
8. Integrate	Add to an existing inventory
9. Monitor	Control access and use of the product
10. Upgrade	Upgrade the product if conditions change
11. Maintain	Repair the product as necessary
Retirement	
12. Transferor Dispose	Move, return, or dispose of product
13. Account For	Monitor expenses related to the product

Research Methodology

In the first part of the study, an assessment of the overall use of Internet was undertaken. However, due to resource constraints, this part of the study was limited to the evaluation of the Web presence of public listed companies, where information are more easily accessible through the internet.

The second part of the study was done through the observation of the elements employed in the Web sites of various businesses. In this study three groups of businesses were identified. These are mainly the large, medium and small firms, which have a Web presence and the pure-play dot-coms. The PLCs are chosen in this research to represent the larger organisations due to the cost effectiveness and easier access to available information. The small and mediums firms are grouped together in the strata referred to as SMIs. The third strata comprise of the pure play dot-coms.

The third part of the study involves the perspective of the customers in general. This was achieved through a questionnaire developed based on the research framework.

The Malaysian Perspective

Overall Web-Presence And Of The Various Industry Sectors

Of the total population of the public listed companies in Malaysia only thirty three percent was found to have a Web presence. This is considered low in view of the current trend towards the usage of Internet, especially in the global context. It is also not satisfactory, especially with the high level of emphasis given by the government towards building a more knowledge-based economy. As for the industry sectors, the Trust, Technology and Finance were seen as leading the pack. In the middle level the sectors are comprised of the Trading/Services, Infrastructure Project Companies, Hotel, Industrial Products and Consumer Products. At the lower level of Web presence are sectors such as Properties, Construction, Plantation and Mining. These are the more traditional types of industries. A profile of Web presence of the various industry sectors and the total is tabulated as shown in Table 2.

Table 2: WEB PRESENCE OF PUBLIC LISTED COMPANIES BY SECTORS

Sectors	Total	Web Presence	%
Trusts	4	3	75%
Technology	16	11	69%
Finance	64	34	53%
Trading/Services	149	61	41%
Infrastructure Project Companies	5	2	40%
Hotel	6	2	33%
Industrial Products	237	73	31%
Consumer Products	123	34	28%
Properties	75	19	25%
Construction	69	15	22%
Plantation	39	8	21%
Mining	7	1	14%
Closed-End Funds	1	0	0%
	795	263	33%

The level of overall usage of Internet amongst the business community is low in general. This is the case despite the various efforts taken by the government to encourage a shift towards a more knowledge-based economy. There are two ways in tackling this issue whereby the first involves the focus on the business community while the second is on the general population.

Much effort has been undertaken by the government through initiatives such as the MSC to push for the establishment of the high technology sector. The various flagship applications are underway to spearhead these developments. Therefore it is also the duty of the corporate leaders to demonstrate their forward-looking leadership role to embrace greater adoption of technology in their organisation along with efforts of the government.

As for the general population, the level of Internet penetration is low compared to other more advanced countries. It is also a fact that the pace of adopting e-commerce by the business community is also dependent on the availability of the market for it. With a relative small population and a low rate of Internet penetration it may not seem to be very attractive a market. Therefore much effort must be undertaken to increase the latter so as to build the necessary critical mass of Internet users. In this case the role of the government is vital. This can take the form of assimilating IT into the various aspect of the education system as well as to encourage the public to adopt IT. There are already various initiatives undertaken by the government. Therefore the main focus should be towards an efficient and effective implementation.

The Adoption of Web-based Customer Service

The results confirms the initial suspicion that there is a significant difference in the adoption of Web-based customer service elements between the Public Listed Companies (PLC), Small and Medium Sized Industries (SMI) and the pure-play dot-coms. It was also established that the adoption level is greatest for the Dot-com companies followed by the PLC, while the SMI is the lowest.

a. Developmental Lifecycle

The developmental lifecycle model, Fig. 2, was used in assessing the current state of adoption between the three groups of companies [14]. It was found that the Dot-com businesses have moved much further ahead in the adoption of Web-based customer service, compared to both PLC and SMI. It has moved passed the phase of providing customer support and interaction and very much into the phase of supporting electronic transactions. It also starts to develop in the areas of fostering a community. However, it seems to have given less emphasis and skipped the areas of personalising interaction with customers. This is also apparent in the other two groups. As for the PLC it is at the phase of starting to move into supporting electronic transactions. In the case of the SMI it is lagging behind the PLC and mainly uses the Internet to supply company and product information as well as some level of customer support and interaction.

b. Elements of Web-based Customer Service Adopted

The assessment of the Web sites revealed that there was significantly higher level of adoption of the elements such as providing product/service information, company information and e-mail for both the PLC and SMI. These elements are considered entry-level based on the evolution of Web site model. Similarly the Dot-coms also have significantly higher level of adoption of the mentioned elements.

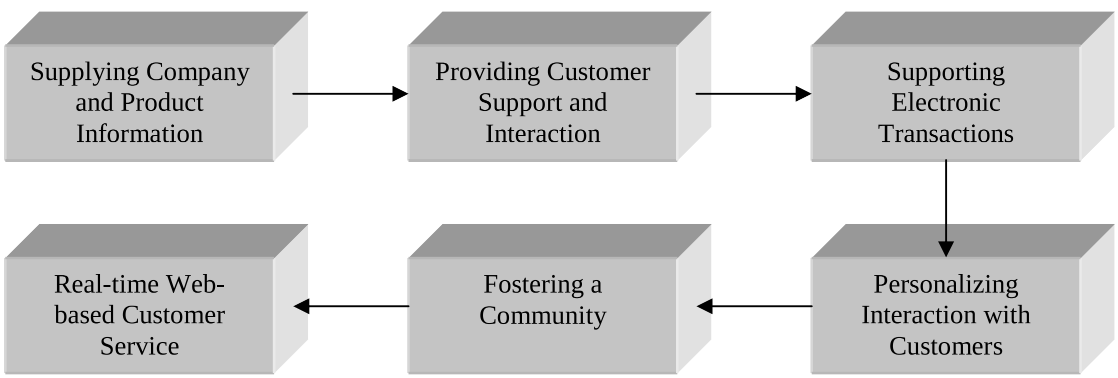

Figure 2: DEVELOPMENTAL LIFECYCLE PHASES

However, in addition they also have very high level of adoption of the elements such as preview of product, local search engine, frequently asked questions (FAQ) and online purchase. The first three elements are very much focused towards increasing the user friendliness of the site to the customer, as well as triggering the interest of the customers to the products or services. The latter element is generally expected in a Dot-com site whereby goods or services are purchased on-line over the Internet. An obvious difference between the Dot-com and the PLC and SMI is the higher spread of elements used. The usage of element's frequency diminishes rapidly as we go down the list for both PLC and SMI. This is even more obvious in the case of SMI. (Refer Table 3 – 6)

Table 3: LIST OF SEGMENTS AND THE ELEMENTS

Segments	**Elements**
Supplying company and product information	Product/Service information Company information Preview Product Mailing List
Providing customer support & interaction	Email Local Search Engine Site Map FAQ Introduction to first time user & site tour Product Configuration Complaining ability Problem Solving
Supporting Electronic Transactions	Online purchase Membership On-line Data Sharing Customer Self-Service
Personalising interaction with customers	- Site Customization
Fostering a community	- Community Bulletin Board - Links
Real-time web-based customer service	- Click to chat - Click to talk - Click to call-back - Collaborative browsing

Table 4: ELEMENTS ADOPTED BY PLC

Elements	Ranking	Frequency
Company information	1	30
Product/Service information	2	28
Email	3	27
FAQ	4	8
Site Map	5	7
Local Search Engine	6	6
Customer Self-Service	7	6
Preview Product	8	5
Links	9	5
Mailing List	10	4
On-line Data Sharing	11	4
Problem Solving	12	3

Online purchase	13	3
Membership	14	3
Product Configuration	15	2
Community Bulletin Board	16	2
Complaining ability	17	1
Introduction to first time user & site tour	18	0
Site Customization	19	0
Click to chat	20	0
Click to talk	21	0
Click to call-back	22	0
Collaborative browsing	23	0

Table 5: ELEMENTS ADOPTED BY SMI

Elements	Ranking	Frequency
Product/Service information	1	29
Company information	2	27
Email	3	27
Links	4	3
Complaining ability	5	2
Preview Product	6	1
FAQ	7	1
Problem Solving	8	1
Customer Self-Service	9	1
Mailing List	10	0
Local Search Engine	11	0
Site Map	12	0
Introduction to first time user & site tour	13	0
Product Configuration	14	0
Online purchase	15	0
Membership	16	0
On-line Data Sharing	17	0
Site Customization	18	0
Click to chat	19	0
Click to talk	20	0
Click to call-back	21	0
Collaborative browsing	22	0
Community Bulletin Board	23	0

Table 6: ELEMENTS ADOPTED BY DOT-COM

Elements	Ranking	Frequency
Product/Service information	1	30
Email	2	29
Online purchase	3	29

Preview Product	4	25
Company information	5	24
Local Search Engine	6	18
FAQ	7	17
Membership	8	13
Mailing List	9	12
Introduction to first time user & site tour	10	11
Links	11	10
Customer Self-Service	12	9
Community Bulletin Board	13	8
Site Map	14	7
Problem Solving	15	4
Complaining ability	16	3
On-line Data Sharing	17	3
Site Customization	18	2
Collaborative browsing	19	1
Product Configuration	20	0
Click to chat	21	0
Click to talk	22	0
Click to call-back	23	0

It was obvious that the SMI is lagging far behind in terms of the elements adopted and mainly uses the Internet to supply company and product information as well as some level of customer support and interaction. In a knowledge-based economy competition will be shifting away from the old economy whereby traditional barriers of entry are prevalent. These include pricing, promotion, economy of scale, distribution channel, geographical etc. The advent of Internet technology and the application for e-commerce has open up a great opportunity for new players. To some extent it has levelled the playing field for smaller or new players to compete. This should be the best opportunity for SMI to utilise Internet to establish them and to compete more effectively with the bigger players. At the same time the ability to leverage on the association with a group such as the Small Medium Industries Development Corporation (SMIDEC) would further enhance the chance of success. Many incentives are available through SMIDEC and other government bodies as well as the financial institution to promote the SMIs.

At the same time the current trend towards the use of Application Service Provider augurs well with the obstacles currently faced by smaller organisation in setting up e-commerce operation. One of the hindrances established in a previous research is related to infrastructure and technology [15]. Companies that have less access to advance telecommunication infrastructure and lack of technological expertise are likely to have lower level of adoption of e-commerce. Therefore the SMI companies should make use of the services provided through the ASP whereby the e-commerce facility is provided based on an agreed fee that is dependent on the actual level of usage.

The Malaysian Consumers

We have so far looked at the adoption of Web-based customer service through studying the actual implementation of the elements by the three groups of companies. It was established from the analysis that there were disparities between the levels of adoption between the three groups. It was also seen that the three groups are at different phases in the developmental lifecycle. There were also some similarities as well as differences in the elements of Web-based customer service, in terms of the frequencies of the usage. However the question remains as to whether the elements being adopted and given emphasis are contributing towards improving the ability to serve the customer better. Also important is the question of what the customer expects from Web-based customer service. It is therefore necessary to look at these questions from the perspective of the customer. Knowledge of the customer's expectation would greatly increase the effectiveness of the Web site in delivering customer service. An analysis of the behavioural patterns of the Malaysian consumers were undertaken on the followings:

- Frequencies of Accessing the Internet
- Use of Internet to Search for Information
- Use of Internet to Purchase On-line
- Use of Internet for After Sales Support

The survey was conducted in the Klang Valley, a metropolitan area that includes the nation's capital, Kuala Lumpur. The objective of the survey was to gain a view of what are the perceptions and expectations of the consumers relating to the online customer service experience specifically as well as the e-commerce experience in general. Thus an Internet savvy sample is required. This is important to ensure the respondent's understanding on the concepts.

Firstly, the sample could be classified into two groups to determine the impact of the frequency of usage on the other behavioural patterns. The frequent users make up a total of 81% compared to the 19% of the non-frequent users. This figure confirms the expected higher proportion of Internet savvy users as being the majority of the respondents.

In the case of using Internet to search for information, the mean is low. However, it was established that one of the main usage of Internet by businesses is to provide information about the company as well as for product and services, which was supported by the ranking of the elements used by the three groups of business. It does seem at this juncture that the intention of the business of putting up information on the web in the hope that it will be used extensively has not been achieved. The respondents' usage of the Internet for on-line purchase is very infrequent. Such trend does not augur well with the various initiatives by the businesses to venture into e-business, where investments are generally very high. Similarly, the situation for the usage of Internet for on-line purchase shows a similar pattern as to the use for after sales support.

Further analysis also shows that the frequent user group has a significant higher average score for both the use of Internet for search of information and for on-line purchase. In a way this situation is expected of an Internet savvy sample. However, it was not the case for the use for after sales support. Both the groups have similar low usage reflecting the across the board lack of extensive online customer services. The current low usage level would represents the potential in the future to expand usage, but this will depend on the whether there is any value gained from the customers' point of view.

When asked as to whether they believe Web-based customer service as an important mean for businesses to gain competitive advantage, it was a consensus for 'very important'. From the customer's perspective, Web-based customer service is an important contributor towards gaining competitive advantage for businesses. In other words, the consumers demand Web-based customer service.

The perceived customer service level is low. There could be several factors that contribute to the perception of service level. It is important for businesses to establish the main factors so that concerted effort can be made to achieve higher service level. The analysis also confirms that there is a direct relationship between the value provided through Web-based customer service and the perceived customer service level.

Further analysis on the sub-areas reveals that the area of acquisition has a direct relationship with the level of service. However, the relationship for requirement, ownership and retirement is not so direct. The results from this analysis mean that it may be more effective for business to concentrate their effort into the area of acquisition of the customer service lifecycle. However, it would be unwise here to conclude that the areas of requirement, ownership and retirement are not important. In the customer service lifecycle model, all the components play a role towards the total customer's experience. In this analysis the results should be interpreted as a shift in relative focus and some adaptation may be needed for different industry.

Amongst the top Web-based customer service elements that are considered most important by the respondents are:

- product/service information
- preview product
- problem solving
- company information

- complaining ability

A review of the three groups of business shows that the product/service information and company information elements are found among the top ranks in all the groups. However, for the preview of product it is only available in the top ranks for Dot-com businesses. This perhaps is largely due to the absence of on-line purchase in the PLC and SMI in general. More importantly the element of problem solving is not available from among the top 5 of the list for all the groups. In addition the element of channel for complain is also missing in both the PLC and Dot-com.

There seem to be a great difference in the attitude towards how the Internet should be used. On one hand the businesses would like to push to the customer as much information as possible whereas on the other hand the customer is asking for more on problem resolution. The use of e-mail for feedback, which is ranked among the top 5 elements in all the groups, is not featured highly in the survey. This could be due to the users past experience of poor responses.

Some of the elements such as mailing list, membership and site map, which are quite extensively used in the Web sites, are not given high ranking in terms of importance by the respondents.

The survey indicates that the customer have strong inclination to seek avenues for more direct person to person contact even though the initial contact is through the Internet. The highest scored element is the 'click to call-back' in which the callback could either be immediately or scheduled return call. The callback is usually done via an established call centre system, which also points to the importance of such facility as well as the direction for the convergence with the Web-based approach.

On the contrast is the 'click to talk' through voice over Internet Protocol (VOIP). Ironically, this element has the lowest score. Relating back to the previous element, it is quite identical in terms of the customers' ability to seek person-to-person contact albeit using VOIP. One of the main reasons for the low ranking would be due to the inconsistent quality of voice delivery over the Internet. As the telecommunication technology develops and higher bandwidth is made widely available, it would change the outlook of this element.

The second highest score goes to for 'click to chat' using text based communication. This means of communication is very well established using the IP protocol and with services such as ICQ etc. Most avid Internet users would have experienced usage of such technique. It is an effective and cheap form of interactive communication made available through the Internet technology. As such this technique could be incorporated into the mainstream business for remote customer support.

The final element is the use of collaborative browsing where both parties use a synchronised web browser. This feature is useful because in addition to voice, visual narration is made possible where the subject of discussion is presented in a diagram or pictorial format. This can be applied to various situations in the customer service lifecycle. Examples include where the customer is guided through the product features, demonstrating to users the proper usage of the product etc.

Conclusion

The concept of customer service through leveraging on the Internet promises great potential in ensuring success for an organisation. It adds another touch point to the whole customer relationship process in addition to the traditional means. Despite the current state of consolidation faced by the dot-com business, the e-commerce arena is expected to continue to have strong growth albeit at a more gradual pace.

The study also has highlighted the significant potential of Web-based customer service towards ensuring e-commerce success, from both technological features and consumers' perception and expectation. Therefore business should adopt Web-based customer service as one of the key component in their e-commerce strategy towards building a competitive advantage.

The Malaysian government has already taken numerous steps to lead the country towards a more knowledge-based economy in their efforts of realisation of Vision 2020. The MSC project is a key initiative taken by the government, which is targeted as the catalyst for the nation's economic development [16]. Besides being the tool for better utilisation of the country's national system of innovation (NSI), the MSC is also the main vehicle for the country's e-commerce initiatives which had been identified as one of the key ingredient towards becoming a knowledge-based economy [17].

However, the study shows that the Malaysian businesses are still lagging if compared to their counterparts in the developed countries. Reasons such as the consumers are not ready for it, can no longer be used, as the Malaysian consumers are becoming more and more Internet savvy. The government has already shown their commitment with the various initiatives that had been put in place. The question now remains as to whether the corporate leaders are committed to demonstrate their forward looking leadership role to embrace greater adoption of technology in their organisation. Web-based customer service is the tool to exploit the global opportunities of e-commerce and it has been proven that there are market demands for it. It is up to the businesses to response and achieve e-commerce success.

References

[1] Input (2000). Executive Guide to Enterprise E-Business Infrastructure in South Asia. Input, 2000.

[2] http://www.nstp.com.my (13/12/2000)

[3] Kotler, Ang, Leong and Tan (1999). Marketing Management - An Asian Perspective. Prentice Hall, 1999.

[4] Klasnic, Kathleen (2000). Peoplesoft: European Call Centre Survey reveals opportunities for web-enabled call centre software tantalisingly in reach. *M2 Presswire*, Nov 7, 2000.

[5] Mike Murphy, Joni Roberts and Guillaume Robert (2000). Online Customer Service: Web Technology and Call Center Integration. 2000

[6] http://www.nstp.com.my (18/12/2000)

[7] Russel, Guy (1998). Marketing - Customer Service In Cyberspace, The Other Sides, Professional Presence Network.

[8] Gianforte, Greg (2000). The Insider's Guide to Next-Generation Web Customer Service. RightNow Technologies, Inc, 2000.

[9] Plaut (2000). Plaut calls for imprived e-commerce customer service; Top ten recommendations issued to improve Christmas online shopping. M2 Presswire, Nov 15,2000.

[10] Kotadia, Harish (2000). Business Line: India: CRM - a critical resource module. Businessline, Nov 8,2000.

[11] Anton, Jon (2000). Customer Service Life Cycle. (URL: isds.bus.lsu.edu/cvoc/Projects/cslc/html/research.html)

[12] Gable, Jennifer (2000). Customer Service on the Net: Improved or Inefficient? MBA, 2000.

[13] Liew, Voon Kiong (2000). Level of Adoption of E-commerce Applications among the SMI/SME in Malaysia, University Malaya, 2000.

[14] Ab. Aziz, K. and Omar, A.A., "Sustainable Development, Strategic Alliances and national System of Innovation: A Malaysian Outlook" Paper presented at the 6th International Conference on Global Business and Economic Development (Bratislava, Slovakia, November 7-10, 2001).

[15] Ab. Aziz, K. and Omar, A.A. "The Multimedia Super Corridor: A Physical Manifestation of the Malaysian National System of Innovation." Paper presented at the ECIS "The Future of Innovation Studies" conference (Eindhoven, Netherlands, September 20-23, 2001).

Section 8
Accounting, Taxation, Ethical and Environmental Issues

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An Empirical Analysis of the Inventory Accounting Methods of U.S. Multinational Companies: Segment Effects

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Abstract

Typically the choice of inventory methods for U.S. companies is assumed to reflect the tax savings choice made by the company. Companies choosing to minimize their taxable income choose the LIFO method of accounting for inventories since the tax code requires the use of this method for financial reporting purposes in order to be used for tax purposes too. Companies choosing not to minimize their taxable income or in other words, choosing to maximize their reported income typically are assumed to select a non-LIFO method, such as FIFO. In the international arena, the choice of inventory accounting is frequently limited since a lot of the countries in the world do not permit the LIFO method of accounting. Thus, U.S. Multinational Companies (MNCs) may not be able to select the LIFO method for international operations. The inventory accounting choices made by MNCs has been examined only in a few studies. The purpose of this study is to examine the choice of inventory accounting methods by U.S. MNCs grouped by segment groups.

Companies are selected from the Disclosure database. Only MNCs are selected for study, based on the disclosures made by the companies on foreign operations. Segment information is examined by disclosures made by the companies in their supplementary schedules. A model is constructed based on theoretical expectations and the hypotheses tested by statistical analyses. The conclusions from this study have implications for policy makers and managers.

Introduction

The choice of inventory costing method is an important one for companies since the consequence of the choice is apparent in both the balance sheet and the income statement. In periods of rising prices, companies choosing the income-reducing method of Last-in-First-out (LIFO) also leave the lower earlier prices in their inventory values. This results in inventory values in the balance sheet that are based on the older prices and hence this understates the current assets of the company. Thus, in times of rising inventory prices, the LIFO method results in lower net incomes and also lower values in the current assets. The only advantage to choosing this method is the lower tax expenses based on the lower income. The American tax code requires the use of the LIFO method for financial reporting purposes if that method is used for tax purposes. When used for tax purposes, LIFO with its lower reported incomes correspondingly results in substantial tax savings for companies with large amounts of inventories, typically most large merchandising and manufacturing companies in the economy.

The LIFO method of costing inventories is not universally accepted in global markets. Most industrialized countries do not allow the use of this method of accounting with the U.S. market as a rare exception in permitting companies to use the LIFO method. This creates a choice issue for U.S. Multinational Companies (MNCs). If the MNCs choose the LIFO method for reporting in the domestic market, then they will have to account for foreign inventories using a non-LIFO method, such as First-in First-out (FIFO) or an average costing method. This creates an additional cost to them for maintaining inventory accounts with different cost methods and also imposes a need for reconciliation when intracompany transfers occur. These issues can be avoided if the MNCs choose a non-LIFO method for costing both the domestic and foreign inventories. The purpose of this paper is to study the choice of inventory costing methods by U.S. MNCs in costing domestic and foreign inventories and examine the factors that cause the companies to choose the same or different methods in accounting for these inventories. The remainder of the paper is divided into four sections. The next section reviews the earlier studies that have examined inventory accounting choices by companies. Section three outlines the specific methodology used in this study. Section four contains the results and analysis of the study and the last section summarizes and concludes the study.

Literature Review

The choice of inventory costing methods by companies has been examined in the U.S. market in many earlier studies. In periods of rising prices, switching to the LIFO method of accounting could save millions of dollars in tax expenses to companies. Biddle (1980) and Morse and Richardson (1983) document the potential for this in many firms in their studies. Hunt (1985) examined the choices of companies in a two year period, 1974 and 1975, to either switch to LIFO during this high inflation period or retain the use of FIFO. He found that firms with high levels of debt were less likely to switch to the income decreasing LIFO method. Dopuch and Pincus (1988) examined the differences in accounting numbers and accounting ratios of long-term users of FIFO and LIFO methods, finding evidence that the choice of LIFO method was more related to tax savings than any other variable. Hughes and Schwartz (1988) used an information asymmetry hypothesis to test why some firms in some industries switched from FIFO to LIFO and others did not. They conclude that managers in firms have private information, which they signal to the investors with their choice of inventory accounting methods. Neihaus (1989) examined the relation between inventory method choice and ownership structure of U.S., public companies and found that with higher managerial ownership firms tended to choose LIFO, a method that lowered reported earnings but also resulted in tax savings. With lowered managerial ownership, a negative relationship was found to the choice of LIFO as the method of accounting. Lindahl (1989) developed a Markov Chain model to study the firms changing from LIFO to FIFO and vice versa. He found that his model more closely explained firms changing to LIFO through price-level changes and size. Cushing and LeClere (1992) studied the characteristics of U.S. public companies that had chosen to stay with their original choice of FIFO or LIFO accounting method in the period 1975 to 1984. They found that companies using LIFO had significant tax savings while those using FIFO had no single dominant characteristic that explained their inventory accounting choice. Kuo (1993) examined the factors affecting the choice of inventory accounting method in small companies in U.S. He found that as the size of the company, measured in total sales, increased the likelihood that the company would use LIFO increased while the debt to equity ratio had an inverse effect, suggesting that small companies, like their bigger counterparts, were more likely to choose an income increasing method when debt increased due probably to the covenants placed in their debt contracts. Bar-Yosef, Hughes and Venezia (1995) provided a model in their study to explain why some firms would choose not to switch to LIFO in periods of rising prices. They conclude that for more efficient firms rising prices may not always result in increased production prices and hence the tax savings provided by the switch may not offset the cost of switching. Hence more efficient firms provide a signal to the market by not switching to LIFO while other lesser efficient firms do so.

Very few studies have examined the inventory accounting choice of U.S. companies when they operate in foreign markets. Archambault and Archambault (1999) compared the characteristics of Canadian and U.S. firms in their choices of FIFO and non-FIFO cost methods. In Canada the tax code does not allow companies to use LIFO for tax reporting purposes. Hence most Canadian companies do not choose the LIFO method for financial reporting purposes using average costing when moving away from FIFO. The authors found that the characteristics of Canadian and U.S. firms choosing FIFO were similar and the Canadian firms choosing average costing had similar characteristics with U.S. firms choosing LIFO as the inventory costing method. The authors conclude that more of these firms in Canada would choose the LIFO method if the tax code in Canada permitted LIFO for tax reporting purposes. In a study closely related to this study, Craycraft, Sedo and Gotlob (1998) examined whether U.S. firms with high levels of foreign operations are less likely to use the LIFO method of accounting in their domestic operations than companies with relatively lower level of foreign operations. They find significant results for their primary hypothesis.

Methodology

Model

Similar to Craycraft, Sedo and Gotlob (1998), we examine the impact of foreign operations on US MNCs' choice of inventory accounting methods. However, our study is different from theirs in that we also examine the impact of segments (SEG) on the accounting method choice. Merely having higher levels of foreign operations may not always mean that companies would be more likely to use non-LIFO methods in the domestic market. The cost of maintaining a dual inventory system may be offset if the company operates in many different segments. Segmentation could occur if a company operates in many different product lines or has many important geographical segments for its market. Since significant efficiencies could occur with segmentation and a choice of different inventory methods in the different segments may not be necessarily cost prohibitive. Thus, MNCs with more segments (either geographical or product lines) will be more likely to choose LIFO in the domestic market and a non-LIFO method in foreign markets. Craycraft, Sedo and Gotlob (1998) also included 55 dummy variables in their study for the industry the company was classified into in their study, but they fail to discuss the impact of these variables in their results. We choose not to include industry classifications since the choice of inventory accounting method should be independent of this variable.

In addition to the above variable, our study incorporates control variables of the ratio of inventory to current assets (INVCA). As the proportion of inventory increases in comparison to the amount of total current assets, the likelihood that the company will choose a single method (non-LIFO) increases since the cost of maintaining a dual system for domestic and foreign inventories would be very high in such cases. We include a measure of debt exposure (LEV) to our model, consistent with previous studies. The higher the amount of debt a company carries the less likely that it will use LIFO in the domestic market since the probability of violating debt covenants increases with income decreasing methods like LIFO. Our model also incorporates a variable for the capitalization of assets (CAP) that is measured as a ratio of the fixed assets to total assets. As the amount of capitalized cost increases, the choice of income decreasing methods like LIFO is unlikely since the capitalized cost will already result in lower incomes due to depreciation and amortization expenses. Hence firms with higher capitalized costs will likely choose a non-LIFO method for both their domestic and foreign inventories. Consistent with earlier studies we also include a size variable (SIZE) that is measured as the total sales revenue reported by the company. While other studies have used total assets as a proxy for size, we believe total sales revenue is a better choice since the companies are interested in the amount of reporting earnings, which is directly impacted by the amount of sales revenue.

The statistical model we test is this study is thus

$$\Pr(\text{LIFO}) = b_0 + \underset{+}{b_1 (\text{SEG})} + \underset{-}{b_2 (\text{INVCA})} + \underset{-}{b_3 (\text{LEV})} + \underset{-}{b_4 (\text{CAP})} + \underset{+}{b_5 (\text{SIZE})} + e$$

where the Pr (LIFO) is a dummy variable with a value of 1 if the company has chosen LIFO for its domestic inventories and 0 if it has chosen a non-LIFO method. The expected signs for the coefficients are given below the variables.

Sample Selection and Statistical Analysis

U.S. MNCs were chosen for this study from the 2001 Disclosure database. Companies were chosen on the basis of their footnote disclosures on the choice of inventory methods for domestic and foreign markets. In addition, information was compiled for the companies for their segment disclosures, amounts of inventory, current assets, fixed assets, total assets, total debt and total sales revenues. A total of 209 companies were selected for analysis. Since the dependent variable is a dummy variable, a Probit analysis was performed since the assumptions of normality and equality of covariance matrices are not necessary under this method. The Probit analysis was done using SAS software.

Results

The results of the Probit analysis are shown in Table 1. The coefficients for all the variables are in the direction indicated, but only the coefficients for LEV and CAP are statistically significant. The variable of interest in this study, SEG is positive, indicating that MNCs with more segments do have a tendency to choose LIFO as the inventory cost flow method for domestic inventories but this is not statistically significant. The coefficient for INVCA is negative as expected, indicating that as the amount of inventories increase as compared to current assets, companies are less likely to choose LIFO for domestic inventories. However, this variable is only slightly significant. Similarly, the coefficient for the size variable, SIZE, is positive as expected, indicating that as sales increase companies are likely to use LIFO for domestic inventories. However this variable is not statistically significant.

Table 1: RESULTS OF ANALYSIS

Variable	DF	Estimate	Standard Error	Chi-Square	Pr > ChiSq
Intercept	1	1.61236000000000	0.3465600	21.6449	<. 0001
SEG	1	0.00750810000000	0.0688300	0.0119	0.9131
INVCA	1	(0.96574000000000)	0.5998100	2.5923	0.1074
LEV	1	(0.00116680000000)	0.0005094	5.2458	0.0220*
CAP	1	(0.92171000000000)	0.4052100	5.1741	0.0229*
SALE	1	0.00000000053446	0.0000000	0.2491	0.6177

*significant at pr<0.05

Variables for LEV and CAP are in the expected direction and statistically significant. Companies with higher debt are less likely to select LIFO for domestic inventories. This result is consistent with earlier studies. Also, as the amount of capitalized costs in fixed assets increases, the likelihood that companies will choose LIFO for domestic inventories decreases, consistent with our expectation.

Conclusion

The purpose of this study was to examine the characteristics of U.S. MNCs in their choice of inventory costing methods for domestic and foreign inventories. Since the tax saving method of LIFO is not available in most foreign markets, MNCs using LIFO for domestic inventories have the added cost of maintaining foreign inventories using a non-LIFO method. Thus, MNCs have a choice of either adopting non-LIFO methods for both inventories or maintaining two sets of inventory records, which results in added costs of bookkeeping and reconciliation. The primary variable examined in this study, SEG, was not statistically significant, indicating the number of geographical or product line segments does not impact MNCs choice of inventory costing method. However, consistent with earlier studies, debt and size impact the inventory method choice, with companies with larger debts and sales less likely to select LIFO for domestic inventories.

The results from the study suggest that more research is necessary to understand the characteristics of MNCs in their choice of inventory costing methods.

References

[1] Archambault, M. and J. Archambault, "A Test of the Firm Characteristics Hypothesis for LIFO Choice of Canadian Firms," *Journal of International Accounting, Auditing &* Taxation, Vol. 8 No. 1, 1999, pp. 165-188.

[2] Bar-Yosef, S., P. J. Hughes, and I. Venezia, "The LIFO/FIFO Choice as a Signal of Future Costs," *Journal of Management Accounting Research*, Vol. 7, Fall 1995, pp. 52-65.

[3] Biddle, G. C., "Accounting Methods and Management Decisions: The Case of Inventory Costing and Inventory Policy," *Journal of Accounting* Research, Vol. 18 Supplement, 1980, pp. 235-280.

[4] Craycraft, C., S. Sedo, and G. Gotlob, "Foreign Operations and Choice of Inventory Accounting Methods," *Journal of International Accounting, Auditing and Taxation*, Vol. 7 No. 1, 1998, pp. 81-94.

[5] Cushing, B. E. and M. J. LeClere, "Evidence on the Determinants of Inventory Accounting Policy Choice," *The Accounting Review*, Vol. 67 No. 2, April 1992, pp. 355-366.

[6] Dopuch, N. and M. Pincus, "Evidence on the Choice of Inventory Accounting Methods: LIFO Versus FIFO," *Journal of Accounting* Research, Vol. 26 No. 1, Spring 1988, pp. 28-59.

[7] Hughes, P. J. and E. S. Schwartz, "The LIFO/FIFO Choice: An Asymmetric Information Approach," *Journal of Accounting Research*, Vol. 26 supplement, 1988, pp. 41-58.

[8] Hunt III, H. G., "Potential Determinants of Corporate Inventory Accounting Decisions," *Journal of Accounting Research*, Vol. 23 No. 2, Autumn 1985, pp. 448-467.

[9] Kuo, H, "How Do Small Firms Make Inventory Accounting Choices," *Journal of Business Finance & Accounting*, 20 (3), April 1993, pp. 373-392.

[10] Lindahl, F. W., "Dynamic Analysis of Inventory Accounting Choice," *Journal of Accounting Research*, Vol. 27 No. 2, Autumn 1989, pp. 201-226.

[11] Morse, D. and G. Richardson, "The LIFO/FIFO Decision," *Journal of Accounting* Research, Vol. 21 No. 1, Spring 1983, pp. 106-127.

[12] Neihaus, G. R., "Ownership Structure and Inventory Method Choice," *The Accounting Review*, Vol. LXIV No. 2, April 1989, pp. 269-284.

An Evaluation of the Corporate Tax Systems in Malaysia and Thailand

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Abstract

The types of taxes imposed by a Government are generally divided into two: direct and indirect taxation. The principal taxes imposed by the Government of Thailand are direct taxes (personal income tax, corporate income tax and petroleum tax) and indirect taxes (Value Added Tax: VAT, specific income tax, customs duties, excise tax and stamp duties). The principal tax law in Thailand is the Revenue Code that outlines regulations for the imposition of personal and corporate income taxes, VAT, specific business taxes and the stamp duties. Customs duties are regulated by Thailand's Customs Act; the Excise Act manages the excise tax while the Petroleum Income Tax Act governs the taxation of petroleum income.

In Malaysia, the Inland Revenue Board is responsible for all policies relating to direct taxes (income tax, real property gains tax, stamp duty and petroleum income tax). The Royal Customs and Excise Department is responsible for indirect taxes (service tax, excise duty, sales tax and customs duties). The law governing income tax is the Income Tax Act 1967 while petroleum income tax is governed by the Petroleum Income Tax Act 1967. The various indirect taxes are governed by the Service Tax Act 1975, Excise Duty 1976 Act, Sales Tax Act 1972 and Customs Act 1967, respectively.

Tax Administration

In Thailand, the Ministry of Finance has three distinct departments to manage the administration of taxes: Revenue Department; Customs Department; and Excise Department. The responsibility for the administration of personal income tax, corporate income tax, petroleum income tax, Value Added Tax (VAT), specific business tax and stamp duty lies with the Revenue Department. The administration of customs duties is the responsibility of the Customs Department while the excise tax is administered d by the Excise Department.

In Malaysia, the Ministry of Finance has two distinct departments to manage the administration of taxes: direct taxes are administered by the Inland Revenue Board while the indirect taxes are managed by the Royal Customs and Excise Department.

The section below reviews some pertinent aspects of corporate income tax in Thailand when compared to Malaysia. The comparisons are reviewed under the following sub-headings:

- Scope of Charge
- Business Organizations
- Tax Rates
- Treatment of Losses
- Deductions
- Remittance Tax

Scope of Charge

Thai resident companies are liable to corporation tax on all sources of income and capital gains, wherever arising. Capital gains are treated as ordinary income under Thai tax laws. Foreign companies not registered or not resident in Thailand are subject to tax only on income derived from sources within Thailand and they include royalties, interest, dividends and rental payments derived in Thailand.

In Malaysia, income tax is charged on a company's income that accrues in or is derived from Malaysia. Overseas income remitted by companies (other than those carrying on sea and air transport business, insurance, and banking) is tax exempt. Resident companies carrying on sea and air transport business, insurance, and banking operations are taxed on a world income basis. No tax, however, is charged on offshore income derived by an offshore company. Offshore business activities are governed under the Labuan Offshore Business Activity Tax Act, 1990.

The scope of charge on income is more favorable for companies in Malaysia when compared to Thailand as income remitted into Malaysia is exempted (with some exemptions). There is no capital gains tax under the ITA in Malaysia other than limited taxation of real property under the Real Property Gains Tax (RPGT) 1976.

Business Organizations

Businesses in Thailand are generally registered as sole proprietorships, partnerships, limited companies and public limited companies. In addition, branches of foreign corporations are recognized and may be required to be registered to do business in many sectors. A "representative" or "liaison" office of a foreign company is not recognized as a distinct legal entity and may be treated as a branch office for tax and other purposes.

In Thailand, corporate income tax is levied on juristic companies and partnerships. Under the Revenue Code, "juristic companies and partnerships" include the following:

(i) a limited company, a public company or juristic partnership organized under the Thai or a foreign law;

(ii) a joint venture; and

(iii) a foundation or association engaged in any revenue producing business.

Generally, business organizations in Malaysia comprise of sole proprietorships, partnerships and companies. Partnerships, however, are not taxable entities but the income that is allocated to the partners is assessed on them.

Tax Rates

Incorporated firms operating in Thailand pay income tax at a rate of 30 percent of net profits. Foundations and Associations pay income taxes at a rate of two to 10 percent on gross business income, the actual tax rate would depend on the nature of activity. International transport companies are taxed at a rate of three (3) percent of gross ticket receipts and three (3) percent of gross freight charges.

In Malaysia, all corporations are subject to a flat 28 percent tax on its chargeable income while income of non-resident companies is taxed at varying rates depending on nature of income (see Table 1). Generally, Thailand has more flexible corporate tax rates applicable to resident companies when compared to Malaysia.

Table 1: MALAYSIA: INCOME TAX RATES

	YEAR OF ASSESSMENT 2001 (%)
Resident companies - all income	 28
Non-resident companies - royalties - rental of moveable properties - technical or management service fees - interest - dividends - business and other income	 10 10 10 15 28 28

Treatment of Losses

In Thailand, net business losses can be only be carried forward up to a maximum of five (5) consecutive years but in Malaysia such losses can be carried forward indefinitely until fully absorbed by other business losses. The tax treatment of losses in Malaysia encourages tax planning activities whereby companies in a group are encouraged to inject viable businesses into a loss making company so as to lower their tax exposure.

Inter-corporate dividends declared by Thai companies are exempt from tax on 50 percent of dividends received. For holding companies and companies listed on the Stock Exchange of Thailand (SET), dividends are completely exempt, provided the shares are held three (3) months prior to and after the receipt of dividends. Malaysian companies do not benefit from such an exemption other than those companies benefiting from varying investment and income tax incentives.

Deductions

Generally, expenses exclusively incurred for the purpose of generating income other than certain expenses specified under sec 65 of Thailand's Revenue Code are tax deductible. In Malaysia too, expenses wholly and exclusively incurred in the production of income, other than certain expenses specifically disallowed under sec 39 ITA, are tax deductible.

A couple of unique features that are considered for deduction under the Revenue Code are summarized below.

The deductions for gifts and donations in Thailand vary according to the nature of contribution. For instance, the deductions for gifts and donations up to a total of four (4) percent of net profits are available, as follows:

- two (2) percent to approved public charities or for public benefit;
- two (2) percent to approved education or sports bodies.

In Malaysia, donations to approved institutions are deducted from a corporation's aggregate income to arrive at it's taxable income. However, the donations allowed are restricted to five percent of the corporation's aggregate income.

Under Thailand's Revenue Code, no deduction is permitted for any expenditure that is determined on the basis of net profit. For example, bonuses paid as a percentage of net profit at the end of an accounting period are disallowed. Entertainment and representation expenses are deductible up to maximum limits as a percentage of gross sales, or of paid-up capital at the closing date of the accounting period whichever is greater. In Malaysia, bonuses paid to employees are fully allowed as a deduction but entertainment expenses incurred to lure potential clients are wholly disallowed.

Remittance Tax

In Thailand, remittance tax applies to profits transferred or deemed transferred from a local branch to its head office overseas. It is levied at the rate of 10 percent of the amount to be remitted before tax, and must be paid by the remitting office of the offshore company within seven days of the date remittance. However, outward remittances for the purchase of goods, certain business expenses, principal on loans to different entities and returns on capital investment, are not subject to an outward remittance tax. Furthermore, the tax does not apply to dividends or interest payments remitted out of Thailand by a company or partnership; they are taxed at the time of payment. Malaysia does not enforce any form of remittance tax.

The next section reviews the administration of the self assessment system in Thailand and Malaysia**.**

Self Assessment

Broadly speaking, Thailand's tax administration operates on a self assessment basis. Consequently, taxpayers have a legal obligation to voluntarily declare their income and settle their taxes. Under the self assessment system, the declaration of taxable income and payment of taxes are regarded as correct. The due process of audit and tax vigilance would however enable the tax authorities to trace cases of taxpayers failing to submit returns or filing false or incomplete tax returns.

The Malaysian Government introduced self assessment for companies from the year 2001. Under the Self Assessment System (SAS), the responsibility for correctly assessing a company's tax liability is transferred from the Inland Revenue Board (IRB) to the taxpayer. Henceforth, the IRB assumes a policing role, with the function (amongst others) of identifying those taxpayers that submit incorrect returns. This is accomplished mainly through the procedure of field audits, which is an essential enforcement tool of the SAS.

This section deliberates the self assessment tax system for companies under the following sub-headings:

- Filing of Returns
- Payment Date
- Capital Allowances
- Group Relief for Companies

The final sections are devoted to a review of investment incentives that are available in Thailand and Malaysia (Section 4); followed by a discussion of the double tax treaties (Section 5); a deliberation of the VAT system in Thailand (Section 6); and a brief outline of tax treatment of income derived from electronic commerce (Section 7).

Filing of Returns

A corporate taxpayer in Thailand must file a half-year return and pay 50 percent of the estimated annual income tax by the end of the eight-month of the accounting period. Failure to pay the estimated tax or underpayment by more than 25 percent may subject the taxpayer to a fine amounting to 20 percent of the amount in deficit. Failure to file a tax return, late filing or filing a return containing false or inadequate information may subject the taxpayer to various penalties. Failure to file a return, and subsequent non-compliance with an order to pay the tax assessed, may result in a penalty equal to twice the amount of tax due. Penalties are due within 30 days of assessment.

The Revenue Department has the right to audit the books and records of Thai taxpayers for a period of two years after filing returns (which may be extended to five years where the tax authorities suspect tax evasion). As in Malaysia, once fraud or intent to evade taxes is established, the right to audit the books and records runs indefinitely.

In Malaysia, companies are required to submit within six (6) months from the date of closing of accounts. Particulars to be furnished with the return include the amount of chargeable income and tax payable by the company. On submission of the return, an assessment is deemed to have been made on the company. The Return Form is deemed to be a notice of assessment, which is deemed to be served on the company on the day that Return is submitted.

Payment Date

In Thailand, corporate tax is collected in two installments. The first installment is due 60 days after six months of operation, based on an estimated income statement, and the final installment is due on or before 150 days after the normal business year for the company. Employers are required to withhold personal income tax from their employees.

Malaysian companies are required to make payments of tax by 12 equal monthly installments, beginning from the second month of the company's basis period (financial year). An estimate of tax payable for the year of assessment must be furnished to the Director General one month before the beginning of the basis period. The balance of the tax payable by a company is due to be paid on the last day by which the return must be submitted. Tax on royalties, rental of moveable properties, technical or management service fees and interest received by non-resident companies are collected by means of withholding tax. The withholding tax is payable within one month of crediting or paying the non-resident company.

Capital Allowances

Businesses in Thailand are eligible for capital allowances in respect of depreciation for equipment and other physical assets (See Table 2). The rates given for the varying assets are as follows:

Table 2

Type of Asset	Rate (Percent)
Buildings	not more than 50% pa
Machinery and equipment	not more than 20% pa
Motor vehicles	not more than 20% pa

They apply to particular assets purchased for a Thai company's business including its foreign branches; and to assets purchased by the Thai branch of a foreign company. Capital allowance for buses and passenger cars with a maximum seating capacity of not more than 10 persons is based on maximum allowable value of Baht 1 million per vehicle.

In Malaysia, annual capital allowance rates vary according to type of asset used by the business (See Table 3).

Table 3

Type of Asset	Rate (Percent)
Office equipment, Furniture and fittings	10
Plant and machinery (general)	14
Heavy machinery, motor vehicles	20

Where capital allowance rates exceed 20 percent for certain types of plant and machinery such as computers and pollution control equipment, companies are allowed to continue using the higher rate. For example, the increased annual rate for computers is 40 percent.

Group Relief for Companies

In both the corporate tax systems in Thailand and Malaysia, each company within a group is considered as a separate legal entity and they are taxed independently. Consequently, losses incurred by one company cannot be used to off-set the taxable profits of another company within the same group. In Malaysia, however, the Inland Revenue Board would consider allowing group relief for agriculture-based companies if they satisfy stringent conditions such as harvesting specific agricultural produce.

Investment Incentives

Thailand is the first country in Asia to introduce investment promotion law providing tax and non-tax incentives to potential investors. The investment promotion law was first enacted in 1954 and the legislation was reviewed over the years to accommodate the changing business environment. The governance of this law is vested with the Board of Investment (BOI), a policy making body, which promotes domestic and foreign investments considered vital to the country's economic and social development. The BOI defines priority areas for investments; identifies investment opportunities and ascertains nature of incentives that are to be given to qualifying investors.

Currently, the Investment Promotion Act 1977 that is administered by the BOI publishes a list of activities that are eligible for investment promotion. The extensive list broadly covers the manufacturing sector and gives special incentives to certain investments considered important and useful to the social and economic development of Thailand. The Board defines the priority areas for investment. To provide incentives, the BOI divides Thailand into three zones. Zone 1 comprises of highly developed areas while Zone 2 covers developed areas located in 10 provinces. Zone 3 covers the remaining 57 provinces. More tax incentives are given to Zone 3. For instance, corporate income tax exemption for projects located in Zone 3 covers eight years while those in Zone 1 are given three-year exemption. Dividends derived from the promoted activity will be exempted from income tax in the hands of the recipient for a period equal to the exemption period from the corporate income tax of a promoted person.

In Malaysia, the Pioneer Industries Ordinance was introduced in 1958 to encourage the development of manufacturing industries. As a result, foreign investors were largely involved in developing import-substitution industries such as food, beverages and tobacco. In 1968, the Investment Incentives Act replaced the Pioneer Industries Ordinance and this move encouraged the development of not only import-substitution industries but labor intensive industries that produced goods for export. To stimulate the growth of export-oriented industries, Free Trade Zones (FTZs) and Licensed Manufacturing Warehouses (LMWs) were established.

Essentially, the investment incentives lower the initial cost of capital outlay and reduce operating cost of investments resulting in increased profits (after tax) for the investor. In this regard, the Promotion of Investment Act 1986 (which replaced the Investment Incentives Act 1968) provides numerous incentives that fully or partially exempt income of investors. Specific provisions in the Income Tax Act 1967 also wholly exempt income of venture capital companies and reduce the taxable income of approved operational headquarters companies.

Treaties to Avoid Double Taxation

Both Thailand and Malaysia have adopted the Organization for Economic Co-operation and Development (OECD) model, in form and substance, in concluding Double Taxation Agreements (DTAs) with other countries (see Table 4). The principal objective of these agreements is to eliminate double taxation on taxpayer's income. The agreements generally place taxpayers in a more favorable position for Thai income than they would be under the Revenue Code, as profits will only be taxable if the taxpayer has a permanent establishment in Thailand.

The double tax relief or credit pattern adopted by Malaysia in its agreements is a combination of territorial taxation (as opposed to worldwide taxation) and exemption of foreign income unless remitted into Malaysia. Thailand has less double tax treaties compared to Malaysia. However, the Thai Government is currently negotiating with several countries to finalize tax treaties. These countries include Bangladesh, Greece, Israel, New Zealand, Spain, Switzerland, Taiwan and the US.

Table 4: THAILAND & MALAYSIA: DOUBLE TAXATION AGREEMENTS

Country	Thailand	Malaysia
Albania	✗	✓
Austria	✓	✓
Australia	✓	✓
Bahrain	✗	✗
Bangladesh	✗	✓
Belgium	✓	✓
Canada	✓	✓
China	✓	✓
Czech Republic	✓	✓
Denmark	✓	✓
Fiji	✗	✓
Finland	✓	✓
France	✓	✓
Germany	✓	✓
Hungary	✓	✓
India	✗	✓
Indonesia	✓	✓
Ireland	✗	✗
Israel	✗	✗
Italy	✓	✓
India	✓	✗
Japan	✓	✓
Jordan	✗	✓
Laos	✓	✗
Luxemburg	✓	✗
Malaysia	✓	✗
Malta	✗	✓
Mauritius	✓	✓
Mongolia	✗	✓
Nepal	✓	✗
Netherlands	✓	✓
New Zealand	✗	✓
Norway	✓	✓
Pakistan	✓	✓
Papua New Guinea	✗	✓
Philippines	✓	✓
Poland	✓	✓
Romania	✓	✓
Russia	✗	✓
Singapore	✓	✓
South Korea	✓	✓
South Africa	✓	✗
Spain	✗	✗
Sri Lanka	✓	✓
Sudan	✗	✓
Sweden	✓	✓
Switzerland	✗	✓
Thailand	✗	✓
Turkey	✗	✓
Soviet Union	✗	✓
United Arab Emirates	✗	✓

United Kingdom	✗	✓
United States	✓	✓
Vietnam	✓	✓
Zimbabwe	✗	✓

Value Added Tax in Thailand

The value added tax (VAT) system was introduced in Thailand on 1 January 1992. The VAT system largely replaced the old business tax system, which critics claimed caused inefficient redundancies and facilitated tax evasion. The current VAT rate is seven percent on turnover.

Under the new tax regime, value added at every stage of the production process is subject to a seven percent tax rate. Those who are affected by this tax are: producers, providers of services, wholesalers, retailers, exporters and importers. A zero VAT rate is applicable on exports; services provided in Thailand for persons in foreign countries and on international transportation by air and sea by Thai juristic persons.

Malaysia has not introduced a VAT system but service tax and sales tax are imposed on goods and services. Service tax is a consumption tax levied and charged on any taxable service provided by any taxable person except exported taxable service. The rate of service tax is five percent *ad valorem*. A complete list of taxable persons and taxable services can be found in the Second Schedule to the Service Tax Regulation 1975. Sales tax is a single-stage tax imposed on certain locally manufactured goods and on similar goods imported. Labuan, Langkawi, Free Zones and Licensed Manufacturing Warehouses do not fall within the ambit of this tax. Sales tax is a consumption tax and under the system, the onus is on the manufacturers to levy charge and collect the tax from their customers. In the case of imported goods, sales tax is collected from the importer at the time the goods are released from customs control. Sales tax is generally an *ad valorem* tax and the rates vary between five (5) and 15 percent depending on the nature of manufactured goods.

Tax Treatment of E-Commerce

Thailand initially took the bold step of granting tax-free status to cyber trade transactions in order to encourage Internet activity. However, with Thailand's participation in the World Trade Organisation (WTO), the Government repealed the tax-free status and is now training as officials in e-commerce taxation with a view to prosecuting e-commerce tax evaders

The IRB of Malaysia has not taken any concrete stand to tax income arising from electronic commerce. It has taken the cautious step of adopting a common platform with other countries through participation in international forums such as the OECD, the Asia Pacific Economic Co-operation (APEC), and the WTO. In the meantime, existing taxation laws govern e-business transactions providing ample opportunities for e-commerce to minimize the payment of tax.

Conclusion

The Governments of Thailand and Malaysia offer various tax and non-tax incentives to lure local as well as foreign direct investments. Available data suggest that Thailand offers more liberal tax incentives to lure foreign direct investment compared to Malaysia. Pioneer companies located in Zone 3 are wholly exempt from corporate tax for eight years. Malaysia, however, has a lower tax rate (28%) compared to Thailand (30%). Furthermore, overseas income remitted by companies (other than those carrying on sea and air transport business, insurance, and banking) is wholly tax exempt.

The Ministry of Finance in Thailand has successfully implemented a VAT system that is perceived to be an efficient mechanism to collect a consumption-based tax. Once a VAT system is in place, it will be easier for the Government to collect taxes from businesses executed electronically. Malaysia has yet to introduce a VAT system. Important issues for the tax authorities in Thailand and Malaysia are to explore and reach consensus on how new technologies can be exploited to provide improved services to taxpayers. Tax authorities too should be armed with legislative support so that Revenue agencies can provide an equitable and clear taxation environment for commerce carried out by both conventional and electronic means. Imposition of new taxes such as e-business tax should be such that they should not dissuade commercial development that is beneficial to the economy.

References

[1] Chuerboonchai, T., and Prasongprasit, R., (2001), "Thailand: Commissionsire Arrangements", *Asia Pacific Tax Bulletin*, Amsterdam.

[2] Customs Act 1967 (as amended), International Law Book Services (ILBS), Kuala Lumpur.

[3] Dhanasarnsombat, P., and Sthapornnanond (2000), "Thailand's Tax System*), CCH International*, Bangkok.

[4] Excise Duty Act1976 (as amended), International Law Book Services (ILBS), Kuala Lumpur

[5] Income Tax Act 1967 (as amended), International Law Book Services (ILBS), Kuala Lumpur

[6] Petroleum Income Tax Act 1967 (as amended), International Law Book Services (ILBS), Kuala Lumpur

[7] Revenue Code 1938, Bangkok, Thailand

[8] Revenue Code Supplement, 1997, Bangkok, Thailand

[9] Sales Tax Act 1972 (as amended), International Law Book Services (ILBS), Kuala Lumpur

[10] Service Tax Act 1975 (as amended), International Law Book Services (ILBS), Kuala Lumpur

[11] Tanvitayanon, T., and Sangasubana, P., (2001), "Thailand,'s Tax Treatment of Corporate Restructuring", *Asia Pacific Tax Bulletin*, Amsterdam.

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Awareness of the Concept of Corporate Social Responsibility Among Malaysian Managers in Selected Public Listed Companies

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Abstract

With increasing globalization and liberalization, businesses in Malaysia are faced with stiff challenges to survive. A big challenge of businesses today, is that of fulfilling societal expectations of being responsible corporate citizens. We argue that several factors, i.e. higher levels of education, active NGOs, etc. together, with businesses' inclination to portray an image of responsible corporate citizens, should trigger increased levels of social reporting and the establishment of various corporate social responsibility (CSR) initiatives by companies. However, this has not happened. We propose that this 'gap' exists due to a lack of awareness of CSR among managers. We also suggest that this results in few CSR initiatives being implemented. Our results however, imply that managers are aware of CSR, although this does not appear to translate into higher levels of social reporting and CSR programs. Consequently, further research is needed on what other factors cause this'gap' .

Introduction

Operating in an emerging market economy, characterized by rapid advances in information and communication technology, globalization and liberalization, businesses in Malaysia are faced with stiff challenges to survive and maintain a competitive edge. One of the biggest challenges of businesses today, that will have an impact on profitability in the long run, is that of fulfilling the rising expectations of society, of being responsible corporate citizens. A business however, will not succeed in its attempt to be socially responsible if management is unaware of the need to be socially responsible.

The premise of our paper is that management plays an influential role in providing the direction of a company in terms of its mission and vision. Consequently, for the successful implementation of a CSR initiative, at the company level, it is crucial that management is aware of the concept of CSR. This paper has two objectives. First, to determine the awareness of the concept of corporate social responsibility (CSR) among Malaysian managers in selected public listed companies. Secondly, the present study aims to examine the extent, to which, different social responsibility initiatives, are being implemented by companies.

This study has implications for company decision makers and policy makers for a number of reasons. First, studies on awareness of the concept of corporate social responsibility are almost nonexistent. Previous studies on corporate social responsibility have largely focused on the level and type of disclosures and the decision usefulness of corporate social responsibility information (See for example, Belkaoui, 1980; Bowman, 1973; Tsang, 1998). Accordingly, the present study fills a gap in the literature by examining managers' awareness of corporate social responsibility and the different social responsibility initiatives being implemented in Malaysian public listed companies. From the practical perspective, exploring the awareness amongst managers, of the concept of corporate social responsibility will allow us to decide if managers need to be further exposed to this emerging concept. Finally, the results from the present study will prove to be beneficial for the policy-makers in their decision-making on whether there is a need to make certain social responsibility programs mandatory at the company-level.

This paper is organized as follows. The following section provides a discussion of the background and presents the theoretical framework of the present study. Section three discusses the methodology. This is followed by a discussion of the results and interpretation. Finally, the last section provides concluding remarks and suggests possible areas for future research.

Background and Theoretical Framework

CSR has been defined by the World Business Council for Sustainable Development, as, "the continuing commitment by businesses, to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large" (http://www.wbcsd.com). Similarly, Gray et al. (1987: 4) states that "[s]ocial responsibilities are the responsibilities for actions which do not have purely financial implications and which are demanded of an organization under some (implicit or explicit) identifiable contract".

CSR emerged in the developed countries, in the 1960s. At that time the prime area of concern was human rights and equal employment opportunities (Gray et al., 1987). Rising public concern, then, on such social justice issues of discriminatory hiring practices, etcetera caused a paradigm shift in societal perceptions of the role of businesses. Milton Friedman's (1962) thesis that the social responsibility of businesses is confined to maximizing profits for shareholders or that "the business of business is business" was rebuked and challenged. Instead, the public demanded that businesses be responsible corporate citizens to a wider group of constituents, encompassing shareholders, employees, consumers and the general public. In the 1980s and 1990s, due to rising concern over the adverse impacts of business operations on the natural environment, environmental issues became the core issues of concern in CSR. In response to these societal pressures, businesses in the developed countries began to embrace CSR. Many large corporations went a step further by implementing various CSR programs/initiatives at the company level. For instance, Zairi and Peters (2002) cite Royal Mail as an example of best practice social responsibility. Royal Mail, one of the largest employers in the UK, states that it has two major aims in its community policy. Its first aim is to support and encourage employees in participation in community services. Second, to show to the community, that the company strives to preserve the natural environment and to enhance the opportunities available for the people in the community. Meanwhile IBM has launched its 'Reinventing Education Program' to assist the instruction of non-English speaking children in their native language. This teaching model has been implemented in the Philadelphia school system and uses a voice-recognition technology (O'Brien, 2001).

Another example of a multi-national company, which takes CSR seriously, is Coca-Cola. One of the social responsibility programs that the company has been involved in for some time is investment in community education. The company has invested heavily in schools and libraries. Recently, the company has also implemented CSR programs in its overseas operations. For example, Coca-Cola spent more than $350 000 in water conservation projects in China. These include tree-planting and other efforts, which are aimed at halting desertification and depletion of ground water (O'Brien, 2001). These examples serve to illustrate how seriously companies in developed countries view the issue of CSR. In fact, CSR is given increased importance and attention to the extent that some companies not only have CSR committees but even a Vice President of CSR.

This paradigm shift, however, is less apparent in the developing countries. Studies have shown that despite what appears to be an increased public awareness and concern for businesses to be socially and environmentally responsible, businesses in these countries have been slower in responding to the CSR agenda. This situation is reflected somewhat, in the low levels of social and environmental responsibility disclosures in company annual reports in such countries like Jordan, Bangladesh, Malaysia and Singapore (See for instance, Abu Baker and Naser, 2000; Andrews et al., 1989; Belal, 2000; Nik Ahmad and Sulaiman, 2002; Nik Ahmad, Sulaiman and Siswantoro, 2002). In the case of Malaysia, for example, the country has undergone tremendous development and economic affluence, bringing about, higher levels of education for the people. This has, in turn, brought about increased public awareness and consciousness on social and environmental issues. Active non-governmental organizations (NGOs) including the Malaysian Trade Unions Congress (MTUC), Tenaganita, Malaysian Nature Society and Sahabat Alam Malaysia have also played a crucial role in highlighting the need for businesses to be responsible corporate citizens. All these factors have resulted in an increased societal concern and awareness of the importance of the concept of CSR. However, businesses in Malaysia, do not appear to be seriously responding to these societal pressures. The other factor that appears to reflect this 'luke-warm' response is the fact that a cursory examination of company annual reports reveals that CSR in the developing countries have been largely confined to philanthropic activities such as charitable donations to orphanages and the like. This is reflected when one examines the annual reports of companies. Most references to corporate social responsibility would be made in the context of cash and other charitable donations to other organizations. Very rarely is CSR discussed in the context of other aspects, for example, minority hiring, product safety, establishment of CSR committees, etcetera. This seemingly paradoxical situation provides the motivation for the present study.

We propose that this situation may be largely attributed to a lack of awareness on the concept of CSR among managers of companies in Malaysia. We also suggest that this lack of awareness is also reflected in the extent to which CSR programs are implemented within companies. We suggest this because the literature on the role of company leadership and business ethics and social responsibility emphasizes that one of the responsibilities of top management is to create a climate, within, the organization, which fosters ethical and socially responsible actions and behavior (See for example, Bansal and Roth, 2000; Hitt, 1990; Minkes, Small and Chaterjee, 1999). The literature for example, argues that top management plays a critical role in promoting and establishing the notion that socially responsible actions are important elements of the managerial task.

Figure 1 below presents the theoretical framework for the present study. The framework posits that Malaysia has gone through a number of changes, which should lead to an increased societal awareness and concern for businesses to be responsible corporate citizens. These changes include higher levels of education, increased economic affluence, increased pressures by a wider group of stakeholders, including active NGOs and consumer groups, as well as the move towards a K-economy. Such increased awareness and concern amongst the general public, should, theoretically, trigger a response from businesses to attempt to portray the image of being socially responsible. This is particularly so, when businesses are faced with increasing competition as a consequence of globalization and liberalization. We argue that this fact, combined with the natural inclination of businesses to gain public acceptance and to appear credible (as posited by Legitimacy theory - Lindblom, 1994), should be reflected by higher levels of corporate social reporting and an inclination to implement a number of CSR initiatives within the company.

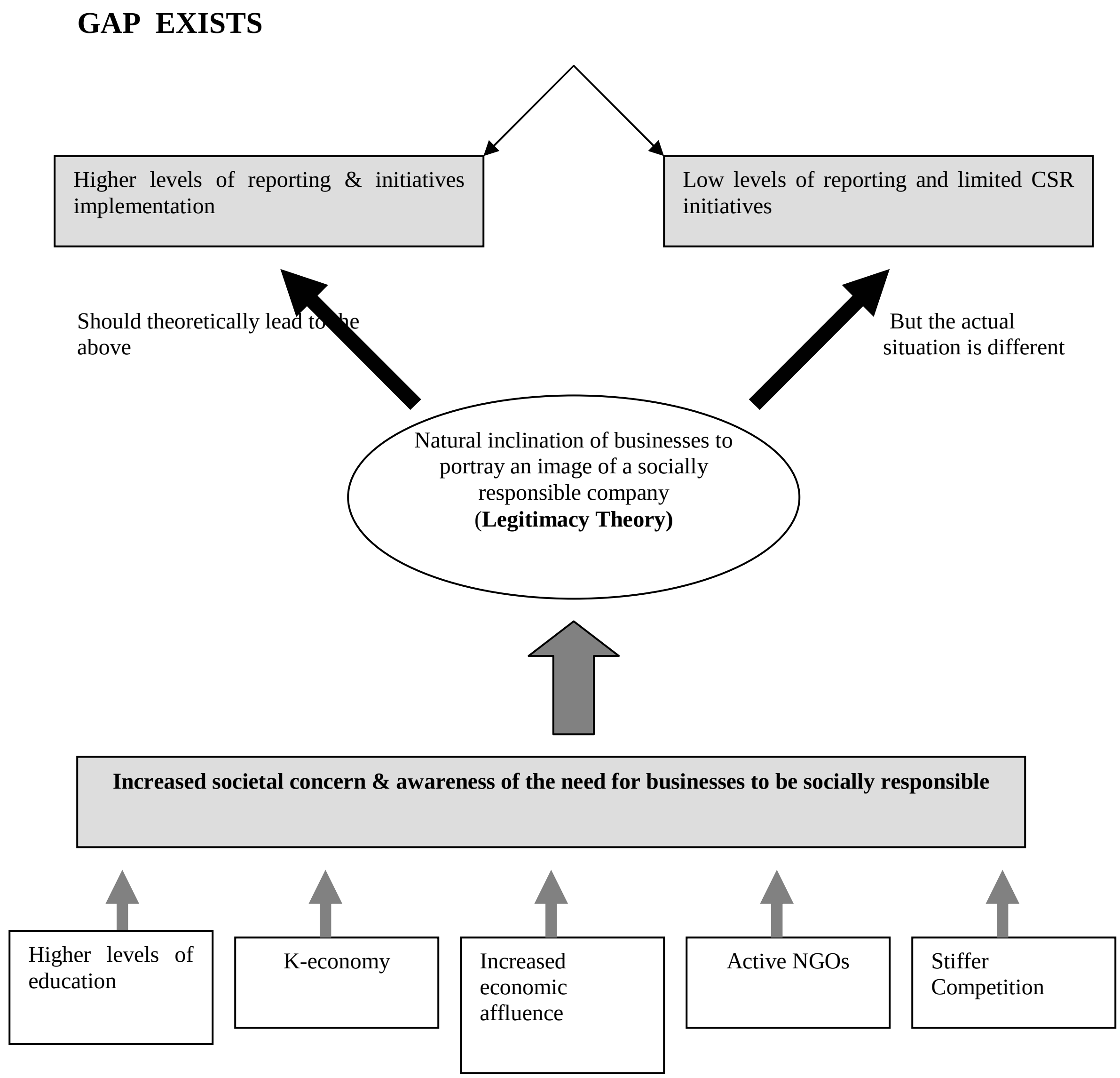

Fig 1: CORPORATE SOCIAL RESPONSIBILITY MODEL

However, the limited research on CSR disclosures in Malaysian annual reports, for instance, shows very low levels of social and environmental reporting (Nik Ahmad and Sulaiman, 2002; Nik Ahmad, Sulaiman and Siswantoro, 2002; Teoh and Thong, 1984). In essence, therefore, there exists a 'gap' between what is expected, in terms of the level of social reporting and the extent to which different CSR initiatives are implemented, and what is the actual situation in Malaysia. This apparently contradictory situation leads to several major questions. First, are managers in Malaysia, aware of the concept of CSR? In other words, can the 'gap' referred to earlier, be explained by the lack of awareness, amongst managers, of the concept of CSR? Second, to what extent are CSR programs or initiatives implemented by companies in Malaysia? Is it possible that the programs are implemented but not reported in the annual reports? Or can the lack of CSR programs also be attributed to a low level of awareness amongst managers?

Methodology

Questionnaire design

The survey instrument used in the present study comprised two parts. Part A contained questions on respondents' awareness on the concept of corporate social responsibility, the extent to which certain social responsibility programs have been implemented and factors influencing the implementation of social responsibility programs. Meanwhile, Part B sought information on the number of employees in the company, as well as the industry sector to which the company belongs. This section also contained questions on the personal characteristics of respondents. The survey instrument was developed from a review of the literature (Fulop, Hisrich and Szegedi, 1999; Minkes, Small and Chatterjee, 1999). The instrument was pilot-tested by distributing it to a number of part-time Masters students, who were working as managers, as well as several lecturers in the Faculty of Economics and Management Sciences at the Institution where the authors are attached. Minor modifications to the wording of a number of questions were made as a consequence.

Questionnaires were sent out to the Corporate Communications managers of 250 randomly selected public listed companies on the KLSE Mainboard during the period of March–July, 2002. The questionnaires were sent out after telephone contact was made with each of the 250 companies, to obtain the names of the companies' Corporate Communications managers. In cases where the company does not have a Corporate Communications Department, we explained the focus of the survey and requested for the name of a manager from an appropriate department or unit of the company. A total of 15 completed questionnaires were received during the initial mailing. Due to time and cost constraints and the extremely low response rate, it was decided that for the first follow-up, we would target a smaller number of companies but would call the managers personally and appeal for response. We narrowed down the list of non-respondents to 70 companies located within the city and then personally called up the managers to appeal for response. We also volunteered to visit the company to collect the questionnaire, if necessary. This first follow-up resulted in another 14 responses. A few companies either informed by telephone, or official letter that it was a company policy not to respond to surveys. This had also reduced our response rate. We were unable to proceed with another round of follow-ups due to the time constraints for the present paper.

Results and Discussion

Demographics of respondents

The demographic information for the respondents is shown in Table 1. The level of education, as well as the respondents' position within the company, appear to indicate that the respondents are competent to respond to the questions in the survey instrument. A majority of the respondents were the Corporate Communications manager in their respective companies. This implies that the respondents were the appropriate target group for a study on the awareness of managers on CSR. Accordingly, this should add credibility to the results from the present study. The table also shows that the sample of companies surveyed, though small, comprised 8 different industry sectors of the Kuala Lumpur Stock Exchange's (KLSE) Mainboard. The questionnaire covered three major areas; namely, company awareness of CSR, respondents' awareness of CSR, and the extent to which different CSR programs were implemented in companies. The remainder of the results section will be discussed under these three sub-headings.

Table 1: DEMOGRAPHICS OF RESPONDENTS

		n	%
Age	20-25	1	3
	26-35	14	48
	36-45	11	38
	>45	3	6
Gender	Male	15	52
	Female	14	48
Education Level	a) Masters	4	14
	b) Degree	20	69
	c) Diploma	4	14
	d)Secondary School		
	e) Others	1	3
Industrial Sector	a)Trading Services	5	17
	b) Hotel	0	0
	c)Infrastructure Project	2	7
	d) Finance	4	13
	e) Properties	2	7
	f) Technology		
	g) Industrial Products	4	13
	h) Plantation	2	7
	i) Construction	6	21
	j)Consumer Products	4	13

Results on company awareness of CSR

The first question asked respondents to rate, on a five-point Likert scale, ranging from 1 = Not at all aware to 5 = Highly aware, their rating of their companies' degree of awareness of CSR. The results are as shown in Table 2. It can be seen from the table that more than half of the respondents (58.6%) feel that their companies are highly aware of the concept of CSR. Another 34.5% felt that their companies were aware of CSR, while only 6.9% were not sure. Interestingly, no respondents felt that their companies were either "not aware" or "not at all aware" of CSR. Additionally, the mean of 4.52 suggests that the respondents were inclined to feel that their companies are either aware of, or highly aware of, the concept of CSR. This result is fairly surprising given that previous studies on levels of CSR disclosure in company annual reports report low levels of disclosure.

Table 2 : COMPANIES' AWARENESS OF CSR

	Not aware at all	**Not aware**	**Not sure**	**Aware**	**Highly aware**
	1	**2**	**3**	**4**	**5**
n	0	0	2	10	17
%	0	0	6.90%	34.50%	58.60 %

***Mean* = 4.52** ***Std Dev* = 0.63**

Question 3 also revolved around the respondents' perception of their companies' awareness of CSR and was stated as follows: "In your opinion, how does your company rank the following groups of people in terms of importance?" The three groups listed were consumers, employees and the general public. As Table 3 shows, as many as 72.4 % of the respondents ranked consumers as most important. This is followed by employees, with 34.5% of respondents ranking them as the most important stakeholder group. Finally, only a mere 17.2% of respondents ranked the general public as most important. This is consistent with the prior literature (http://www.csreurope/).

Table 3: IMPORTANCE OF STAKEHOLDER GROUPS

Stakeholders	**Ranking 1**		**2**		**3**	
	n	**%**	**n**	**%**	**n**	**%**
Consumers	21	72.4 %	7	24.1%	0	1.0 %
Employees	10	34.5 %	13	44.8%	6	20.7%
Public	5	17.2 %	5	17.2%	19	65.5%
(1= Most important)						

Results on respondents' awareness of CSR

Questions 4, 5 and 9 examined the respondents' awareness of CSR. Question 4, asked respondents to tick, what they feel are examples of the lack of social responsibility on the part of businesses. A total of four items were listed. These items are damage to the natural environment, advertising of harmful products, unethical advertising and discriminatory hiring practices. The results indicate that a significant majority i.e. 96.6% of the total respondents agreed that damage to the natural environment was an example of the lack of social responsibility on the part of businesses. Surprisingly, though, only 41.4% of respondents felt that advertising harmful products was an element that reflected the lack of social responsibility. Meanwhile, 72.4% of respondents agreed that unethical advertising implies the lack of social responsibility and 44.8% felt that discriminatory hiring practices meant the lack of social responsibility. These results appear to suggest that what respondents understand as CSR may differ from one individual to another.

Question 9 presented respondents with a total of twelve areas, in five categories that constitute a part of being socially responsible. The five categories were consumers/product, employees, community involvement, environment/energy and 'others'. The items are derived from a review of the related literature. The respondents were asked to tick all relevant areas, which they felt, constituted a part of being socially responsible. The results appear in Table 4 below.

Table 4:AREAS OF CSR

AREAS	n	%
Consumers/Product		
Quality of product/ services	20	69.0%
Consumer relations	17	58.6%
Safe product	20	69.0%
Employees		
Fair salaries	22	75.9%
Proper working conditions	24	82.8%
Training employees	22	75.9%
Community involvement		
Donation of cash, products or employee services to support established community activities	24	82.8%
Sponsoring public community activities	24	82.8%
Funding scholarship activities	20	69.0%
Environment/ Energy		
Environmental protection & preservation	21	72.4%
Environmental policy	19	65.5%
Energy conservation	18	62.1%

Interestingly, two of the three areas which were ticked by the highest number of respondents (24 out of a total 29 or 82.8%) were 'donations to support community activities' and 'sponsorship of public community activities'. Both of these are basically philanthropic activities. The other area is 'proper working conditions'. Further, it is interesting to note from the table, that 'safe products' was ticked by only 69% of the respondents. This is somewhat surprising, as one would assume that the manufacture and/or sale of safe products would be a crucial area of corporate social responsibility. On the whole, however, it is evident from Table 4 that generally, all the twelve areas listed were considered by more than half of the respondents, to reflect socially responsible behaviour. This suggests that respondents are generally aware of the concept of CSR and understand that CSR activities are not confirned to merely philanthropic contributions to charities and the like. In other words, the findings here suggest that respondents do understand that CSR encompasses responsibility to multiple groups of stakeholders including employees, consumers and the society at large.

Results on the implementation of CSR initiatives

Table 5 provides details of the mean responses concerning the knowledge of managers of their companies' CSR initiatives and the extent to which the company has implemented four different CSR programs within the company. These four programs are; the appointment of a manager to be in charge of social responsibility issues, the establishment of a CSR committee, the organization of CSR courses, training programs and/or workshops, and finally, the consideration of CSR aspects when evaluating subordinates' performance. Although CSR initiatives may comprise a variety of programs, we limited the list to only these four as we felt that these four initiatives represent a more structured and serious attempt by companies to discharge their social responsibility. The results from the table, clearly indicates that CSR has not progressed very far in Malaysia. This is because the CSR initiative that has been implemented by the highest portion of companies, the appointment of a CSR manager, has only been implemented by a mere 37.9% of the total companies in the sample. Meanwhile, only 24.1% of companies have set up a CSR committee. 13.8% of companies do consider CSR aspects in the evaluation of subordinates and finally, what is most surprising, is that only 2 companies, or 6.9% of the total sample, have conducted courses or training programs on CSR.

Table 5: CSR INITIATIVES

Practices/ programs	**Unknown**	**Known but considered unimportant**	**Known and considered important**	**Implementation is planned**	**Implemented** **5**
			%		**n**
The appointment of a manager to be in charge of CSR issues	0.3	3.8	2 0.7	3.8	1 1 7.9
CSR Committee	3.8	7.2	2 7.6	3.8	7 4.1
CSR Courses/ Training/ Workshops	3.8	7.2	3 1 7.9	7.2	2 .9
Consideration of CSR aspects when evaluating subordinates' performance	3.8	.4	5 5 1.7	3.8	4 3.8

Conclusion

The paper presented a model which posits that there are a number of external factors such as higher levels of education, active NGOs and others, which have resulted in an increase in societal concern and awareness of the need for businesses to be responsible corporate citizens. This situation, combined with the premise of Legitimacy theory, which argues that businesses are naturally inclined to want to be seen as being socially responsible, should lead to higher levels of social responsibility reporting in annual reports and the implementation of different CSR programs within companies. However, prior research appears to show that the expected outcome has not materialized. Instead, levels of CSR disclosures in company annual reports are low and in most cases, very general in nature. In addition, a review of company annual reports reveal that very limited initiatives have been undertaken. Most companies' CSR activities are confined to philanthropic donations to schools, orphanages and the like. Consequently, the present study sought to determine if this 'gap' can be explained by a general lack of awareness, amongst managers, of the concept of CSR.

The results however, indicate that generally, the respondents had some level of awareness on the concept of CSR. 27 out of the 29 respondents rated their companies' undertanding of CSR as either 'aware' or 'highly aware'. The respondents' awareness was also reflected in their responses to questions on areas of CSR and the relevant stakeholder groups. In other words, the results imply that the 'gap' which we identified in our CSR awareness model cannot be attributed to a lack of awareness amongst managers. This points to the need for further research to investigate what factors actually explain the gap between what is expected in terms of level of social reporting in

Malaysia as well as, the implementation of various CSR initiatives, and what is the actual scenario in Malaysia. A possible reason for this 'gap' is that managers in Malaysia have only a basic level of awareness of what CSR means, the important stakeholder groups and common examples of CSR. This awareness however, does not extend to an understanding that CSR is necessary for companies to have a strategic edge over competitors and that CSR initiatives or programs can be designed in such a way as to match the core competencies of companies (O'Brien, 2001). As a result, managers may not feel that it is important for companies to embrace CSR programs in a big way and just feel that CSR merely constitues giving away some extra cash to the needy. It is also possible that though managers have some awareness of CSR and its importance, there is no support and involvement from top management. Some authors have emphasized that any attempt to inculcate CSR values in companies will only be successful if it comes from the topmost level of management (Bansal and Kendall, 2000; Fulop, Hisrich and Szegedi, 1999). Another possible reason for the 'gap' is a misperception amongst companies and their senior management that it is neither profitable nor strategic to be socially responsible. In other words, top management may feel that being socially responsible is costly and does not bring about any direct benefits to the companies themselves. A third reason could be the general state of apathy amongst companies in Malaysia on the issue of being socially responsible. Consequently, companies may adopt the 'wait and see' attitude and may subscribe to the philosophy that for as long as no other companies are seriously implementing CSR programs and/or reporting extensively on CSR activities, neither will they. In fact, these companies may feel that they are at a competitive disadvantage just by being socially responsible. Finally, it may well be that the reason for the apparent 'gap' is that managers, though aware of CSR, are inadequately trained and do not have the requisite skills to initiate or develop CSR programs at the company level.

There are however, two major limitations to the study which means that more research needs to be done to allow for generalizability of the findings. One limitation is the very small sample size. As a result, we were not able to use parametric statistical tests and our analyses was limited to only descriptive statistics. If the present study is replicated with a larger sample size, it is possible that the results will be different. In addition, with such a low response rate as was the case of the present study, there is always the possibility of a non-response bias. Accordingly, the present study should be considered as a preliminary study, which serves as a basis for further work in the area.

To conclude, the results of the present study enhances our understanding on the awareness amongst managers in Malaysia, of the concept of CSR. The results show that though managers are relatively aware of CSR, this does not translate into high levels of reporting. This awareness is also not evident in the extent to which CSR initiatives have been inplemented by companies. Thus, one avenue for action is for companies to continue efforts to educate their management on the concept of CSR so that managers are not only aware of the concept of CSR, but also understand its importance and the role that they can play to ensure that their companies are responsible corporate citizens. Managers need to be convinced that social responsibility and profit maximization need not be conflicting goals. Instead, as many multi-nationals in the developed countries have learnt, social responsibility can be used as a strategic tool to enhance the reputation and public image of a company, while at the same time, prove to be profitable for the company (O'Brien, 2001). This message can be conveyed to managers through various training programs, seminars or workshops, awareness campaigns, company briefings by the CEO, company newsletters and/or bulletins and other company programs. In addition, the government too, can play a major role in promoting CSR practices by establishing a CSR Code, by which companies should be encouraged to adhere. Perhaps, such a code may be introduced initially, just as a guideline but if it appears that companies are not following it, then the government may want to consider making it manadatory. Another possible avenue for action is the introduction of Corporate Social Reporting Awards, similar to the Environmental Reporting Awards initiated first by NACRA (National Annual Corporate Report Awards) and then recently, by ACCA Malaysia (Chartered Association of Certified Accountants, Malaysia). The introduction of such awards will further motivate companies to be more socially responsible as they will be evaluated on how well they report on their social performance. Additionally, research on the success factors and barriers to the implementation of corporate social responsibility programs within public listed companies could prove to be fruitful. This would provide useful insights into the factors that are necessary to successfully implement CSR initiatives at the company level. Finally, one interesting area for further research is examining motivations which induce companies to be responsible corporate citizens. It will be useful to know if companies do indeed have a conscience, whether companies feel pressured to do so, whether companies are attempting to preempt legislation, whether companies' sole interest lies in mere regulatory compliance or whether companies are socially responsible as a result of the values of managers and other employees.

References

[1] Abu-Baker, N., & Naser, K. (2000). Empirical evidence on corporate social disclosure (CSD) practices in Jordan. International Journal of Commerce and Management, 10 (3&4), 18-34.

[2] Andrew, B. H., Gul, F. A., Guthrie, J. E., & Teoh, H. Y. (1989). A note on corporate social disclosure practices in developing countries: The case of Malaysia and Singapore. British Accounting Review, 16(1), 12-26.

[3] Bansal, P. & Kendall, R. (2000). Why companies go green: A model of ecological responsiveness. Academy of Management Journal. Retrieved on August 29, 2002 from the World Wide Web EBSCOhost Business Source Premier: http://www.lib.iiu.edu.my

[4] Belal, A. R. (2001). A study of corporate social disclosures in Bangladesh. Managerial Auditing Journal, 16(5), 274-289.

[5] Belkaoui, A. (1980). The impact of socio-economic accounting statement on the investment decision: An empirical study. Accounting, Organizations and Society, 5(3), 263-283.

[6] Bowman, E. H. (1973). Corporate social responsibility and the investor. Journal of Contemporary Business, Winter, 21-43.

[7] CSREurope. Retrieved August 2, 2002 from the World Wide Web: http://www.csreurope

[8] Friedman, M. (1962). Capitalism and freedom. Chicago: University of Chicago Press.

[9] Fulop, G., Hisrich, R. D., & Szegedi, K. (1999). Business ethics and social responsibility in transition economies. Journal of Management Development, 19, 5-31.

[10] Gray, R., Owen, D., & Maunders, K. (1987). Corporate social reporting: Accounting and accountability. London: Prentice/Hall International.

[11] Hitt, W. D. (1990). Ethics and leadership: Putting theory into practice. Columbus: Battelle Press.

[12] Lindblom, C. K. (1994). The implications of organizational legitimacy for corporate social performance and disclosure. Paper presented at the Critical Perspectives on Accounting Conference, New York, NY.

[13] Minkes, A. L., Small, M. W., & Chatterjee, S. R. (1999). Leadership and business ethics: Does it matter? Implications for management. Journal of Business Ethics, 20(4), 327-335.

[14] Moir, L. (2001). What do we mean by corporate social responsibility? Corporate Governance, 1(2), 16-22.

[15] Nik Ahmad, N. N. and Sulaiman, M. (2002). Environmental disclosures in Malaysian annual reports: A study of the construction and industrial products sectors. Paper presented at the European Accounting Association Annual Congress 2002, Copenhagen Business School, Denmark.

[16] Nik Ahmad, N. N., Sulaiman, M., & Siswantoro, D. (2002). Corporate social disclosure practices in Malaysia: A content analysis. Unpublished working paper. International Islamic University Malaysia.

[17] O'Brien, D. *Integrating corporate social responsibility with competitive strategy: 2001 winner "Best MBA paper in corporate citizenship".* The Center for Corporate Citizenship at Boston College [Public information]. Retrieved August 20, 2002 from the World Wide Web: http://www.bc.edu/corporatecitizenship

[18] Teoh, H. Y., & Thong, G. (1984). Another look at corporate social responsibility and reporting: An empirical study in a developing country. Accounting, Organizations and Society, 9, 189-206.

[19] Tsang, E.W.K. (1998). A longitudinal study of corporate social reporting in Singapore: The case of the banking, food and beverages and hotel industries. Accounting, Auditing & Accountability Journal, 11(5), 624-635.

[20] World Business Council for Sustainable Development. Retrieved August 19, 2002 from the World Wide Web: http://www.wbcsd.com

[21] Zairi, M. & Peters, J. (2002). The impact of social responsibility on business performance. Managerial Auditing Journal, 17(4), 174-178.

Digital Products: Intellectual Property Rights, Standards, and Common “Goods”

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Abstract

Corporate concerns have narrowly framed the debate about intellectual property on the internet in legal terms, largely in an effort to protect their market power. Legal issues neglect several important concerns. First, it is in the larger interest of the society to promote the diffusion of cultural products, to not limit access to them or control their content. Second, “ownership” is a term that has a different or special meaning with respect to cultural products that are built on the common folklore, traditions, and artistic styles, not solely from the work of a single or individual creator.

History shows that the media industries continually cope with changing technology. Many other technologies of the 20th century lowered the cost of distributing cultural products. Far from harming the market, diffusion of cultural products in new formats substantially stimulates cultural production. Businesses that develop new formats bring about new cultural forms.

Introduction

With the explosive growth of the WWW, there has been enormously improved public access to a variety of cultural and scientific materials published on the internet. To name but a few, these materials include great literary works – such as the works of Shakespeare, graphic arts, important scientific material, news, and health information. A new accessibility to information has, without a doubt, facilitated important changes in the on-going transformation in society, and new developments in social values.

Commerce has provided some of the economic basis for this activity, but it is a small part of the story. Profits yielded by sales revenues and advertising on the web has thus far facilitated publishing on the web, or brought about digital development of this material. Popular works of many types are being reformatted in new digital formats. This includes novels, non-fiction works, music, photography, movies, and music videos. The digital explosion of products will continue as industry develops new access devices, such as digital assistants and radio-based devices, but also new artistic formats.

The scope and volume of publicly available material, once limited to the shelves of libraries, has now greatly increased. The increase in access and the spread of such works is socially significant and globally important. However, with the development of P2P (peer to peer) file sharing networks, popularized by Napster and enabled by gnutella and other private systems of digital exchange, economically powerful business organization are raising concerns as to the legitimacy of public access to material on the internet and taking steps to limit it. In spite of this enormous good fortune that the internet has brought about, new debates have arisen which threaten to curtail or even reverse the cultural progress of the last decade by restricting new uses.

Much of the debate on these issues centers about the economic issues involving intellectual property rights and standards as exclusively a financial problem or “corporate right” of some kind. Industry has also raised concerns about the harmful economic effects of such things as software piracy, hacker culture, and file sharing; this has already discouraged new software development. However, these issues have obscured one of the more important aspects of the digital revolution, namely the fact that electronic tools have enabled the low cost diffusion of socially significant works of human culture that has heretofore not been possible. Apart from consideration of the rights of the publishers of cultural products, the social importance of continuing the spread of cultural and scientific knowledge also needs consideration.

The Issues: What is “At Stake”?

Certainly there are powerful counter arguments to be made against the vested economic interests that would like to control the internet. Important concerns are at stake. The majority of the population that is actively using the internet has not yet become cognizant of the dangers of regulation, both of the internet and related technologies.

In “Code and Other Laws of Cyberspace” [4], Lawrence Lessig warns against the common assumption that information technology is inherently democratic, anarchistic, or allowing free access to users. He argues that cyberspace is in danger of being restricted, and these restrictions will have even more important and threatening social and economic implications. He gives several examples of how firms have been forced to re-design hardware and software to command compliance with powerful business interests.

Powerful media interests have already restricted the development of technology. One example is the law mandating that DVD players include anti-copying technology. This substantially restricts usage of DVD machines, raises their cost, and limits their utility to users. The logic of this restriction is perplexing since there is no such restriction on machines that play videotapes or audiotapes. Private recording for individual use has been judged to be legal. In Sony Corp. v. Universal Studios, Inc., 464 U.S. 417 (1984), for example, the Supreme Court held that copying a television program for noncommercial use within the home did not infringe the copyright in the program. More specifically, the Court determined that the practice of “time-shifting” (recording a television program for viewing at a later time) was permissible under the fair use doctrine. While digital recordings currently appear to have a “different” legal status than other sorts of recordings, the legal or logical basis for this distinction is hardly clear to consumers. Most of the users who share files on the internet do not believe that there is anything wrong with the practice [1].

Lessig (1999) argues that, without efforts to the contrary, new legally mandated and standardized software “codes” (akin to that which is required on DVD players) can, and will, displace enacted legislation and laws that protects users to utilize technology. This will promote even more narrowly defined domains of intellectual property, restrict the functioning of technology, and curtail development of new technologies. Lessig offers a persuasive argument as to how information technology can be –and, in fact, already is being transformed –into a mechanism for regulation and control.

Lessig, as a constitutionally grounded legal scholar, reminds us that the Founding Fathers drafted the U.S. Constitution with the intention “to promote the Progress of Science and useful Arts.” The first copyright law limited the protections of copyright to a mere 14 years. The goals of the Founding Fathers were to create incentives to reward creations, but at the same time to protect the free flow of ideas and information. Though the 14-year limit as it was drafted is somewhat arbitrary, the basis for the short limit was rooted in the values, traditions, and beliefs of Founding Fathers that the American democratic constitutional system should preserve the free flow and growth of ideas.

Have these values changed? Apparently, legislators believe that they have. In fact, copyright has continually been extended throughout the latter part of the 20th century to extend to at least 70 years after the death of the creator. Lessig has challenged the constitutionality of new copyright law, especially the most recent version called the “Bono law,” and is scheduled to argue that challenge to the U.S. Supreme court in 2003 [6]. Extending copyright to such an extreme certainly defies the spirit of the constitution and the values of the Founding Fathers. The issue, however, is not simply or exclusively a legal one. The extension of copyright –prolonging the monopoly that a copyright imposes –has significant social costs and competitive implications.

Developing Technology

The questions that Lessig raise are particularly important, particularly considering that the development of technology is tied to the development of industries that shape contemporary culture. These industries have global effects. Each new technological development –beginning with the printing press and continuing to the phonograph, telephone, movie projector, and television –have created industries, led to highly important cultural works, and brought about new artistic styles and formats. The concomitant social and cultural effects of these technologies were not anticipated when inventions were created. As with all technological advances, there were winners and losers as a result of these inventions.

The current rhetoric to defend the restriction of developing technology based on extending the time frame for intellectual property often takes on a highly moralistic and jingoistic language. Intellectual properties such as movies are a major U.S. export, and protecting their rights has been spoken about as a national priority in the U.S. in WTO and other trade considerations. Copying CDs and other branded merchandise has been a major international problem, yet it has been very difficult and expensive to enforce, putting an economic burden on developing countries.

The costs of protecting intellectual property have not been sufficiently addressed by those who benefit from restricting it. These costs need to be questioned, especially in cases where the rewards for protecting intellectual property accrue to various parties in the distribution system, not a work's "original" creators. Though media interests may frame peer-to-peer (P2P) technologies that enable file sharing as "acts of piracy" that reduce or "steal" value from producers and harm the market system, the basis of value in the market economy needs to be considered before such pronouncements can be equitably considered.

Much as Copernicus and others who had a different view of the universe threatened the basis of power of church leaders, so are vested media interests threatened by new technologies. The church took steps to jail Copernicus, much as the NIAA would like to jail the teenage and college users who defend file sharing on Napster and other P2P systems. The problem is that file sharing is common; outlawing the practice criminalizes behavior that is intuitively accepted as the norm. If it is legal to make an audiocassette copy of something on the radio, it seems legal to make a MP3 copy of something discovered on the internet.

Moreover, "ownership" is a term that has a different or special meaning with respect to cultural products. Cultural products are built on the common folklore, shared traditions, and artistic styles. These are not solely developed from the work of a single or individual creator, but develop over a period of time with contributions from many parties. Culture is the collective property of multiple creators and audiences.

The larger issue is that culture and technology are related. After the technology of the printing press, the publication of the Bible created greater public access to sacred texts and this affected social and political structures and norms. Similarly, the internet has a global impact and changes norms and values. Restricting the development and use of the internet prematurely forecloses on the ability of firms and individuals to make further technological and cultural contributions. Regulating internet technology, such as recent threats to outlaw streaming media technology, will destroy an industry that is now in its nascent state.

The development of the internet itself is a lesson in the unpredictable development of technology. When the Arpanet, the precursor to the internet was created, email was spontaneously invented by its users. Much to the surprise of Arpanet's managers, by the second year email accounted for the bulk of the communication over the system. [7]

Modern cultural industries are based upon new technologies. When Thomas Edison invented the phonograph in 1877, the music industry started, even though the last thing on the inventor's mind was using his device to record music. Moreover as recording technology has been developed and spread, new artistic forms and formats emerge. For example, the 78 rpm recording, being limited to 3 minutes, influenced artists to keep compositions to a short format and affected the popularization of jazz and blues recordings in the early 20th century. Later, long-playing 33 rpm recording popularized other styles, new performers, and alternative formats [3].

The Internet has the potential to change the economics of the music industry –and several other industries as well. It is important to understand that these industries largely produce "pop culture" products that garner huge revenues. These industries control media content and hold a lot of power.

Given the unpredictable course of the development of technology, it is predictable that established firms will continue to try to safeguard their interests. Thus far, they have attempted to control the development of these tools by laws and regulations, finding that the only solution is to regulate and control the development of software code itself. The problem, as Lessig argues, is that this threatens to hinder this experimentation and foreclose on useful new inventions in the future. Foreclosing on innovation through legal maneuvers is a much more serious problem than the business revenue issues that have been raised. In fact, there is scant evidence that revenues of firms in the recording industry have been significantly affected by Napster.

Competitive factors need to be considered. Firms have dealt with changing technologies in the past, largely by adapting to new technologies by offering products in new formats. Record companies sold music in new formats, beginning with 78 rpm recordings, later 33 rpm, audiotape, and later CDs. Changing technologies provide opportunities to meet new needs, and this affects competitive practices in these industries.

Economics of Pop Culture

Like many other industries, the music, television, and film industries are oligopolies. Moreover, these industries are not very old –production, distribution, and marketing have been frequently, even regularly, significantly affected by technological change. An extensive system of investment, development, promotion, and marketing sustains the revenues of the major companies in each industry.

Production and distribution of popular music, for example, has become extraordinarily concentrated. In the year 2000, five companies controlled 84 percent of music distribution in the world. A business of about $US 37 billion in revenue, the so-called "Big Five" (BMG Entertainment, Sony, AOL Time Warner, EMI and Vivendi Universal Music Group), sell over 80 percent of popular music [1] [5].

The peculiar thing about this industry is that very few artists make any money from their work. As with other products of what Hirsch [2] calls the "cultural production system," the few products that are economically successful pay for the ones that are not. Since it is very difficult to know which artists will be popular, it is necessary for the record companies to "sponsor" or finance many popular musical groups, for film companies to finance many films.

The economic clout, and resulting cultural influence, of these media companies is substantial. First, popular music (and also popular film) is largely marketed to a young age group. Young people are heavily peer-influenced and demonstrably driven by conformity to trends. The popular culture system produces "hits" and "mega-hits" and profits from these products tend to cover the many mistakes of investing in products that lose money.

Music and film distribution companies have used many tactics to limit the variability of their income stream, predominantly by attempting to control and influence cultural tastes. Tactics such as "payola" (giving money to radio station to play their music) have been outlawed [2]. The so-called "studio system," whereby a few movie companies controlled all aspects of production and distribution, was later broken up in the courts in the 1950s, just as the advent of television once again changed the economics of movie distribution.

Popular culture depends upon established, easy to understand formats; ironically it needs a degree of innovation to attract attention. While the popular culture production system tends to be restrictive to new artists and innovators, innovations in popular culture stimulate growth. Established media use a strategy to "co-opt" new artists to the system. Once proven to attract an audience, new artists that work outside the system are co-opted by popular culture producers who invest in them and promote them. They eventually gain a share in the revenue as they are popularized and then defend the system itself. Thus, it is no surprise that the established rock group "Metallica" criticized Napster (many other popular groups have defended new file sharing technologies, however).

Since vested media interests largely control distribution of popular works, it is difficult to get access to the substantial amount of capital required for their production without dealing with one of the major companies. Many arguments have been made across the political spectrum that this system unfairly influences access to the popular media and controls artistic tastes. Sometimes this leads to laws that increase access but these have usually been small –for example, limited access to the television is grant to a few to allow statements on issues by community groups.

Changing Formats

One common business strategy that the media industries use to capture increasing revenues from popular product is through changes of format. After movies have their run in the theaters, they are later shown on cable and network television, and then distributed for sale. The fact that people are willing to pay to see a movie at a theater rather than "free" on television is hardly surprising; the movie-going experience adds value to a substantial number of users. Though the invention of television limited the growth of movie houses, the new format actually brought in new revenue sources to producers in the movie business. Cable television similar brought about revenue growth in movie production as well, as do video rentals.

The recording industry has similarly benefited from new formats. For example, reissues of music in CD formats were stimulated after the technology of the 33 rpm recording declined. New revenues are also captured as new artists recorded previously popular works, or use them in movies or commercials. Demand for high quality musical work and film is persistent. Even during times of economic depression and recession, demand continues to grow.

Recording formats tend to standardize, however, competition in formats tends to disappear over time. The Beta and VHS format were both once offered; the latter survived because of the added expense that video distribution companies had in offering products in two formats. Competing formats currently limits introductions of DVD recording devices. Firms have to carefully consider format issues with respect to their production decisions with developing technology.

The new digital MP3 format that is being used to download and play music on computers offers some new advantages. Individuals can more precisely customize their musical selections and with less distortion than reproducing them on audiotape. With the growth of new compact computer storage devices, collections can be kept in small devices. The playback process is changing the musical experience –visual enhancements to audio sound have been offered in some of the playback software. Also, new compact digital devices are increasingly able to store more and more music, offering users new options to listening.

While the new technologies offer some distinctive advantages, the large recording companies are pursuing few of them since they are wedded to controlling the distribution of content. Fox [1] notes that the companies have few incentives to change the dynamics of the industry since "the Big Five have made significant investments in the distribution infrastructure to support the manufacture, distribution, and retailing of music." Not only does the internet significantly reduce the Big Five's market power in the area of distribution, but it also creates new opportunities for artists to directly market their product to consumers. New artists, upon whose work the future of the industry depends, can do so in new and more intimate formats.

The internet not only poses a threat to the power of music companies' control of distribution, but it is also has the potential to affect the marketing of popular culture products. As the computing and computing devices become more omnipresent, new means of reaching listeners becomes a possibility. The young artists that are not yet wedded to the current distribution system for music may be able to undertake distribution and marketing activities more cheaply via the internet, and new forms and styles will develop in reaction to these developments. Co-operative communities for sharing music are emerging, and these have a great deal of potential to distribute music based around the creative and musical aspects, which is, as Pfahl [8] notes, "the basic reasons why fans are drawn to musicians in the first place."

Issues Affecting Pop Culture

Though popular culture industries are only a part or a segment of the media industries, in economic terms, they are the clearly the most attractive or profitable segment. The problem is that accumulations of economic power in the media tend to threaten free speech by controlling access, and this threatens the full expression of ideas among the diverse sectors of society. Legislation has been formed to limit concentrations of power in these industries in several instances. Unlike other industries, monopolies in the media industries need to undergo special scrutiny. Limitations to power have consistently been placed upon large organizations that tend to limit competition in these industries.

The concentration of power in the popular culture industries clearly has created a certain dynamic of popular culture –a system of production that has strongly affected social values and the development of artistic forms in many ways. However, it is important to note that the cultural production system in the U.S. is not the only one that is possible –and not even the only one that is desirable. Television in Europe, for example, supplements production by taxation. This affects the actual content of what is produced, and commercials and televised shows have a different kind of content and format. A similar system of public support can be seen in the U.S. for opera houses and art museums –"high art" forms that differ from the so-called "popular" arts are supported by sources including non-profit foundations, donations, and government sources rather than simply ticket sales.

Conclusion

The consideration of new business models for funding the production of popular works in an era of file sharing has been long overdue. Though innovations in internet technology may have shaken the structure of the firms that compose the cultural production system, demand for popular products is clearly unabated. Alternative business strategies clearly need to be considered since the advent of these technologies.

The large established firms are largely driven by the profits that come from the popularity of works, and certainly the promotion of works to achieve the various kinds of massive popularity that they achieve is itself a cultural by-product itself. Popular culture has employed the tools of technology to create sensational products, and the resulting process is one that has alters social practices, affects conceptual systems, and brings about the variety of material artifacts of contemporary life. Changing cultural production systems will do more than affect the fortunes of a few companies; it will change the fabric of contemporary life.

Given the history of litigation in these industries, it is also no surprise that media companies now attempt to influence laws to protect their interests. However, this effort may be misplaced. Though these companies control the distribution of popular works, revenue is largely driven by the production and marketing of new works. To retain their power, the media companies have no choice but to embrace internet media which is becoming a primary, if not dominant, personal communication tool in society. It remains to be seen if the interests of established media – industries that have a lot of economic power –will align with larger social, cultural, and global concerns to promote new growth in this technology.

References

[1] Fox, Mark, 2002, "Technological and Social Drivers of Change in the Online Music Industry," *First Monday*, volume 7, number 2 (February), accessed at http://firstmonday.org/ on Aug. 10, 2002.

[2] Hirsch, Paul, 1972, "Processing Fads and Fashions: An Organization Set Analysis of Cultural Industry Systems," *American Journal of Sociology*, 77, 5, pp. 639-659.

[3] Karr, Rick, 2002, "Techno Pop" a National Public Radio report, reported and accessed at npr.org on 9/20/02.

[4] Lessig, Lawrence, 1999, *Code and Other Laws of Cyberspace*, New York: Basic Books.

[5] _________. 2001, *The Future of Ideas*, New York: Random House.

[6] _________. 2002, "Free Culture" Keynote Address from OSCON 2002, Published on The O'Reilly Network (http://www.oreillynet.com/) accessed 8/24/02.

[7] Meine, Carol, 1996, The Guide to Mostly Harmless Hacking, see techbroker.com.

[8] Pfahl, Michael 2001. "Giving Away Music to Make Money: Independent Musicians on the Internet" *First Monday*, volume 6, number 8 (August), accessed at http://firstmonday.org/ on Aug 10, 2002.

Does Public School Auditing Save Taxes?

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Abstract

Financial statements are a crucial source for outsiders to obtain information about an organization's economic activities. Auditors provide assurances concerning the quality of this information. The recent failure of Enron, involving its auditor, has raised important questions about current auditing and information disclosure systems in the United States. Addressing the role of auditing in the public sector operation, this paper examines the association between public school auditing and the efficient use of taxes in the State of Georgia where Quality Basic Education (QBE) ACT has recently been implemented. The results indicate that the intensity of accounting procedures required by QBE funding is negatively correlated with efficient use of taxes while federal funding is positively correlated with efficiency. In addition, the results show a negative relationship between auditors' time allocation and nonproductive use of taxes, suggesting complexity has an adverse effect on the productive use of taxes.

Introduction

The general public seems to accept the notion that a primary role of government is to administer wealth transfers. Elected officials designate wealth transfer as campaign promises and large amounts of taxes are spent on public sector operations. Despite the fact that financial statements issued by public institutions disclose information about economic activities of these organizations, the amount of accounting research devoted to the public sector is very small compared that in the private sector. The recent failure of Enron, involving its auditor, has raised important questions about current auditing and information disclosure systems in the United States. Thus, this study analyzes the role of auditing in public school operation. The primary objective of this paper is to examine the association between public school auditing and the efficient use of taxes.

The state of Georgia implemented the Quality Basic Education Act (QBE) in 1985. Under this educational reform, $908.9 million in state-level educational support was added in the first year (Dayton and Kenneth, 1995). QBE funding increased the relative proportion of state level funding in education, and improvement of Georgia public education became a political promise by the state's governor. This newly implemented educational reform policy provides an opportunity to investigate how complexity in accounting requirement will affect auditing and further affect efficient use of taxes in Georgia school operation.

In Georgia, state auditors provide management advisory services (MAS) in addition to financial auditing services for most school districts. They act as an oversight body for state tax spending. The MAS of the state auditors provide elected officials with a closer monitoring system for school administrators who might take opportunities to transfer wealth from the designated parties to their own use. Auditors in the MAS enable close monitoring of school district operations and provide relevant information about improving these operations. Given this environment of auditors providing MAS and financial auditing, this analysis sheds a light on the role of auditing in the public sector.

Healy and Wahlen (1999, p.366) describes about ideal financial reporting as a tool to help "the best-performing firms in the economy to distinguish themselves from poor performers and facilitates efficient resources allocation and stewardship decisions by stakeholders." Based on their description of ideal reporting, I define effective auditing policy as an increase in the transparency of client operation and examine (1) how newly implemented complex accounting procedure affect the effectiveness of the auditing in public schools operation, and (2) whether auditing effort allocation problem exists in current auditing practices.

Hypothesis Development

Addressing the issue of transparency in financial reporting, the analysis focuses on a potential adverse effect of newly implemented complex requirement of accounting procedures. School district accounting involves the budget-based fund accounting procedures.[1] As stated by Zimmerman (1977), the fund accounting system (sets of self-balancing accounts) creates complex and awkward accounting procedures in the public sector in general. The use of funds is restricted to specific purposes and often requires complex reporting systems. In addition, "investors" in the public sector are widely dispersed and the economic benefits derived from public services are difficult to determine.

The large amount of taxes involved in QBE funding in Georgia, however, drew public attention to the use of taxes in providing public education. In addition, the QBE funding is tied to the governors' political promise and elected officials have a strong incentive to ensure the promised outcomes that enhance Georgia public education. The efficient allocation of resources provides higher credibility for elected officials' and hence results in a political advantage for elected officials. I would expect the demand for effective monitoring and the proper use of taxes are high in such a situation. Consequently, the auditing function plays an important role in monitoring public school operation.

High level state officials might be able to place a great deal of complexity in the auditing procedure without imposing large costs by selecting the state auditing unit rather than selecting private auditors. By scrutinizing accounting procedures, such a selection, therefore, ensures their political promise is less costly. Although auditor independence is a controversial issue among auditors providing MAS, under severe political competition, elected officials' incentive to assure efficient use of taxes outweighs auditor independence problems. The officials encourage transparency in school district operations so that the public can evaluate their abilities in providing good quality of education given the school environment. Interestingly, the mission statement of Georgia state auditors stresses the MAS in which they publicly state their function as an oversight body for state tax spending. A financial statement would help to distinguish the best-performing firms in the economy from poor performers by enhancing transparency in the operation. Thus, transparency is the ultimate solution for providing competence in a politically competitive environment

The First Hypothesis about Complexity in Auditing Procedures

State funding of education has increased due to the implementation of the QBE Act. Restrictions on QBE funding require fund accounting procedures in which the funding is allocated to designated programs. Since fund accounting procedures called for separate complex self-balancing reports, I would expect that QBE funding increases auditing difficulties. Consequently, the complex auditing procedures potentially reduce effectiveness in auditing, if all other things are held constant. Especially when such requirements are newly implemented, the auditors have to adjust their efforts on each accounting unit. As a result, they face time allocation problems. Complexity could become an impediment in the auditing practices and have an adverse impact on effectiveness in auditing making it more difficult to establish transparency in reporting. Thus, my first hypothesis in alternative form is:

> H1: Complex auditing procedures create an auditor time allocation problem and hence have an adverse effect on effectiveness in auditing.

The Second Hypothesis About Adjustment Of Auditors Recourse Allocation

The earnings management literature suggests that the choice of accounting procedure is complex and involves a great deal of uncertainty. The summary paper by Dechow and Skinner (2000) describes the discrepancy between practitioners and academics view of earnings management partly arise from data limitations and estimation techniques in a proxy of earnings management.

The fact that accounting procedures in the public sector allow some discretion in applications of funding and the management of specific funding provide the public servant some freedom to engage in something like earnings management by private sectors managers. In such a situation, MASs that closely council educational providers, helps to strengthen school district operation by supplying an extra outside monitoring structure. The MAS of the state auditors provides elected officials with a closer monitoring system for school administrators who might otherwise take such opportunities to enhance their own position. It is a cost effective extra layer of close monitoring. Thus, MAS should reduce ambiguous spending and ensure proper resource allocation, thereby enhancing disclosure in public school operations.

Since Dechow and Skinner (2000) point out the potential problems in estimation techniques used in the earning management literature, and, since my analysis is of the public sector, I use a frontier estimating technique to ascertain potential "earnings management" in a public sector setting. The nonproductive use of taxes can be used as a proxy for "earnings" (tax) management by school officials. School districts auditors are expected to scrutinize the tax spending, thereby, nonproductive tax spending should be reduced. When school auditors allocate their time effectively, the variation of nonproductive use of taxes provides information about potential earning management by school districts. During a period of reform, however, these relationships are not so clear-cut because auditors face resource allocation problems. If auditors are still in a process of calibrating their requirement for their new auditing environment, their time allocation itself might create resource allocation problems. Thus, my second hypothesis in alternative form is:

H2A: Auditing time will be negatively correlated with nonproductive use of taxes, when auditors overcome their own resource allocation problems.

The competing alternative hypothesis is:

H2B: Auditing time will be positively correlated with nonproductive use of taxes, when the auditors' effort allocation problem still exists.

Data Collection

The data for school district (all elementary and secondary school operations from grade 1 to12) are collected from the Georgia Public Education Report Cards provided by the Georgia Department of Education. After implementation of the Quality Basic Education Act (QBE) in 1985, new precise educational data became available at the school district level, beginning in the 1994/95 academic year. In this analysis, three years of data from the 1994/95 to the1996/97 academic years are used. For simplicity, I called these year 1995, 1996, and 1997.

The variables used as proxies for educational outputs are the Iowa Tests of Basic Skills (ITBS) and the Tests of Achievement and Proficiency (TAP) for grades 3, 5, 8, and 11. Since TAP data is only available for 1995 and 1996, I approximate 1997 TAP scores using the Georgia High School Graduation Tests (GHSGT).[2] The dropout rate is the ratio of students leaving school in grades 9 through12 to the total enrollment in these same grades. It is not adjusted for retained students. Socioeconomic factors, such as the proportion of racial groups and the proportion of free/reduced lunch program participants, are also provided by the Department of Education.

The input price variables are the average teachers' salary,[3] the average support personnel salary,[4] and the adjusted consumer price index for materials costs. These materials costs are non-labor expenditures that are directly related to teaching and student activities such as books, food services, library and media services, and student transportation costs. These three categories typically make up about 75% of total district expenditures on education. These expenditures are used as the budget constraint.

Georgia has a total of 181 school districts. After dropping several counties which do not have junior high or high schools, a final sample becomes 166 school districts for each year, a total of 498 observations. Of the 166 school districts, 145 are county districts and 21 are city systems.

To test second hypothesis, data on auditing activities are required. The auditing data are collected from the Georgia Department of Audits. Auditing time data are available only for the1996/97, 1997/98, and 1998/99 academic years. About 20 school districts are audited by private auditors and no auditing time data is provided by these school districts. The number of employees in the Georgia Department of Audits, and total salary data are available from 1992 to 1999. Since other data are based on school years 1994/95 to 1996/97, utilization of this data limits for the second hypothesis my analysis to the 1997 academic year.

The Model for the Analysis

I empirically estimate non-value-added costs in providing public school operation for a pooled cross-section of 166 school districts in the state of Georgia during the three academic years from 1995 to 1997. They are the equivalent of the unproductive use of taxes that is further defined as output inefficiency in this analysis.

Estimation on Educational Output

Family effects on schooling outcomes have been shown to be very significant (Hanushek, 1986; Loeb and Bound, 1996). These effects include the residential choices of parents, students' study habits, preferences for future careers, and parents' perception of education. To control family effects, this analysis employs a value-added residual technique (Hanushek and Taylor 1990; Meyer 1997; Grosskopf, Hayes, Taylor, and Weber 1997) embodied in the following equation.

$$\begin{aligned} TEST_{t,d,s} = {} & \delta_{1,t,d} + \Sigma\,\delta_{2,t,d,}\ ETHNICITY_{t,d} + \delta_{3,t,d}\, LUNCH_{t,d} \\ & + \delta_{4,t,d}\, POPD_{t,d} + \delta_{5,t,d}\, TEST_{t-2,d,s} + \Sigma\,\delta_{6,t,}\, DUMY + \varepsilon_{t,d,s}\,, \end{aligned} \tag{1}$$

where t indicates year, d indicates school district, and s indicates test subjects. Racial composition (ETHNICITY) is used to control for socioeconomic factors,[5] percentage of free/reduced lunch program participants (LUNCH) is used to control for income level of families, and population density (POPD) is used to control for rural characteristics. The previous test scores ($TEST_{t-2}$) for the cohort test are included to extract a specific cohorts' marginal effect on test scores. Dummy variables (DUMY) for each year are included to capture specific year effects in the model. Since researchers have reported that mathematical skills are more closely related to higher future salary (Bryk, Lee, and Holland, 1993; Sander, 1997; and Murnane, Willett, and Levy, 1995), reading and mathematics test score are used separately to extract residuals. A similar equation with the proportion of dropouts during a year as the dependent variable ($1\text{-}DROP_{t,d}$) is also estimated to account for this undesirable output.[6] The technique for estimating seemingly unrelated regressions is used to obtain parameter estimates for these models since contemporaneous correlation in error terms are expected.

The residuals estimated from these models represent the deviation of value-added in a particular school district from the state mean. Since half of the districts will have negative residuals and the distance function employed in this analysis cannot handle negative outputs, I add the average intercept for the above equations as suggested by Grosskopf, Hayes, Taylor, and Weber (1997). Thus, output is:

$$Output_s = INTER_{s,y} + \varepsilon_{t,d,s}, \tag{2}$$

where $INTER_{s,y}$ is the average intercept of each of value-added equation for each separate year.

Estimation of Nonproductive Use of Taxes

The cost indirect output distance function (CIODF) is employed to estimate optimal school district operation given observed budget and output levels. The CIODF was introduced by Färe, Grosskopf and Lovell (1988) and is suitable for "modeling the technology of public enterprises that produce multiple outputs under conditions of budgetary constraint" (Grosskopf, Hayes, Taylor and Weber; 1997, p.117). The translog form of CIODF use to estimate nonproductive use of taxes follows (Grosskopf, Hayes, Taylor, and Weber 1997),

$$\frac{1}{\|y_{st}\|} = ID_o\left[\frac{w_{st}}{c_{st}}, z_{st}, \frac{y_s}{\|y_{st}\|}; \alpha, \beta\right]\varepsilon_{st}\ , \tag{3}$$

$$\ln\left(\frac{1}{\|y_{st}\|}\right) = \alpha_0 + \sum_{i=1}^{n}\alpha_i \ln\left(\frac{w_{ist}}{c_{st}}\right) + \alpha_j \ln z_{st} + 1/2\sum_{i=1}^{n}\sum_{j=1}^{n}\alpha_{ij}\ln\left(\frac{w_{ist}}{c_{st}}\right)\ln\left(\frac{w_{jst}}{c_{st}}\right)$$
$$+ \sum_{k=1}^{m}\beta_k \ln\left(\frac{y_{kst}}{\|y_{st}\|}\right) + \sum_{i=1}^{n}\sum_{k=1}^{m}\beta_{ik}\ln\left(\frac{w_{ist}}{c_{st}}\right)\ln\left(\frac{y_{kst}}{\|y_{st}\|}\right) \tag{4}$$

where $\| y_{st} \|$ is the Euclidean norm of the outputs measure,
$\| y_{st} \| = (y_{s1t}^2 + y_{s2t}^2 +,..., y_{smt}^2)^{1/2}$, y is the vector of educational outputs, $\frac{w_{ist}}{c_{st}}$ is the vector of budget deflated input prices, i, j, k, and s are indices for input prices, output quantities, and school districts $i \neq j$, t is an index for time, and z is the environmental variable student to teacher ratio. Inefficiency is radically measured from the estimated frontier, $y_{kst} / \| y_{st} \|$ is normalized output,[7] α and β are parameter estimates, and ε_{st} is the error term. The value-added method is used to estimate educational output.

The Model on the First Hypothesis Testing and Results

My first hypothesis is that complexity in auditing procedures reduces the quality of auditing by creating auditor time allocation problems. Complex accounting procedures created by QBE funding most likely require an adjustment period for auditors to allocate their efforts efficiently, and hence I expect the auditing quality drops at the introduction phase. For example, federal funding is an other type of funding where compliance requirements increase auditing difficulties. However since this funding has been in placed for more than 5 years, I expect auditors have already adjusted their effort allocation. In addition, federal elected officials (higher ranking officials) have stronger incentives to ensure proper implementation than lower ranking officials (Baber,1994). Thinking these two items together, I would expect the level of these two types of funding to have an opposite sign in terms of output efficiency.

I use output efficiency to evaluate these relationships. The output inefficiency is nonproductive use of taxes and represents a potential proxy for a public sector analogous to earnings management. Misallocation of resources can arise either from school district operation or from auditing practices. My interest in the first hypothesis is to examine auditing-side of resource allocation difficulties. Thus, I need to control for school-side effects. Control variables are the school-side factors associated with resources allocation problems. Previous research report the wide variation in student ability creates teaching difficulties (Daynarski, Schwab, and Zampelli; 1989, Hanuskek, 1986, 1989, Murray, Evans, and Schwab;1998, Dayton, 1998). Based on these studies, I control for test scores (the grade11, math and reading), proxies for teaching difficulties in general. In addition, since size effects are often discussed in accounting and business literatures I include the student enrollment to control for the size affect. The final model for testing the H1 is,

$$\text{Eff} = \beta_0 + \beta_1 \text{QBE} + \beta_2 \text{FEDR} + \beta_3 \text{ENRL} + \beta_4\text{TM} + \beta_5\text{TR} \tag{5}$$

where EFF is the efficiency score for each school district,

QBE is the percentage of QBE funds received by each district,
FEDR is the percentage of federal funding,
ENRL is the enrollment for each district,
TM is the grade 11 mathematics test score, and
TR is the grade 11 reading test score.

The expected signs for testing variables are negative for QBE funding (β_1) and positive for federal revenue (β_2). For the control variables, I expect TM (β_4) and TR(β_5) to be positive, since higher test scores indicates less difficulties in teaching. There is no prediction for enrollments (β_3). Descriptive statistics for the variables, and results of the regression analysis for equation (5) are shown in Table 1.

Table 1: DESCRIPTIVE STATISTICS AND ESTIMATED COEFFICIENT FOR TEST OF THE FIRST HYPOTHESIS

Variables	Mean	Std Dev	Minimum	Maximum
Efficiency	91.2936	1.8667	86.2165	100.0
QBE	0.5310	0.1053	0.1442	0.7705
FEDR	0.0933	0.0339	0.01764	0.2812
ENRL	7602	13460	475	90311
TM	53.9016	10.4716	21.0000	87.0000
TR	44.0944	11.1940	15.0000	78.0000

(5) Eff = $\beta_0 + \beta_1$ QBE + β_2 FED + β_3 ENRL + β_4TM + β_5TR

Parameter	Expected sigh	Estimate	Standard Error	T-statistics
Intercept	+	86.35000	0.7627	113.219*
QBE	_-	-2.47435	0.7971	-3.442*
FEDR	+	21.41848	2.9673	7.218*
ENRL	?	0.00003	0.00001	5.934*
TM	+	0.00061	0.01036	5.880*
TR	+	0.01908	0.00925	2.064**

The number of observation: 498
Adjusted R-square: 0.2031
F-value: 26.333

Efficiency is the efficiency scores (dependent variable) multiplied by 100,
QBE is the percentage of QBE fund received,
FEDR is the percentage if federal funding received,
ENRL is the number of student enrollment for each district,
TM is the grad 11 mathematics test score, and
TR is the grad 11 reading test score.

* , ** is the p-value less than 0.01, 0.05 respectively.

The sign on the estimated coefficient for QBE funding is significant and negative, and that on the federal revenue is significant and positive, both at an α level of 0.001. These results support my hypothesis that complex and newly implemented accounting procedures have an adverse effect on effectiveness in auditing. When new procedures such as QBE funding are implemented, auditors have to adjust their time allocation to ensure proper auditing procedures. My analysis provides evidence that complicated reporting requirements imposed by QBE funding create auditor effort allocation problems and reduce auditing quality, measured by nonproductive use of taxes. Although, federal funding requires complicate accounting procedures, it has a longer history and is crafted in an environment with extreme political competition. My result suggests, in this case, elected public officials appear to carefully scrutinize the prompt use of federal funding, and with years of auditing experience, the auditing requirements do not induce resource allocation problems.

The Model for The Second Hypothesis and Results

The second hypothesis examines the direct association between auditing efforts and the nonproductive use of taxes. When auditors solve the resource allocation problems created by newly implemented requirements, their effort allocation should be directly toward reducing ambiguous tax spending that is a proxy of earnings management in school district operation. This is especially true for auditors providing MAS. The nonproductive use of taxes (ambiguous tax spending) is a potential undesired wealth transfer from taxpayers to public officials. In this case, the auditors' effort allocation should be negatively correlated with the nonproductive use of taxes that is analogous of earnings management. Thus, if auditors' time allocation problems have been solved in the current period, I would expect a negative relationship between auditing time and the nonproductive use of taxes; hypothesis H2A. If the current period is the adjustment phase, however, I would expect a positive relationship between auditing time and the nonproductive use of taxes; hypothesis H2B.

To test these hypotheses I first analyze the change in auditing time over the years. If these changes fluctuate over the periods, it indicates an experimental period. If not, the auditors have already adjusted their resource allocation. The percentage change in the number of employees and in total salary fluctuates between 1992 and 1999 are shown in the Figure 1. The fluctuations of the number of employees and total salary during these periods most likely indicate that this time period is still in an adjustment phase. Next is the direct test that relates nonproductive use of taxes with auditors' effort allocation. I use an interaction between auditing time and QBE funding to test whether a coefficient estimate of this term is negative or positive. The model to test this hypothesis is,

$$\text{Eff} = \beta_0 + \beta_1 \text{ AUDT} + \beta_2 \text{ ADCOM} + \beta_3 \text{ FED} + \beta_4 \text{ ENRL} + \beta_5\text{TM} + \beta_6\text{TR} \qquad (6)$$

where EFF is the efficiency scores for each school district,

AUDT is auditing time,

ADCOM is an interaction between auditing time and the percentage of QBE funding received by each district,

FED is the percentage of federal revenue,

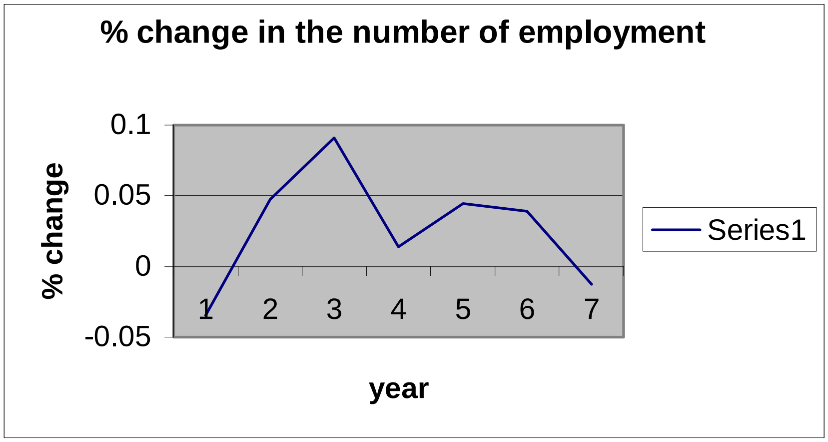
ENRL is the enrollment for each district,

TM is the grade 11 mathematic test score, and

TR is the grade 11 reading test score.

If auditors are still in the adjustment phase, a coefficient estimate for an interaction term ADCOM (β_2) should be negative. Given the limitations on the data sets, this analysis can be conducted only for the academic year 1997. In 1997, 19 school districts hired private auditors in which provide me no information about auditing time. I eliminate these 19 school districts and analyze a total of 147 districts. The same control variables that are used in the equation (5) are included in the model. In addition, the FED is also included as a control variable for other complex funding. H2A predicts a positive sign for β_1 and β_2. H2B predicts a negative sign for β_2. If β_2 is negative, β_1 should not be positive. In this case, auditors' inefficiency in their effort allocation increase nonproductive use of taxes and hence β_1 should be either negative or insignificant. A positive sign for β_3 is predicted because federal funding has a long history and auditors should have adjusted their time allocation problem in this case. The results shown in Table 2

year	%change
93	-0.03448
94	0.04762
95	0.09091
96	0.01389
97	0.04452
98	0.03934
99	-0.01262



93	-0.00716
94	0.03044
95	0.09928
96	0.10380
97	0.02804
98	0.11671
99	0.06579

Fig 1: THE PERCENTAGE CHANGE IN THE NUMBER OF EMPLOYEES AND TOTAL SALARY IN THE GEORGIA DEPARTMENT OF AUDITS AND ACCOUNTS

Table 2: THE SECOND HYPOTHESIS ABOUT AUDITING TIME

(6) $Eff = \beta_0 + \beta_1 AUDT + \beta_2 ADCOM + \beta_3 FED + \beta_4 ENRL + \beta_5 TM + \beta_6 TR$

Parameter	Expected sign	Estimate	Standard Error	T-Statistics
Intercept	+	83.7567	1.1160	75.05*
AUDT	+/-	0.0016	0.0011	1.5
ADCOM	+/-	-0.0049	0.0020	-2.39**
FEDR	+	28.8986	4.5653	6.33*
ENRL	?	0.0001	0.0000	3.60*
TM	+	0.0579	0.0173	3.35*
TR	+	0.0316	0.0158	2.01**

The number of observation: 147
Adjusted R-square: 0.2681
F-value: 9.92

Efficiency is the efficiency scores (dependent variable) multiplied by 100,
AUDT is the auditing time for year 1997, the mean is 506.2313 and standard deviation is 241.2067
ADCOM is the interaction between auditing time and the percentage of QBE fund received
FEDR is the percentage if federal funding,
ENRL is the number of student enrollment for each district,
TM is the grad 11 mathematics test score, and
TR is the grad 11 reading test score.

* , ** is the p-value less than 0.01, 0.05 respectively.

support H2B, the β_2 is negative and β_1 is insignificant. Indication of this analysis is that auditors face time allocation problem due to complex accounting requirement. Their efforts are not directed toward reducing nonproductive use of taxes but rather are spent on adjusting to their new environment in auditing procedure. Thus, their efforts do not reduce nonproductive use of taxes, and the added complexity actually increases nonproductive use of taxes.

Finally, I analyze whether there are any differences between school districts that are audited by state auditors and they served by private auditors. These are only 19 school districts with private auditors. Because of this small numbers of observations, a mean comparative analysis is conducted between these two samples. The results are shown in Table 3. The average efficiency score is higher in the school districts which retain private auditors than school districts which are served by the state auditors. Almost all of comparisons are statistically significant (the one exception is the proportion of black population), suggesting these two groups of districts are distinctly different. This result is sensible if the school districts that hire private auditors are keen to recruit quality students and to build good reputations which corresponds to the explanation given by a state auditor. The demographic characteristics suggest that private auditors are employed in suburban residential school districts, characterized by higher family income and higher test scores in both mathematics and reading. These districts also have a higher proportion of local tax funding and moderate population density.

Conclusion

I analyze the role of auditing in public school district operations. The main focus is on the effect of complex requirements in accounting procedures on the effectiveness in school auditing. Educational reform has

Table 3: THE CHARACTERISTIC OF SCHOOL DISTRICTS WHO HAVE PRIVATE AUDITOR AND STATE AUDITORS

		Private	Auditor		State	Auditor	Sample	difference
Variable	N	Mean	Std Dev	N	Mean	Std Dev	T-score	P-val
EFFICIENCY	19	0.92305	0.02656	147	0.90939	0.01519	3.334	0.0011
LOCAL	19	0.41648	0.11867	147	0.26682	0.09714	7.446	0.0001
FEDR	19	0.06900	0.03586	147	0.54897	0.15023	-3.401	0.0008
ENRL	19	264731	27890.61	147	5378.95	8489.32	7.162	0.0001
BLACK	19	0.38067	0.27759	147	0.33263	0.23306	0.824	0.4109
LUNP	19	0.39977	0.20980	147	0.49650	0.14963	-2.522	0.0126
POPD	19	618.209	572.0535	147	127.868	279.252	6.195	0.0001
TM	19	59.2632	10.0269	147	54.367	9.465	2.108	0.0366
TR	19	49.211	10.326	147	44.211	9.823	2.076	0.0395

EFFICEINCY is the efficiency scores,
LOCAl is the percentage of local fund received,
FEDR is the percentage of federal funding received,
ENRL is the number of student enrollment for each district,
BLACK is th eproportion of black population,
LUNP is th eproportion of students who participate in free/reduced lunch programs,
POPD is population density,
TM is the grad 11 mathematics test score, and
TR is the grad 11 reading test score.
T-score is the T-Statistics for a mean comparison between two types of school districts,
P-val is the P-value associated with these T-scores.

received a great deal of public attention because of the poor performance of American students in cross-country comparison, and the issue has become an important agenda for public officials. The state of Georgia implemented the Quality Basic Education (QBE) ACT and this legislation increased the proportion of state support for education and, coincidentally, added complexity to auditing procedures because of precise fund accounting requirements. Given this environment, this analysis examines the relationship between complexity in accounting procedures and the effectiveness in auditing.

The results show that the newly implemented complex accounting procedures have an adverse effect on productive use of taxes and increase nonproductive use of taxes. The estimation of the nonproductive use of tax provides meaningful information about school districts operation that represents something akin to earnings management for public officials, by transferring wealth to the school administrators instead of the designated parties. The efficient use of taxes should improve school operations, and encouraging such efficiency benefits taxpayers. Addressing these issues, two relationships are tested, first, between the nonproductive use of taxes among school districts and QBE funding that requires complex accounting procedures and, second, between the nonproductive use of taxes and auditing efforts. I find that the intensity of accounting procedures required by QBE funding is negatively correlated with efficient use of taxes, while the intensity of federal funding is positively correlated with efficiency. In an environment where a new system is being implemented, any current nonproductive use of taxes might arise from either school or the auditing-side of resources allocation problems. The empirical results from my analysis suggest that the constant modifications of the qualification of QBE funding in Georgia and its complexity create auditor-side of resource allocation problems and hence increase the nonproductive use of taxes. In terms of policy implications, these results suggest that when a new policy increases complexity in accounting procedure, the marginal benefits of the policy can be ambiguous. It is possible to have a negative effect if the costs associated with complexity in auditing procedures outweigh the benefits derived from the policy.

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References

[1] Auditing Report,1995, Rockdale County Board of Education, Conyers, Georgia, Year Ended June 30.

[2] Baber W. (1994). The influence of political competition on governmental reporting and auditing. Research in Governmental and Nonprofit accounting, l 8, 109-127.

[3] Benabou, R. (1996).Equity and Efficiency in Human Capital Investment: The Local Connection. The Review of Economic Studies, 63, 237-264.

[4] Bryk, A. S., V. E. Lee, and B.P. Holland, (1993). Catholic schools and the common good, Cambridge, Massachusetts: Harvard University Press.

[5] Dayton, J. (1998). An Examination of Judicial Treatment of Rural Schools in Public School Funding Equity Litigation. Journal of Education Finance, 24. 179-205.

[6] Dayton, J. and M. Kenneth. (1995). Georgia School Finance: Funding Education in the New Empire of the South. ERIC ED 385939.

[7] Dechow M. P. and D. J. Skinner. (2000). Earning Management: Reconciling the Views of Accounting Academics, Practitioners, and Regulators. Working paper, (February).

[8] Dynarski, M. , R. Schwab, and E. Zampelli. (1989). Local characteristic and Public Production: The Case of Education. Journal of Urban Economics, 26. 250-263.

[9] Färe, R., S. Grosskopf, and C.A. Knox Lovell (1988). An Indirect Approach to the Evaluation of Producer Performance. Journal of Public Economics, 37. 71-89.

[10] Grosskopf, S., K. J. Hayes, L. L. Taylor and W. L. Weber, (1997). Budget-Constrained Frontier Measures of Fiscal Equality and Efficiency in Schooling. The Review of Economics and Statistics, 79. 116-124.

[11] Hanushek, A. E. (1986). The Economics of Schooling: Production and Efficiency in Public Schools. Journal of Economic Literature 16. 1141-1177.

[12] Hanushek, A. E. (1989). Effectiveness of Educational Resources :Expenditures, Efficiency, and Equity in Education: The Federal Government's Role. American Economic Review, 79. 46-51.

[13] Hanushek, A. E. and L. L. Taylor.(1990). Alternative Assessments of the Performance of Schools, Measurement of State Variations in Achievement. Journal of Human Resources, 25. 179-201.

[14] Healy M. P. and J. M. Wahlen. (1999). A Review of the Earnings Management literature and Its Implications for Standard Setting. Accounting Horizons, 13. 365-383.

[15] Johnson, E. G. and F. P. Stafford. (1996). On the Rate of Return to Schooling Quality. The Review of Economics and Statistics, 6. 686-691.

[16] Loeb, S. and J. Bound. (1996). The Effect of Measured School Inputs in Academic Achievement: Evidence from the 1920s, 1930s and 1940s Birth Cohorts. The Review of Economics and Statistics, 6. 653-663.

[17] Meyer H. R.. (1997).Value-Added Indicators of School Performance: A Primer. Economics of Education Review, 16. 283-301.

[18] Murray E.S.a, W N. Evans and R. Schwab. (1998). Education-Finance Reform and the Distribution of Education Resources. American Economic Review, 88. 789-812.

[19] Sander, W. (1997) Catholic High Schools and Rural Academic Achievement. American Journal of Agricultural Economics, 79. 1-12.

[20] Zimmerman J. (1977). The Municipal Accounting Maze: An Analysis of Political Incentives. Journal of Accounting Research, 15. 107-144.

End Notes

1. “Fund accounting is designed to demonstrate legal compliance and to aid financial management by segregating transactions related to certain government functions or activities. A fund is a separate accounting entity with a self-balancing set of accountings. An accounting group is a financial reporting device designed to provide accountability for certain assets and liabilities that are not recorded in the funds because they do not directly affect expendable available financial resources” (1995, Auditing Report).

2. To do this, we calculated the ratio of TAP to GHSGT for every county using the average of the data for 1995 and 1996. Then, an approximation of the county TAP score for 1995 was computed as the product of the county GHSGT score and the ratio estimated above. The ratio of the 1994/95 TAP score to these estimated TAP score was reasonably close to one. This suggests that the county GHSGT scores, scaled by their ratio to TAP score, is a reasonable estimate of TAP scores for a county. The same method had to be employed to estimate the TAP score for the Thomasville city system in 1995.

3. Both full-time and part-time teachers.

4. Support personal includes Students Service personal, information Services personal, Librarian/Media Specialists, Special Education Specialists, and recreational Therapists. Most of CPI codes 400 are included in this category (The Report Cards 1996-97).

5. Characteristics of peers or the effects of other students have received attention from several researchers as the part of socioeconomic factors. The racial composition is one of these variables (Hanushek,1986; Johnson and Stafford,1997; and Benabou,1996).

6. The relationship is written as:

$$(1\text{- DROP}_{t,d}) = \delta_{1,t,d} + \Sigma\,\delta_{2,t,d,}\ \text{ETHNICITY}_{t,d} + \delta_{3,\ t,d}\,\text{LUNCH}_{t,d}$$

$$+\ \delta_{4,\ t,d}\,\text{POPD}_{t,d} + \Sigma\,\delta_{5,t,d}\,\text{TEST}_{11,d,s} + \Sigma\,\delta_{6,t,}\,\text{DUMY} + \varepsilon_{t,d,s}\,.$$

7. Modeling multiple outputs, a norm was chosen as $1/\,\|\,y_{st}\|$.

Eliminating "Optics" in Global Accounting Practices: The Business Ethics Case for the Purity of Regulatory Cultures

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Abstract

One significant result of the Enron collapse has been the strengthening of the case for IAS (International Accounting Standards) as the preeminent set of standards for global accounting practices. Its chief competitor, U.S. GAAP (Generally Accepted Accounting Principles) continues to draw its key strengths from its rule-based approach, which is better suited to the accommodation of the growing complexity of business management procedures and technological development. IAS has now gained ground against GAAP because its principles-based approach may create a structural framework of ethical business practice better able to restore public confidence in corporate conduct. However, given the rapid development of innovations in financial services over the past quarter century to accommodate the growth of global business, mere restoration of public confidence may not be sufficient. Regulatory agencies have not kept pace with this accelerated rate of change, and private enterprise dominates the employment of the new "culture of expertise" in the accounting and legal professions. This paper examines the historical forces that have shaped the current state of affairs, and then focuses on new IAS standards pertaining to business combinations and derivatives activities. A tentative conclusion is reached outlining reasons why both IAS and GAAP standards will be beset with difficulties going forward.

Globalization stands today at an important crossroads as a result of the myriad of accounting scandals currently plaguing business confidence in the United States. Deregulation in the West and weak regulatory frameworks in emergent economies have allowed multinational businesses to proliferate rapidly and efficiently on the global stage, making use of new multilateral organizations such as the World Trade Organization to provide the basic structure of rules, trading practices and grievance procedures to ensure the continuing success of global enterprise. However, one crucial ingredient in this formula for success is the development of a uniform set of global accounting standards that would provide an effective means for comparing the performances of same-industry businesses in different nations in order to ensure the most efficient allocations of investment, capital spending, etc. At present, the competition pits GAAP Generally Accepted Accounting Principles against International Accounting Standards (IAS).

GAAP is highly suited to the growing complexity of international business because of its intensively detailed, rule-based structure. IAS provides a more encompassing, principles-based approach that will more readily accommodate national differences. Both systems are predominant in different sets of nation states, although numerous emergent economies are not yet sufficiently developed beyond a loose adaptation of rules absorbed from former colonial masters.[i] IAS must be must be used by all companies listed on European exchanges by 2005; however, some multinationals like DaimlerChrysler use GAAP exclusively. To gain a listing on U.S. exchanges, foreign companies must provide reconciliation to U.S. GAAP, and GAAP results can differ significantly to those attained under IAS. Official organizations responsible for the competing systems, the IASB in Europe, FASB and SEC in the U.S., concur on the need for convergence between the two systems, but political and policy conflicts between different national administrations have thus far prevented agreement.

Global NGO's without any political agenda have also weighed in on the debate, but have pointed out what has until the recent spate of accounting scandals been an ignored dimension of this issue, an ethical dimension. In a position paper addressed to the Securities and Exchange Commission,[ii] The Association for Investment Management and Research (AIMR) noted that a successful set of standards "properly and consistently applied," would depend upon "ethical, trained preparers [of financial statements]," and "ethical, trained and independent auditors."[iii] However, while it is agreed that this requirement for ethical character on behalf of corporate officers, auditors and regulators is necessary, it is not sufficient. The competition over global accounting standards opens a much more extensive set of ethical issues that must be addressed if such standards are to function successfully on the global stage. Specifically, regulatory organizations must be created or altered so as to produce institutional cultures sufficiently independent and committed to enforcement of the spirit as well as the letter of regulations. Such organizations must exhibit sufficient professional expertise and foresight to anticipate problems arising from the complexity and technological sophistication of global business development. One of the crucial objectives in developing international accounting standards must be the commitment to effective enforcement of existing rules and speed, efficiency and ethical acuity in developing new ones. Settling for the attainment of "investor confidence" or the "optics" of effective regulation will not be sufficient.

It will be the objective of this paper to set forth a broad overview of ethical issues that surround the current debates over global accounting standards, as well as the historical circumstances that brought these issues into existence. From a business ethics perspective, the achievement of an effective regulatory culture depends upon the realization of a more "pure" culture; i.e., a culture not only independent and driven by its own internally generated codes of conduct and appropriate procedures, but one also clearly dedicated by tradition to its original mandate. In the case of the accounting industry, this must clearly focus on the role assigned to it in the 1930's within an overall regulatory structure designed through legislation intended to correct the market excesses associated with the 1929 stock market crash by means of increased corporate disclosure. Economic pressures, as well as the overall trend towards deregulation over the past twenty years have pressed the industry into much more multifaceted roles as corporate consultants and advisors on issues ranging from tax to labor law. But this movement took place within a much broader historical background covering the explosive growth of globalization within the context of the transformation of international finance from a system of fixed exchange rates to floating rates. This coincided with the gradual disempowerment of nation states, which in turn facilitated the establishment of a global regime of free trade. The establishment of the United States as the sole global superpower has brought with it, even after the demise of the Soviet Union, longstanding structural pressures to continue standard foreign policy practices of realpolitik and extraterritoriality, both of which have been apparent in the enforcement of legislation covering the conduct of U.S. multinational corporations operating overseas, such as the Foreign Corrupt Practices Act.[iv] In such an environment, there will be obvious political pressures for the U.S. to advance GAAP as the global standard – and, as will be made clear, multinational institutions will be responsive to such pressures.

Once this background has been established, two specific trends in the current competition between IAS and GAAP will be isolated: first, the accelerated trend towards corporate mergers, which, from the perspective of a business ethicist, has changed the nature of the long-term perspective of business and thereby altered principles of corporate governance by isolating short term interests of management against the traditionally long term view of shareholders. From an accountant's perspective, standard concepts such as pooling and consolidation have changed in response to this trend. The second trend, related to the first, is the explosive growth of derivatives over the past fifteen years. Here, the focus will shift to the objections raised by the Bank of International Settlements to IAS-specific standards that will change the reporting requirements for such financial instruments from a historical cost base to fair value assessment. It is hoped that these two trends, largely pertaining to IAS standards 30 and 39, will provide an effective microcosm of the larger debate over the relative suitability of IAS and GAAP as an international standard and thus point the way to general conclusions on the development of an effective regulatory culture with respect to global accountancy.[v]

Background Issues

General studies on the development of international accounting practices have pointed to the fact that "accounting is embedded in the political and economic systems" of individual nation states. However, such specificity is subordinated to one universal ethical principle: "Accounting systems have developed on the basis of an obligation for accountability. This obligation is usually based on law, economic or political or even religious power."[vi] The development of accounting practices within the framework of nation states has resulted in a diversity of systems with differing priorities depending on numerous factors: economic sophistication, overall composition of business firms, legal/political frameworks, stability of the national currency, legislative philosophies (predilection for private or public ownership models, extent of government interference in business practices), etc.[vii] In developed nations, the evolution of accounting practices largely follows the parameters of the current divide between IAS and GAAP. The Anglo-American tradition embodied in GAAP emphasizes protection of shareholder interests and changes to principles are undertaken by a private body of professionals (FASB – the Financial Accounting Services Board). Europe and Latin America have tended towards legislative authorization to changes in accounting principles aimed more at the protection of creditors and with comparatively lower levels of disclosure.

Traditionally, GAAP has been regarded as the preeminent accounting system, since the complexity of its rule-driven approach facilitates its ability to grow with the increasing complexity of technological society. As a private organization, FASB was originally empowered to respond quickly and with great flexibility to needed changes relative to legislatively driven systems, despite the fact that this ad hoc approach tended to result in poor, overall integration of principles.[viii] IAS, on the other hand, derives overall advantages from being a principle-based system that emphasizes compliance to the spirit as well as the letter of accounting rules.[ix] With the recent spate of accounting scandals in the United States, GAAP's preeminence has been strongly challenged by IAS, with claims advanced that Enron's accounting deceptions would have been much more readily detected under the latter system.[x]

Much of the recent criticism of GAAP has focused on its rule-based approach, on the fact that the creation of a plethora of miniscule rules creates incentives for enterprising management to find new ways to get around these rules, thus creating a vicious circle of non-compliance through a circuitous increase in more finely detailed rules. Compliance with such rules affords management and auditors a ready legal defense, while reducing disclosure statements to more obscure, legal language that can actually obfuscate general findings of a serious nature that should be raised with regulatory agencies. FASB's independence in creating accounting principles has been strongly challenged, since high-level controls that need to be implemented, e.g., the separation of accountancy from consultancy work, the need to expense employee stock options, etc., can be effectively altered or aborted through political pressure.[xi]

Some historical background is required to provide an explanatory context for this perceived loss of effectiveness. Both GAAP and the fortunes of the accounting industry have been strongly affected by three interrelated trends: globalization/deregulation, the ebb and flow of merger activity, and the global transition to a floating rates regime in the 1970's. The first two will seem obvious, since globalization has sparked a great deal of merger activity, especially in the automotive industry. The accounting profession has thus had to come to grips with issues of pooling and consolidating financial statements. But the changing fortunes of the U.S. dollar during the post war period have also had a very powerful effect on merger activity, as well as on globalization and deregulation. The explosive growth of derivatives trading that followed from the adoption of floating rates has fundamentally altered the nature of the arm's-length relationship that has traditionally existed between financial institutions and their clients, dissolving the separation of interests that have been of longstanding concern in accounting issues such as pooling. Thus, it may be possible that a principles-based system such as IAS might have strong advantages over GAAP going forward, if the complexities and risks of a global financial system increasingly driven by derivatives are to be properly understood and marshaled.

The 1950's and early 1960's were characterized by the relatively successful operation of the Bretton Woods system, comprised of a global system of fixed exchange rates founded on the value of the U.S. dollar, which in turn was fixed to the price of gold. Large American business enterprises, buoyed by the strength of the dollar, moved significant operations to overseas subsidiary facilities (first to Europe, to become positioned within the European trading block, and then around the world). Foreign direct investment by U.S. firms increased from $11 billion in 1950 to $350 billion by 1980. Recessions within the United States encouraged larger businesses to form conglomerates to provide protection against downturns in a particular business area. The massive movement of dollars out of the United States satisfied the foreign demand for the dollar as the globally accepted reserve and intervention currency, but by the mid-1960's, the global dollar surplus had transformed into a dollar glut. The Americans stuck with the high military expenses of maintaining the global war against communism and with the costs of space and domestic programs, monetized budget deficits with the result that domestic inflation increased and was exported globally (both through dollar purchases by foreign central banks that had to be monetized domestically and through the increase of Eurodollar lending). As the dollar remained overvalued and as European and Japanese multinationals began to compete successfully against their American counterparts on the global stage, U.S. domestic industries went into a downspin, leading to the de-industrialization and the increasing move into services that marked the 1970's.

Business practices remained stable throughout the 1950's, and this stability afforded both a long- term business perspective and immutable, standardized accounting practices. But increasing inflation undermined this stability and long-term perspective. The increasing gulf between book value and market value afforded companies the option of selling off assets to realize quick value over the historical cost held on the books, thus detracting from the long-term perspective. Inflation then combined with low stock values in the 1970's to produce a new wave of cash-financed mergers. U.S. banks turned their attention away from losses in domestic real estate and corporate lending in the 1970's to focus on the profits to be earned from lending in international markets. The United States broke the linkage of the dollar to gold in 1971 and this was followed by both formal and free market dollar devaluations during the rest of the 70's.

Inflation in the United States was broken during the early 1980's through contraction of the money supply and a rise in U.S. interest rates. As the dollar's value escalated and its role as the predominant global currency was reestablished, U.S. markets became a magnet for foreign investment and flight capital, thus reversing the situation of the late 1950's and early 1960's, when repatriation of U.S. dollars was a chief concern. Investment flows to foreign nations affected by the debt crisis retracted, and thus funds repatriated to the U.S. remained at home available for investment in U.S. industry.[xii] By 1984, merger activity in the U.S. gained new vigor from readily-available, leveraged funds. But merger activity was no longer focused on conglomerations but on intra-industry consolidations, much of which entailed extensive downsizing in order to concentrate on business activities that promised the most immediate short term gains

The 1990's have continued this pace of merger activity and emphasis on short-term gains, with the trends enforced by a rapid technological development that has placed a premium on first-to-market product development and characterized by short product life-cycles. The low-inflation environment, assisted by incoming foreign capital flows, kept interest rates in the U.S. artificially low and thus triggered significant increases in debt loads by businesses and consumers (after a debt ramp-up by governments in the 1980's). The rush to bring expensive R & D projects to market, the misreading of market signals, and an increase in questionable accounting practices all contributed to the development of a market bubble in technology.

The 1990's also witnessed the explosive growth of derivatives trading as a response to the instabilities produced by the transition into floating rates. Global investors and bankers reinvented traditional forward exchange contracts to cover a wide range of trading conditions with more detailed contractual conditions. New risk assessment techniques were developed and derivatives trading spread rapidly. Notional principal values of interest rate swaps grew from $400 billion in 1986 to $6.2 trillion in 1993. By 1995, the notional value of outstanding over-the-counter (unregulated) derivatives had grown to $47.5 trillion. The $2.4 trillion replacement value of these positions is more than three times the combined capital of the world's 75 largest banks.[xiii]

The combined effects of these historical changes have greatly magnified the complexity of accounting requirements and the need for a growing flood of more specific accounting rules. These changes were occurring against a backdrop of increasing power of corporate management that grew to such a degree that many of the fundamental principles of 1930's securities law were being undermined. Basic concepts of corporate governance were being undermined by interlocking directorates, conflicts on corporate boards, etc.[xiv] The Securities and Exchange Commission was increasingly incapable of managing increased workloads created by increasing disclosure.[xv] And accounting firms were also being cast adrift from their mandate of passing judgment on the reliability of corporate statements. Increasing complexity meant increasing cost and difficulty in conducting standard transaction-based testing. Forensic testing was abandoned altogether in many cases, and actual testing would often focus largely on internal control systems. In the deregulated environment of the 1980's, corporations were eager for advice on navigating the fine points of increasingly complex accounting rules, made more complex by the increasing technological sophistication of business operations. In cases where consultancy work was not clearly separated from audit work, an auditing firm might find itself testing internal control systems that its consultancy arm had already helped to implement.

The resulting shift of emphasis to more highly lucrative consultancy work, coupled with the increasing complexity of accounting rules, led to a culture of expertise that rivaled that once enjoyed by the legal profession.

Cynical critics could point to unduly complex rules that could themselves be made subject to deregulation,[xvi] but there were clear benefits not only to accounting firms but to the firms and the executives they served. Executives could use minute compliance to these complex rules to avoid legal repercussions from unethical or even illegal corporate activity, since they could claim to be relying on specialized, expert advice.[xvii] Large corporations could gain benefits over smaller rivals not able to afford the same quality of advice.[xviii] The combination of deregulation with more complex accounting rules has created a protective legal buffer that both shields corporate executives against criminal prosecution and makes shareholder lawsuits more difficult to undertake. For an important domain of corporate activity, regulation and enforcement responsibilities have been taken away from government and handed over to a private body (FASB), over which corporations can exercise influence in a very non-transparent matter.[xix]

The accounting industry is very well organized and has proved itself to be highly adept at fending off proposed legislative reforms over the past quarter century. As this period coincides with the historical background detailed above, a brief analysis will now be directed to two specific areas that could prove highly interesting in the determination of the relative effectiveness of IAS and GAAP. The first pertains to accounting procedures for pooling of interests during corporate acquisitions and mergers. The second focuses on derivatives trading.

Mergers, Consolidation and Pooling

Among the many facets of the Enron case is the irregular use of fund pooling between the company and two of its publicly regulated pipeline subsidiaries in order for the subordinate firms to lend money to Enron that would never be repaid, the ultimate cost to be borne by the ratepayers of the pipeline utilities. This was part of a larger phenomenon within the Enron debacle, one that included collusion between rival firms to create fictitious revenues by booking invalid cross-sales and, of course, using special purpose entities to disguise genuine debts through derivatives. The real question for the business ethicist lies in establishing where genuine; arm's-length boundaries between competitive firms or between banks and clients may be located. For the business ethicist, there is a fact of the matter as to what the long-term motivations and commitments of shareholders really are, as difficult as they may be to determine in practice. Large share blocks may remain under the control of a company's founders with little inside selling, or historical costs may yield the best performance picture for a long-established bricks and mortar company. Conversely, large issuance of employee stock options, aggressive use of internal corporate finance arms, or questionable use of pro-forma accounting may indicate a more short-term perspective. There is no necessary connection between a short-term outlook and suspect ethical business practices; indeed, the nature of the business itself (e.g. technology business) may compel it. But our historical overview has shown that the interlocking trends of increased business/technological complexity and an overall movement to a short-term perspective has coincided with a marked increase in illegal and unethical business practice that has called into question the effectiveness of the philosophy of disclosure on which post-war business practice in Western nations has been established.

Given the recent round of corporate scandals, "pooling" is of great interest to business ethicists because it focuses directly on the core issue of genuine motivations of shareholders. Merged firms may bring together a variety of conflicting (and sometimes, as in the case of Daimler-Chrysler, incompatible) shareholder interests. Corporate governance principles are more easily overcome in firms where clear directions of shareholder interests are not obvious, and management gains clear advantages and empowerment from a more unimpeded mandate to dictate such directions. Besides its other advantages of retaining book value of assets and avoiding working capital drain, pooling creates assumptions of unified interests of the shareholders of the merged entity that may not exist in reality.[xx]

The concept of genuine ownership interests cuts across a number of related issues, and creates interesting distinctions between IAS and GAAP. The longstanding vagueness in GAAP with respect to the permissibility of special purpose entities has already been noted. But American practice has long stipulated the use of pool accounting over purchase accounting, provided certain conditions were met. IAS, on the other hand, severely restricts circumstances under which unification of interests can be recognized and requires that business combinations be recognized as acquisitions using the purchase method. (U.S. GAAP now does require the use of purchase accounting.) The issue not only affects the undermining of genuine shareholder interests that go unrecognized, but also the empowerment of management in de facto ownership roles that likewise goes unrecognized. Effective ownership control of Enron's partnerships proved to be a crucial element of the Enron case and again created divisions between IAS and GAAP with respect to conditions under which SPE's were to be consolidated.

However, collusion between Enron and its chief bankers over the financing of some of Enron's offshore partnerships raises the question of genuine ownership of these SPE's, since effective ownership was disguised through the use of derivatives. The banks were clearly motivated by the need to retain Enron's business, or else considered Enron "too big to fail." But this activity reflects a much larger historical trend whereby commercial banks have been gradually abandoning their traditional lending role in favor of a more freewheeling, quasi-brokerage approach under which loans or credit facilities can be sold or swapped, or else made the basis of more complex derivatives trades. Third world debt has now been widely opened up to debt for equity swaps and other free market initiatives such as the Brady Plan. However, severe ownership conundrums can be created, as shown in the example of highly irregular real estate transactions effected by the Bank of Credit and Commerce International in Argentina during the 1980's, in which millions in Argentina's national debt ended up in the ownership control of Argentina's central bank through a series of corrupt transactions. A key element of any well regulated, ethical market is the framework role of banks and the arm's-length relationship it maintains with its borrowing customers. Such a role is best preserved when banks take a long-term interest in borrowers by managing loan portfolios from the date of the original discount of loans through to their ultimate payout. Today, numerous corporations from GE and General Motors to Enron possess their own internal finance divisions, often managed in conjunction with over-the-counter derivatives trading. Other large telecommunications firms such as Lucent, Cisco and Nortel have created severe difficulties for themselves through excessively liberal policies of vendor finance.[xxi]

IAS standard no. 30, covering disclosure standards for financial statements of banks and other financial institutions, had to be revised during the 1990's because of significant issues raised with respect to "disclosure and presentation issues that arise for all types of entities that engage in deposit-taking, lending, or securities activities irrespective of whether they are regulated and supervised as banks or not."[xxii] It was here that IAS officials recognized that disclosure issues for banks were raising even more crucial concerns with respect to effective measures of risk evaluation and solvency reporting, given the explosive growth in derivatives trading that took in a broad range of issues of effective ownership and raised the need for more exacting standards of narrative disclosure. Proper risk assessment entails effective transparency, but this was not always possible when the specialized nature of derivatives contracts required exacting, legalistic reporting that may not create a hierarchy of red flags that would trigger concerns from regulators, bond agencies, investment bankers, etc., (as happened at Enron). All banks had developed internal policies of overall risk management designed to meet capital adequacy requirements, but with the increasingly specialized nature of individual derivatives contracts, such internal policies could be called into question. Did senior management of banks have an effective grasp of risk exposures entailed by a wide range of specialized derivatives contracts? Was solvency risk exposure being effectively evaluated? These questions set the stage for the direct concerns with derivatives trading raised in IAS no. 39.

Derivatives

IAS would again provide for a more restrictive approach to derivatives than U.S. GAAP, but more intense interest was soon focused on IAS policies on fair value accounting requirements, which called into question internal bank policies on overall risk assessment. The Bank for International Settlements has been particularly concerned to safeguard this privilege of senior bank management. In its April 2000 report to the Group of Seven,[xxiii] the BIS took strong issue with IAS no. 39 for introducing fair value accounting for all bank-held derivatives, regardless as to whether these are held for hedging or trading.

Existing rules prior to IAS no. 39 permitted different accounting policies to apply to a bank's trading and banking books, with the former subject to fair value and the latter to amortized cost. Derivatives used for hedging would then be accounted at historical cost for banking book and fair value for trading. By accounting for all derivatives at fair value, the BIS argued that too much volatility would be introduced into reported earnings and equity that would not fairly reflect the risk management policies undertaken by bank management. Given the extensive overhang of derivatives over bank capitalization, concerns could easily be raised about capital adequacy. The BIS cited the lack of liquidity in many derivatives markets as a reason for objecting to the accuracy of methods proposed for determining fair values. Banks, it is argued, have the power to use internal transactions to move higher risk exposure items on to the trading book, thereby increasing management effectiveness, reducing transaction costs and avoiding elevated credit risk by increased need for contracts with counterparties.

However, these arguments are rather disingenuous. Given the recent spate of irregular banking activities with respect to Enron and other firms, it would not be surprising to discover that banks had reversed the process of internal transactions to move high risk trading items on to the banking books. Increasing counterparty transactions increases transparency and would provide a more accurate measure of a bank's risk management policies.[xxiv] But arguing that fair values are not possible because of market illiquidity simply points out the obvious danger of banks building large derivatives positions in the first place. As previously noted, senior management, with its penchant for relying and expert advice (and disclaiming responsibility Enron-style when that advice is misplaced), may not have a sufficient grasp of the contractual complexities of its myriad of derivatives contracts and what impact they may have for capital adequacy under worse-case scenarios.

While derivatives point to the dangers of GAAP approaches for devising new rules that give increased incentives for more sophisticated expertise to identify new ways for bypassing the rules, the principles-based approach of IAS may be equally inefficacious. Derivatives trading, which prior to 1985 represented a small, high-risk, carefully managed corner of market activity, have now exploded in volume to such a degree that there is a clear danger that they could (as in the 1998 case of Long Term Capital Management) overwhelm the stable, broadly based markets on which they are founded. Derivatives trading has become increasingly based on highly complex, specialized contracts that can only be wound down in highly illiquid markets, thus reducing the standardization on which rule-making in the market depends and raising the premium on expert legal and accounting advice needed to write and implement such contracts. Complexity and illiquidity thereby drive the potential volatility of markets, and this in turn raises the risks for players in these markets, especially those with heavy positions. Federal Reserve intervention in the case of Long Term Capital Management was necessary to prevent a chain reaction of collapsing values in illiquid derivatives markets in which several major commercial banks and even two central banks had very significant exposure. A principles-based approach such as offered by IAS depends upon standardization of practices to a sufficient degree to allow viable markets to be created for these contractually based financial instruments. Of course, the pressure of expert opinion will move the trend in the opposite direction.

The irony of the primary objectives of derivatives trading seems clear enough. By piggy-backing on to the foundational value of base securities, derivatives' trading elicits profits through the exploitation of periodic destabilization in these underlying markets. The readjustment of these strong, underlying markets is essential, as in the case of Long Term, to making derivatives markets viable. Yet the vast extent of derivatives trading today offloads considerable risk on to these underlying markets by creating the potential for market panic if large, complex positions have to be wound down in a hurry in illiquid markets (as in 1998). As previously noted, the historical movement into a regime of floating exchange rates has greatly magnified the importance of derivatives markets as a way of offsetting risks created by the increasing instability of interest rates and exchange rates, but the risks to global markets are significantly increased when major commercial banks extend derivatives trading to such an extent that overall capital adequacy of the global banking system is called into question.

Conclusion

Our historical overview had pointed to number of dovetailing trends over the past quarter century since the transition to a floating regime for international exchange rates. The transition to a floating rate regime of exchange rates has brought a flood of capital into the United States that ameliorated credit and capitalization difficulties left over from the 1970's and opened new investment opportunities in the U.S. Yet the increasing complexity of a prosperous, technologically oriented society has opened difficulties for the accounting industry, as increased pressures towards global business and deregulation have coincided with broader trends towards a more short-term business focus which in turn has altered more traditional assumptions of concepts of share ownership and corporate governance. The increasing trend to pooling and mergers has highlighted issues of separation of corporate interests, the points at which arm's-length relationships between competitors or between bank and client can and should come into effect. At the same time, the accounting industry moved more rapidly towards the development of consultancy services rather than traditional accounting practice. The longstanding systems of regulation based on principles of disclosure have proven less effective in assuring stability and honest practice for markets, especially given the increased trends towards derivatives trading and the risks thereby incurred.

Weaknesses have been identified in both the rules-based approach of GAAP and the principles-based approach of IAS in providing the basis for standardization in global accounting practices. In focusing on IAS no. 30, 39, it is clear that innovations in developing new financial instruments and new methods of internal corporate financing have rapidly outstripped the expertise and capability of traditional regulatory cultures. An overall shift in corporate attitudes or civil society demands is now necessary to balance the scales and effect a return to a traditional purity in regulatory cultures.

References

[1] American Accounting Association. Report of the Committee on International Accounting Operations and Education, 1975-1976. (65-132). *The Accounting Review*. Volume 52. Issue Committee Reports: Supplement to Volume 52 of the Accounting Review (1977).

[2] Association for Investment Management and Research. The Financial Journalist Newsletter, May 2002. http://www.newswise.com/articles/2002/FJMAY2.IMR.htm.

[3] Association for Investment Management and Research. Letter addressed to U.S. Securities and Exchange Commission, dated June 5, 2000, in response to SEC Concept Release: *International Accounting Standards*. (File no. S7-04-00.) http://www.aimr.com/advocacy/00commltr/00conrel.htm.

[4] Bank for International Settlements, Committee on Banking Supervision. "Report to G7 Finance Ministers and Central Bank Governors on International Accounting Standards." http://www.bis.org/publ/bcbs70.htm.

[5] Bergsten, C. Fred. *Dilemmas of the Dollar: The Economics and Politics of United States International Monetary Policy*. Second Edition. New York: Council on Foreign Relations Publications, 1996.

[6] Canadian Institute of Chartered Accountants. *Significant Differences in GAAP in Canada, Chile, Mexico and the United States*. Toronto: CICA Publications, 1998.

[7] Choi, F.D.S. and G.G. Mueller. *An Introduction to Multinational Accounting*. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1978.

[8] Cooper, Richard N. and Paul R. Krugman. "Floating Exchange Rates: Experience and Prospects. Comments and Discussion." (451-464) *Brookings Papers on Economic Activity*. Volume 1985. Issue 2. (1985).

[9] Cragg, Wesley and William Woof, "The U.S. Foreign Corrupt Practices Act: A Study of its Effectiveness." (98-144). *Business and Society Review*. Volume 107. No. 1. (Spring 2002).

[10] Ebenroth, Carsten Thomas. "Innovations in LDC Debt Conversions." (32-63) in *International Finance in the 1990's: Challenges and Opportunities*. Edited by J.J. Norton and R.M. Auerback. London: Basil Blackwell Limited, 1993.

[11] Gaa, James C. and Charles H. Smith. "Auditors and Deceptive Financial Statements: Assigning Responsibility and Blame." (138-155) in *Business Ethics in Canada*. Second Edition. Edited by Deborah C. Poff and Wilfrid J. Waluchow. Scarborough: Prentice-Hall Canada, Inc., 1991.

[12] Gore, Pelham. *The FASB Conceptual Framework Project 1973-1985*. Manchester, England: Manchester University Press, 1992.

[13] Hibler, Michelle and Rowena Beamish, editors. "Canadian Corporations and Social Responsibility: Canadian Development Report – 1998." Toronto: North-South Institute, 1998.

[14] International Accounting Standards Board. *Accounting for Financial Instruments – Standards, Interpretations, and Implementation Guidance*. London: IASCF Publications, 2001.

[15] International Accounting Standards Board. "Deposit-Taking, Lending and Securities Activities." Supporting document to IAS no. 30. http://www.iasc.org.uk/cmt/

[16] International Accounting Standards Board. "Disclosures in the Financial Statements of Banks and Similar Financial Institutions." Supporting document to IAS no. 30. http://www.iasc.org.uk/cmt/

[17] International Accounting Standards Board. "Financial Instruments: Recognition and Measurement." Supporting document to IAS no. 39. http://www.iasc.org.uk/cmt/

[18] International Accounting Standards Board. *Interpretations of International Accounting Standards*. London: IASC Publications, 1997.

[19] International Accounting Standards Board. *Shaping IASC for the Future*. London: IASC Publications, 1998.

[20] Leuz, Christian. "IAS versus US GAAP: A New Market Based Comparison." Revised Draft, June 2001. University of Pennsylvania, Wharton Business School.

[21] Leuz, Christian and Robert E. Verrecchia. "The Economic Consequences of Increased Disclosure." (91-124) *Journal of Accounting Research*. Volume 38. Supplement. (2000).

[22] Mayer, Martin. *The Bankers*. New York: Ballantine Books, 1974.

[23] Obstdeld, Maurice and Kenneth Rogoff. "The Mirage of Fixed Exchange Rates." (73-96) *The Journal of Economic Perspectives*. Volume 9. Issue 4. (Autumn 1995).

[24] PriceWaterhouseCoopers. *International Accounting Standards: Similarities and Differences – IAS, US GAAP and UK GAAP*. PWC Publications. September 2001.

[25] Rutteman, Paul. "International Pressures for Harmonization of Accounting." (57-69) in *International Pressures for Accounting Change*. Edited by Anthony G. Hopwood. Hempstead, England: Prentice-Hall International (UK) Ltd., 1989.

[26] Schoenfeld, Hanns-Martin. "International Accounting Development, Issues and Future Directions." (83-100). *Journal of International Business Studies*. Volume 12. No. 2. Supplement (Autumn 1981).

[27] United States Securities and Exchange Commission. *SEC Concept Release: International Accounting Standards*. File no. S7-04-00. http://www.sec.gov/rules/concept/34-42430.htm.

[28] United States Senate Subcommittee on Terrorism, Narcotics, and International Operations. *Report on the Bank of Credit and Commerce International to the Committee on Foreign Relations.* (1992).

Endnotes

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[i] Report of the American Accounting Association Committee on International Accounting Operations and Education, 1975-1976. (65-132) *The Accounting Review*, Volume 52. Issue Committee Reports: Supplement to Volume 52 of the Accounting Review (1977). 72.

[ii] Letter addressed to U.S. Securities and Exchange Commission dated June 5, 2000, in response to SEC Concept Release: *International Accounting Standards* (File No. S7-04-00). http://www.aimr.com/advocacy/00commltr/00conrel.htm.

[iii] *Ibid*., 1.

[iv] Wesley Cragg and William Woof, "The U.S. Foreign Corrupt Practices Act: A Study of its Effectiveness," (98-144) *Business and Society Review* Volume 107. No. 1. (Spring 2002).

[v] This paper is an abridged version of a larger treatment of the subject.

[vi] Report to the American Accounting Association, *op cit.,* 69, 70.

[vii] F.D.S. Choi and G.G. Mueller. *An Introduction to Multinational Accounting* (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1978), 23-28.

[viii] Hanns-Martin Schoenfeld, "International Accounting: Development, Issues, and Future Directions," (83-100) *Journal of International Business Studies* Volume 12. No. 2. Supplement (Autumn 1981) 85.

[ix] U.S. case law does support a principles-based approach with respect to GAAP.

[x] It should be clarified that the predominance of one of these two systems over the other or some convergence of the two will not provide a fool-proof, invulnerable framework against global accounting fraud. This was dramatically exemplified by the collapse of BCCI, the Bank of Credit and Commerce International, in 1991. For years, no overall picture of the fraudulent activities of this international bank could be attained, since the division of the bank's global operations into holding companies domiciled in two highly under-regulated regimes, Luxembourg and the Cayman Islands, resulted in separate audits of these divisions by two accounting firms. Even after the unification of the bank's accounting under the aegis of PriceWaterhouse, the U.K. and U.S branches of the firm's operations did not communicate vital information to each other that would later be required by regulators. A major concern later raised by U.S. Congressional investigators centred on the fact that PWC failed to recognize that it could not fulfill its primary obligation to the bank's shareholders, since the primary shareholders were largely front men paid by the bank to project a false image of prosperity. PWC should have recognized a primary obligation to the bank's depositors. *U.S. Senate Subcommittee on Terrorism, Narcotics and International Operations. 1992. Report on the Bank of Credit and Commerce International (Committee on Foreign Relations). 258-260.*

[xi] In 1994, FASB initiatives to expense stock options were blocked by Congressional interference and industry lobbying under threat of stripping FASB of some of its powers. FASB relies on industry and accounting firms for a third of its budget. (Recent efforts have been made to switch its funding source to the Treasury Department.) Because of the rapidly escalating complexity of business transactions and the need to multiply accounting rules at a faster rate, FASB has lost much of its effectiveness in terms of rapid turnaround. It took ten years to develop basic rules on derivatives, and effective procedures (in comparison with IAS) regarding special purpose entities were not developed, resulting in much of the Enron carnage.

[xii] Business growth clearly benefited from deregulation throughout the 1980's, which, in tandem with globalization, made business activity much more fluid and efficient on the global stage. Regrettably, not all instances of deregulation were well thought through. The abolition of Regulation Q and investment restrictions on financial institutions combined with the development of new financial instuments to produce a crisis in the Savings and Loan industry in the U.S., leading to a bailout that cost U.S. taxpayers over $2 billion in federal deposit insurance claims. Deregulation in the 1990's, through the Telecommunications Act of 1995 and the abolition of the Glass-Steagall Act in 1999, have also yielded negative consequences.

[xiii] "Canadian Corporations and Social Responsibility: Canadian Development Report – 1998." Edited by Michelle Hibler and Rowena Beamish. (Toronto: North-South Institute, 1998), 43.

[xiv] Inherently long term interests of shareholders, the protection of which was a distinguishing feature of both GAAP and shareholder theory, became increasingly hostage to short term interests of executives. The particulars of executive pay packages, including options, bonuses, and golden parachutes, were geared to short term stock price results rather than to more meaningful standards of industry comparison. Executives thus benefited directly from the rapidly increasing inflows of flight capital (the consequence of floating rates) that poured in from the rest of the

world. The results were indeed impressive. Executive pay relative to average worker rates increased from 15 to 1 in the early 1970's to 430 to 1 by the end of the 1990's.

[xv] The first signs of SEC understaffing were noticeable by 1975, when the Commission initiated a voluntary disclosure program to account for irregular payments by American corporations to foreign government officials in the wake of the Watergate crisis. This program revealed that such payments were widespread; however, the SEC did not have the staff to investigate all the individual cases. (The program resulted in the disclosure of over $300 million in suspect payments by 400 corporations.) Just prior to recent legislative initiatives, the SEC employed only 35 investigators to cover the entirety of potential irregularities of American business. (This has since been raised to just under 150.)

[xvi] One Morgan Stanley analyst claims that the entire complex of rules on lease accounting could be replaced by a single requirement: "All non-cancellable obligations must be capitalized." From "Called to Account." *The Economist.* April 11, 2002.

[xvii] This mirrors the repeal of "reason to know" legal provisions made for the original version of the Foreign Corrupt Practices Act. Under these provisions, corporate executives were held legally responsible for the actions of corporate agents or employees and could not hide behind claims of relying on "expert advice" that obfuscated ultimate legal or ethical consequences. The burden of proof rested with the executive to demonstrate the exceptional circumstances that precluded reasonable expectation of such knowledge. "Reason to know" was based on the principle that managers are fully accountable for knowing the circumstances and potential outcomes of all activities under their domain of responsibility – a principle that executives seldom fail to enforce on their own subordinate managers. The "reason to know" provisions of the FCPA were repealed by the Reagan administration in 1988.

[xviii] This has been especially true under the Foreign Corrupt Practices Act. Most successful prosecutions over the past quarter century of the law's existence have been undertaken against small to medium-sized firms. Most large corporations avail themselves of the costly services of accounting and legal firms that specialize in FCPA work.

[xix] The Enron case has undermined the significance of this distinction, since Enron attempted to pay substantial sums to influence FASB, as well as FERC and the Chicago Commodities Trading Board. (Whether or not Enron attempted to influence the two wholesale electricity-trading boards in California has yet to be established.)

[xx] In this analysis there is no room to consider the issues currently being debated in corporate governance theory with respect to the facility of shareholders to communicate effectively and express unified interests, a facility that can be effectively undermined by existing management powers.

[xxi] An excellent account of free market initiatives in third world debt financing is found in Carsten Thomas Ebenroth, "Innovations in LDC Debt Conversions." (32-63) *International Finance in the 1990's: Challenges and Opportunities*. J.J. Norton and R.M. Auerback, eds. (London: Basil Blackwell Limited, 1993). The BCCI/Argentina debacle is covered in the Congressional Subcommittee Report on BCCI.

[xxii] Supporting Document to IAS no. 30: "Deposit-Taking, Lending and Securities Activities." http://www.iasc.org.uk/cmt/0001.asp?s=1129630&sc={3C4E6537-983D-45D9-8AAA-BC2F53ED7OFF}&n=1019.

[xxiii] BIS Basel Committee on Banking Supervision, "Report to G7 Finance Ministers and Central Bank Governors on International Accounting Standards." http://www.bis.org/publ/bcbs70.htm.

[xxiv] In the case of Long Term Capital Management, the hedge fund hardballed its bargaining with banks to such a degree that many banks were caught with non-offsetting positions that greatly increased their risks.

Environmental Values as a Basis for Sustainable Regional Economic Activity – Biodiversity Hotspots in South East Asia

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Abstract

The protection of global biodiversity hotspots is an environmental and economic imperative. The justifications initially are to protect important ecosystems and to preserve their critical function in replenishing the wildlife stocks and natural resource values of surrounding regions. Biodiversity, particularly marine and coastal biodiversity, supports large human populations in the coastal communities throughout South East Asia. However, this vital natural resource base is diminishing in response to increasing human pressure, which now exerts directly on the remaining biodiversity hotspots themselves. Protection of these vital natural resources must address the principal reasons for their decline. These are ultimately economic reasons. Protection and management must involve sustainable economic solutions. This means integrating management and protection mechanisms into the functions of local and regional economies. This is required to alleviate destructive exploitation through establishment of sustainable alternative livelihoods, enriching the regional natural resource base for human use, and thereby strengthening local economies.

Planning paradigms and key policy for protection of natural resource values

The effective protection of natural resource values must be based on the full appreciation and internalization at the national and local levels of a development planning paradigm that addresses three key policy concerns. First, addressing the economic welfare of stakeholder communities and alleviating human use pressures must go hand in hand with environmental protection. Second, ‘protected areas’ must be conceived as economic entities and ultimately integrated into the wider regional and national economy. Third, sustainable management must involve self-financing strategies that often utilizes outside resources (external to the communities involved) – expertise and research/training grant funds – to bring into focus the issues involved and generate meso-level (regional, local, or sectoral) and micro-level (individual) appreciation, support and eventually, resource commitments. This approach ensures that the local population can attain an acceptable present and future level of welfare that is compatible with ecological circumstances at the supra-local level.

Economic development options for the future

Economic welfare may be viewed as being made up of two components: 1) the use of man-made products and services, and 2) the use of environmental amenities. Substitution possibilities within each component and between these two welfare components are possible provided the net overall change in economic welfare is still positive.

Conservation strategies focusing on the first component of economic welfare are usually centered on interventions that seek to ensure the sustainable generation of consumption use values from natural resources such as marine, forest, and agricultural land. Local communities generally benefit in terms of a sustainable increased flow of income from the harvest, sale and use of the natural resource products.

Conservation strategies based on the second component of economic welfare usually involves some form of nature-based tourism to generate park revenues, local employment, and provide financial and market support to sustainable alternative livelihood programs. Support activities like research and development and training programs change attitudes and teach new ‘environmentally sound’ practices.

Both sets of strategies aim for self-reliance, improved education, better techniques and economic multipliers to build confidence and the hope of a better future. With better income flows, benefits to good environmental management start to make economic sense. And as opportunities for investment and business develop, the local economy grows, and the vicious cycle of poverty-misuse of environmental assets-more poverty gets broken, and eventually a modest consumer society emerges.

The cases presented in this paper bring stories of hope and workable ways towards sustainable regional economic activity in more remote regions of South East Asia – and also a strategy for linking local economies into the developed nation economies, in mutually beneficial ways. This paper expands on these issues, and explores the critical implementation issues.

Three comparisons – Subic Bay, Tabuc Island and the Komodo Archipelago

Three sites are used to highlight the issues involved. The first is the proposed national government-controlled, Japan Bank for International Cooperation (JBIC)-supported Subic Bay Protected Area at Subic Freeport Zone in Zambales Province, Luzon Island, Philippines in the process of being implemented. The second is the completely community-initiated, -supported, and -patronized Tabuk Island Marine Park and Fish Sanctuary at the municipality of Palompon, in Leyte Province, Philippines that has been successfully implemented since 1996. The third is the Komodo National Park (also World Heritage Site and Human Biosphere Reserve) in Nusa Tenggara, Indonesia.

Both Subic and Komodo involve terrestrial and marine environmental values and are sites of regional and international biodiversity and conservation significance. Both rely heavily on central government initiatives and foreign support.

Tabuk Island involves marine environmental values that were locally-appreciated and locally-supported, and combine the harvest of marine products as well as the use of the environmental amenities as incentives to “ecological amelioration”.

All three sites have human use pressures bearing down strongly on those values. They also have differences that are useful for the purposes of comparison. Both Subic and Komodo await massive central government and foreign support for full implementation while Palompon is a shining example of something that has been successfully done on a completely community-level.

Subic Bay, Philippines

Until 1992, Subic Bay, 80 miles west of Manila, was home to the largest overseas US Navy installation. When the lease was terminated, the naval base and surrounding restricted zone were designated the Subic Bay Freeport Zone (SBFZ), now administered by the Philippine Government. The site contained extensive infrastructure including an airport, port facilities, housing, office buildings and power plant. In addition, the zone encompassed undeveloped beaches, mangroves, coral reefs, and some 9,717 hectares (24,000 acres) of tropical rain forest that had been protected from development for jungle survival training and military security needs.

Realizing the economic value of the SBFZ including the surviving natural areas, the Subic Bay Metropolitan Authority (SBMA) was established and given the task of planning for both the economic development of the SBFZ and protection of its natural resources.

The complex myriad of spatial-economic forces such as the high density of population and economic activities surrounding the SBFZ, the nodal position of SBFZ in interwoven geographical and functional-economic (inter)national networks and the ambition of SBMA to act as a growth engine in the highly competitive process of open trade regions have generated environmental protection challenges that include:

- Ancestral land claims of the indigenous inhabitants of the forest, the Aeta people on much of the forest area.
- Communities surrounding the bay exerted intense fishing pressures on marine resources, and extracted bamboo and other materials from the forest.
- Marine and waterway pollution generated by the bustling city of Olongapo and the municipality of Subic.
- Growing demand for strategically located and well-serviced industrial land in Central Luzon.
- High-end demand for vacation housing and recreational facilities on sites with good environmental amenities.

The approach taken in the recent preparation (1999 to 2002) of a Protected Area Management Plan was based on the principle that decisions should be based on the real and perceived values of the ecological resources of the region, as well as the actual socio-economic functions and realities of the region. The study process consisted of:

- Identifying ecological and human values of the natural resources;
- Identifying concerns and issues of the various stakeholders; and
- Developing a plan that protected their values and addressed their concerns.

Protection of a healthy sustainable ecosystem was cited as the ultimate value because all other values depend on it, particularly sustainable economic values. In addition to biological values, the study also identified human-use values of the ecosystems, such as bamboo for building, various plant and animals as food, and plant materials for medicinal purposes. A key consideration was the dependence of the indigenous Aeta on the forest and mangroves for medicines, food and building materials.

Stakeholder identification was critical and included the SBMA, the indigenous Aeta community representatives, local business and developers, the Philippine Department of Environment and Natural Resources, non-government organizations (NGOs) such as the World Wildlife Fund, and the general public. Direct consultations were held with many of the stakeholders, and especially with the indigenous Aeta. The consultation process established that, while there were many commonly held values to be protected, there were also many conflicting values requiring resolution. With the understanding that it was not possible to preserve all values in a single location, the planning challenge was to establish a range of management and use zones within the protected area. Developers, locators and strategic planning groups were encouraged to create a joint approach to protect the ecosystem and support compatible types of development.

Sustainable use environmental resources is possible for a variety of appropriate activities such as scuba diving, forest trekking, bird watching, and various income-producing activities based on ecologically sustainable practices. These can form the basis of thriving tourism industry sector. Some of the resources have multiple values. For example, the giant fruit bats that roost in large colonies in the forest are ecologically essential for seed dispersal. They are also an important food item for the Aeta and hunters in neighboring communities, and the roost is a major tourist attraction. The Aeta are a potential visitor attraction by themselves, as well as potential key players in a growing ecotourism industry.

With major infrastructure around Subic Bay there is easy access for visitors, and good facilities providing accommodation and services near to the environmental attractions. Hence, opportunity for ecologically compatible economic development based on ecotourism exists.

Achievement of these objectives requires a plan to integrate all the competing interests and factors involved. In the Subic situation this was the Subic Bay Protected Area Management Plan. For example, areas protected from fishing in Subic Bay serve as nursery areas that can allow the wider habitats to re-stock through natural population recruitment. With the recovery and protection of other varied natural resource, a basis for employment of the wider population, both through direct participation in eco-tourism ventures and park management, and in many direct spin-off activities, will be provided.

Tabuk Island Marine Park and Fish Sanctuary

The municipality of Palompon is a fifth-class municipality of the island province of Leyte in Eastern Visayas, Philippines. The town serves as the center of trade and commerce in northwest Leyte. It has a land area of 10,400 hectares (has.) with a population of 50,000. Twenty (including the poblacion) of its 50 barangays are coastal, and about 95% of the total labor force is engaged in agriculture and fishing.

Palompon has “one of the most impressive environmental sanctuaries in the whole country”. Its three mangrove islands – Tabuk, Gumalac and Cablan (collectively known as the “Tres Marias”) - hosted a variety of common and exotic marine and bird species, and protected the coastal areas of the town from strong winds especially during typhoons. However, the indiscriminate cutting of mangroves, unregulated catching of fish during the spawning seasons, illegal and destructive fishing techniques practiced by both local and out-of-town fishers, and uncontrolled extraction of corals and other valuable marine resources resulted in a serious depletion of marine life. Fishers suffered from an alarming decrease in their catch (even with increased fishing efforts) and their family income. Consumers faced the problem of high prices of fish and marine products. Coastal residents worried about their growing vulnerability to tidal waves generated during the typhoon season.

Realizing that the difficulties experienced by most of the town population were traceable to environmental destruction, local government unit (LGU) officials, concerned citizens, and local non-government organizations like the Palompon Multipurpose Cooperative with a membership of 4,000, the Jaycees, the various school organizations in the town, and even the Air Rifles Association of Palompon organized themselves into a Human and Ecological Security Commission (HESC) in 1996 and formulated the Ecological Amelioration for Sustainable Development Program aimed at protecting and rehabilitating the marine environment especially the fishing grounds to improve fish catch and provide alternative livelihood activities.

The HESC succeeded through a series of community dialogues especially with the fishermen to pass 7 environmental ordinances within its first year of existence:

- Declaration of Tabuk Island as a Marine Park and Fish Sanctuary with a bird viewing and sunset station. For the entire first year of the program, there was a total ban on fishing within a kilometer radius around the island.
- Total ban on the catching a valuable fish species – “danggit” – during the spawning season from February to April each year.
- Total ban on the extraction of coral stones from the town’s coastal barangays.
- Banning of destructive fishing methods.
- Creation of a 24-hour patrol against violators of environmental laws and ordinances.
- Procurement of support equipment like patrol boats, radio sets, search lights and megaphones.
- Provision for the construction and maintenance of support infrastructures like patrol stations near Tabuk Island and the Bird and Sunset Viewing Tower.

The initiatives were completely local with the HESC relying on the combined “wisdom”, “experience”, and “creativity” of the local residents, especially the fishermen’s association and the technically-capable residents, the local politicians, and the local police force in designing.

All of the material and human resources required in designing, implementing, and monitoring of the town’s environmental program were internally generated. The program’s annual financial budget of Php 740,000 is shared by the municipal government and the barangay councils. The town residents contributed by way of free expertise and labor in mangrove replanting (over 60,000 mangrove seedlings have been replanted since 1996), installation of artificial reefs, and volunteer patrol services.

At first, the proposals for environmental rehabilitation and protection were met with skepticism and even resistance from fishermen. But through intensive community dialogues hosted by the HESC, the program was given the “benefit of the doubt” by the residents during its first year of operation. And after a year of operation, when initial positive results in terms of catch were experienced, the entire town including all of the local fishermen became ardent supporters of the program. Fishermen served as part of the 24-hour volunteer patrol force and reverted to hook and line, fish nets with bigger eye, fish pens, bamboo fish traps and other non-destructive fishing methods.

Palompon’s port that is naturally protected from big waves by the natural breakwater islands is being rehabilitated and enlarged to accommodate both inter-island and international vessels.

The HESC is now looking at ways by which the increased boat traffic can be accommodated with not much discernable negative effects on the sanctuary.

Komodo National Park and World Heritage Site

Komodo National Park (KNP) lies between the Indonesian islands of Sumbawa and Flores and is about 500 kilometers east of Denpasar, Bali. The park exhibits both marine and terrestrial environmental values of great importance. This wider area also features cultural interest and diversity. KNP has a total area of approximately 173,000 hectares (510 square miles) of land and sea, encompassing an archipelago of islands, the two biggest of which are Komodo and Rinca.

The flora and fauna within the park, especially the fish resources, have always been vital natural resources for the local communities. The precipitous islands within the park offer diverse terrain, landscapes, and rich flora and fauna that are of great interest to scientists and tourists alike. The Komodo Dragon (*Varanus komodoensis*), a monitor lizard endemic to this area, is unique and famous throughout the world.

The marine environment features enormous variety, from shallow waters and extremely varied coral reef to oceanic depths with strong currents. It is one of the world's richest marine ecosystems. There are exceptionally diverse marine habitats, including coral reefs, mangroves, sea grass beds, seamounts, and semi-enclosed bays. Marine environment and coral habitats in KNP have the specific strategic importance of being particularly resilient to the effects of coral bleaching caused by global warming and the El Nino current oscillations in particular, due to the up-welling effect of cooling water from deep ocean depths of the Java Sea. Hence in view of the extremely high loss of global coral reef systems, Komodo will act as a critical genetic/species storehouse with which to replenish and re-colonize devastated coral habitats elsewhere in the region.

There were approximately 3,267 inhabitants living within the Park in 1999, spread out over four settlements (Komodo, Papagaran, Rinca and Kerora). An estimated 16,816 people were living in fishing villages directly surrounding the Park in 1998. In-migration to Komodo has included people from nearby Sape and Manggarai, as well as further afield from Madura and Sulawesi. Park inhabitants mainly derive their income from a pelagic lift net ('*bagan*') fishery that targets squid and small schooling fish.

In the wider Kecamatan Komodo (containing KNP) there is a 33,001 total population (1997), and in Kecamatan Sape a population of 77,857 (2000). Growth rates in the 1990s have been 13.5% and 9.1% respectively. Within this wider area Labuan Bajo, 'gateway' to the KNP, has the fastest growing population of nearby settlements. The education levels of the population within the KNP are generally grade four of elementary school. Less than 10% of those who graduate from this level go to Labuan Bajo to attend high school.

This is a poor region of Indonesia. Most villages have a local medical facility, but quality of medical care is low, and poor health is a problem. Fresh water is scarce, and as natural supplies dwindle in the dry season water quality deteriorates rapidly, and malaria and diarrhea become rampant. During the dry season water is imported in jerry cans from Labuan Bajo, costing families Rp 100,000 per month (2000), a significant amount for subsistence fishing families.

The economy within KNP is reliant on fishing (97% of income). Minor cultivation occurs and some woodland products are collected. Further agriculture is not an option due to poor soils, steep terrain and limited water. Although agriculture does supplement fishing on Sape and Sumbawa Island, alternative economic opportunities are limited by low education. For local fishing communities, the following characteristics prevail:

- Daily and seasonal incomes are variable;
- The catch is perishable and must be marketed quickly;
- Large working capital is needed and risks are high;
- Small share of profits for fishers; and
- Traditional processing of marine products is of low quality.

The community within the park is considered to be over the population carrying capacity of the KNP. Hence, incentives (financial, social) are needed to attract people living in the villages to move to the adjacent larger islands. Education is the key to change, but there are currently few incentives for education past elementary school, as the existing major economic opportunity (fishing) does not require extensive education. It is difficult for fishermen and their families to improve their quality of life or increase the opportunities available to their children.

As in all natural resource rich coastal and marine locations in South East Asia, former traditional harvesting of resources at sustainable levels are being rapidly altered towards unsustainable resource depletion and destruction of habitat, both terrestrial and marine due to the following factors:

- Direct population increase and human use pressure on the environment;
- In-migration of people with alien value systems, and lack of local traditional knowledge systems that formerly contributed to appropriate natural resource use and practice;
- Introduction of destructive hunting, fishing and resource use techniques; and
- Exploitative fiscal practices.

Combining environmental and economic objectives – socio-economic threats to natural resource protection

The macro-regional and community-level development assessment of the Subic Bay Freeport Zone, the municipality of Palompon, and the Komodo area indicates that the threats to the environment often result from the following kinds of underlying problem, all of which tend to be accentuated by rapidly increasing human population densities:

- *Planning failure*, in which resource utilization plans are made to use living systems within the Subic Bay area, the municipality of Palompon, and the Komodo area in ways that they cannot sustain because of their inherent fragility;
- *Market failure*, in which the people who benefit from damaging living systems – the communities and businesses who derive use values from the living systems - do not also bear the full cost of that damage;
- *Excessive wealth and power among a significant number of privileged individuals*, making them so remote from the rest of the community that they become reckless of damage to living systems which sustain the community;
- *Excessive poverty among many individuals*, making them unable to avoid abusing living systems within the protected areas in order to live while depriving them of the means to use such systems better; and
- *Open access exploitation*, in which social rules governing access to resources in the local region have broken down, allowing them to be exploited competitively by different groups and individuals.

Pressures to use natural resources in an unsustainable way often reflect economic or social forces outside the area. This means that conservation intervention should not be limited, for example, by the enforcement of legal protection for habitats and biodiversity. Instead, projects need to go beyond the borders of protected areas, to improve underlying circumstances elsewhere that may otherwise generate problems.

A rational approach to basic development and resource management

Natural ecosystem, such as those at Subic, Palompon and in the Komodo, can provide a wide range of economic products, and diverse exploitation and utilization systems may achieve multiple yields from the same environment. The most durable resource management system for a complex conservation project should be characterized by:

- Minimization of open-access to use of resources, through tenure and usufruct arrangements providing long-term and exclusive access by individuals or communities. Properly-set rental rates combined with limitations on the use of traditional use zones – i.e., ban on fishing during the spawning season, ban on the extraction of coral stones, ban on the use of destructive fishing techniques, etc. - will not only promote sustainable yields but will also generate revenues that can be funneled back for protected area management.
- Community ownership and trust is critical to long-term program sustainability. In the case of Palompon, even residents not dependent on fishing had a large stake in the overall success of the program because the restoration of the mangrove belt would protect their homes against turbulent weather conditions.

- Community-based and –supported monitoring and enforcement is critical to long-tern success. Even the so-called "sacred cows" can be swiftly apprehended for violations by a vigilant community. External intervention should limited to technical advice and periodic assessments.

The resource management approach utilizes the social and economic benefits from sustainable use of the protected areas as powerful incentives for the community to protect the core natural resource values, by ensuring that:

- The people most likely to have direct impact on the natural resources will receive what they perceive as a 'fair share of the benefits' from the use; and
- There is a clear connection between the benefits obtained from using the environmental resources and conserving them.

In the short and medium term command and control policing is required, offset perhaps by the provision of support services to the promotion of an improved agro-fishery systems perspective in order to achieve sustainable and participatory management of the natural resource base.

Guiding principles for investment in and around Protected Areas

Investments in core protected areas, their buffers and surrounding environments should be guided by the following principles:

- Respecting and promoting culture, traditions, and the way of life of local communities that are compatible with conservation of natural resources and protected areas;
- Promoting the development of community-level education programs especially those that deal on the uniqueness of the resources in and around the protected area;
- Fostering cooperation, especially commercial joint venture activities, between the communities of the protected area/buffer zone and surrounding region to develop sustainable use projects that demonstrate the value of forest and marine resources; and
- Assist in the development of markets, and promoting access to those markets on favorable terms, for the products of sustainable management of the forest and marine resources.

Main focus for proposed development projects

In general, core protected areas and their buffers present four major categories of development project for implementation:

- Conservation activities – to protect flora and fauna, through protection by prohibiting and preventing illegal and destructive practices, such as clearing and logging, fishing and agricultural encroachment, settlement and promoting only sustainable natural resource uses of the terrestrial and marine environments;
- Agri-fishery and agro-forestry – to develop alternative sources of income in the adjoining areas to relieve the need to exploit the resources of the protected area and buffers zones for profit and survival;
- Ecotourism and nature based tourism – to develop revenues based on sustainable visitor levels to the core protected area itself, and tourism multipliers in the wider region through the provision of ancillary tourism servicing sector business enterprises; and
- Community development programs – to ensure that local people are involved in all aspects of the project, and to provide an effective interface between the local population and the implementing entities.

The existence of a cohesive investment promotion package for a protected area will help assure that conservation programs area undertaken alongside economic projects from which revenues can be derived by the investors and communities.

Project development considerations

The design of various development project components is anchored on the following socio-economic-political development considerations.

- Balancing incentives and disincentives since providing alternative income sources will not stop people from over-harvesting resources unless linked to other measures such as enforcement and education.
- Negotiated formal and monitored agreements, preferably recognizing traditional and communal ownership and usage rights, whereby project benefits area exchanged for co-operation with conservation aims.
- Maximizing local participation by helping local communities express their own development options and priorities in a form to which the project can respond largely through their participation.
- Employing and training local people wherever possible, either directly or through local NGOs, who can be involved in long-term community development programs.
- Localizing management authority to a group in which all local interests are represented, consistent with the need for national oversight, coordination with other agencies, and conflict resolution.
- Ensuring sustainable financing through local cost recovery, endowments, or other means to reduce dependency on subsidies from outside the project area.
- Managing whole ecological units rather than trying to manage the protected area in isolation from its geographical, social, economic and political context.
- Helping build a local capacity and encourage local participation and flexibility by starting with, and then building upon, small pilot activities.

Potential for local and regional economic activity

In the work undertaken to protect the natural values of Subic Bay, Palompon and Komodo, those involved have realized that the only way to long term success is to establish protected area management entities that are financed as far as possible by revenues derived from the natural assets in some way or other. The principles of this are to increase yields following a mutually-agreed-upon harvest limitation schedule, attract fee paying visitors (i.e. gate fees), to establish visitor services and attractions that generate revenue, and by establishing alternative and sustainable livelihoods for local communities outside the core conservation zones, and hence prevent further loss of the natural resource values due to destructive livelihood practices in the conservation zones.

The Subic example

The principle is to take a business approach to the management of protected area. This is a means to an end, that of better, more sustainable protection. The managers should view their job as running a business in order to preserve the basic environmental values, which is in effect the basic business asset and working capital.

The Subic Bay Freeport Zone attracts a large number of visitors at present, who come to enjoy natural attractions, sports/recreational facilities, shopping, and the commercial hotels/resorts. Nearly one-fifth of foreign visitors visit the region because of natural attractions (12.2%), sports/recreation/adventure (4.9%), and shopping opportunities (2.4 %). More than one-fourth of local visitors to the region did so for the same reasons.[i] Visitor arrivals in Subic in the period 1995 to 2000 grew about 30% per annum. While foreign visitors constitute less than 3% (2.9%) of total visitor arrivals in the Philippines, it has a good growth potential.

Preliminary calculations indicate that the most likely value of the annual consumer surplus for nature-based tourism in the Subic Bay area of US$19.0 (probability of 92.4%). This represents less than 1% of the 1997 estimated US$2.80 billion tourist receipts of the country. The simulated figure gives a crude indication of the potential economic value of nature based tourism in Subic Bay if it can be developed to a level that is on a par with that of other comparable sites in the world. While very limited, the economic value of nature-based tourism can be considered critical for conservation efforts in developing country settings, since they could if properly and responsibly tapped, yield substantial financial resources for both local and national efforts.

The Tabuk Island example

The program harvests include the following:

- Increased fish population: During guided night tours, fish were observed to be leaping out in large numbers. Fish diversity increased from just a single species in 1995 to 10 species within a 500 sq. m. study area.
- Increased income: Fishermen whose average catch before the program was between 3 to 4 kgs. in 10 hours of fishing claimed that their catch increased from 4 to 7 kgs. in 6 to 8 hours of fishing. Seven livelihood organizations including those providing services to island visitors have been organized and financially assisted by the HESC. The tapping of the eco-tourism and nature education potential of the sanctuary in terms of a wider (nationwide and even a limited foreign visitor market) market is being studied by the HESC.
- Increased LGU revenue. Annual rental of specifically designated fishing areas amount to nearly Php 65,000 per year.
- In-migration of rare birds. Thousands of birds including migratory ones belonging to 20 rare species have been observed to feast daily on fish and other marine products in the vicinity of Tabuk Island.
- Strong Citizen-LGU partnership. The concrete results have reinforced the town's commitment to continue improving the program including the expansion of the spatial coverage of the marine sanctuary to include the two other islands and lengthening the duration of the ban on fishing during the spawning season of certain fish species.
- Prevention of illegal fishing. Destructive fishing techniques have been reduced to minimal levels if not out rightly stopped.
- Program replication in areas with similar conditions. Neighboring municipalities have been reported to initiating moves to replicate the Palompon program. This development has the potential to serve as the start of an island- and even a region-wide marine environment protection program.

The Komodo example

The Komodo situation differs to Subic in that the regional setting is not well developed with very limited infrastructure, for tourists particular, and the regional population less in numbers and significantly poorer. In the Komodo situation a third party, The Nature Conservancy (TNC), the Indonesian operations of a leading US NGO, is participating with the Komodo National Parks authority in devising and implementing a Komodo Collaborative Management Initiative (KCMI) to achieve sustainable long term management and protection.

The strategy recognises that it is as important to 'manage' the key factors in the region surrounding the KNP, as it is to manage the park itself. The 'greater Komodo area' is an integral ecosystem for one thing. Economically these are areas of important fishery and tourism resources also. Thus, the strategy focuses on both conservation largely focused on the park and development activities focused on the external region. There are five conservation and development components to the strategy:

- Collaborative management approach that will use a combination of mechanisms, agreements, and institutions to foster partnerships between all stakeholders including a Joint Venture between commercial tourism operators and TNC to promote and manage the growth of fee-paying tourism to the KNP as a basis for achieving sustainable park management funding.
- Conservation management that entails capacity strengthening to ensure effective conservation management of the parks biodiversity – the natural resource base in the wider region upon which the regional population depends (e.g. fishing).

- Tourism management and sustainable financing strategy aimed at promoting the park, encouraging greater visitation, and managing revenues from a flexible park entrance fee system.
- Livelihood program with the elements of research and development into use of marine resources (e.g. pelagic fisheries, mariculture, etc), small grant funds to address urgent welfare needs during the early phases when existing destructive practices are phased out, and support for sustainable enterprises by the local community through the provision of a Sustainable Enterprise Fund, administered by a committee of local leaders.
- Monitoring and evaluation plan to ensure the objectives of the overall KCMI are effective in all respects.

Management and financing of the conservation and development components is separate but interdependent. The conservation component would be financed by the gate fees and related revenues derived within the park. The development component would rely on service industry taxes levied on tourists outside the national park. This would allow the park authority and the local government to concentrate on park management and regional economic development matters, respectively, and have a designated revenue stream for the purpose. The overall strategy also includes foreign assistance (loans and grants) for first five to seven year establishment period, which has not been discussed in this paper. The identified key economic/fiscal options include:

- Implementation of a hotel and services tax in the local 'Komodo Gateway' service support area to be completely retained by the local government to provide funds for local environmental and infrastructure improvements outside the park.
- Limitation of use to traditionally open access fishing grounds through usufruct arrangements and the setting of rental fees.
- Contingency planning for fuel price deregulation as current, fuel subsidies make activities more economic than they otherwise would be.
- Allow for cost recovery mechanisms to be implemented as critical services (sanitation, waste disposal, water supply, energy, etc) are progressively upgraded.
- Cost sharing for environmental protection at various levels – population, the local government, the central government, and the foreign institutions.

Conclusion

Environmental resource conservation calls for the stakeholders to self-organise and capture a greater share of available natural resource values on a sustainable basis. Rather than the majority of the surrounding community continuing to deplete the concentrated areas of highest natural resource value, there is a vital need for a collective realization of a better and sustainable alternative. This involves necessary short term restraint in exploiting easily accessible natural resources in an unsustainable way, and instead using that biological diversity to replenish surrounding habitats and provide alternative sustainable harvesting grounds. If this occurs hand in hand with an increase in sustained tourism based on the successful management and conservation of those same core environmental values, together with development of successful and diverse alternative livelihood projects, a beginning towards sustainable economic activity can be achieved.

There is then the real prospect for many different business enterprises to flourish, taking advantage of, first, the increased outputs from primary production (fish, seaweed, forest products, plantation agriculture products, etc), and second, the tourism and general service supply industry sectors.

A key ingredient for success is resource mobilization. During the initial phase, it is critical that local resource commitment especially in the form of expertise and labor commitments by concerned people and local government funds be secured to assure community ownership and trust.

The initial local resources invested can be leveraged to attract investment funds from both domestic and foreign sources. The ideal would be for the banking and investment community to understand that biodiversity hotspots in Southeast Asia are not only vital environments to be conserved for the good of the ecosystem, but can also serve as good investment areas and growth contributors to surrounding regional economies. Indeed, in a location such as Komodo, it is probably the best opportunity for the local economy to grow in the short to mid term.

In the Subic example, the protected area could greatly add to the performance of the local economy and the prosperity of the region, which is a designated economic development zone. In the case of Palompon, it has resulted in increased income using lesser fishing efforts, increased local government revenues from fishing area rentals, and the more than 20 rare species attracted to the sanctuary has served as the nucleus of nature-based tourism in the area, but awaits the development of a wider market. Its example is being emulated by surrounding municipalities, which hopefully, could encourage an island-wide program. In all cases, the primary conservation objective becomes integrated with economic objectives, which is exactly as it should be. The two are not and never should be antagonistic.

For the big players, the real need is to understand that micro-business activity can salvage such regions from the economic wastelands of the planet, and encourage their growth and integration into the national and then global economic mainstream. Assisting these regions will mean the salvation of their internationally significant environmental values as well as their communities, and the expanded regional economies will ultimately be good for sustainable global business.

References

[1] Cynthia A. Tan. "Ecological Amelioration for Sustainable Development," published in Encouraging Innovations and Excellence in Local Governance: Modeling for Local Governments. Local Government Academy (LGA) of the Department of Interior and Local Government (DILG), pp. 1-20. 1998. This was the basis for the Tabuk Island case plus my direct observations when I visited the place last Aug 3, 2002.

[2] LGA-DILG. Kaban Galing: The Philippine Case Bank on Innovation and Exemplary Practices in Local Government, Vol II - Managing the Environment, LGA-DILG with support from the Ford Foundation, the UNDP and UNICEF.

[3] MADECOR and UP PLANADES, Liguasan Marsh Development Master Plan, prepared for NEDA REgion XII with funding from the Office of the President of the Philippines, 1998.

[4] UP-AIT, Study On Regional Travel In The Philippines: Region III, 1997, June 1998.

[5] M. Wells, The Economic And Social Contribution Of Protected Areas In The New South Africa, Land And Agriculture Policy Centre, Johannesburg, 1996.

[6] M. Norton-Griffith and C. Southey, The Opportunity Costs Of Biodiversity Conservation In Kenya, Ecological Economics 12, 1995.

[7] F. Filion et al., The Economics Of Global Ecotourism, in Protected Area Economics And Policy: Linking Conservation And Sustainable Development, J. Munasinghe and J. McNeely (Eds), World Bank, 1994.

[i] Based on the results of a 1997 survey conducted by the University of the Philippines Asian Institute of Tourism. The AIT findings are well within the 10- 90% range for South Africa, the 29% attribution of Kenya, and Canada’s 25%.

Industrial Growth versus Pollution: A Dialog for the Future

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Abstract

Although pollution is considered to be the product of industrialization, the history of heavy metal contamination goes back to the discovery of fire. One of the most deadly of these metal contaminants is lead. Each year throughout the world there is a loss of millions of children who die before the age of five from a variety of causes including lead poisoning. It is agreed that adults can survive higher levels of lead than growing children, pregnant mothers, and developing fetuses. There is general agreement, however, that once the level of lead is elevated in and individual's blood from such exposure, the individual is at risk for damaging effects to the nervous, cardiovascular, and kidney systems. In the United States efforts are in place to control exposure to this metal contaminant. Knowledge gained by the toxicologist in the United States must now be brought to countries through out the globe striving to benefit economically from industrialization. Although most debates on the risks versus benefits of industrialization and pollution, such as the lead pollution problems, concentrate on already highly industrialized countries, one must not ignore that fact that rapid economic growth and increased global markets will also bring these environmental pollution issues to other venues throughout the world. Responsibility and balance will come with an educated public. As global economy grows so to will the problems of pollution, and environmental and occupational health. These become great dilemmas for countries once kept pristine and safe from these opposing challenges. This paper will take a position to show that this loss of children and illness of adults are the ethical and moral responsibility of those involved in developing industry in a growing global economy. A dialog must be encouraged between the scientist and the global entrepreneur. Joint efforts and communication should be developed to allow exchanges of ideas between academics in both areas.

Each year throughout the world there is a loss of more than 12 million children who die before the age of five. This includes a considerable number who die from the effects of sustained environmental poisoning (Waldman, *et al.*, 1997). This number ranges from lows of 8 per 1000 in the Netherlands and 10 per 1000 in the USA to 31 per 1000 in Thailand. Numbers advance to such as 78 and 75 per 1000 in Namibia and Indonesia respectively. Surely access to primary care physicians alone is not the only factor in these unfortunate numbers. Silbergeld (1991) reports that the effects of lead on fetal growth, intrauterine development, and postnatal care remain a serious concern to those interested in environmental and occupational medicine. This paper will take a position to show that this loss of children, and illness in adults, is an ethical and moral responsibility for those involved in developing industry in a growing global economy. The scientific data must be presented in an understandable and simple way to those involved in the growth and development of chemical and pharmaceutical, manufacturing, mining, and development of artistic/decorative ethnic crafts. The safety of the worker and his ultimate health should walk hand in hand with effort to bring industrialization and monetary gain to the rising global community.

Lead has been in our water, our atmosphere and our soil since ancient times. In fact, Nriagu (1996) explains that lead would have appeared as a pollutant in the caves of prehistoric man after the discovery of fire. Lead pollution, and lead poisoning, can be used as an example of the many types of heavy metal pollution which must be understood more clearly by the manufacturing, financial and management communities to honestly present their workers with a chance for not only monetary gain but also a chance for a healthy long life. The work of Hamilton (1943) traces the pollution problems that have haunted civilization at every step in attempts toward greater global industrialization. One can go back to the works of Hippocrates, the father of medicine, to find concerns for the health of individuals exposed to lead. The decline of the civilization of the ancient Romans is believed to have been accelerated by some neurological damage caused by lead leached out into the water via lead pipes. The historian Pliny advised miners to protect themselves from lead dust by stretching membranes of animals over their mouth and nose.

In the United States efforts have been initiated to control exposure from this metal contaminant through the 1978 adoption of a comprehensive health standard by the Occupational Safety and Health Administration (OSHA). It was believed that adults could handle higher levels of lead than growing children, pregnant mothers, and developing fetuses. This has certainly proven true, however research over the past decades has proven that lead level standard must also be lowered for adults in the workplace. Thus, the knowledge gained by the toxicologist in the United States must now be brought to countries through out the globe striving to benefit from industrialization. The monetary gain of a developing country must not be compromised by potential health hazards for the overall population. The artisan developing a seemingly comfortable small market for painted ornaments or hand crafted jewelry must also be educated to the use of safer materials, for example, elimination of the use of leaded paints.

Lead is present in many sites around the world and it has high potential for gaining entry into the body through contamination of soil, water, food, and air. There is general agreement that once the level of lead is elevated in an individual's blood from such exposure, the individual is at risk for damaging effects to the nervous , cardiovascular, and kidney systems. When external exposure is lessened, blood levels decline. However, lead does not disappear from the body. Instead it is deposited in the bone and remains in the body for years. The work of Gonzalez-Cossio *et al.* (1997) have shown that although bone appears to be a static tissue, it actually undergoes heightened turnover during key periods of life, such as pregnancy, lactation, and the time of greatest osteoporosis associated with aging. Thus, bone stores of lead may become mobilized and serve as an internal reservoir of lead exposure, which implies that lead based toxicity may occur in individuals many years after environmental lead exposures have declined. As scientists learn more about the deposition of lead in the human body, it has become evident that the factors contributing to bone lead accumulation and release need to be closely examined. The USA Food and Drug Administration still allows some lead acetate in cosmetics and hair dye and these products are in use through out the world. Small permissible amounts of this soluble form of lead can easily contaminate food and enter the body. It is known that lead is still a stabilizer in certain plastics and vinyl products. The Centers for Disease Control in the USA have identified inner city soil as a major location for lead poisoning of young children.

Since the 1920's , millions of American children have been quietly poisoned by lead, and thousands of deaths are attributed to this over the long term. Mielke has shown in 1999 that although childhood lead exposure has diminished over the years, the problem has by no means been resolved. Marked differences exist in lead absorption in children when compared to adults. For example, children absorb 5-10 times more lead than do adults. Lead is a neurotoxin that can be especially dangerous to the developing nervous system of infants and young children. Chronic exposure of as little as 10 micrograms of lead per deciliter of blood has been shown to impair brain functioning, thus limiting a child's intellectual and social development. As much as 90% of total lead in the body is bound to the skeleton, although it can easily be released during both normal and increased bone remodeling. Mobilization of lead from skeletal stores during pregnancy and lactation may constitute a potential threat to the fetus during critical stages of organ development. The work of Silbergeld (1991) shows that this mobilization of lead during pregnancy can result in relatively high dose exposure with overt toxicological consequences to the infant. It is generally agreed by embryologists and toxicologists that lead accumulations in the bone interfere with calcium-regulated or calcium- calcium gates for cell membrane permeability. More specifically, lead indirectly effects alternation of cell functions required for important calcium balance in the body. Bone is also affected by other potential industrial pollutants such as cadmium and aluminum. It should be understood that many pollutants would show their effects in later life in the form of cancer as seen in studies of chromate, acrylate, asbestos *etc*.

Although most debates on the risks versus benefits of industrialization, and pollution problems such as the lead mentioned previously, generally concentrate on already highly industrialized countries; one must not ignore that fact that rapid economic growth and increased global markets will also bring these environmental pollution issues to other venues throughout the world. As global economy grows so to will the problems of pollution, and environmental and occupational health will become greater issues for countries once kept pristine and safe from these challenges. For example, the economic growth of South East Asia has been on the rise since the early 1980's. Holloway reported in 1995 that the earliest increases in the growth of the economy of most of the countries of South East Asia was agricultural. Certainly, this was not without problematic issues of pollution to waterways caused by excessive fertilization. Brandon and Ramcutty (1989) have written a World Bank discussion paper which showed the sinking of ground water supplies in Bangkok and concern for entry of salty water into the supply. They hold that the greater issues of potential pollution are not the lack of supply of water but instead the local overuse of natural resources and industrial or agricultural pollution. This road toward greater industrialization continues and is generally encouraged. Industrialization is seen as a necessary means of developing a greater voice in world economics. Fortunately, the formation of the Association of Southeast Asian Nations (ASEAN) has been established to strive toward the protection of the environment and the sustainable management of natural resources. This is a sensible commitment to balance the responsibility to stimulate economic growth and to also manage and preserve the use of the remarkable natural resources of the area. A Strategic Plan of Action for the Environment, 1999-2004 was issued at an ASEAN Summit. This included commitments to a plan for cross boundary pollution control by Brunei, Cambodia, Indonesia, Laos, Malaysia, the Philippines, Singapore,Thailand,and Vietnam.

Pollution and its effects on the population of a country has many faces. It ranges from the issue of world lead pollution, with issues of child mortality and bone defects, to overuse of forests, and the burning of lands which result in haze pollution and respiratory suffering to the population. The United States, together with Western Europe, is supporting the economic transition of many global markets. Growth is rapidly bringing a more affluent lifestyle to Eastern Europe, Latin America, Southeast and East Asia and more recently Central Asia. Along with opportunities for the establishment of companies in these areas there must also be encouragement to preserve and maintain the natural resources of the individual countries experiencing rapid economic growth. Responsibility, and balance come with an educated public. Just as the USA has had to face the inadequate standards of permissible pollution, and, for example, has had to reassess the levels of permissible lead, so to countries with rising economies must be aided and encouraged to do the same. A growing economy must work hand in hand with efforts to maintain a healthy population. It should be the goal and commitment of the business world to strive to educate the people in the countries that are developing and to give a balance of both economic growth and human quality of life.

The question arises of exactly how to maintain a safe environment for the population while still encouraging economic independence and growth. A dialog must be encouraged between the scientist and the global entrepreneur. Joint efforts should allow exchanges of ideas between academics in both areas. Budding global entrepreneurs in our academic institutions should have a working knowledge of potential pollution problems in the manufacturing process. These discussions should lead to the ability to balance economic development and increases in manufacturing with a commitment to maintain and improve the human quality of life. Biomedical and environmental ethical discussions should not remain in the laboratory. The innovations and discovery of science go hand in hand with development of new and improved manufactured products for the global markets. Today, the educated individual must know how to analyze problems, ask critical questions, and explain events. A literate citizen must also be able to apply scientific knowledge and processes in new situations. Dialog between the scientist and the global entrepreneur is our best guarantee of a healthy and prosperous life for future generations worldwide.

References

[1] Brandon,C &r. Ramankutty (1989) Toward an environmental strategy for Asia. *World Bank Discussion Paper,224,*65-68.

[2] Gonzalez-Cossio,T.,K.T. Peterson, L.H. Sanin,E.Fishbein,E.Palazuelos,A.Aro,M.Hernandez Avila,&H.Hu.(1997) Decrease in birth weight in relation to maternal bone lead burden. *Pediatrics,100,* 856-862.

[3] Hamilton,A. (1943) Exploring the dangerous trades. Boston: Little,Brown

[4] Hollaway,N. (1995) No pain no gain.. *Far Eastern Economic Review,16,* 11-14.

[5] Mielke, H. (1999) Lead in the inner cities. *American Scientist,87,* 63-73.

[6] Nriagu, J.O. (1996) A history of global metal pollution. *Science, 272,* 223-224.

[7] Silbergeld,E. (1991) Lead in bone:implications for toxicology during pregnancy and lactation. *Environmental Health Perspectives, 91*, 63-70.

[8] Waldman,R., L. Brown & M.Rock. (1997) Child survival deserves global action. *Central European Health and Environment Monitor, 5,* 1-6.

Managing Business Ethics: Putting the Oxymoron to Use

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Abstract

Unpopular actions as a consequence of global competition, reduction in R&D expenditure, anti-competitive practices, deregulation, unfair dealings in accounting, corruption, misleading advertising, are just some of the well known ethical issues. Doing business and being ethical appear to be so contradictory that it is impossible to be both an effective business manager and an ethical individual. What may be wrong for one need not be so for the other. This paper discusses ethical issues that managers face. More often business ethics is a matter of dealing with dilemmas that have no clear indication of what is right or wrong. The paper concludes with a decision-making model that managing ethical values in the workplace legitimizes managerial actions, improves trust in relationships between stakeholders, and cultivates greater sensitivity to the impact of the enterprise's values and communication.

Introduction

Are doing business and being ethical so contradictory that it is impossible to be both an effective business manager and an ethical individual? Undoubtedly many would give an affirmative answer to this question. But if it were true that management effectiveness and individual ethics are mutually exclusive, why would anyone want to be a manager?

Business is not just a profession. It is also a system in, which everyone, managers and non-managers alike, must live and survive. Corporate policies and strategies are no longer considered to be bedfellows altogether incompatible with ethics and morals. This holds true because man is first a human being and then anything else. He takes care of honoring social values. Even then the social sciences show a greater reluctance or inability to look at the darker side of the moon. The tough lesson is that ethics is no longer a luxury – it is a staple in the success of any enterprise.

In the times of 'global unlimits' and global competition, managers can no longer rely on growth, and plentiful cheap resources to solve our problems. Businesses face ethical dilemmas such as need for more control or more freedom; more individual risk and initiative, or more collective collaboration. The perception that business and ethics are contradictory to each other is based on a generally accepted view of what managers are supposed to do and how they are supposed to act [1]. The following two statements define the traditional view of a manager's role:

- Profit maximization is the exclusive goal of business management, and
- The expectations of others serve as constraints on a manager's ability to achieve the exclusive goal of profit.

It is from this traditional view that people conclude that business ethics is an oxymoron [4]. Concern for self and concern for others clash; hence business and ethics clash.

The traditional description of the role of manager is dysfunctional because it draws a manager's attention away from the fact that other people play an important role in the achievement of profit. Participants in business activities are interdependent on each other for success. They need to co-operate with each other for success. A company, for example, cannot succeed without the help of its employees, suppliers, and customers. Most managers recognize the existence of interdependence and create a win-win situation daily. However, there are situations where interdependence is not so obvious. Managers then fail to recognize such situations under the prevalence of the second principle of managerial role. Unlike a rock most people kick back when they are kicked. The constraints are perceived as opponents with whom they should compete rather than cooperate. This view of others as adversaries is self-destructive resulting in negative pay-off for such individuals.

Under the light of two principles of managerial role it follows that most managers will pursue the goal, fault on the side of profit maximization, and may have unexplained prejudices against others. This leads to managerial actions such as deception, advantage taking, responsibility avoidance, and disloyalty. Instead, managers must trust others and not retaliate against them. A new, more effective, managerial role must be developed for operating in an environment of interdependence. The subject of ethics, concerned with organizational behavior that injures or benefits other people, can provide such a model.

Four Types of Organizational Behavior

Barry Johnson and Kevan Scholes have grouped organizations into four categories [7].

1. At one extreme there are organizations that believe that the only social responsibility is to increase its profits.
2. There is another group tempered with recognition of the long-term benefit to the company of well-managed relationships with external stakeholders.
3. The third group described as progressive organizations, believe that stakeholder interests and expectations should be more explicitly incorporated in the organization’s policies and strategies.
4. The final group is those businesses that are specifically founded and run as a response to community need. Society needs are paramount and financial considerations are of secondary importance or a constraint.

It can be tempting to perch in the midst of extensive lay-offs and business failures. Managers wish for predictability, hope for wise control from the center, and feel coerced to manage things for the short-term bottom line. And, yet we know the bureaucratic solution no longer works to resist change and concentrate intelligence and control in the head. More liberal and adapting self-organizing systems have capacity for self-renewal that is more than self-preservation.

Business organizations are set up with the going concern. Rules of the game change with change in time. And, so do organizational goals and objectives. Business organizations constantly undergo self-assessment and self-study in response to changes – changes in their markets, among the competitors, and from the government.

The Social Responsibility Dimension

Another dimension of business that has of late gained strength is known as corporate social responsibility. Neo-classical economists hold that the sole responsibility of business is to maximize its immediate bottom line subject to only the most minimal constraints of the law – a view which is in congruence with the first category of Johnson and Scholes model referred above. They then make unfavorable choices that are harmful to them as well as customers. These may be due to the result of a lack of thought, misunderstanding, or pressures placed on them by others who have power over them.

Advocates of corporate social responsibility argued that ethical management requires more than merely following the dictates of the law or signals of the market. Rather, ethical management is a process of anticipating both the law and the market for sound business reasons.

The social responsibility approach not only took an expansive view of the law but also urged managers to take an expansive view of the market. In the short term ethical behavior may prove costly to a company’s bottom line. But ultimately the market will reward such behavior. Corporate executives have observed that if they were not running their business in the interest of customers, the customers would get back to them with restrictive regulations and laws.

If the purpose of business goes beyond making profits, then managers have a different decision-making guide [3]. Every marketer must be aware that:

- According to the customers, the purpose of a business is to provide us with goods and services that satisfy our needs and wants.
- According to the owners, the purpose of a business is to maximize wealth of its stakeholders.
- According to the employees, the purpose of a business is to provide us with a good standard of living.

Customers, owners, and employees are all members of the business system. Each of the stakeholders contributes value to business, and each expects some return for his contributions.

Decision-making in ethical situations is comparable to the prisoner's dilemma. In the prisoner's dilemma, the police attempt to encourage either of two guilty suspects to turn state's evidence. If both suspects keep quiet (choice), both receive a shorter jail sentence (consequences). If one prisoner confesses (choice and conflict), that prisoner will go free and the other will receive a longer sentence (consequences). If both confess (choice) both will receive the longer sentences (consequences).

Marketers today face a prisoner's dilemma type situation. Suppose they advocate objectives such as increasing customer service, improving product quality, and improving overall performance for the customer. Everyone would agree that these are noble objectives. Everyone would like to cut costs, often done in the short run to ensure the company's survival; but that may mean:

- Reducing opportunities for fair and competitive earnings,
- Eliminating peoples' jobs without regards to skills and performance,
- Drastically reducing research and development, and
- Eliminating the audit group so that the cost-cutting measures cannot be effectively monitored.

Much debated cases of divestment of state-owned enterprises to private sector by governments, industry (oil, cement, drug) cartels, pharmaceutical companies reducing R&D expenditure in less profitable drugs for malaria, sleeping sickness among others, and accounting manipulations to inflate bottom-lines only substantiate these 'noble objectives', to raise questions about the companies' philosophy of ethics.

The Myopia of Moral Philosophy

Business ethicists have two basic problems with the enlightened self-interest answer to the question of why manager should be ethical [8]. First, they disagree that ethical behavior is always in a company's best interest. Ethics and interests can do conflict. Second, they object that even when doing good is in the company's best interest, acts motivated by such self-interest really cannot be ethical. Moral philosophy tends to value altruism, the idea that an individual should do good because it is right or will benefit others, not because the individual will benefit from it. For many business ethicists, motivation can be either altruistic or self-interested, but not both. *Business ethics means acting within business for nonbusiness reasons.*

No corporation is truly ethical unless it has banished all forms of external motivation for employees. Freeman and Gilbert refer to external motivation as traditional managerial tools such as authority, power, incentives, and leadership. Relying on such motivational tools is just a sophisticated form of coercion and therefore "morally wrong". In order to be ethical, companies have to make sure that employee goals are in alignment with organizational goals.

If at all self-interest becomes a part, then altruism – and hence ethical motivation – can no longer be assumed. Ironically, neoclassical economists, who believe that all human behavior is essentially self-interested, share this view. While neo-classical economists hold that self-interested motivation is not immoral, for many business ethicists, mixed motives deserve and receive no moral credit. Managers are likely to have some degree of self-interest in their businesses.

Defining New Business Ethics

While differing in their specific approaches, advocates of the new business ethics can be identified by their acceptance of two fundamental principles. First, they agree with their colleagues that ethics and interests can conflict. Businesses have to find out ways of doing what is morally right and socially responsible without ruining their career and company.

Second, the new perspective reflects an awareness and acceptance of the messy world of mixed motives. Accordingly, business ethicists must participate with managers in designing new corporate structures, incentive systems, and decision-making processes that are more accommodating of the whole employee, recognizing his or her altruistic and self-interested motivations.

Let us assume that managers come with good intentions. It is a fact that all managers face complex situations whose solutions are not so obvious, where the reconciliation of profit motives and ethical imperatives is an uncertain and highly tricky matter. Business ethics should concern itself with designing and developing organizations for managers who, like all human beings, display the normal range of ethical instincts and see that these instincts are not compromised at work.

Hard times also call into question more self-indulgent goals such as quality of work life and minimizing environmental degradation. The ethics required to save businesses, to make them competitive in the global trading system, is a very deep kind of ethical wisdom. To flourish in the modern marketplace, employees need to be highly committed, often to do the impossible: to achieve unprecedented quality and responsiveness in products and services along with heroic frugality, to create incredible levels of integration and collaboration within and outside the organizations, and especially to pull off continuous, brilliant, and cheap innovation.

This is where people make the difference. However, there is no way to manage high-order human output but to set the conditions for everyone doing their best: including support of the core competencies of people, their ability to self-organize, change and grow.

According to Andrew Stark moderation, pragmatism, and minimalism are new words for business ethicists [8]. In each of these new approaches, what is important is not so much the practical analysis offered but the commitment to converse with real managers in a language relevant to the world they inhabit and the problems they face.

Kenneth Blanchard, in his article Ethics in American Business, advocates five principles of ethical power for individuals [1].

1. Purpose: A person believes that he is ethically sound and that he is guided by his conscience. A company mission clearly stated and guided by values, hopes and behavior is vital for its ethical stance.
2. Perspective: An organization keeps to its purpose when work and life remain in perspective of employees. Managers and employees need to take time to pause and reflect, take stock of where they are, evaluate where they are going, and determine how they are, evaluate where they are going, and determine how they are going to get there.
3. Patience: Patience is needed for employees to believe that holding to their ethical values will lead them to success in the long-term. This involves maintaining a balance between obtaining results and caring how they achieve those results.
4. Persistence: Churchill once said, “Never! Never! Never! Never! Give up!” A person’s behavior must be consistent with his intentions. It involves having a commitment to live by ethical principles that does not falter over time.
5. Pride: A person when feels good about himself. There is a realization of self-esteem. When employees have patience and persistence in keeping to ethical principles they value, pride will result. This feeling gives way to ethical behavior.

In business managers are not just competing, but cooperating as well. It, therefore, follows that:

1. A manager should not be concerned solely with maximizing profits, but should consider also the interests of customers, employees, suppliers, the trade, the locality, and the wider communities within which he operates.
2. A manager should not be trained exclusively in the mastery of specialized skills in his particular field, but should also acquire skills in solving conflicts of interest between the people with whom he deals and in responding to moral issues.
3. A manager should see himself not as motivated by mercenary considerations alone, but as a facilitator who enables people to benefit from the goods or services he provides, and to do better with his aid than they would have done without.

Managers are not entirely selfish, but are separate centers of decisions making with different ethical backgrounds. All their needs and wants, self-interest, and aims and objectives are based on their moral values.

The Decision-Making Model

A manager must be able to evaluate a situation and formulate response. Various practitioners and academics have developed many ethical-reasoning models. Following is a comprehensive ethical reasoning model derived from some of these models. The model expands the traditional cost-benefit analysis to include all the individuals and groups affected, not just the decision-maker's organization, to help clarify the ethical dimensions of a decision. The procedure consists of:

1. Identifying the decision options and the likely consequences of each.
2. Identifying all individuals and organizations that will be positively or negatively affected by the consequences of each option.
3. Estimating the negative impact (costs) and positive impact (benefits) of each option from the point of view of each affected party, taking into consideration their particular interests and needs.
4. Ranking the costs and the benefits of each option and making a decision.

This approach is an attempt to be systematic and logical in ethical decisions. It will work only if the decision-maker can be objective and impartial. Business transactions are basically a matter of cooperation, and take place because all can do better if interested stakeholders cooperate than if they do not. It is necessary for all parties to look into the interests of one another.

Conclusion

Business transactions imply having external relations with customers, suppliers, and competitors. There are ethical differences among each of these parties. There also lies a feeling of respect for each other. Thus each transaction needs to be considered not as a single one but in regard to individual, circumstance, and time. A responsible businessman, therefore, pays his suppliers promptly gives more than contractual notice, and competes only by fair means.

The complex structure of modern business enterprises produces a complex structure of responsibilities. That of employer and employee is the closest and has the most fine structure, but other responsibilities are also important. In evaluating these, the businessman is properly partial to his own concerns, but should consider also how his actions impinge on other people and other interest, and the part he should play in the cooperative framework within which he works.

References

[1] Blanchard K, "New Traditions in Business: Spirit and Leadership in the 21st Century, Berret-Koehler Publishers, San Francisco, 1992.

[2] Bovee, Houston and Thill J.V., "Marketing", McGraw-Hill Inc.

[3] Chonko L.B., "Ethical Decision Making in Marketing", Sage Publications Inc., U.S.A., 1995.

[4] Collins J.W., "Is Business Ethics An Oxymoron?", Business Horizons (September-October 1994), pp.1-7.

[5] Fournier S., "Preventing the Premature Death of Relationship Marketing", Harvard Business Review (January-February 1998), pp.42-51.

[6] Griffiths and Lucas J., "Ethical Economics", MacMillan Press Ltd., 1996.

[7] Johnson and Scholes K., "Exploring Corporate Strategy: Text and Cases", Prentice-Hall of India, New Delhi, 1994.

[8] Stark A., "What's the Matter with Business Ethics?", Harvard Business Review (May-June 1993), pp.38-48.

Social Responsibility of Business: A Revisit

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Abstract

The challenges of ecology, equity, and economic growth in a socially- fragmented world are emerging as the human agenda in the 21st- century. The paper takes a historical, evolutionary approach and enunciates a theory of social change. It suggests that the efficiency as well as the stakeholder perspectives, now dominant in management literature, were valid and appropriate perspectives for a particular epoch in the institutional evolution of human society. The paper then extends the analysis to the emerging socio-political epoch in the beginning of the 21st century. This new epoch will be shaped by three major pursuits; economic growth, ecology and equity. The pursuit of fossil-energy based economic growth and western consumerism by all human groups is ushering in a borderless economy, polity and a homogenized (Americanized) human world. World Bank, IMF and WTO represent the institutionalized thrust of this pursuit The pursuit of ecological stewardship; symbolized by international agreement on climate, bio- diversity, forests, endangered species; aims at protecting the global commons. The upsurge of traditional identities with their passionate quest for respect and dignity are highlighting the issue of social and economic equity. The paper, using the evolutionary framework, offers some comments about the appropriate role of business system in the new epoch and suggests some principles that may serve as guidelines for corporate policy and action.

Erosion of Corporate Legitimacy

The issue of corporate social respectability - accountability to shareholders in particular as well as to the society at large- has again come to the forefront in the public square. Corporate legitimacy - the rightful use of corporate power - is under serious challenge. The shocking details of scams, fraud and audacious criminal conduct of large corporate houses in G-7 (or 8, if we include Russia) countries have undermined both ideological and moral legitimacy of corporations. The prolonged recession in Japan; slow economic growth in the U.S., endemic high unemployment rates in Europe and deepening economic crises in the rest of the world have raised serious questions about the functional legitimacy of the corporate economy. The worldwide anti-globalization movement and the rise of non-governmental organizations as monitors of the performance of the economic and political system are also symptoms of the decline in corporate legitimacy. The new global codes of conduct for global corporations and a corresponding system of global monitoring and accounting are attempts to redefine market- state- society interrelationships in the wake of loss of the faith in the corporate legitimacy. The recent spate of management books (Kennedy A; 1982, 2000; Collins J, 2001; Deal T. and Kennedy A; 1999; Goleman, D; 1995,2002; Kotter J; 1992, 1996) articulating the need for altering corporate culture to ensure viability of limited liability based corporations are also aimed at rebuilding corporate legitimacy.

This erosion of corporate legitimacy is the result of the incongruence between the normative grounds underlining the corporate economy and the outcomes and impacts of its working on the ground level. It suggests the need for revisiting and reexamining the normative role of corporations and, if necessary, to re-conceptualize the structure of market-state-society interrelationships to restore societal faith and commitment to the corporate economy.

Three Major Expectations (3 Es)

The corporate economy will have to meet three major expectations, both at the national as well as the global level, to earn, maintain and deepen its social legitimacy. They are (A) Economic Growth, (B) Ecological Sustainability, (C) Economic and Social Equity. The post World-War II social compact between the rich and the poor - within nations and among nations - has emphasized economic growth as a primary goal of developmental policy. Internationally, the emphasis was on the state acting as a main agent and private sector as a junior partner to achieve the desired economic growth rate. Foreign aid was the primary means of development. The 1972 Stockholm Conference on “Human Environment” attempted to raise the issue of ecology. The poor countries in the South, rallying under the banner of “poverty is the worst form of pollution”, pushed for adding the right to development (though a demand for respect and justice but, in practice, equated with economic growth) kept the focus on economic growth. The 1992 Rio conference on “Environment and Development” ended up with a strong emphasis on development (meaning economic growth) rather than on environment. As a sideline, Rio also raised the issue of vertical equity among nations by highlighting the principals of common but differentiated responsibilities, burdens and benefit-sharing and advocating technological transfer and financial assistance from the North to the South. On the ground level, there was limited progress in building structures and polices to ensure environmental sustainability but no progress on the vertical equity front. The subsequent rise of anti-globalization movement, the growth of the non-governmental civic organizations and the upsurge of fundamentalist movements asserting respect and dignity for different social groups have raised the banner of social and economic equity, not only among nations but also among different social groups within nations. The 2002 Johannesburg world summit on sustainable development ended up with a focus on ways to deal with poverty and achieve equity in human society. The World Bank’s 2003 report talks of transforming institutions to achieve economic growth to achieve equity (quality of life of all groups) in an environmentally and socially sustainable way. Equity has taken place alongside economic growth and ecology as a major societal expectation.

Coming Conflicts

These three expectations are at present on the collision course. The pursuit of fossil-energy based economic growth and the consumerist life-style propagated by the media and marketing machine of the rich industrial societies have given rise to a borderless economy requiring unrestricted mobility of capital and goods. The economic regime to assure even playing field for frictionless mobility of capital has been institutionalized in the legal framework of WTO, complemented by the structural adjustment policies of the IMF and the World Bank. As more nations join this pursuit of fossil-used based economic growth, the conflicts on equity issue and the pressures of environmental constrains are going to be very explicit in the socio-political environment. Corporations as the main agents for the process of economic growth will be at the center of these conflicts and will have to develop political assets and competencies to manage these conflicts.

Response by Strategy Scholars

Business strategy scholars have recognized this fact and are in argument that a corporation has to engage in the political and social arena to create, protect and/or sustain competitive economic advantage (Baron: 2003; Boddewyn, J. and Brewer, T; 1994; Boddewyn, 1993; Dunning, 1993; Gross and Behrman, 1992, Mahon, 1993; Moran, 1985; Shipper and Jennings, 994). This necessity of social/political engagement by business is especially great in the global arena as there is not only globalization of markets but also globalization of social, political and cultural issues (Desai, 2000 and 2002). These strategy scholars initially emphasized a careful scanning of not only economic and technological environment but also social, political, ecological and ethical environment to identify major issues faced by the firm. The analysis then was extended to include institutional and ideological components when it became clear that the understanding of these components was essential in sorting out business-state-society relationships. (Wood, 1994; Warstick and Wood; 1998). Freeman (1994) added the requirement of mapping out major stakeholders or interests that can be or are affected by business activities. Baron (2000) synthesized this evolution by characterizing the non-market environment in terms of four I’s: Issues, Institutions, Interests and Information. He and other business scholars recommend undertaking a cost-benefit analysis of engaging in political action by various interest groups and the resultant likely scenarios of likely outcomes to map a firm’s non-market society.

This approach which I term as "the traditional approach" suffers from some serious shortcomings. (Desai, 2001). It views institutional and ideological evolution and adaptation either as exogenous or as a product of simple horse-trading among special interests in a zero-sum game. This methodological individualism and positivist stance involves use of money a symbolic sign to convert values of costs and benefits. It naturally excludes or ignores that cannot be quantified in monetary terms. Social goals (e.g. liberty, rights, freedom, fairness, justice, diversity, inclusion, family values, and personal relationships) get neglected with a focus on gains in material wealth as a sole objective of human endeavor and a neglect of social and spiritual wealth. (Diwan 2000, Schumacher, 1973). This is a serious shortcoming as these other neglected dimensions are very important in the non-market arena. It is not surprising that the traditional approach suffers form schizophrenia. It discusses these larger issues under the heading of business ethics and then merrily adopts a positive approach in its policy analysis and conclusion, bereft of any ethical considerations. The non-market arena is treated simply as a market for distributive gains by various special interest groups. No wonder such an approach provides a partial, incomplete (and therefore inaccurate) explanation of what is happening in the non-market arena.

A more fruitful approach to the study of non-market environment should not only consider normative values besides efficiency but also explain ideological and institutional evolution of human society. In the remaining part of the paper, I suggest a general framework of such approach and use it to enunciate some principles that should guide our thinking on the issue of social responsibility of business.

Theory of Institutional Evolution

Starting with the notion that the essence of human personhood is the ability of reflective self-evaluation and forming preferences about one's preferences (Frankfurt, 1971), I conceptualize the march of human history as one of building human institutions and ideological structures that expands human freedom and rational and moral autonomy. Recognizing the fact of human dependency, such autonomy has to be exercised in the company of fellow human beings through social interaction. Human personhood initially is a historical and cultural creation, a product of socialization processes. Yet, the exercise of autonomy and the resultant self-definition, self-transcendence and self-rule within these historical and culture limits has the potential to choose new actions and behavior thereby recreating oneself and one's world. Through knowledge, reflection, practice, training and drill; it is possible to be free from the origin or what is thought to be so to what you can be. This is what it means to be the author of one's own conduct; to be empowered to achieve human autonomy. This is true meaning of freedom.

Role of Ideology and Institutions

Social interaction among free (autonomy-excising) individuals requires mechanism to ensure coordination and integration of their efforts so that the needed collective action takes place in an orderly fashion. This task of coordination requires that all participants subscribe to shared ideologies or at least congruent ideologies; thereby reducing transaction costs of social interaction. The ideological complex are cognitive concepts or referential filters that provide road map that describes how the institutional framework - determining how it is or 'works' – will ensure the achievement of society's norms and value - what ought to be. The ideological complex is the product of history, of cultural and community choices and experiences. Individual choices are conditioned by this complex. Institutional complex embodies principles, rules of the game, decision-making procedures that guide, manage and control social interactions as well as their ultimate outcomes. Ideological complex bestows legitimacy and status to the institutional complex and invites commitment and fidelity from all participants.

Both these complexes should be consistent, harmonious and congruent for the smooth operation of the society. A persistent in-congruency will set the stage for societal evolution. If there is growing distance between the outcomes predicted by the preached ideologies and the existential reality; it will result in ideological disaffiliation and ultimately to a new re-conceptualization of both complexes. The in-congruency between the two complexes may arise due to (i) changed environment (e.g. expansion of human freedom, war and conquest, technological infiltration etc.) and/or (ii) innate growth of ideological and institutional complexes. The in-congruency can be resolved either by (a) changing the institutional complex so that social values and expectations preached by ideological complex can be met with changed circumstances and/or (b) re-conceptualizing the ideological complex so that values and expectations are again in harmony with the institutional complex. Only when both of them are in harmony, the institutions will regain their coherency and legitimacy. Their 'rules of the game' will then be accepted as the operational basis for individual choice and interaction.

Theory of Social Change

I view the enfolding human history as a progressive expansion of human freedom (autonomy) in human society(ies). This force - drive for human freedom - is central to an understanding of societal evolution. Three major institutions - economic (market), political (state) and social (society) - their roles, their interrelationships, and evolution of these interrelationships can be explained as a process, with cause and effect specified, in terms of this drive for human freedom. This notion of freedom is not a negative notion - freedom from the effects of power - but a positive one. It includes freedom to participate in existing power-relations (participatory democracy) in society as well as freedom to will and act as self-controlling and self-developing agents (individual empowerment).

In the remaining part of the paper, I will briefly sketch the path of historical evolution using the concepts developed in this paper. I also locate the changing expectations of social responsibility of business within this evolutionary framework.

Medieval Period

Market-state-society relationships were governed by feudal traditions and/or church edicts during the medieval period. A small elite (structured in a pyramidical, hierarchical way) controlled society and, through custom, tradition and religion, legitimized their authority. Traditions also imposed on the elite the responsibility for the welfare of the masses. All power was concentrated in society and market as well as state were subservient to society. Even though religious principles proclaimed the spiritual equality of all humans; the medieval system restricted freedom and autonomy to the elite only and denied autonomy, freedom and participation to the masses. This exclusion set a barrier to the process of innovation and wealth formation unutilizing the creative abilities of the masses.

Capitalism

The Renaissance ushered in an era of individualism, especially rationalistic approach to the understanding of the different facets of the real world. Institutional legitimacy was sought to be established in human reason. Economic liberalism in the market place, nation-state and democracy in political sphere; protestantism in the social sphere emerged as the new ideological complex. Nation-state produced the framework for a market economy where individualism can operate without being frustrated by feudal privileges and religious constraints. Initially, the need to build strong nation-state led to mercantilism. Once the nation-states were firmly established, the mercantilist outlook became less useful and Laissez-faire liberalism emerged as the dominant ideology. The power and authority was now derived and legitimized by property ownership. In market-state-society relationships, power shifted from the social sphere to initially the nation-state and market but ultimately to the market. The enlightenment's rationalistic approach freed humankind from medieval feudalism and religious orthodoxy and enabled the bourgeoisie – craftsman, traders, money lenders, bankers, guilders, shopkeepers – exercise their autonomy and freedom and led to the expansion of a productive base of humankind by utilizing their creative and innovative ability.

Entrepreneurial Capitalism

The market was not constrained by tradition or religion or by the state. The role of the state was restricted to protect security of the person, liberty, and property rights. The state was expected to abstain from active interference in the economic arena. The economy was posited to emerge from the process of a competitive equilibrium among self-interested individuals in decentralized markets and achieving not only efficiency, economic growth but also public interest (social goals). That was the beauty of the competitive economy. It did not require political and/or social interference to enforce social responsibility of business. The first stage of industrialization was a period of entrepreneurial capitalism – where the owner-manager engaged in “craft”, “batch” production and reaped all profits. The scale of operation was small due to communication and transportation constrains. The large number of small producers and buyers created purely competitive markets idealized by classical economic theory.

Managerial Capitalism

Later on, the second stage of industrialization involved ‘mass’ or ‘scale’ production (use of expensive specific-task machinery, limited variety and large volume of production of uniform quality), resulting in concentration and centralization of economic power in large autonomous corporations. The link between ownership and management got attenuated (Berle & Means, 1932). Authority to make economic decisions now was based and legitimized, not by ownership rights, but by professional meritocracy rooted in know-how. Managerial (corporate) capitalism replaced entrepreneurial capitalism. Monopolistic competition and differentiated oligopoly replaced pure competition as a norm in the economic arena. Prices and wages became more a matter of organizational strategies and politics than outcomes of competitive interactions. The competitive mechanism to ensure that self-interested individual behavior will lead to the attainment of public purposes or interests does not work effectively in corporate capitalism. Corporate managers have now considerable discretionary power. There was thus a need for an institutional framework to transmit necessary information about social objectives and to provide incentives to managers to harmonize corporate policies with public interests. There was a need for emphasizing social responsibility along with profitability as an important corporate goal.

Ideological Evolution

This led to several responses. Ideologically committed neo-classical economists restated their case by developing agency theory that treats managers as agents of stockholders who are the legal owners or the principals in a corporation. Management’s primary and sole duty was defined as maximization of shareholder’s wealth (Friedman, 1970). This duty was enforced by two controlling forces. (1) External control through hostile take-overs and proxy-wars in financial markets, either capital markets or banks. (2) Internal control by Board of Directors enforced through compensation packages. Corporate control markets have been basically shut-down by (i) state anti-takeover laws and other regulatory restrictions and (ii) by opposition from incumbent corporate managers in the form of tactics such as poison pill, Greenmail, stock repurchase plans, etc. Devising and making appropriate corporate internal control system work was suggested as the major challenge in the 1990s (M. Jensen, 1989, 1993). The classical liberal perspective, according to this ideologues, is still valid and simply needs a readjustment and reform of the internal control system.

Another response came from the behavioralists. Simon, H. (1957) proposed a behavioral theory of the firm, developing the concepts of ‘bounded rationality’ and ‘satisficing” rather than ‘maximizing’ behavior. He argued that managers are unlikely to behave only in owner’s best interests as they have too many interests of their own they want met. Corporate managers, therefore, attempt to achieve a ‘satisfactory’, acceptable and defensible outcome in terms of their multiple goals. That also includes achieving a satisfactory rate of return for stockholders. (Baumol, W; 1961) The behavioral theory of the firm focused attention on the process of managerial decision making in a corporation and highlighted the role of interpersonal politics, perceptual limits and other non-economic factors influencing individual and organizational behavior (Cyert and March, 1963). The Business Roundtable’s statement on Corporate Responsibility (1981) went further and recognized that business and society have symbiotic relationships. Corporations are responsible for the outcome related to their primary and secondary areas of involvement with society (Preston and Post, 1975). Corporate managers must understand the expectations of different constituencies from the corporation and the impact of their decisions on these constituencies. They should aim at a careful balancing act in meeting these diverse expectations from their constituencies or stakeholders. The whole literature on non-market strategy follows this tradition where managers are supposed to use their discretionary power after listening to and evaluating the impact of their policies on different stakeholders.

In the political arena, economic liberalism acted as an ideological check on the tendency of the state to meddle in economic affairs. Another check on the expansion of the state powers was the evolution of the concept of political democracy whereby the state apparatus was made answerable to the electorate who initially was composed of only property owners.

Institutional Readjustment

Later on, the emergence of four factors transformed the external environment necessitating a more activist role for the nation-state. (1) The full flowering of the ideology of individualism in the political arena led to the extension of franchise to the non-propertied groups (middle class, workers, minorities, women, etc.) who had no or little influence on the outcomes in the market arena. These groups used their voting power to articulate their sufferings, their needs, their interests and demanded remedial action and attempted to get a more equitable distribution of the national pie through the political process. A liberal nation-state, with the extension of franchise, was transformed to a welfare-state. (2) The degree of monopoly and excess capacity that emerged during the era of corporate capitalism weakened the argument that the working of the unregulated market automatically leads to economic efficiency and growth. The nation-state, as embodying national will, was called upon to control the growth of monopoly power by enforcing anti-trust laws or by regulation. (3) Modern depression with its massive unemployment brought recognition to the fact that the market system is not self-equilibrating and self-adjusting, leading to full employment level. The economy may collapse due to self-perpetuating insufficiency of aggregate demand. The nation-state, as the representative of the nation, was called upon to undertake the task of stabilizing and keeping the economy at full employment level through appropriate fiscal and monetary policies. (4) Ours is a society of organizations. Individual is hostage to forces beyond his control. This has spawned demands for protection of individual rights against organizations, leading to a movement for social regulation of business. These four functions: redistributive, control of monopoly, minimization of economic fluctuations and protection of individual rights expanded the role of nation-state at the expense of the market.

In the social sphere, the enlightenment's emphasis on individual and its denigration of all other social identities led individuals to focus wholly on unbridled self-concern – to consumerism and the fracturization of society. In the cultural spare, the individualistic rationalistic approach led to existentialism, nihilism, cynicism, and, without any attachment to any values. It has created moral chaos well reflected in the tabloids and media of modern society.

Stock-market Global Capitalism

Increasing efforts of nation-states to restrain or to regulate business and/or to redirect trade and investment in pursuance of national goals have led corporations to be global to overcome these obstacles to their decision-making. Capital was always mobile but through appropriate technological advances; people and information have acquired significant mobility. Scholars have noted the transition of corporate organization from hierarchical to decentralized (flat) to a networking organization. We have moved to the stage of alliance capitalism where several relatively independent corporations have, through alliances, formed a network with central staff developing underlying strategy and providing information, resources and guidance to keep the network functioning. These MNCs with their ability to locate any corporate function in any country have acquired power to change, at will, patterns of production locations and foreign private investment in any country. These MNCs are not geo-political anymore.

They are mainly technocratic organizations that are shaping the new global economic order. MNCs have become more important than nations. Nation-states are now placed in a position to compete with one another to attract business. Power relationship, on the economic front, has shifted back from nation-states to market.

But such globalization of business has created what I have termed as global economic apartheid. It has increase unemployment, increased income inequity and income variability. (World Bank, 2000, 2002) It has brought new human groups in the culture of consumption by creating new tastes and desires through the image-making of activities of its media classes while shrinking the income-generative capabilities of a significant part of humanity. Global-business led processes of economic growth has run into ecological constraints and turned the quest for equity from a movement to achieve human freedom to a movement for redistribution of shares of a zero-sum game. Simultaneous search for equity and ecology requires a re-conceptualization of the process of growth – that accommodates aspirations of different human groups. The masses and the non-governmental civic organizations who have aquired space in the political and social arena in the forward march for human freedom are articulating these concerns in the political and social arena. It seems likely that power will again shift from the market to a more democratic state and ultimately to a more pluralistic society.

Actually, it is already happening at the global level. A new global policy regime establishing set of explicit or implicit principles, rules, norms, mutual understandings and procedures to mediate, stimulate and control processes of economic contact, collaboration and conflict is already emerging, reshaping global governance and enforcing accountability on global business. Interestingly, these new policy regimes are not worked out unilaterally by the elite. There is active participation by the representatives of masses. National governments, world institutions and their bureaucrats, MNCs, professional associations, think tanks, non-governmental international civic organizations – all are participating in the formulations of these new global codes of conduct for global business. A corresponding system of global monitoring and accounting for commonly agreed standards of good behavior is also appearing on the horizon. Though the market seems to be supremely triumphant at present; nation-states, international governmental organizations and international/national/local civic groups are also emerging in the non-market arenas as countervailing forces. Authority in the 21st century will depend not upon property ownership or expertise but upon participatory democracy; involving all stakeholders in the deliberative process and accepting the ultimate decision that might emerge from it.

Global business managers will need to develop negotiating skills to engage in such participatory democracy. Instead of assuming an adversial role between business, government, unions, activist groups, etc.; business leaders will have to move to a cooperative model to evolve "negotiated" arrangements in a transformed social contract. The Business Roundtable statement's perspective on managerial capitalism where managers act as an umpire ultimately deciding the trade-off between interests of different stakeholders is no longer valid. The trade-off will need to be arrived in an open public discourse in a public sphere among all stakeholders. Global business managers will have to develop a 'give-and-take' attitude, occasionally 'giving' more than they 'take' in order to maintain the legitimacy and therefore the effectiveness of the business enterprise.

If my hypothesis of the forward march of human history as an expansion of freedom for all human groups is correct, it will require a fundamental rethinking of the social responsibility of business. I am proposing three specific responsibilities for global business.

(1) Accepting the basic fact of socio-diversity of human society; global business will be expected to use their production, marketing and technological strengths to accelerate the process of wealth formation in all countries while remaining sensitive to their environmental and cultural sensibilities. This will require that they seek not a borderless economy but a well integrated mosaic of social diversity of the human world. They will be expected to act as trustees of the communities they operate in by taking account of the impact of their policies and decisions on the socio-economic-cultural context of these communities.

(2) They will be expected to play a leadership role in restructuring economic system, its institutional as well as policy regimes, so that they sustain, safeguard, nurture and strengthen these physical and socially diverse human communities.

(3) They will also be expected to be a major force arguing for reorganizing political, economic and social structures with emphasis on decentralization, openness and participatory democracy. More open, more inclusive communities enable more individuals to bring their knowledge, experience and insights to the marketplace thereby creating more opportunities of value enhancement through exchange. It will foster experimentation, innovation and creativity, thereby generating and maximizing a process of wealth formation consistent with moral, ethical and social values.

If global business adopts such an ethic of social responsibility in their operational behavior, they will be able to earn legitimacy and autonomy and will continue to survive as a desirable form for managing national and global economic activities. If they do not, they will be subject to increased regulation and control by either the state or the society.

References

[1] Bearle, A. and Means, G., The Modern Corporation and Private Property, New York, Mc Millan, 1932

[2] Baron, D., Business and Its Environment, 3rd ed., Englewood Cliffs, NJ; Prentice-Hall, 2000

[3] Baron, D., "Integrated Strategy: Market and Non-market Components" California Management Review; 37, 47-65, 1995

[4] Boddewyn, J., "Political Resources and Markets in International Business" in Rugman and Verbeke (eds) Research in Global Strategic Management, Greenwich, CT., JAI Press, 1993

[5] Boddewyn, J. and Brewer, T., "International Business Political Behavior: New Theoretical Directions," Academic Management Review, 19, 119-143, 1994

[6] Cyert and March, Behavioral Theory of the FIRM, Englewood Cliffs, NJ; Prentice-Hall, 1963

[7] Collins, J; Good to Great, New York, Harper Business, 2001

[8] Deal T. & Kennedy A; The New Corporate Cultures, Reading, MA. Perseus Books, 1999

[9] Desai, S., "Global Economic order in the New Millennium: Two Visions", Journal of Business and Behavioral Sciences, 7, 1-6, 2000

[10] Desai, S.,. "Social Responsibility of Business, unpublished paper presented at 4th International Conference of American Society of Business and Behavioral Sciences, London, 2001

[11] Dunning J., The Globalization of Business, London, Routledge Press, 1993

[12] Diwan, R., "Rational Wealth and the Quality of Life" Journal of Socio-economics 29, 305-340, 2000

[13] Frankfurt, H., "freedom of the will and the concept of a person", Journal of Philosophy, LXVIII, 1, 5-20, 1971

[14] Freeman R. Edward: Strategic Management: A Stakeholder Approach, New York, Harper-Collins, 1984

[15] Friedman, M: "Social Responsibility of Business" The New York Times Magazine, Sept. 1970

[16] Friedman, M: Capitalism and Freedom, Chicago, Uni. Of Chicago Press, 1962

[17] Goleman, D., Emotional Intelligence, New York Bantam Books, 1995

[18] Goleman, D., Primal Leadership, Cambridge, MA; Harvard Business School, 2002

[19] Gross, R. and Behrman J., "Theory in International Business", Transnational Corporations, 1, 93-133, 1992

[20] Jensen, Michael, "Corporate Control and the Politics of Finance", Journal of Applied Corporate Finance, 4, 13-33, 1989

[21] Jensen, Michael, "The Modern Industrial Revolution, Exit and the Failure of Internal Control Systems" Journal of Finance, 1993

[22] Kennedy A., The End of Shareholder Value, Cambridge, MA, Perseus Books, 2000

[23] Kotter, J., and, Heskett, J., Corporate Culture and Performance, New York, Free Press, 1992

[24] Kotter, J., Leading Change, Cambridge, MA; Harvard Business School, 1996

[25] Mahon, J., "Shaping Issues/Manufacturing Agents: Corporate Political Sculpting," in B. Mitnick (ed) Corporate Political Agency, Newburry Park, CA; Sage; 1993

[26] Moran, T., MNCs: The Political Economy of FDI, Lexington, MA, Lexington Books, 1985

[27] Shipper, F. and Jennings, M. Business Strategies for the Political Arena, Westport, CT, Quorum Books, 1984

[28] Wood, D., Business and Society, 2nd ed., New York, Harper-Collins, 1994

[29] World Bank, Entering the 21st Century, New York, University Press, 2000

[30] World Bank, Sustainable development in a Dynamic World, Oxford University Press, 2003

[31] Yaffie, D., "How An Industry Builds Political Advantage" Harvard Business Review, 38, 80-89, 1988

“Sustainable Development”: Law, the Environment and Water Resources in Modern Thailand

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Abstract

The overall purpose of this research is to examine problems concerning implementation of the concept of sustainable development in the area of water resources using Thailand as a case study of a developing country. The aims are to provide an analysis of water case studies focusing on fieldwork undertaken in different regions in Thailand, an analysis of the legal system; and strategies for environmental protection; considered in the context of rapid economic expansion. The research begins with an examination of the foundation and background of Thailand’s legal system, its economic development and its environment. Particular emphasis is given in the thesis to water resources. Water is a specific medium to judge pollution standards as a whole then followed by an analysis and evaluation of the legal framework of environmental law. It must acknowledge that environmental problems cannot be fundamentally solved without addressing them at the time of economic development. Thailand must not adopt the model of western environmental protection laws without first ensuring that the new reforms are suitable for the needs of the Thai economy and people.

Economic development and the environment in Thailand

Thailand’s economic development began in the 1950’s with World Bank support. Industrialisation and foreign investment. Thailand’s status as a “tiger economy” was, not only, because of its economic reputation, but also, its undoubted rapid development. The problem of environmental pollution caused by rapid economic development is very serious. Thailand is faced with challenges about its recovery and its future development. Increasingly economic development must be considered only in the context of sustainable development and an assessment of environmental strategies. In the aftermath of the “boom and bust” experience over the past two decades, the key question is *how should Thailand protect its most precious asset namely its environment?* Sustainable development is as “meets the needs of today, whist not affecting the ability of future generations to meet their own needs”. The implications are that growth is necessary to improve the quality of life, and that such growth should take account of protecting and conserving the environment and natural resources.

The Rio Declaration (1992) on Environment and Development has influenced lawmakers throughout the world. A core of international jurisprudence has developed with countries developing their own agendas for environmental protection. Additional developments since 1992 include Agenda 21 and the purpose of actual need for sustainable development. While there are general issues of accountability and how Agenda 21 might be developed for the future, it is clear that Thailand must address these issues as an integral part of economic development and its reconciliation with the protection of the environment. While internationalisation of environmental protection did not receive universal support in 1997 at the Rio II summit in New York there is a clear agenda for developing countries to learn the lessons of the West.

Challenges in understanding environmental protection in Thailand: A crisis in administration, planning and policy

Environmental awareness, even within developed countries, is a relatively recent phenomenon. Environmentally sound policies are seldom the cheapest. Especially, the legal problems concerning the environmental aspects of exploitation of natural resources. For the poorest of the poor among developing countries, the need to survive does not even allow a choice of strategy. Thus, the solution to an environmental problem in a developed country may not necessarily be applicable to Thailand. The sociological and geopolitical dimensions of the problem have also to be considered. Environmental problems proliferate and their solutions became elusive in any society that has not yet achieved ***‘sustainable development’***.

The Eighth National Economic and Social Development Plan (1997-2001) focuses two main objectives as first, to use natural resources together with improving it, second, to manage natural resources and environment effectively for the balance of both ecology and environment. The Plan also identifies three strategies which would contribute to achieve the objectives as first, to restore and improve the natural resources and environment, second, to promote public participation, third, to administrate and manage natural resources and environment. Consequently, Thailand has tightened up its environmental regulations. It seems that Thailand wants them all to work together, the development, the environment and social improvement. With rapid industrial development and economic growth, the problems of overuse of natural resources and pollution have been increasing for the last ten years this mean the government's policies about the development as well as the environment have failed. Understandably, there are important differences between the developed and developing approaches towards a better environment, reflecting the wide gap in terms of their economic development. Since environmental protection competes with other policy objectives for scarce resources, there are opportunity costs and these costs are particular high for developing countries which have more pressing needs. It is basically a question of a trade-off between a pollution free environment and economic goods.

Thailand's Period of Industrialisation Since the 1960s

Thailand provided an interesting and a unique set of economic characteristics. The above chronology sets out the main events. It is a paradox that a successful economy in the 1980s created the necessary condition for environment problems. A number of economic facts underline this statement.

***** In the three decades since the early 1960s, Thailand has been and is still the only net food exporter in East and Southeast Asia.

***** Thailand in the past has not experienced a negative economic growth rate in the last 30 years of its modern economic development. However, in an unprecedented economic crisis in 1997, it suffered a dramatic depletion in its growth.

***** Economic changes in Thailand took place in a situation where the labour force was still predominantly agricultural where the secondary school attainment was one of the lowest in Asia and where the primacy of its capital. The city of Bangkok increased in size with development effectively outpacing all other Thai cities in the kingdom.

***** Massive foreign direct investment especially Japanese flowed into the country in the late 1980s, and lifted Thailand out of the recession of the mid 1980s and triggered the wave of prosperity that was to last till 1997.

***** Voluntary family planning programmes in Thailand are regarded as one of the most successful in the world and helps explain the fast increase in its per capita GNP.

Thailand has been likened to the "tiger" economy of Japan and other fast growth countries likes Hong Kong. There are common similarities. The tiger economy phenomenon has its roots in the early 1960s at a time when Thailand began to industrialise. Industrialisation has important implications for the environment. The Thai economy may be divided into four periods; suggesting four periods of economic developments.

The Relationship between Economic Growth and the Environment

Thailand has emerged from the 1980s as one of the most promising developing nations in the world. The double figure growth rates of 13 percent and 11 percent, it achieved in 1988 and 1990 were the highest rates of growth in its history. Thailand is in the midst of dramatic change in the nature and quality of the life of its people, in the structure of its communities and in the foundations of its economy. In the past, Thailand was a rural society in which local communities were dependent on the natural resources which surrounded them and the national economy relied on the export of a small number of native crops. The sustainable use of resources was a fundamental aspect of rural life, people understood the inter-relationships between the different components of their local environment and their activities were defined by the need to protect their surrounding resources.

There are four periods identified in that Thailand's economic development that despite the sharp downturn in the 1970s the economy had made remarkably progress. Rapid change and modernisation has moved Thailand's feudal and agricultural economy into a phase of unpredictable and unplanned modernisation. This exponential growth was occasioned by a shift from import-substitution manufacturing to export-oriented industrialisation in the 1970s followed by the great migration of Japanese manufacturing into the country in the 1980s following the appreciation of the yen after the Plaza Accord of 1985. Many Thais have benefited from these developments. Many sectors however remained poor. It is hard to see how the growth in economic wealth has benefited the majority of its people, most of whom still live in poverty in the rural areas. The rapid structural shift towards an industrialised economy is not reflected in the employment and population structure. The problems of unbalanced distribution can be seen from the systems such as the bankrupting of rural society as a result of permanently falling prices of agricultural produce which results in migration to off-farm employment in cities and prostitution. All of which exacerbate both developmental and environmental problems. The benefits of rapid industrialisation have yet to be fully calculated.

Current Environmental Problems in Thailand

Lists of Thailand's primary pollution problems are: (1) pollution of rivers, waterways and coastal ecosystems; (2) air and noise pollution; (3) agro- industry and chemical pollution; (4) industrial pollution; and (5) hazardous wastes. The main causes of environmental problems are the expansion of industrial development and increasing urbanisation. As Thailand has moved to join the newly industrialised countries (NICs) and along with the benefits that the miracle economic growth brings, Thailand is now facing increasing environmental problems. If not properly managed and regulated this may be detrimental to the quality of life of Thai people or even the economic growth itself. There is a phenomenon of a “boom and bust” economy. In order to promote economic development, the government is conscious of the fact that the Thai economy should not be highly regulated by the imposition of a heavy environmental burden. Political decision making policy is in the hands of companies with vested interests leaving the environmental agenda weak and in some confusion. Throughout the public sector in Thailand, there is evidence of corruption and corrupt officials or agents render law enforcement and regulation almost an impossibility.

Current State of Environmental Law in Thailand: Critical Analysis and Evaluation

A. Thailand’s Political and Cultural Approach to Problems

Thailand generally suffers from a shortage of appropriate laws and administrative resources for managing water problems effectively. Ambiguities and poor law enforcement, duplication of administrative responsibilities, frequent lack of knowledge and expertise in some relevant water agencies and most of all corruption, all diminish the effectiveness and efficiency of the state bureaucracy’s role in resolving the increasing problems of water resources in Thailand.

B. The Enforcement of the Law

Lack of law enforcement is a serious problem in Thailand. The Thai research institute, a leading body noted that despite their impressive introduction in the 1992 Act, enforcement of the new environmental laws remains weak. One reason for this problem is that the environmental law in Thailand is modelled on the United States laws. In Thailand there is less stringent implementation given the difference in the level of development

C. Government Agencies and the Law

Problems that exist are multiple agency involvement, overlapping jurisdictional mandates, lack of co-ordination, and vague laws which impede efforts to protect the environment.

New Methods of Environmental Management

The 1992 Act provides a variety of suitable principles for environmental management. There are five categories covering various preventive and corrective measures.

The Prescription of Environmental Quality Standards

The environmental quality standards set the criteria to be observed by the parties carrying out projects or activities. The environmental quality standard prescription may be set up as a mean environmental standard known as *‘Ambient Standard’* or as a standard at the source of pollution known as *‘Emission Standard’*. Sec. 32 of this Act empowers the National Environment Board (NEB) to publish in the government Gazette its notifications of environmental quality standards.

The Designation of Conservation and Environmentally Protected Areas and Pollution Control Areas

Designation of Conservation and Environmentally Protected Areas provide an alternative way of identifying areas characterised by unique natural ecosystems which are different from other areas or worthy of being conserved due to their natural or aesthetic values. It includes areas in which environmental quality, is in a critical condition such areas need to be environmentally protected in order to do this the Department of

The Preparation of Environmental Quality Management Plan

The 1992 Act requires that each government agency has to prepare a development plan for its operation. In the past environmental quality management plans were included in various national social and economic development plans and thus they were consistently disregarded until accumulated problems became detrimental. Since environmental management can not be overlooked anymore, the 1992 Act therefore proposed as the duty of the concerned agencies the preparation of environmental management plans. This is a new approach of a 'Decentralised' system. In the past, Thailand was used to the Centralised approach followed by the creation of a Ministry of the Environment. It has been proven that this did not work properly.

The Preparation of Environmental Impact Assessment Reports

This report is required to indicate methods used to mitigate such impact and the project's monitoring system which is used as an early-warning system. It should be noted that it is the first time Thailand has had these kind of assessments.

The Provision of Treatment Systems

For the first time, the 1992 Act introduces 'the Central Wastewater Treatment' into environmental law. One way to prevent polluted wastes from operations being discharged into the public domain is to treat them first. The 1992 Act stipulates that the government is required to provide central treatment facilities namely central wastewater treatment facilities and central waste disposal facilities. The treatment services shall employ the polluter pays principle (PPP), i.e., when the owner or the possessor of the source of pollution does not have onsite treatment facilities. They are required to send the wastes to the central treatment facilities at their own expense. (Sec.90)

Secondly, there are promotional measures which can be described as follows; Environmental management led to a better environment but it is very expensive in the sense of business costs. Thus it sometimes discourages the owner, possessor of the source of pollution or agencies concerned from complying with the law. This Act therefore provides promotional measures to ensure environmental management.

An Analysis of Thailand's Legal Regime for Water Resources

It is clear not much has been achieved in Thailand's modernisation process in terms of water quality and protection. The lessons that remain are acute. Industrialisation and economic growth give rise to increasing demands for water and energy (In Thailand energy provided by waterpower is significant). Against these demands for the industrial and economic user domestic water supply is a important element in future development. The gap between the rich and poor in Thailand creates inevitable problems of how to regulate the water industry. How can the law fairly provide for the needs of industrial and domestic users ?Thailand has several primary laws controlling the allocation, use, and protection of its water resources. This part of the thesis surveys the major laws affecting the use of Thailand's water resources and associated environmental impacts. Surprisingly, as will be seen throughout this discussion, when the legal mechanism is taken into consideration it is found that the State does not have adequate powers to effectively control water use on the following issues: First, not all types of use and water sources are subject to legal control. Secondly, there is no legal control of large-scale water use. Thirdly, there is no priority of water use. Fourth, enforcement of environmental laws is of crucial importance in maintaining a balance between use and protection of natural resources and in maintaining overall environmental quality in Thailand. Finally, because Thailand is a developing country with limited economy and technology, and because it lacks the financial and technical foundation of more developed countries to put environmental

The Saraphi District Case Study

Saraphi has always been an important agricultural area for Chiang Mai. However, with the rapid growth of Chiang Mai city and of the non-agricultural sector in the past decade Saraphi has become a major suburban area with increasingly varied forms of economic activities. It is the location of this district close to the urban area which allows for such diversity. The district office is only 14 Km downtown from Chiang Mai and 20 Km from downtown Lamphun which is an adjacent province to Chiang Mai. Saraphi is also very close to the Lamphun Industrial Estate where many jobs are available.

The agricultural economy found in the Saraphi District consists of major crops including rice, garlic, soybean, peanuts, cabbage and longan. Water for agriculture comes from three major canals, Phya Kham Canal, Nong Phung Canal and Tha Wangtan Canal. Phya Kahm Canal built around 100 years ago is the largest of all providing water to almost 30,000 rai. It is 17 Km long beginning at Tha Sala sub-district runing through seven sub-districts in three districts and ending at Umong sub-district, Lamphun province.

There are four examples of conflict over water resources: 1) between farmers and city people, 2) between farmers at upper part of the Canal and the lower, 3) among the villagers themselves and 4) between local farmers and recently settled businessmen. The case study illustrates the difficulties mentioned above to reconcile different user groups.

The Nam Pong River Basin Case Study

The Nam Pong Basin is located in the Northeast of Thailand. It has its headwaters in the Phetchaboon Mountain Ranges west of the Khorat Plateau covering at least 4 provinces such as Phachaboon, Loei, Chaiyaphum and Khon Kaen. The Nampong River which is one of the main branches of Shee and Moon Rivers, is approximately 230 km long. Nampong is the main water supply for the people who live along this river farming mainly for rice with secondary crops during the dry season particularly soybean and green bean.

With the governmental policy about promoting industrial development, the government tried to move factories on a voluntary basis into other provinces from Bangkok by offering a variety of incentives and benefits. With the hope that environmental degradation in and around Bangkok would be alleviated and at the same time the problem of distribution of income and migration of labour to Bangkok would be solved. According to this policy, Khon Kaen is one of a few provinces selected by the government, as a centre for the development of the region in the Northeast. So far, there are more than 800 factories registered with the relevant authority. Many are located along the Nam Pong and surrounding areas. The main factories are Phonenix Pulp & Paper Factory, Mahasin Alcohol Distillery, Sugar Mill and M.D.F. Particle Board Factory.

By 1993, the authorities could not go on turning a blind eye when the Nam Pong river became so contaminated that an entire swathe of river ecology was destroyed. Phoenix Pulp & Paper had to spend a large amount of money to clean up the Nam Pong. Since then, the company has been faced with the problem of how to dispose of its treated wastewater. Every year, rice field and orchard owners file complaints against the company for damaged crops. When Phoenix requested permission to open a second mill in 1994, the Office of Environmental Planning and Policy (OEPP) required an Environmental Impact Assessment (EIA), and set some conditions before giving it the go ahead. First, the pulp mill had to find some productive use for discharged water. Secondly, it had to sign an agreement that by July 1996, it will no longer discharge wastewater.

Due to pressures from various groups concerned about the consequences of using treated water, the Phoenix Pulp Company agreed and signed a contract for "zero wastewater discharge." However, the pulp still cannot meet the requirements set by the EIA. The company did come up with Project Green, using the mill's treated wastewater to irrigate eucalyptus plantations. However, studies at Maha Sarakham University show at least seven percent of the treated water irrigating the eucalyptus fields overflows to adjoining land. These areas show increasing salinity or pH levels, which in turn gives rise to concerns about the effect on Khon Kaen's ground water supply. Is it difficult to clean water that has been used to make pulp? No, only expensive. The Industrial Work Department (IWD) said it is very hard for Phoenix to meet EIA requirements if it does not invest more on water treatment technology. It is impossible to treat pulp-mill wastewater to the zero-pollution level if the factory continue using their present machinery. Meanwhile, at least two government offices said they were aware of Phoenix pulp mill's legal violations.

But it is too soon yet to celebrate even if the policy shift is true. In the world of Thai bureaucracy where inertia is a way of life, there is always resistance to change, particularly if it threatens vested interests. It is also an open secret that many industry officials and inspectors maintain a cosy relationship with the factories they regulate. Accusations against polluting factories are usually followed by complaints about industry officials' slow response. When action is taken, it is half-hearted and the resulting penalty no more than a slap on the wrist, hardly enough to induce a change of behaviour. The complaints are made not just by the affected public but also by environment officials frustrated with their lack of authority to deal fully with the industrial polluters. Phoenix is just one of innumerable examples of industry officials' dismal failure to weed out polluters. Some recent cases include the stench from petrochemical factories at Map Ta Phut Industrial Estate torturing nearby residents and school children, dust from rock mining throughout the country, and lead mines contaminating the stream at Thung Yai Naresuan Wildlife Sanctuary. In all these cases, industry officials act more like industry apologists than protectors of the public interest and the environment

Thailand’s Traditional Approach towards Environmental Protection

Thailand’s traditional approach to the environment has a number of unique and special characteristics. Water case studies in different regions of Thailand face many challenges related to Thai traditional way of life to solve the problems. It is important to see the link between the environment and local knowledge. There are some aspects that may help to understand these challenges as following:

Buddhism, animism and local knowledge in Thailand

Environmentalism in Thailand uniquely concerns Buddhism, animism and local knowledge. Buddhism is the country's main religion, and many people still have animistic beliefs. Religious beliefs help promote aspects of sustainable development. The point here is not that Buddhism and animism offer a panacea for many present and future environmental challenges. Rather, the idea is that these are largely neglected sources of Thai knowledge and tradition which may be successfully exposed to place primitives in developing Thailand's environmental protection efforts.

The use of local knowledge can help promote environmental protection. Local knowledge, or what one writer calls indigenous ideological bases for environmentalism can be found in traditional approaches to resource management such as the traditional irrigation systems of northern Thailand, muang-faai.(Canal system). Other examples involve land classification systems for use and conservation, traditional medicines and traditional farming practices. These practices are discussed in more detail as follows:

Local Knowledge: Integrated Farming, Muang Faai Irrigation, and Traditional Medicine

Local knowledge includes the body of information unique to Thailand and known to both Thais and hill tribes. Traditional farming and irrigation methods, as well as traditional medicines exemplify how using local knowledge can promote environmental protection.

The future approach

Thailand has taken some modest steps that indicate that aspects of traditional ways of life may be incorporated incrementally into Thai environmental laws and policies in the future. As noted above, the use of local knowledge will not only be helpful, but also appears necessary if Thailand is to overcome its current environmental, financial and social problems. Community participation, transparency in government processes, and a balance in the use of natural resources will enhance Thailand’s environmental law and policies.

Thailand's current economic and social blueprint, the Eighth National Economic and Social Development Plan (the Eighth’s Plan), also includes provisions which indicate that Buddhism, animism and local knowledge may have a place in Thailand's environmental protection efforts, and specifically in environmental laws and policies. The Plan's development guidelines state that learning and training processes should include integration between the international and Thai wisdom in the context of traditional culture and values, and in harmony with nature. The Plan's summary recognises that traditional ways of life have been fading and states that the Plan will address such problems. To do so, the Plan's initiatives include developing local school curricula based on indigenous wisdom and the local environment encouraging the diffusion and study of local traditional wisdom, arts and culture. In order to foster stronger community and family cohesion emphasising cultural values in human and national development so that development is founded on self-sufficiency and indigenous wisdom revising and enforcing laws for regulating economic activity. So that they take greater account of its potential negative impact on individuals and on society, natural resources and the environment incorporating local wisdom into the conservation and rehabilitation of natural resources and the environment; promoting integrated farming and organic fertilisers; enacting the Community Forest Act and providing legal guarantees for local communities and small fisherman to participate in coastal resource management. And co-ordinating land use policy so that local ecosystem zones are demarcated to take into account any cultural and traditional diversity within the zones so that local people's existing lifestyles can contribute to the sustainable management of natural resources and the environment.

Current and proposed laws or policies also indicate that traditional ways of life may be included in future laws and policies. For example, Thailand's National Forestry Policy discusses the promotion of community forestry projects and Thailand's Community Forest Act recognises the application of local knowledge to forest management. In addition, Thailand is considering adopting a Traditional Medical Wisdom Protection Bill to establish a framework to protect traditional Thai medical wisdom and is developing social impact assessment guidelines for use in the preparation of environmental impact assessment reports. Perhaps most significantly, there seems to be an emerging consensus throughout Thailand that the use of traditional ways of life can positively affect Thailand's environmental protection efforts. The traditional ways of life also play a role in the local communities' environmental protection efforts. Private individuals and Non Governmental Organisation (NGO) are increasingly active and interested in environmental matters. Government officials are learning more about environmental matters and working to improve institutions, laws and policies.

It is possible to draw together the main conclusion for this chapter. From the analysis set out in the case studies it is clear that Thailand suffers from a number of systematic weaknesses. First, planning law is weak and difficult to enforce. Secondly is the lack of understanding and application of legal rules and the knowledge of the rules. Set against the first two themes, there is third theme "self-help" or adjusting outlines. The fourth is the local nature of many disputes. Fifth is the "unpredictable" nature of many disputes. The sixth theme is the difficulty of setting out legal principles or rules to apply to disputes. Seventh is a lack of planning and control over water resources. Eighth is lack of clarity in the law. The ninth theme is a lack of political will involving corruption at many different governmental official levels.

Modernisation strategies prompted by industrial growth inevitably lead to change in the use of law and legal regulation. Sustainable development is adopted from western advanced economic systems. In such examples in the west the disparity between rich and poor, industrial and agricultural, local and central is less than in Thailand. In Thailand, there is a sharp gap between the rich and the poor, and differences in the urban from the rural and the local from the central. There is also a sense that Thailand's planning system over water resources faces a crisis. There is a scarcity of water resources predicted with long-term problems identified in the design of suitable aqua systems. These having failed in Thailand's irrigation and planning system.

It will be readily appreciated that the water case studies on their own raise wider issues about the implementation and integration of the concept of sustainable development in the context of environmental protection in Thailand. Although not intended to be statistically representative of a wider category of water case studies in the same manner as quantitative research, such as a survey. The case studies presented in this chapter may be taken to provide some explanation of the practical working procedures and processes and thereby permit analysis of how theories and principles of sustainable development manifest themselves in a particular set of events. This chapter seeks to identify and analyse the nature of conflicts over water allocation and water pollution, how it is conceived and responded to by different groups, how it is resolved and the findings of these solutions. The case studies have shown how informal mechanisms and culture resolve water conflicts rather than formal or legal solutions or the use of the Courts. It is proved that the traditional cultural way of the Thai people still has a significant role in solving the problems regarding environmental issues. That is why the concepts and principles of sustainable development from western advanced economies or developed countries are not fully applied in practice when they are adopted and used by developing countries such as Thailand. The "mixed bag approach" involving cultural and local knowledge etc. to encounter the environmental issues has to be considered in Thailand.

Thailand not only sits geographically at the heart of Southeast Asia, it symbolises this region's approach to environmentalism in many ways. Like many Southeast Asian countries, Thailand is caught in a crossroads between rapid development and its ancient traditions. Thai environmentalism has now begun to take significant steps towards a comprehensive assessment of its approach to environmental law and policy, considering what it may do to improve its efforts to eliminate pollution and advance conservation. To take productive steps, Thailand needs to evaluate its institutional and legal framework, as well as its place and contribution to regional and international environmental protection efforts. Current challenges concern enforcement, co-ordination between government agencies, finances, conservation and biodiversity, and environmental awareness.

Some unique aspects of Thai life may be used to improve these and other challenges to environmental protection in Thailand. The traditional ways of life have aspects which promote sustainable development, and which may be incorporated into Thai environmental laws and policies. Thailand's recent Community Forest Act, Buddhist activism, the mass of trees, and efforts to protect traditional medicines, traditional irrigation, and traditional farming practices are all examples where they provided a unique solution to environmental challenges in Thailand. Although there are no easy solutions to Thailand's current environmental problems, the traditional ways of life can offer guidance. As the modern world is beginning to overshadow all aspects of traditional Thai life, fewer and fewer people understand or study how those can promote sustainable development. Like much of Thailand's flora and fauna, traditional Thai values are heading towards extinction. The custodians of ancient knowledge, vast treasures of information and skills, must be preserved and utilised.

The environmental problems currently facing Thailand present serious constraints to future economic growth and sustainability. Immediate policy measures and actions are required to mitigate adverse environmental impacts and to rehabilitate degraded natural resources especially water resources, in order to avert the possibility of the future economic decline. Thailand is a country in the midst of dramatic changes; changes in the nature and quality of life of its people, in the structure of its communities and in the foundations of its economy. In the past, Thailand was a rural society in which local communities were dependent on the natural resources which surrounded them and the national economy relied on the export of a small number of native crops. The sustainable use of resources was a fundamental aspect of rural life; people understood the inter-relationships between the different components of their local environment and their activities were defined by the need to protect their surrounding resources. Over the last two decades, Thailand has undergone considerable industrial development and urbanisation such that it is approaching the coveted Newly Industrialised Country status.

However, economic growth and industrial development have been achieved at the expense of the environment and the country’s natural resources base. The challenge for Thailand therefore is to manage the changes taking place in the country in such a way that the well being of the people is enhanced without sacrificing the national, regional or global environment. The bulk of natural resources is now depleted or deteriorated and environmental problems have emerged. In the future, economic development will need to concentrate on improving and increasing efficiency in the use of the remaining natural resources for the greatest benefit. The conflict between utilising and conserving national resources must be contained in order to facilitate both further use and future conservation of the environment.

Sustainable Development: The Way forward

In addressing the problems of economic growth western countries have developed strategies that attempt to meet the competing demands of urbanisation, pollution and the protection of the environment. In 1987 the Bruntland Commission noted in *Our Common Future* how global economic development might be addressed by sustainable development. At its cutting edge, sustainable development questions whether non-renewable natural assets should be put in jeopardy by economic growth. In the case where national assets are in jeopardy growth should be prohibited to protect the environment.

In order to establish how Thailand’s environment might be better protected it is important to consider how policies implementing sustainable development address the current environmental crisis in Thailand.

Sustainable Development and Water Resources

Sustainable development was originally defined by the Brundtland Commission as: “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (World Commission on Economic Development, 1987). This definition meets the needs of a developing country such as Thailand. The definition sets out the necessary policy required to achieve a balance between environment and development. The idea is to see economic growth in the form of continued growth and the context of sustained development that does not jeopardise the position of vulnerable people or deplete the future viability of the environment as a resources base. Thailand remains one of the fastest growing economies among developing countries. It has one of the worst records in protecting its environment. This is why the concept of sustainable development must address the needs of a developing country. Failure to implement sustainable development strategies is likely to result in serious environmental protection.

Since 1992 Thailand’s environmental law has adopted principles of sustainable development as part of its modernisation programme. The 1992 Act has failed to secure the implementation of sustainable development. The question addressed in this chapter is whether sustainable development might yet hold the key to the issues raised in the case studies on Thailand?

Sustainable development as a concept has been developed in Western countries where there are different legal cultures than in Thailand. Despite reservations about its application in developing countries the concept might form the basis for future economic development in Thailand. It is timely to consider the matter. Thailand is expected to stage an economic recovery in the year 2003. Planning future economic prosperity means addressing problems posed by environmental law. The answer outlined below is that sustainable development has not been successfully executed at a local level and has therefore, not been fully effective in addressing to environmental problems.

The paper is organised as follows. First an explanation of the concept of sustainable development, followed by how such principles are integrated into western society and law. It is necessary to understand the theoretical background of the concept and the principles of sustainable development both in the national and international context.

This paper also draws on the UK experience and describes the principles of sustainable development and Agenda 21 in the UK. It is important to understand how the UK has tackled the problems of economic growth and environmental protection. As D. Osborn (1992) noted “the UK was one of the first countries to industrialise and it has had a long experience of the problems of economic development, which can cause resources depletion, pollution, congestion and degradation of the urban and rural environment.” Secondly, as a plan for sustainable development, Agenda 21 necessarily contains an operational definition of that term and provides the way to enhance the role of many groups in decision making for sustainable development. The concept of sustainable development includes Agenda 21 as a means of implementing sustainable development policies. Agenda 21 places a focus on local needs and community action as part of a comprehensive approach to the environment for new century. The question arises as to whether the goal of established sustainable development is achieved through environmental law and regulation in Thailand. Does sustainable development meet the existing demand of developing countries such as Thailand?

The concept of sustainable development: its origins and development

Definition and Origins

It is important to trace the historical origins of sustainable development. Sustainable development has emerged during the late 1980s as an attempt to reconcile the apparent conflicts between environmental protection, economic development, and the quality of life. Its relevance at global, national and local levels is its value for setting the context for policy development and environmental law.

The interpretation of sustainable development may be found in its adaptation in different countries. Most countries aspire to achieve economic development to secure rising standards of living both for themselves and for future generations. They also seek to protect and enhance their environment now and for their children. The debate on the environment is often presented in terms of a conflict between economic activity and the environment. This suggests that it might only be possible to pursue one at the expense of the other. However, this is mistaken. Economic activity and the state of the environment combine to impact on the quality of life.

Often economic investment and environmental protection or improvements go hand in hand. What matters is that all decisions potential throughout society are taken with proper regard to their environmental impact. Economic development does not give improvements in the day to day life of people, such as increased life expectancy, a higher percentage of literacy, an improvement in food production. But there are obvious signs to conclude that development, especially economic development may work against the ecological system. The mismanagement of development has led to environmental damage such as drought and flood. It is clear that the symptoms of environmental law are in evidence in the 1980s.Overuse of natural resources has among other things, brought about an increasing rate of deforestation and each year another six million hectares of productive dry-land turned into desert. The evidence is there for all to see especially in Thailand. Rare plants and animal species are becoming extinct. The growth in the use of fossil fuel produces carbon dioxide, which may lead to global warming, and climate change. Other industrial gases threaten to deplete the planet's protective ozone shield. In the light of the growing awareness of the link between environmental stresses and patterns of economic development, the Commission of the 1987 report of the World Commission on Environment and Development (WCED) called for a new approach in dealing with the environment and economic development. The concept of sustainable development was introduced and since then attempts have been made to reconcile the two objectives through 'sustainable development.' For most societies, one of the objectives is to achieve economic development to secure higher standards of living for present and future generations, the other is to protect and enhance their environment now for themselves and in the future. Economic development is sought by society, not only, to satisfy basic material needs, but also, to provide the resources needed to improve the quality of life in other directions meeting the demand for health care, education, and a good environment. Many forms of economic development make demands upon the environment and natural resources, which sometimes are in limited supply and, generate the by-products of pollution and waste. It is also the case that there are many ways in which the right kind of economic activity can protect or enhance the environment. These include energy efficiency measures, improved technology and techniques of management, better product design and marketing, waste minimisation, environmentally friendly farming practices, making better use of land and buildings and improved transport efficiency etc. The challenge of sustainable development is to promote ways of encouraging this kind of environmentally friendly activity and discouraging environmentally damaging activities.

(a) Historical Basis for Brundtland Definition

The concept of sustainable development is inherently ambitious. An historical background helps explain how the Brundtland definition was developed.

The historical background of the concept of sustainable development can be traced back to the 1972 Stockholm Conference on the Human Environment (UNCHE) which recognised "an urgent need for intensified action at national and international level, to limit and where possible to eliminate the impairment of the human environment". The UNCHE Declaration provides in its Principle 13 as follows:

"In order to achieve a more rational management of resources and thus to improve the environment, States should adapt an integrated and co-ordinated approach to their development planning so as to ensure that development is compatible with the need to protect and improve the human environment for the benefit of their population".

There are also a number of the other UNCHE Principles which provide guidance and stress the need for integration and co-ordination of environmental and development projects. These include responsibility to protect and improve the environment for present and future generations (Principle 1), safeguarding the natural resources of the earth for the benefit of present and future generation through careful planning and management (Principle 2), recognising the importance of nature conservation including wildlife in planning for economic and social development for ensuring a favourable living and working environment (Principle 8). However, all too little progress has been made towards actual integration of environmental considerations into development policies and practices. The statement made by the Stockholm Declaration concerning the linkage between the environment and development is rather general and thus had an immediate impact because many developing countries had have difficulty in implementing it. According to Birnie and Boyle (1991) at p.3, noted "the economic and political implications of restricting developmental activities have made it difficult for the principles to be implemented in practice especially among the developing countries whose incomes have been and are still declining."

However, some of the development in the 1980's showed growing recognition of the concept of sustainable development such as the World Conservation Strategy in the 1980s, the United Nations General Assembly in its Resolution 37/7 on the 28 October 1982etc. Again, according to Birnie and Boyle (1991) at p. 431, noted "it is difficult to argue that the legal status of the Charter has any binding status for the purpose of conservation of natural resources." Nevertheless, the idea of sustainable development was first used herein the World Conservation Strategy, International Union for Conservation of Nature (IUCN), 1980. This first formulation stressed the importance of sustainability in ecological terms and was far less concerned with economic development. A.M. Mannion and S.R. Bowlby (1992) noted " it argued for three priorities to be built-in to development policies: (1) the maintenance of ecological processes (2) the sustainable use of resources and (3) the maintenance of genetic diversity". The emphasis was on the physical environment in its current state and this formulation was criticised for being anti-development. It saw economy-environment relationships simply in terms of the human impact on the environment as a static end-state and tended to imply that any impact was negative. As such, it tended to attack symptoms rather than causes of environmental degradation. For example, it led to simple calls for stopping all tropical forest clearance without considering the forces leading to clearance whether they could be controlled and indeed, whether forest clearance was always a bad thing. There are many places in the world where some form of forest clearance is a logical and desirable use of resources. Indeed, without deforestation there would be no agriculture. It is better to attempt to manage the process in a sustainable way than to try to impose prohibitions, which could never be enforced.

Moreover, A.M. Mannion and S.R. Bowlby (1992) also noted that "poverty and the activities of the poor were seen as one of the main causes of non-sustainable development rather than recognising that poverty and environmental degradation are both consequences of existing development patterns". This lack of vision of the relationship between the economy and the development led to a re-formulation of the concept of sustainable development to reflect concerns over what many commentators or critics saw as an 'anti-poor' bias in the IUCN (1980) report.

After the failure of the IUCN (1980) report, the 1987 World Commission on Environment and Development (WCED) was established, chaired by Mrs. Gro Harlem Brundtland which brought the concept of sustainable development onto the international agenda.

(b) The Brundtland Commissions

The Commission initiated studies, which culminated in the publication of *Our Common Future* (the Brundtland Report), a report, which has set the benchmark for all future discussions of sustainable development. It was clear that this report has provided the most commonly used working definition of sustainable development. The Brundtland Report identifies two key concepts in sustainable development policies:

(1) "The basic needs of all people must be met in a way, which provides for their needs with security and dignity in the world today where the needs of so many are not met. This inevitably means giving the needs of the poor priority. This is not just desirable in moral or equity terms, it is also good development practice.

(2) There are no absolute limits to development, development potential is a function of the present state of technology and social organisation, combined with their impact on environmental resources."

(3) The report also argues that poverty, resources depletion and environmental stress arise from disparities in economic and political power. From this, it is argued that sustainable development at a global level can only be achieved through major changes in the way in which the planet is managed. With this approach, sustainable development is not seen as a fixed state but rather a process of change in which each nation achieves its full development potential while at the same time building upon and enhancing the quality of the environmental resources on which development is based. This ambitious goal will require different forms of resources exploitation, investment patterns and decision-making processes, technological development, and institutional change.

The report advanced a long list of ambitious goals, many of which are imprecise and some of which are not mutually consistent. It is interesting to see that they reflect the problems of the mid-1980s, which were a period of economic stagnation or decline, widening disparities between the income and prospects for the rich and the poor and of an increasing awareness that this form of economic development, which characterised the modern world, was undermining the sustainability of environmental processes.

The Brundtland Commission, however, wanted its report not to be seen as a "prediction of ever increasing environmental decay and hardship in a world of decreasing resources". Instead, there remained "the possibility of a new era of economic growth based on policies that sustain and expand the environmental resources base." By the end of 1988, a report, *Our Common Future* had received public backing from the leaders of over 50 nations. The issues raised by the report were discussed at the UN General Assembly in 1989, leading to the passage of resolution 44/228 which called for a UN Conference on the Environment and Development and established its terms of reference. In 1992, the Brundtland report was the central theme of the UN Conference on Environment and Development (UNCED, popularly known as the "Earth Summit". The Earth Summit was held in Rio de Janeiro in June 1992. It was the first conference on the world's environmental future to be attended by the heads of states and governments. Over 120 world leaders attended the conference and more than 150 countries were represented overall. The conference called on governments to take action at national level and in particular to adopt strategies for sustainable development building on their existing plans and policies. The Earth Summit reached a number of important agreements, which together form a framework for further action. One of the statements agreed was the Rio Declaration on Environment and Development, which sets out 27 general principles for achieving sustainable development. To support this general declaration, the Summit adopted Agenda 21 a comprehensive action plan for the pursuit of sustainable development into the next century with 40 chapters of detailed recommendations addressed to international agencies, national and local governments, and non-governmental organisation (NGOs). A new Commission on Sustainable Development (CSD) was established under the aegis of the UN to monitor progress. The CSD held its first meeting in New York in June 1993, it has elected 53 members. Agenda 21 also called on governments to prepare national strategies for sustainable development and to submit reports to the CSD on the action taken to implement Agenda 21, on the problems faced, and on any other relevant environment and development issues.

Thus, the concept of sustainable development had been developing before the Earth Summit. However, it can be said that the Earth Summit greatly heightened the world's appreciation of the limits on nature's capacity to bear human developmental activities and thus the need for sustainable development. In many ways, the Rio Conference has enhanced the concept through clearer enunciation of the need to integrate environment and development. The concept of sustainable development underlies a number of principles in this Declaration, for example Principle 4 specifically provides for and requires sustainable development:

"In order to achieve sustainable development, environment protection shall constitute an integral part of the development process and cannot be considered in isolation from it."

Other principles address the problems concerning sustainable development more comprehensively and more concretely. These include those relating to the eradication of poverty as "an indispensable requirement for sustainable development"(Principle 5), "according special priority to the needs of developing countries particularly the least developed" (Principle 6), the "common but differentiated responsibility" of states in pursuing sustainable development (Principle 7), reduction and elimination of unsustainable patterns of production and consumption (Principle 8), and encouraging "public awareness and participation" by providing access to information and judicial and administrative proceeding concerning the environment (Principle 10). Moreover, principles relating to the implementation of sustainable development are spelled out namely the precautionary principle (Principle 15), the polluter-pays principle (Principle 16), intergenerational equity (Principle 3), requirement of environmental impact assessment (Principle 17), public participation and those calling for recognition of indigenous rights and community-based management including the role of women (Principle 10,20 and 22). Associated issues relating to the goal of sustainable development are also raised such as the right to development and to a healthy environment (Principle 1 and 3) respectively.

In general, there is a clearer recognition of the developmental need of developing countries in the Rio Declaration than in the Stockholm Declaration, for example in Principal 2, 6, and 11. In the view of international environmental law, it should be noted that the use of "shall" particularly in Principle 4 of the Rio Declaration does not make it binding per se. Although, this Declaration is different from others in the sense that it was adopted by consensus, this kind of procedure makes it more difficult to evaluate the position of individual states. Thus, the legal significance of the Declaration depends very much on subsequent state practice.

In practises, it is obvious that the concept of sustainable development is inherently ambiguous and unclear and it needs to define. The concept lacks a clear definition and meaning. It is open to a wide range of interpretations depending on the interest groups associated itself with the practice of the concept. As evidence, the WECD defined the concept only as development which "meets the need of the present without compromising the ability of future generations to meet their own needs". This hardly provides a clear perception of the concept. Although the concept of sustainable development has become widely known as a result of the Brundtland Report, international recognition of the need for integration of economic and environmental concerns predated the Commission's work. It has long been obvious to the international community that over-development in some countries has resulted in environmental degradation while in others under-development has caused environmental decline.

No matter whether the concept of sustainable development is unclear and has weakened international environmental law or not. There is no doubt that the question of the concept of sustainable development has become widely established as a significant concept applicable to environmental protection and decision making in the development process at all levels and that its importance will continue in the decades to come.

Sustainable development and its application in Asia

In Asia, the aspiration to adopt strategies for sustainable development must be considered against the reality of increasing pollution levels. Much of Asia and particularly Thailand, has experienced rapid economic growth prior to the present crisis in the environment. However, this "Asian miracle" exacted a high price on the region's environmental qualities and natural resources. International undertaking in sustainable development has not been sufficiently clear, even if there had been clarity it in many parts of Asia. For example, the disaster of the Southeast Asian fires starkly reveals this fact. Yet, sustainable development as a normative goal may be the only acceptable response to the fires. A greater emphasis on conservation has not proved acceptable to Thailand or most developing countries, given widespread poverty and current low levels of income. Sustainable development proves problematic not at the conceptual level, but in ensuring that specific programs and processes of decision-making take sustainability fully into account.

The theoretical relationship between economic growth and environmental protection is both settled and controversial. It is settled in as much as the concept of sustainable development is well established by the Brundlandt Report. The goal of sustainable development is to provide "development that meets the needs of the present without compromising the ability of future generations to pursue their own needs." The concept of sustainability attempts to reconcile the twin imperatives of economic growth and environment protection. It served as a touchstone for the U.N. Conference on Environment and Development (or Rio Summit). Increasing numbers of international treaties and institutions, both environmental and economic refer to sustainable development. Some observers believe that it will crystallise into a peremptory norm of international law. But beyond the increasing acceptance of sustainable development as a principle of international environmental law, the connections between economic growth and the environment remain controversial in practice, in specific, concrete situations. Some feel that the concept of sustainable development has been misused to "skilfully disguise a step backwards" for environmental protection because it prioritises economic development. Sustainable development is "non-preservationist" and "reflects a commitment to promote development, albeit of a special qualitative nature." Many environmentalists continue to express concern that economic growth and activity worsen the environment. Some environmentalists believe that increased trade leads to the depletion of natural and environmental resources. As such, the wish to curb trade that harms the environment has generated many controversies, such as the Tuna-Dolphin case and Shrimp-Turtle cases decided by the WTO Dispute Settlement Body. As regards investment, there have been concerns that competition between countries to attract foreign investment will lead to a cut in environmental standards (and therefore costs) in a classic "race to the bottom." This issue continues to garner attention despite the fact that empirical studies show only mixed evidence of industrial migration in response to environmental standards.

On the other hand, some assert that economic growth does not harm the environment, but actually allows greater environmental protection. They believe that free and open market economies are the best means for creating sustainable development and protecting the environment. Principle 12 of the Rio Declaration exemplifies this belief. Anecdotal evidence indicates that foreign investment can also lead to higher standards of environmental protection as foreign multinationals in developing countries conform with their own standards, which are often higher than those set by the host governments. Several studies point to a conclusion somewhere between the extreme views that economic growth is either wholly bad or wholly good for the environment. The experience of the Organisation for Economic Co-operation and Development (OECD) and the newly industrialised economies in Southeast Asia, for example Thailand, teaches that pollution will first increase with economic growth, when industries have relatively low income levels, and then decrease with further economic growth to higher levels of income. This pattern is known as the inverted "U," or Kuznets curves, of environmental quality.

Sustainable development, Agenda 21 and its importance in Thailand

In Thailand sustainable development has been adopted as part of environmental law (1992 Act) and has adopted the strategy for sustainable development since the Seventh National Economic and Social Development Plan (1992-1996). In addition techniques include the precautionary principle, the polluter pays principle (PPP), etc have also been adopted in the 1992 Act. As mentioned in chapter 6, such principles are integrated in the 1992 Act as follows: the application of the precautionary principles can be seen in Section 96 And in Section 10, the Environmental Impact Assessment (EIA) is in Section 46, 47, 48, 49 and 50. The application of the polluter pays principle(PPP) is in Section 68 (2) and Section 70(1). And the principles of public participation is in Section 6.

In recent developments in environmental policies, Agenda 21 is the most important, and in Thailand the least understood document to come out of Rio. Thailand until now (at the time of writing) has not been yet accepted Agenda 21 at national policies level. Agenda 21 is a comprehensive road map of actions necessary for countries to achieve sustainable development. Because Agenda 21 is a programme of action, every chapter or subchapter begins with factual information and policies that explain the basis for action. Objectives or goals are stated next. The heart of each chapter or subchapter is a description of the various actions that countries agreed to take. The plan then describes the means required for their implementation. Agenda 21 was conceived and drafted as a plan, it was obvious that the success or failure of the Earth Summit would be judged by how the nations of the world adhered to the commitments they made in that plan.

"Humanity stands at a defining moment in history," Agenda 21 begins. It then summarises much-discussed global problems: "We are confronted with a perpetuation of disparities between and within nations, a worsening of poverty, hunger, ill health and illiteracy, and the continuing deterioration of the ecosystems on which we depend for our well-being. " Although much can and has been said about these problems, two facts bring the challenges of the next century into focus. By 2050, the current global population of about 5.7 billion people will grow to between 7.9 and 11.9 billion. In the same period, the world's economy will grow by four or five times. These two facts have the potential to greatly multiply already significant and complex environmental, social, and economic problems.

Actions to achieve sustainable development are thus based on enlightened self-interest, not altruism. A degraded natural environment makes it harder for people to make a living. Rising sea levels from global warming would flood coastal cities around the world. Poverty, overcrowding, and competition for scarce resources can easily ignite military conflicts, and often have. To the extent that human activity destroys creatures, habitats, or natural systems that have long been in existence, it impoverishes us all.

Sustainable development, Agenda 21 says, is a way of turning these problems into opportunities. "Integration of environment and development concerns and greater attention to them will lead to the fulfilment of basic needs, improved living standards for all, better protected and managed ecosystems and a safer, more prosperous future. " Because it is an agreement among the world's nations, Agenda 21 represents "the beginning of a new global partnership for sustainable development. " Agenda 21's comprehensiveness is suggested by its length; regardless of how it is printed, the complete text is always several hundred pages long. Its four basic sections, concerning social and economic aspects, conservation and management of resources, strengthening the role of major groups, and means of implementation, suggest its broad scope. These sections are divided into a total of 40 chapters, many of which contain several subchapters. The subjects for these chapters indicate the ambitiousness of Agenda 21. The social and economic section includes chapters on international trade and investment, poverty, consumption, population, human health, human settlements, and the integration of environment and development in decision-making. The resources section contains chapters on the atmosphere, land use, deforestation, desertification, mountain ecosystems, agriculture, biological diversity, biotechnology, oceans, freshwater, toxic chemicals, hazardous wastes, solid wastes and sewage, and radioactive wastes.

In its third section, there is the most important section relevant to the thesis and Thailand. Agenda 21 identifies ways to enhance the role of many groups in decision-making for sustainable development: women, children and youth, indigenous people and their communities, non-governmental organisations, local authorities, workers and their trade unions, business and industry, the scientific and technological community, and farmers.

Finally, means of implementation include money, technology transfer, science, education and public awareness, capacity building in developing countries, international institutions, international legal instruments, and information.

As a plan for sustainable development, Agenda 21 necessarily contains an operational definition of that term. The Brundtland Commission defined sustainable development in 1987 as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs. " That definition captures the basic idea, but it is unsatisfying to those who want to know what it means in a specific context. The actions contained in Agenda 21 provide a way to understand more precisely what sustainable development means. Because the people who worked on specific chapters were knowledgeable about those particular areas, Agenda 21 also represents some of the best current thinking about sustainable development. Agenda 21 thus provides a more focused and useful point of departure for a discussion of sustainable development than the one-sentence definition.

Countries that adhere to their Agenda 21 commitments must figure out what those commitments mean in their particular situations and how they should be implemented. Agenda 21 is simply too general to pull off the shelf and implement. For example: "Governments at the appropriate level, with the support of regional and international organisations, should strengthen regional co-operation and exchange of information on land resources. " If governments are not already doing this, they must decide how to strengthen regional co-operation as well as what information to share with whom. Here and throughout Agenda 21, they must also determine what level of government is most appropriate. In general, Agenda 21 suggests that planning and management be conducted by the lowest governmental level that can take effective action. Because many problems are most obvious at the local level, and because local government is closer to the people than higher levels of government, Agenda 21 proposes that municipalities adopt a local Agenda 21 process. Agenda 21 also indicates that every part of society has a role to play in sustainable development.

Agenda 21 is relevant to all countries. For Thailand and developing countries, it encourages the provision of adequate sanitation systems and water supplies, access to basic health care, and the reduction of air and water pollution. Agenda 21 recognises or incorporates existing treaty commitments, such as those concerning climate or stratospheric ozone layer. Treaties are legally binding under international law on countries that have ratified them. The great majority of the Agenda 21 commitments, however, are not based on treaties. Such commitments are known in international law as "soft law," which is a way of saying that they should be taken seriously even if they do not have formal legal status. The most basic reason for adhering to "soft law" commitments is that a country's public agreement to do something is still a commitment, whether it is legally binding or not. The intense and vigorous negotiations among countries about every word and comma of Agenda 21 attest to the significance of the commitments that countries ultimately made.

Finally, a fundamental premise of Agenda 21 is that all nations have common obligations to their citizens as well as to future generations. Fulfilment of those obligations is part of what it means to be among the community of nations. As D. Hughes(1995) noted “the basic principles to emerge from the document are as follows: First, decisions throughout society must be taken with proper regard to their environmental impact. Secondly, Sustainable development requires the encouragement of environmentally friendly economic activity and the discouragement of activities which damage the environment. Thirdly, to a considerable extent environmental protection requires collective action. Finally, any decision about economic activity should take into account the cost of pollution and waste and the value of resources consumed and conversely, the value of any environmental improvements made.”There are a number of strategies to Agenda 21. First, identifying protection in specifies areas of development, secondly, ensuring financial resources and mechanisms that are applicable to the protection of the environment. Thirdly, the capacity to build co-operation strategies in specific areas of the environment- land, water air, etc. Finally, to develop the sectored responses to environmental protection, success in achieving Agenda 21 targets applies at the implementation stage. Local needs and communities action is a key way to take forward environmental protection. In that sense Agenda 21 sets the scene for the future.

Conclusion

Thailand is entering an age of greater environmental awareness through the adoption of legal measures and policies that accord with the goals and requirements of international environmental law. As evidenced in this paper, a number of substantive measures have been taken to control water problems. An outstanding achievement is a draft Water Bill that concentrates on the management of the country’s water resources, if approved by the cabinet, this will be Thailand’s first water legislation. It is proposed in the Water Bill to change the structure of authority overseeing Thailand water resources. Although this may take some time, it is clear that the trend in Thailand is towards tighter water resource control.

This paper demonstrates the difficulties of implementing the emerging concept of sustainable development in the field of water recourses in developing countries such as Thailand. It should be noted that the success of implementation in developed countries cannot be compared with developing countries. While there is evidence that a number of legal and policy measures are being raised in Thailand, the question is whether enough has been done to avoid the mistakes committed by developed countries. Thailand is in the advantageous position of being able to learn from the mistakes and environmental failures of the UK and other developed countries with respect to environmental-water policies. Thai leaders and citizens have important choices confronting them as they proceed with development and modernisation while seeking to be responsible stewards of their water and other national resources for the benefit of future generations. There is an urgent need to pay more attention to the various principles and concepts referred to throughout this thesis the aims of which are to achieve sustainable development at all levels. It is clear that Agenda 21 and local community participation will play a significant role in the future development of Thailand.

The investigation of environmental laws of Thailand focused on the water resources, analysis of the relevant water pollution legislation, the procedure used to implement the law, the environmental policies and agencies, the political system, the enforcement of the law, analysis of case studies concerning water problems and the relationship between economic growth and environmental protection. It has demonstrated that the new environmental law, the 1992 Act has produced some significant results. But, it proved to be too sophisticated and too complicated for a developing country such as Thailand. It has shown that environmental law in Thailand is still fragile and at too early a stage to achieve sustainable development. Drawing from the findings of the case studies, it has shown the concept failed to be applied locally within different regions.

The level of the law that Thailand currently has in place governing the use and supply of its water resources, the prevention and control of water pollutions and the environmental impact of water resources developments appear to be inadequate. Weak points, especially in the system created for enforcement of the law, problems of ownership, the lack of government intervention in some water case studies and the instability of economic and environmental policies adopted by the government affect directly the viability of environmental law. It is hoped that when the new Water Bill comes into force, it will overcome all legal problems and obstacles.

The conclusions reached by this study seem to be pessimistic, however, it is necessary to bear in mind that Thailand as with most other developing countries has been facing economic and political instability over the years which is a factor of uncertainty for the development of any kind of policy. It is not possible to affirm that this period of instability is over. Nevertheless, it is crucial that Thailand should take advantage of the present phase that favours the existence of environmental law in order to think about the failure of the balance between economic growth and environmental protection in the past. Choices made now will have a crucial impact upon its water resources and environment for future decades.

References

[1] Boyle and D. freestone, International Law and Sustainable Development (Oxford, Oxford Press, 1999), p. 1.

[2] A.M. Mannion and S.R. Bowlby (eds.), Environmental Issues in the 1990s, (Chichester, John Wiley & Sons, 1992), pp.21-35.

[3] Boer, 'Institutionalising Ecologically Sustainable Development: the Roles of National, State and Local Governments in Translating Grand Strategy into Action', in Willamette Law Review Vol. 31, 1995.

[4] Kingsbury, 'The Tuna-Dolphin Controversy: The World Trade Organisation and the Liberal Project to Reconceptualize International Law', in Yearbook of Journal of International Environmental Law p. 1 (G. Handl ed., 1994). For a study of the issues in the context of Asia, see Asian Dragon and Green Trade: Environment, Economics and International Law (Simon SC Tay & Daniel C. Esty eds., 1996).

[5] Hughes, Environmental law (London, Butterworths, 1996), pp. 19-20. See also House of Commons, Select Committee on Environmental Audit Memoranda, HC 175, 27 January 2000, *Consultation Paper on a Revised UK Strategy for Sustainable Development.* (http://www.pubilcation.parliament.uk)

[6] L. Tookey, 'Southeast Asian Environmentalism at its Crossroads: Learning Lessons from Thailand's Electic Approach to Environmental Law and Policy', Georgetown International Environmental Law Review , Vol 11, pp. 307-362.

[7] Osborn, 'Some Reflections on UK Environment Policy, 1970-1995', (1997) Journal of Environmental Law Vol. 9, No. 1, pp. 3-22.

[8] Department of Pollution Control, Ministry of Science, Technology and Environment, Report of Polluted Water Situation in Nam Pong-Chi-Mun, 1992, pp.1-17.

[9] G Handl, A Hard Look at Soft Law , pp. 371-393 (1988). (arguing that sustainable development is a condition sine qua non for human life on the planet and must therefore act as a restraint in the higher interest of the whole international community); see also G. Christenson, 'Jus Cogens: Guarding Interests Fundamental to International Society', in Virginia University Journal of International Law , p.585 (1988).

[10] J. McEldowney and S. McEldowney, Environment Science and Law(London, Longman, 1996), chapter 14, p.294-295.

[11] Jones, Bryn, 'Environmental law-too little too late', in Lomas, O. and McEldowney J. (eds.) Frontiers of Environmental Law (London, Chancery, 1991), at pp. 68-74.

[12] K. Milton, Environmentalism and cultural Theory: Exploring the role of Anthropology in Environmental Discourse (1996), p. 109.

[13] L.K. Caldwell, International Environmental Policy, Emergence and Dimensions, (Durham and London, Duke University Press, 1990), pp.197-204.

[14] M. Pallemaerts, International Environmental Law from Stockholm to Rio: Back to the Future?, in Greening International Law, at 1-19.

[15] Mikimasa and Yoshida, 'Industrial Policy and Industrial Waste Countermeasures in Thailand', in Development and the Environment: The experiences of Japan and Industrialising Asia, (Bangkok,

Environmental Centre, 1995), p. 297 (discussing Thai industrial policy, industrialisation, industrial pollution, and noting that pollution-producing factories are on the increase.

[16] N. A. Robinson, 'Comparative Environmental Law Perspectives on Legal Regimes For Sustainable Development', in Widener Law Symposium Journal Vol. 3, 1998.

[17] National Economic and Social Development Board, Development Guidelines of the Eighth Economic and Social Development and Social Development Plan (NESDP, Bangkok, 1997), p. 3.

[18] P. Chalokpanrat, Summary of Impacts of Pollution upon Fishery in Nam Pong, Research and Development Institute, Khon Kaen University, 23 May 1994.

[19] P. Dupuy, 'Soft Law and the International Law of the Environment', Michigan Journal of International Law, (1991), Vol. 12, p. 420.

[20] P. Hirsch and L. Lohman,'Contemporary Politics of Environment in Thailand',Asian Survey (1989).

[21] P. Hirsh, 'Environment and Environmentalism in Thailand: Material and Ideological Bases', in Seeing Forests Trees: environment and Environmentalism in Thailand (Bangkok, 1997), p. 15, 33.

[22] P. Mekloy, 'The Magic Forest', Bangkok Post , September 11, 1997, p. 1.

[23] R. K. Turner, 'Sustainability: Principles and Practice', in R. K. Turner, (eds.) Sustainable Environmental Economics and Management (London, Belhaven Press, 1993) at pp. 3-5.

[24] T. Funatsu, 'Environmental Awareness in Thailand; Institutionalisation of Environmental Problems and the State of the Save- Nature Boom', in P. Pradubraj and S. Nicro, Environmental Awareness in Developing countries: The cases of China and Thailand (Bangkok, 1997), pp. 169-72.

[25] T. Panayotou and C. Parasuk, Land and Forest: Projecting Demand and Managing Encroachment (Bangkok, TDRI, 1990), p. 13.

[26] T. Thongpao, 'Industrial Expansion Creates Pollution', Thai Development Newsletter, Jan.-June 1997, at 61 (detailing cases of industrial pollution).

[27] Thailand Environmental Institute, 'Towards Environmental Sustainability', in 1996 Annual Report (Bangkok, TEI, 1997), pp. 30-32, 34-39.

[28] U. Tankimyong, Social Organisations in Canal Irrigation System: A Comparative Study of Highland and Lowland Communities in Northern Thailand, (Chiang Mai, Chiang Mai University Press, 1984), pp.8-12.

[29] Witzsch, Guenter (eds.), Lesotho Environment and Environment law(Lesotho, Morija Printing Works, 1992) p.203.

[30] World Commission on Environment and Development, Our Common Future, the Brundtland Report (Oxford, Oxford University Press, 1987), pp. 1-23.

Taxation of Electronic Commerce

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Abstract

No other innovation, or way of doing business, has revolutionized the international economy faster than the Internet. It took generations for the Industrial Revolution to play out around the world while the Internet Revolution has unfolded in less than a decade. The speed of this change has been astounding. In the Industrial Age, as change took place, governments were able to react accordingly. In the Internet Age, today's innovation is tomorrow's standard. Governments are finding that they must act on Internet time, which is a daunting challenge.

This paper examines the current state of affairs with regards to the taxation of Internet commerce. It analysis the historical perspective of the United States of America, the OECD, the WTO, and the European Union, and attempts to answer the question "What happens next?".

Introduction

The biggest standards battle in the history of the digital revolution has again heated up and the fight is about taxes – taxes on e-commerce. The unprecedented growth in the Internet during the "internet bubble economy" highlighted the glaring problems with current taxation laws that address the remote purchases of goods and services. While these problems and concerns may have been sidelined during the past couple of years with the "busting of the internet bubble", the worsening of the worldwide economic slowdown and the surfacing of the global war on terror; they have not been adequately addressed.

And, Internet commerce is not dead. Recent statistics released from the US Census Bureau of the Department of Commerce shows that Internet commerce has risen during the last quarter of 2001 and the first quarter of 2002 in comparison to the last quarter of 2000 and the first quarter of 2001. There estimate of U.S. retail e-commerce sales for the first quarter of 2002, not adjusted for seasonal, holiday, and trading-day differences, was $9.849 billion, an increase of 19.3% from the first quarter of 2001 Fig.1.

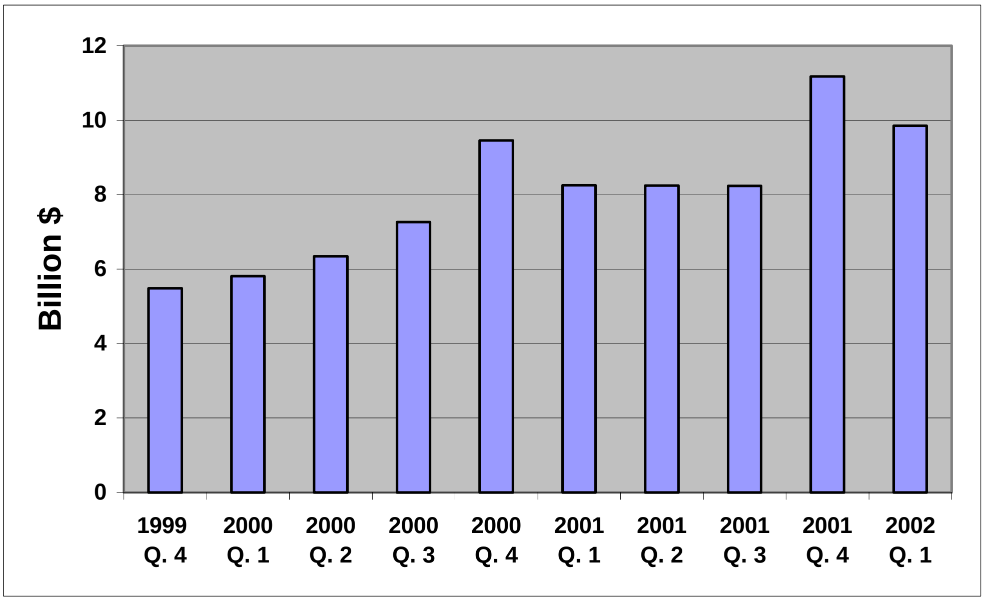

Fig. 1: U.S. e-COMMERCE RETAIL SALES

Total retail sales for the first quarter of 2002 were estimated at $743.8 billion, and increase of only 2.7% from the same period a year ago. E-commerce sales in the first quarter of 2002 accounted for 1.3 % of the total sales while in the first quarter of 2001 e-commerce sales were 1.1% percent of total sales.

The United Kingdom statistics also show a startling increase in e-commerce sales. The Interactive Media Retail Group (an industry body for global retailing) is now collecting hard date on online sales to UK consumers. Their IMRG Index provides robust evidence that the UK e-retail market is significantly larger and growing faster than previously estimated. The Index rose to 262 in April 2001, up from 100 in April 2000 – giving an estimate of e-commerce retail sales for the month of April 2001 of 210 million pounds sterling. This increase of 162% in e-commerce retail sales compares with only a 5.9% increase in general retail sales. Figures from the Index similarly show an increase of 10.4% in March, 2002 compared with February, 2002 and the organization estimates that e-retail will continue to grow ten-times faster than mainstream retail, with no indication that any sector is beginning to plateau.

In a press release dated June 2002, they stated “Half a billion people are online at home worldwide and a third of them shop online.” They continued, “Europe now has more internet users than the US. The UK is responsible for a third of all e-retail sales in Europe, with online sales worth an estimated £507 million in May (2002) alone. Internet sales continue to surge, against the general retail trend, but while these direct sales are the most concrete manifestation of e-retail, and may reach 15% of all retail within a few years, they are only one element in the e-commerce equation.”

They also highlighted that “throughout the first half of 2002 a steady stream of positive reports have been issued by e-retailers, whose ventures are showing profits - many for the first time - and experiencing rapid growth in sales. The UK e-retail market is currently growing at over 90% year-on-year, and is expected to be worth £7 billion this year (2002), representing almost 4% of the total retail market by the end of the year”.

IDC Research confirms these figures[1]. As the world's leading provider of technology intelligence, industry analysis, market data, and strategic and tactical guidance to builders, providers, and users of information technology; their recent research suggests that more than 600 million people worldwide will have access to the Internet - spending more than $1 trillion online. While the United States now accounts for 40 percent of the money spent online, they suggest that as residents of Asia and Western Europe increase their spending, The U.S. should only account for 38 percent by 2006. In some Asian nations, governments are lobbying to bring more citizens online, thus contributing to rapid Internet penetration in those markets. In Western Europe, e-commerce is expected to rise 68 percent this year as the adoption of the Euro brings better competition, price transparency, and improved deals for online buyers.

Accordingly, governments at all levels and all types of retailers are now addressing the best way to deal with legislative shortcomings surrounding the taxation of e-commerce; with local government groups pushing for tax assessment based on where the purchaser lives rather than the seller’s location, and businesses lobbying for a neutral, fair and equitable, easily administered system. The EU recently acted unilaterally with their Electronic Commerce Directive.

The Problem

It is unquestionable that developments in e-commerce and new business models have allowed all kinds of businesses to change their trading practices in ways that were unimaginable when tax rules were developed for traditional business models. The emergence of the commercial Internet has opened new routes for the exchange of goods and services. Almost any goods that can be digitized can be bought, sold and distributed quickly and inexpensively through the Internet to consumers worldwide. Substantial questions remain, however, about how electronic commerce will be treated by the various laws of taxation.

Electronic commerce raises domestic and international tax issues. Specifically:

1. There are unique problems in tax administration posed by electronic commerce.
2. There are sales and use tax issues, such as nexus and the non-uniform (and sometimes inconsistent) manner in which tax laws treat electronic commerce-related activities.
3. There are international taxation issues arising under domestic taxation laws and foreign value added tax systems (with this changing business climate, tax authorities the world over have been particularly concerned that private customers would buy digital products and services from non domestic suppliers because no sales tax was due on these products).

Most nations have in place a system of tax laws and regulations which govern the tax treatment of goods and services crossing their borders and assert taxing jurisdiction on the basis of the "source" of income and the residence of the entity earning the income. For example, determining the source of income is important both to businesses in the United States and to foreign entities doing business in the United States. Under the Internal Revenue Code (I.R.C.), United States citizens and residents ordinarily are fully taxable in the United States on income which is derived from sources outside the United States, subject to certain exemptions and limitations. A corporation created or organized in the United States also is taxable on its worldwide income. Foreign entities, however, are generally only taxed in the United States on income generated from sources within the United States. For example, nonresident aliens in the United States and certain foreign corporations in the United States are taxed on income which is "effectively connected" to the conduct of a trade or business within the United States.

Taxation of international commerce also depends on the provisions of various international bilateral tax treaties. Among the most important concepts in these treaties is that of "permanent establishment," which is essentially a fixed place of business through which the business of an enterprise is wholly or partly carried on. To prevent double taxation of international activity, countries generally tend to restrict their taxation of business profits to those profits that are attributable to a permanent establishment in their jurisdiction.

The Internet raises difficult unresolved questions about how to determine whether an entity engaged in electronic commerce is engaged in a trade or business in a particular country or has a permanent establishment in that country for tax purposes. Parties engaged in electronic commerce, for example, may not have, or need, a physical place of business in a country in order to conduct extensive business online in that country. Thus, it is not always clear whether they have a permanent establishment which would give rise to any tax obligation. It is unlikely, however, that foreign electronic vendors who merely solicit orders within a country and then ship tangible goods into that country based on those orders will be considered as engaging in a trade or business in that country.

Where's the Nexus?

The power of a state to impose income taxes or sales or use taxes, or an obligation to collect taxes, depends on whether a "nexus" exists which would support a state's taxing jurisdiction. "Nexus" essentially means a "contact or link" – a contact or link which forms the legal basis for the imposition of taxes. Only those parties having sufficient contacts or links with a state are subject to taxes by that state - some minimum connection or link between the taxing state and the person, property, or transaction it seeks to tax. Where is the "nexus" in electronic commerce: is it between the seller and his home state, the seller and the state of the customer, the customer and the state of the seller, the customer and his/her state of residence, the internet service provider and their resident state, the internet service provider and the home state of the customer, or the internet service provider and the state of the seller? These questions still have to be answered.

In addition, if nexus exists for online transactions, the question of what, actually, is subject to sales and/or use tax remains. In general, this depends on how the transaction in question is classified under sales and use tax laws. Normally, governments distinguish between transactions in tangible personal property, services and intangibles and take a variety of approaches to classifying electronic activities under sales and use tax statutes, with little uniformity or guidance in their application. Sales and use taxes are normally imposed on retail sales of tangible personal property unless the law provides for a specific exemption or exclusion. "Tangible personal property" typically includes material goods that may be perceived by the senses. Services are not generally covered by sales and use tax unless the law specifically enumerates the services as taxed. Although services are less extensively taxed than tangible goods, over the years there has been a gradual broadening of the tax base for services. Intangibles, such as transfers of stocks and bonds or intellectual property rights, generally are not subject to sales tax. Sales and use taxation of intangible intellectual property rights has been an important issue in taxation and, given the important role that licensing plays in electronic commerce, promises to continue to be important in the future.

Taxation in connection with electronic commerce must also take into account the unique features of the Internet and other electronic networks. Most tax laws and regulations were established before the rise of electronic commerce, and are rooted in concepts of physical location or presence. Determining the identities of the parties who participate in a transaction, where a transaction is "sited," and identifying key "taxing points," for instance, are often important to the administration of taxes. These concepts, however, may be difficult to analogize to transactions occurring in cyberspace.

The Problem of Lost Revenue!

Not requiring internet-based merchants to collect sales and use taxes, places them at a significant advantage over traditional retailers. This inequity could have a profound negative impact on not only retailers but local communities because it risks governments' ability to collect the revenue needed for education, police, and other essential services, and could lead to increases in property or income taxes. In the United States nearly 40 percent of all state revenues come from the sales tax; it is the single most critical source of funding for public education. There is serious concern in the United States that unless the Congress moves to restore a level playing field by taxing internet commerce, current industry and academic studies project American States will lose between $10-20 billion in sales tax revenues by 2003, $45.2 in 2006 and as much as $54.8 billion by 2011 – Figure 2.

Given the above, it obvious why a central theme in the debate over the tax treatment of internet commerce centers around the extent to which the inability to tax them has eroded government sales tax collections. Revenue losses from e-commerce generally arise because e-commerce enables a significant increase in remote sales, thereby causing a shift from collecting sales taxes at the point of sale to collecting use taxes for goods used, consumed, or stored in a jurisdiction. The resulting revenue losses are generally the result of tax evasion, not tax avoidance, since the use tax is due even if the sales tax cannot be collected.

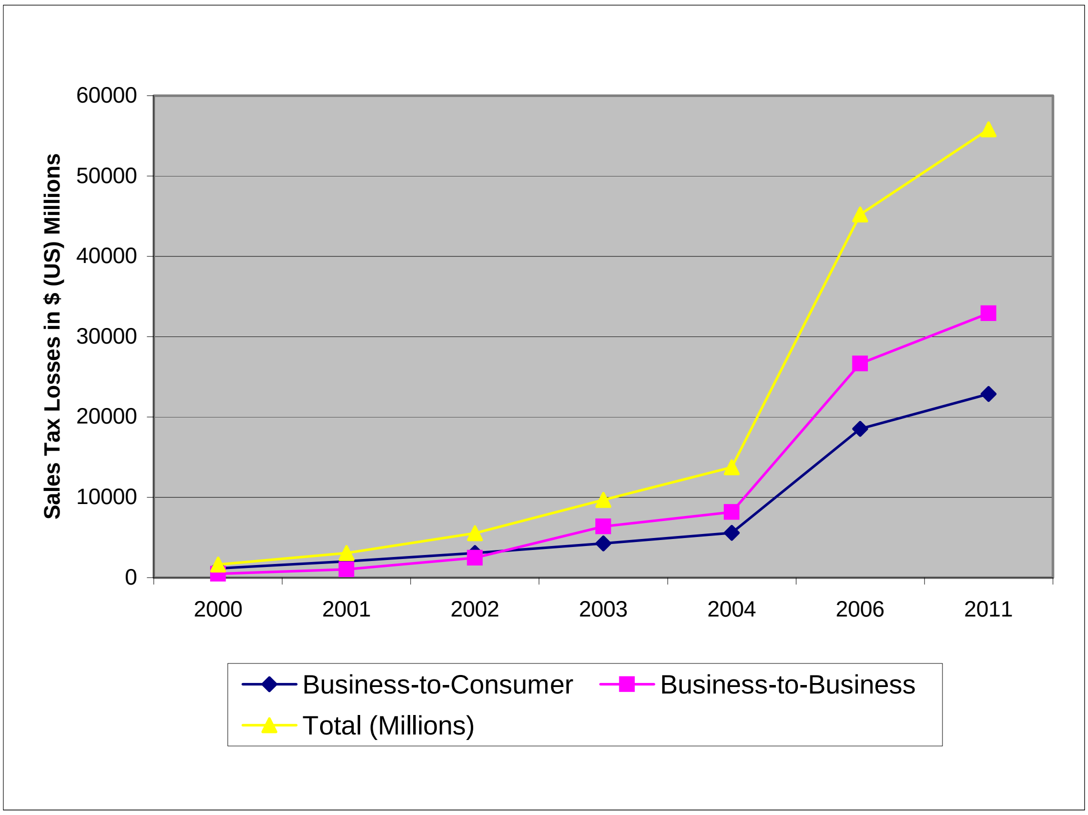

Fig. 2: US.S SALES TAX LOSSES ON ELECTRONIC COMMERCE

Are We Close to a Solution?

The Clinton Proposal

In July 1997, the US discussion on e-commerce taxation was formalized in the Clinton Administration report entitled "A Framework for Global Electronic Commerce". It articulated the United States government's view that governments should adopt a "non-regulatory, market-oriented approach to policy development around electronic commerce". The paper set forth five principles for facilitating the growth of commerce on the Internet:

1. The private sector should lead.
2. Governments should avoid undue restrictions on electronic commerce.
3. Where governmental involvement is needed, its aim should be to support and enforce a predictable, minimalist, consistent and simple legal environment for commerce.
4. Governments should recognize the unique qualities of the Internet,
5. And, electronic commerce over the Internet should be facilitated on an International basis.

It expressed the government's view that the Internet should be a tariff-free environment, and committed that the United States would advocate The World Trade Organization and other international groups to declare the Internet to be tariff-free "whenever it is used to deliver products or services". The Paper also stressed the US governments position that no new taxes should be imposed on electronic commerce and that taxation of such commerce should be consistent with established principles of international taxation. Further stating that taxation of Internet sales should neither distort nor hinder commerce, be simple and transparent, and be able to accommodate tax systems used by the United States and its international trading partners.

The Internet Tax Freedom Act of 1998

The Clinton Proposal was followed by the Internet Tax Freedom Act of 1988[2]. Concerned with the negative effect of taxation by local governments on the growth in online sales; the US Congress, with Clinton Administration backing and the support of John McCain in the Senate, attempted (with minor exceptions) to make the Internet a tax free zone. This legislation established a three-year moratorium on the state and local taxation of Internet access and "multiple or discriminatory taxes on electronic commerce". The Acts major e-commerce provisions included:

- A ban until October 1, 2001, on any new taxes on Internet commerce or access charges.
- Grand-fathering of existing taxes.
- And, the creation of an Advisory Commission on Electronic Commerce (ACEC)[3], which found in their Report to Congress "governments should keep the tax and administrative burden on consumers and businesses as low as possible", and outlined "It should not be presumed that the collection of sales and use taxes on internet transactions is an inevitability".

The ITFA's statutory language suggested several specific topics for the Commission to study, including an examination of:

- The collection and administration of consumption taxes on electronic commerce in other countries and the United States, and the impact of such collection on the global economy, including an examination of the relationship between the collection and administration of such taxes when the transaction uses the Internet and when it does not.
- The impact of the Internet and Internet access on the revenue base for telecommunications excise taxes.
- Model state legislation that would provide uniform definitions of transactions subject to or exempt from sales and use taxes and would ensure that Internet access, online services, and transactions using the Internet, Internet access or online service would be treated in a tax and technology neutral manner relative to other forms of remote sales.
- The effects of taxation, including the absence of taxation, on all interstate sales transactions, on retail businesses and on state and local governments to collect sales and use taxes owed on interstate purchases from out-of-state sellers.

A proposal submitted to The Commission by state and local governments, sought a uniform sales tax regime that would have applied to e-commerce and other remote-sales transactions where the seller does not have a presence "or nexus" in the state where the buyer is – although not uniformly applied, the US Supreme Court has upheld the "nexus" test.

This moratorium[4] on (amongst other things) new, multiple and discriminatory taxes on internet commerce expired October 21, 2001 at midnight after the U.S. Senate successfully rejected an effort to take up legislation passed by the House to extend the ban for two years.

The US Streamlined Sales Tax Project[5]

The U.S. Streamlined Sales Tax Project began in early 2000 as an initiative by state governments (via the Committee on State Taxation – COST[6]), with input from local governments and the private sector, to simplify and modernize sales and use tax administration for all types of commerce.

This simplified system was to incorporate uniform definitions within tax bases, simplified audit and administrative procedures, and emerging technologies to substantially reduce the burdens of tax collection. The focus of the project is to improve sales and use tax collection and administration systems for both Main Street retailers, remote sellers, and for states. There are currently forty-two states involved in the project.

The project's main goal is to provide a sales and use tax systems that have the following characteristics:

- Neutrality – Taxability should be independent of the method of commerce used in a transaction.
- Efficiency – Administrative costs should be minimized for both business and government.
- Certainty and Simplicity – Tax rules should be clear and simple.
- Effectiveness and Fairness – Taxation systems should minimize the possibility of evasion.
- Flexibility – Taxation systems should keep pace with changes in the economy.

In January 2001, U.S. state leaders, working with more than 100 companies, unanimously adopted a model state streamlined sales and use tax legislation to remove the burdens on business of compliance with thousands of different state and local sales tax systems. This new system[7] proposes a 21st century, simplified tax system that would provide a single method of registration and a single means of reporting for all states, uniform rules and schedules for remittance to states, and uniform definitions of goods and services.

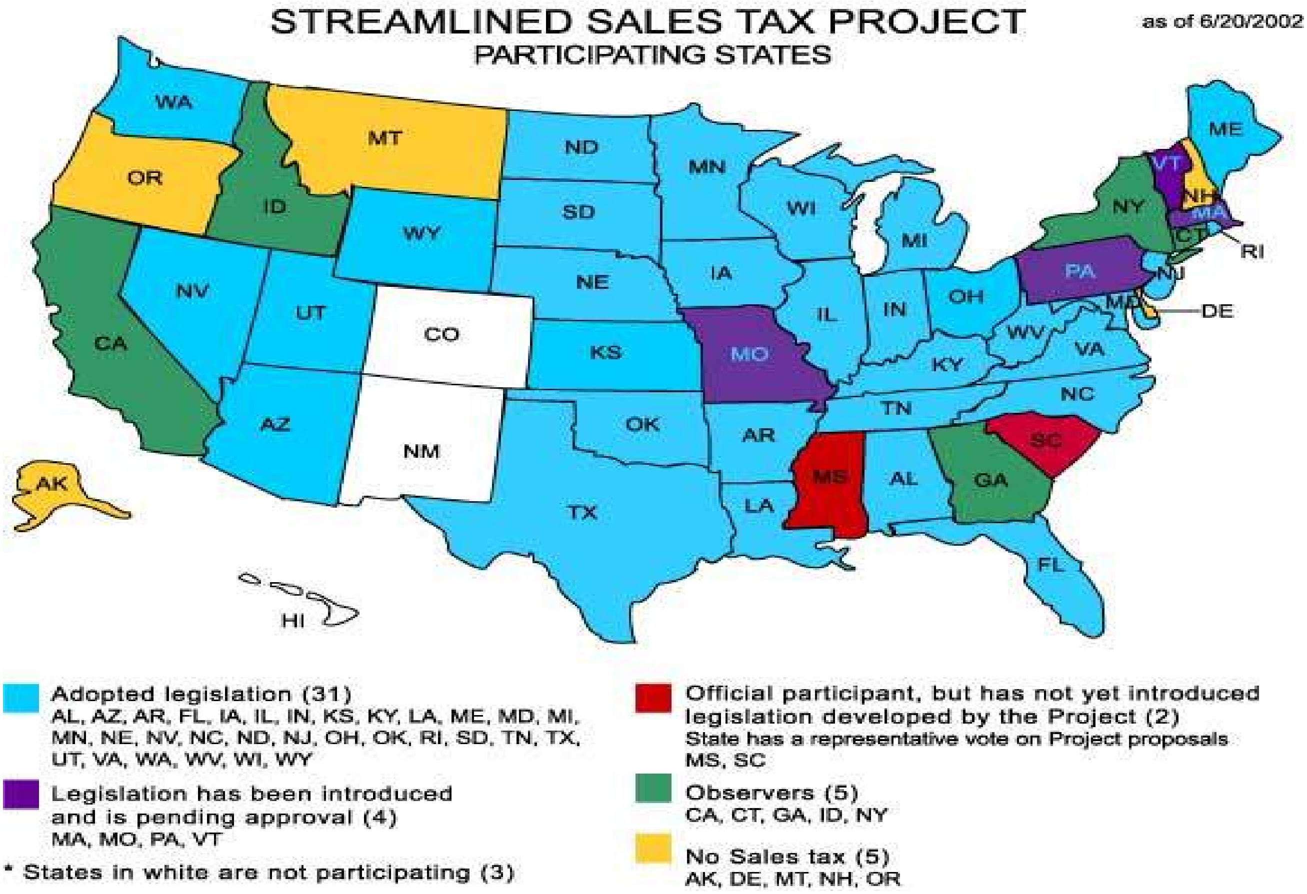

Fig. 3: SREAMLINED SALES TAX PROJECT PARTICIPATING STATES[8]

The European Union

Although the US was undoubtedly the major player in e-commerce, American policy makers were not alone in their quest to define appropriate e-commerce taxation rules – Europe and other countries had equal concerns.

European Union members formally documented their own 'plans' for taxing Internet transactions, initially for example, in the Bonn Ministerial declaration and the European Commission's 1997 "European Initiative in Electronic Commerce". In the latter the principle of a "clear and neutral" tax environment was supported. However, the document clearly stated that "electronic trade in goods and services clearly falls within the scope of VAT" and pointed out that VAT would apply to the purchase of soft goods at the place of consumption.

In an extraordinary session on December 13, 2001, The EU Council of Economic and Finance Ministers met in Brussels and decided to move forward on two major tax initiatives - proposed directives on savings taxation and e-commerce VAT. On February 12, 2002 The Council reached a political agreement, on amending Regulation (EEC) 218/92 on administrative co-operation in the field of VAT and on amending the sixth Council Directive 77/388/EEC on VAT arrangements for certain services supplied by electronic means, as well as subscription-based and pay-per-view radio and television broadcasting. But these could only be formally adopted when all the language versions became available. This was done on May 7, 2002, when Council Directive 2002/38/EC was adopted[9]. At the same time the Council adopted Council Regulation (EC)792/2002, temporarily amending Regulation 218/92 on administrative co-operation in the field of indirect taxation, to introduce additional measures necessary for the registering of foreign e-commerce traders for VAT purposes and for distributing the VAT receipts to the Member States where the services were actually used.

The new rules aim to ensure that certain electronically delivered services are taxed at the place of consumption. They can be summarized as follows:

- Non-EU suppliers will have to charge VAT on services electronically supplied to EU customers at the VAT rate of the Member State where their customer usually resides. They can register in the Member State of their choice (so called Member State of identification) and pay all VAT due on a quarterly base. The State concerned will then re-allocate the VAT revenues to the Member States where the consumer is located. Registration will not be necessary for non-EU established traders whose annual level of sales within the EU is below EUR 100 000.
- When these services are provided by an EU operator to a non-EU customer, the place of taxation will be where the customer is located and they will not be subject to EU VAT.
- When an EU operator provides these services to a taxable person (i.e., to another business) in another Member State, the place of supply will be the place where the customer is established.
- Where the same operator provides these services to a private individual in the EU, or to a taxable person in the same Member State, the place of supply will be where the supplier is located.

Additional measures can be summarized as follows:

- Tax on supplies to business customers will be accounted for by the customer. Registration for tax purposes will only therefore be necessary if supplies are made to private customers.
- A single place of registration (which will, in practice, normally be the Member State to where a first taxable supply is made) will be possible. This will enable the operator to discharge all obligations for EU VAT with a single administration. This latter measure effectively puts EU and non-EU operators on an equal basis when supplying to EU customers.
- It will also be possible to complete electronically all procedures in relation to registration and the making of tax returns.
- Tax administrations will provide operators with the means to distinguish easily the status of the customers (i.e. whether the customer is a VAT registered business or not) and this will normally provide the means whereby a supplier, acting with all possible diligence, can determine whether or not a transaction should be charged with tax.

Existing VAT rules for other transactions remained unchanged.

The OECD

The OECD at its Turku meeting in 1997 presented its own "framework conditions" (document 25 from the Committee of Fiscal Affairs) for dealing with taxation and e-commerce. It outlined the general tax principles that should be applied to e-commerce. Specifically: neutrality; efficiency; certainty and simplicity; effectiveness and fairness; and flexibility.

Of primary concern to OECD member states was their belief that the Internet would facilitate increased cross-border commerce and increase the mobility of business and capital. Related tax administration and compliance issues were also of concern. Specifically:

- They feared the lack of any user control as to the location of the activity (vendors don't know where their customers are, customers don't know where their vendors are, and governments don't know where either participant is).
- They feared being unable to identify users.
- They feared the reduced use of information reporting and withholding institutions (disintermediation).
- And, they had concerns regarding the development of electronic payment systems.

Members also believed, and were equally concerned, that tax havens and offshore banking facilities would become more accessible and, presumably, more widely used to avoid or evade tax.

Based on a consensus reached on the Taxation Framework Conditions at their Ottawa conference (October 1998), which included participation of a number of non-OECD countries, the OECD committee on fiscal Affairs (CFA) set up Technical Advisory Groups (TAGS), to produce recommendations on a variety of issues. It also issued a draft-revised commentary to article 12 of the model treaty addressing the tax treatment of software. In addition, they proposed a change to the commentary on Article 5 of its model tax convention with respect to the definition of "permanent establishment." Under this expanded definition, the presence of a server or Web page by itself generally would not satisfy the requirements for a permanent establishment. A server could be a permanent establishment if it performed significant activities that were more than "preparatory" or "auxiliary." It was left up to each member country to adopt clear and certain rules as to what would constitute significant activities for that purpose.

But their work continues! Since the agreement on the taxation Framework Conditions, the organization, through its Committee on Fiscal Affairs ("Committee"), has pursued an ambitious work program directed at effective implementation of the framework conditions. A key element of that work program has been an international dialogue, involving not only OECD member countries but also the international business community and a number of non-member economies. In March 2001, they published a progress report on the implementation of the Framework Conditions and a number of other "key documents"[10] have emerged from that work program - on international direct tax issues, on consumption tax issues, and on tax administration issues.

On international direct tax issues:

- The full text of the agreed "Clarification on the Application of the Permanent Establishment Definition in E-Commerce: Changes to the Commentary on the Model Tax Convention on Article 5"[11]
- The final report on "Treaty Characterization Issues Arising from E-Commerce, which was produced by the TAG (Technical Advisory Group) on Treaty Characterization of E-Commerce Payments"[12].
- A Discussion Draft on "Attribution of Profit to a Permanent Establishment Involved in Electronic Commerce Transactions, prepared by the Business Profit TAG"[13].
- A discussion draft on "The Impact of the Communications Revolution on the Application of "Place of Effective Management" as a Tie Breaker Rule", prepared by the Business Profits TAG[14].
- A report by the Business Profits TAG[15] summarizing progress made in the context of its mandate, and proposed areas of future work.

On consumption tax issues:

- A report by the Committee's Working Party No. 9 on Consumption Taxes: "Consumption Tax Aspects of Electronic Commerce"[16].
- A report by the Consumption Tax TAG[17] summarizing progress made in the context of its two-year mandate, and proposed areas of future work.
- A report by the Technology TAG[18] summarizing, in particular, its advice on possible collection mechanism options for consumption taxes, and proposed areas of future work.

On tax administration issues

- A report by the Committee's Forum on Strategic Management: "Tax Administration Aspects of Electronic Commerce: Responding to the Challenges and Opportunities"[19].
- A report by the Professional Data Assessment TAG[20] summarizing progress made in the context of its two-year mandate, and proposed areas of future work.

It is evident the OECD sees the development of appropriate Internet taxation policies as a major international issue.

The World Trade Organization

In terms of The World Trade Organization (WTO); currently tariffs are not imposed on most electronic transactions but are normally only applied to the physical trade of goods. However, The General Agreement on Trade in Services (GATS)[21], the WTO agreement covering trade in services, does include under "Communications Services", some sub-sectors which relate to conduction of electronic commerce (including data transmission services, electronic mail, information and database retrieval, electronic data interchange, and online information and data processing – including transaction processing).

In their "Declaration on Global Electronic Commerce" adopted at the Second Session of the (Geneva) Ministerial Conference on May 20, 1998, the WTO Members agreed to establish a work programme to examine all trade-related issues relating to global electronic commerce (specifically taking into account the needs of developing countries) but, to continue their practice of not imposing customs duties on electronic transmissions. Implementation of the Work Programme was assigned to four WTO bodies, namely; the Council for Trade in Services; the Council for Trade in Goods; the Council for TRIPS; and the CTD. The General Council adopted the plan for this work programme on September 25, 1998, initiating discussions on issues of electronic commerce and trade by the Goods, Services and TRIPS (intellectual property) Councils and the Trade and Development Committee.

The Doha Declaration resulting from the November 2001, Fourth Ministerial Conference in Doha, Qatar; endorsed the work already done by the work program on electronic commerce sub groups and stated that the WTO members would continue their practice of not imposing customs duties on electronic transmission. The Declaration stated that members would continue this practice until the Fifth Ministerial Conference.

But, the organization remains divided on the question of whether to treat electronic commerce transactions and digitally delivered products as goods or services. The issue is crucial for businesses engaging in e-commerce, since it determines which multilateral trade rules and market access obligations apply to these transactions. The United States, in particular, has urged that goods delivered in digital form be classified as goods rather than services to the maximum extent possible, thus automatically making such transactions subject to the mandatory basic market access provisions of the General Agreement on Tariffs and Trade ("GATT"). In contrast, the European Union has advocated a services classification, which would only require WTO members to commit to a market access liberalization over which they have significant discretion.

The Industry Perspective

While governments strive to develop appropriate methods for taxing e-commerce (likely based on the residence of the consumer), consumers and technology vendors largely take an opposite view – no new Internet taxes.

The Internet Tax Fairness Coalition (a U.S. organization whose members include; AeA (formerly the American Electronics Association, America Online, Inc., Apple Computer, Inc., Cisco Systems, Inc., Direct Marketing Association, First Data Corporation, Information Technology Industry Council, Information Technology Association of America, Microsoft Corporation, Novell, Inc., Oracle Corporation, Software Finance and Tax Executives Council, Software & Information Industry Association, Sun Microsystems) contends that imposing additional taxes on Internet sales could severely hamper existing small and midsize resellers and retailers, and could prevent others from entering the market. They feel that interstate commerce and the economy are burdened by multiple, confusing and inconsistent state tax rules. Therefore, development of a simple and uniform system is critical. They support the following objectives for reducing the tax burdens imposed on interstate commerce that thwart the development of a borderless marketplace:

- Establish simple and uniform sales and use tax rules that reduce compliance burdens for all taxpayers.
- Enact nexus standards for business activity taxes that eliminate uncertainty and the potential for double taxation.
- Promote availability of the Internet to all by prohibiting taxes on access fees.
- Prevent multiple and discriminatory taxation by extending the application of traditional tax rules to electronic commerce.

In their letter to the of September 6, 2001 to The Finance Committee, following testimony at the August 1, 2001 Finance Committee hearing on "Cybershopping and Sales Tax: Finding the Right Mix"; they urged the Committee to move forward on the single point of consensus that emerged from the witnesses' collective testimony—that the moratorium of the Internet Tax Freedom Act ought to be extended. They made an identical plea to the US Congress suggesting, "If the ITFA moratorium is permitted to expire it will cast a chill over interstate commerce by signaling to the more than 7600 state and local taxing jurisdictions that disparate tax treatment of transactions based on the medium used is acceptable. The Internet Tax Fairness Coalition (ITFC) believes that Congress must not delay. We urge you to extend the moratorium on the imposition of these new taxes before it is too late". Their proposed draft legislation provided to extend the moratorium enacted by the Internet Tax Freedom Act through 2007, and encouraged States to develop an Internet tax regime that is simple and uniform.

"We're opposed to any new taxes on the Internet," says George S. Isaacson, acting director of the Association for Interactive Media (reportedly the largest Internet trade association). Isaacson explains "We're working for the Amazons of the future to make sure they have the ability to grow and gain market share". In his presentation to the commission, he argued, "Information technology and electronic commerce have been the most important factors fuelling the largest and longest economic boom of this century" and warned against the negative effects of inappropriate e-commerce taxation policies.

However, there are more moderate and even dissenting views. Mark Negergall, president of the Software Finance and Tax Executives Council, says his group, compiled of major software providers, is neutral on taxation as long as the tax is non-discriminatory. “Our view is that we should be treated no better or worse than any other medium, such as telephone, telegraph, telefax or direct mail.”

In spite of a study released by Ernst & Young (funded by the e-commerce Coalition) which challenges the notion that Internet commerce threatens to drain the treasuries of state and local governments; leadership in Silicon Valley appears to be siding with state and local governments in favor of taxing the Internet. As with other advocates for taxation, they argued that state and local governments need the potential sales tax revenues offered by on-line commerce. They suggest that failing to apply sales taxes to on-line transactions is fundamentally unfair and is a disadvantage to traditional in-store buying.

What Happens Next?

It is clear that if electronic commerce continues to grow (especially if the growth is at the expense of conventional commerce) the question of e-commerce taxation will have to be answered both at the domestic and international levels. The current lack of neutrality and basic fairness in e-commerce taxation legislation will become more painfully obvious (at the heart of the debate is the principle that states and other local governments have the right to tax goods sold within their jurisdiction). Consequently any future discussion on e-commerce taxation must include the following key issues:

- The proper relationship between federal and the local governments on issues of taxation, and which levels of government ought to bear the responsibility for determining and financing the needs of their citizens and businesses;
- The necessity of keeping tax policy neutral so that neither traditional retailers nor remote sellers (catalog, Internet, or similar enterprises) are given an advantage based on tax policy;
- The need to stop erosion of essential revenue streams that support education and other key public services at the local level.

And, the technical issues on the table continue to be:

- What constitutes taxable presence from the use of the Internet?
- What is the tax classification of income from electronic activities (the main consequences being the application of withholding tax and indirect taxes)?
- How are taxpayers identified and their transactions audited?
- What are the implications for transfer pricing and the use of tax havens?

The U.S. is making an effort with its Streamlined Sales Tax System for the 21st Century Project.

The European Union, growing more and more concerned about the potential loss of revenue adopted new rules with regards to VAT on electronic commerce which will come into effect in July 2003. But the new directive has drawn international criticism – the OECD, Japan and the U.S. have all voiced concerns. The Commission justified making its proposals without waiting for the outcome of the OECD negotiations, saying that under the Ottawa Framework, consumption taxes such as VAT should be levied in the jurisdiction where consumption takes place, and that for those purposes, a supply of digital products should not be treated as a supply of goods. It said the new proposals would ensure that the EU VAT system conformed to the framework's principles. Commissioners also assured the U.S. and Japan that they recognized the need for international collaboration on the taxation of e-commerce, but suggested that they were particularly concerned with simplifying European VAT rules to ensure that non-EU operations were brought within their scope as soon as possible. There is growing concern however that this unilateral move by the EU could open the floodgates for other nations to impose e-commerce taxes in an uncoordinated, cost-inflicting patchwork.

The OECD continues its work and is supported by the US in their efforts to create consensus around baseline taxation rules that could under gird the international expansion of e-commerce. The WTO will present the latest developments in its efforts to address e-commerce taxation at the Fifth Ministerial Conference.

While the debate is far from with international “saber-rattling” continuing; the EU has definitely moved the discussion up a notch with its new electronic commerce directive. Only time will tell if their new “consumption-based” directive, and its inherent administrative cost burden, is taking the e-commerce taxation issue in the right direction.

References

[1] Advisory Commission on Electronic Commerce Report to Congress, April 2000 (http://www.ecommercecommission.org/acec_report.pdf)

[2] Anonymous: E-commerce on rebound according to IMRG retail index; *Marketing Week*: London; May 2, 2002

[3] Anonymous; Mapping out e-commerce growth: *The Secured Lender*; New York; May/Jun 2002.

[4] Brightbill, Tim; Worlton, Amy: E-Commerce Law Report, May 2002, Page 9, Vol. 4, No. 7, Pg. 9, “New Markets, New Risks: Barriers to Global Electronic Commerce”

[5] Bruce, Donald; Fox, William; 2001, Tax Analysts, State Tax Today, August 23, 2001 “State and Local Sales Tax Revenue Losses from e-Commerce: Updated Estimates, September 1, 2001.

[6] Clinton, William J; Gore, Albert Jr.: A Framework For Global Electronic Commerce, (http://www.w3.org/TR/NOTE-framework-970706.html)

[7] esalestax.com: Proposal to Address Issues of State and Local Taxation of Internet Transactions for the Advisory Commission on Electronic.

[8] European Union: Directive 2000/31/EC of the European Parliament and of the Council of June 8, 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market (Directive on Electronic Commerce).

[9] European Union: A European Initiative in Electronic Commerce Communication to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions COM(97)157 (http://www.cordis.lu/esprit/src/ecomcom.htm)

[10] Isaccson, George S.: Exploding Nexus Myths - *Why Current Constitutional, Standards Are Fair , And Serve The National Interest*, prepared for, The Advisory Commission on Electronic Commerce (http://www.ecomercecommission.org/document/George_Isaacson2.doc).

[11] Interactive Media Retail Group, Press comment June 2, 2002 - e-retail hots up :(http://www.imrg.org/IMRG/press.nsf/(httpPressReleases)/9D2EE6E5A4DCB1A980256BEA00510CD7)

[12] Millistein, Julian S; Neuburger, Jeffrey D.; Weingart, Jeffrey P.: Doing Business on the Internet, 2002 by Law Journal Press.

[13] Negergal, Mark E., President, Software Finance and Tax Executives Council before the Subcommittee on Commercial and Administrative Law, Committee on the Judiciary, United States House of Representatives, June 29, 2000. Hearings on: H.R. 4267, the “Internet Tax Reform and Reduction Act of 2000:, H.R. 4460, the “Internet Tax Simplification Act of 2000”, H.R. 4462, the “Fair and Equitable Interstate Tax Compact Simplification Act of 2000” (http://www.softwarefinance.org/policy/tax/judtest6_00.doc)

[14] OECD; Electronic Commerce: Taxation Framework Conditions. A report by the Committee on Fiscal Affairs as presented to Ministers at the OECD Ministerial Conference, “A Borderless World: Realizing the Potential of Electronic Commerce” on 8 October 1998.(http://www.oecd.org/pdf/M000015000/M00015517.pdf)

[15] Shafroth, Frank, NGA Director of State-Federal Relations, before the Senate Finance Committee on Tax Equity and Sovereignty for States in the Digital Age, August 1, 2001.

[16] US Census Bureau, Depart. of Commerce (http://www.census.gov/mrts/www/current.html).

[17] U.S. Tax Code Online, http://www.fourmilab.ch/ustax/ustax.html.

[18] World Trade Organization: WT/MIN(98)/DEC/2, 25 May 1998, (98-2148), Ministerial Conference, Second Session, Geneva, 18 and 20 May 1998, Declaration on Global Electronic Commerce, Adopted on 20 May 1998.

[19] World Trade Organization: Restricted G/C/W/128, 5 November 1998, (98-4330), Council for Trade in Goods, Work Programme on Electronic Commerce.

[20] World Trade Organization: DOHA WTO MINISTERIAL 2001: MINISTERIAL DECLARATION, WT/MIN(01)/DEC/1, 20 November 2001, Ministerial declaration, Adopted on 14 November 2001 (http://www.wto.org/wto/english/tratop_e/dda_e/dohaexplained_e.htm)

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[1] IDC Research, (http://www.idcresearch.com) IDC delivers dependable, high-impact insights and advice on the future of e-business, the Internet, and technology to help our clients make sound business decisions. We forecast worldwide markets and trends and analyze business strategies, technologies, and vendors, using a combination of rigorous primary research and in-depth competitive analysis. We provide global research with local content through more than 720 analysts in 43 countries worldwide. IDC's customers comprise the world's leading IT suppliers, IT organizations, e-business companies, and the financial community.

[2] The Internet Tax Freedom Act (formerly known as S.442, now Title XI of P.L. 105-277, the Omnibus Appropriations Act of 1998), (http://www.ecommercecommission.org/ITFA.htm)

[3] The Advisory Commission on Electronic Commerce (ACEC) was created by Congress to study federal, state, local and international taxation and tariffs on transactions using the Internet and Internet access. The Commission's 19 members included three of the U.S.'s governors, heads of several major information technology corporations and other government and business leaders from across the U.S. Virginia Governor James S. Gilmore, III, chaired the Commission.(http://www.ecommercecommission.org/about.htm)

[4] The moratorium did not apply to existing sales taxes on e-commerce (applicable, for example, where the consumer and seller are in the same state).

[5] http://www.geocities.com/streamlined2000/

[6] The Committee On State Taxation (COST) is a nonprofit trade association based in Washington, DC. COST was formed in 1969 as an advisory committee to the Council of State Chambers of Commerce and today has an independent membership of 550 major corporations engaged in interstate and international business. COST's objective is to preserve and promote the equitable and nondiscriminatory state and local taxation of multijurisdictional business entities.http://www.statetax.org/index.html

[7] The Streamlined Sales Tax System for the 21st Century, http://www.geocities.com/streamlined2000/

[8] Source: Letter from Governors Parris N. Glendening and John Enbgler to The Honorable Donald Evans, Secretary U.S. Department of Commerce and the Honorable Paul O'Neill, Secretary, U. S. Department of the Treasury.

[9] http://europa.eu.int/comm/taxation_customs/taxation/ecommerce/vat_en.htm

[10] OECD, Taxation Aspects of Electronic Commerce, Publication of Reports and Technical Papers (http://www.oecd.org/EN/document/0,,EN-document-101-3-no-4-1564-101,00.html)

[11] http://www.oecd.org/pdf/M000015000/M00015535.pdf

[12] http://www.oecd.org/pdf/M000015000/M00015536.pdf

[13] http://www.oecd.org/pdf/M000015000/M00015525.pdf

[14] http://www.oecd.org/pdf/M000015000/M00015526.pdf

[15] http://www.oecd.org/pdf/M000015000/M00015527.pdf

[16] http://www.oecd.org/pdf/M00022000/M00022378.pdf

[17] http://www.oecd.org/pdf/M000015000/M00015515.pdf

[18] http://www.oecd.org/pdf/M000015000/M00015516.pdf

[19] http://www.oecd.org/pdf/M000015000/M00015520.pdf
[20] http://www.oecd.org/pdf/M000015000/M00015523.pdf
[21] The agreement on trade in services reached in the Uruguay Round is perhaps the most important single development in the multilateral trading system since the GATT itself came into effect in 1948. The new General Agreement on Trade in Services (GATS) for the first time extends internationally agreed rules and commitments, broadly comparable with those of the GATT, into a huge and still rapidly growing area of international trade. Although reliable statistics on services are few, conventionally measured trade in services is generally agreed to be equivalent in value to about one-quarter of international trade in goods. World Trade Organization, General Agreement on Trade in Services, April 1994. (http://www.wto.org/wto/english/tratop_e/serv_e/gatsintr_e.htm) (http://www.wto.org/wto/english/tratop_e/serv_e/gsintr_e.doc)

The Impact of the Potential Financial Innovation on Chinese Taxation System and an Analysis

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Abstract

The widespread use of innovative financial transactions in international financial market in recent years is primarily driven by the need for greater financial risk management by businesses and financial investors. Many related factors have contributed to the needs of business for more sophisticated financial instruments, as well as to the financial world's technological ability to meet that demand.

Developments in international financial markets that have influenced this dramatic change include the following: (i) Increased volatility of interest, currency exchange rates and commodity prices; (ii) Expansion in scope of multinational operations of corporations; (iii) Deregulation of financial markets; (iv) Elimination or liberalization of exchange controls; (v) Increasing speed and efficiency of transmission of information.

In fact, Chinese financial instruments were generally limited to securities that could be classified as either debt or equity investments at the time being. Chinese taxation rules presumed a sharp distinction between these two forms of instruments. In particular, it was assumed that debt provide for a relatively fixed return of income and principal, whereas returns on equity investments are contingent on the performance of the issuing corporation. These classifications lead to tax rules reflecting differences in the timing and character of the income from these discrete classifications.

Introduction

The explosive growth in the use of new financial products during the last several decades in the world financial market has revealed an underlying weakness in the above assumptions. Both the development of new instruments and the application of financial engineering techniques to the existing financial products have demonstrated that the risk-return relationship between debt and equity is a continuum rather than a difference in kind. One of the factors that fueled the breakdown of traditional debt/equity distinctions was the development of securities that combined elements of both categories. Examples of such financial instruments include perpetual debt, equity notes, bonds with equity warrants and convertible debt.

Derivative instruments and other innovative financial instruments serve legitimate business and investment purposes. The holder can use such products either to take a position carrying specifically defined opportunities for profit, or to offset the inherent risks of other investments or business activities. Therefore, the ability to shift, substitute, or transform risks through the use of financial products is an essential tool of modern business and investment.

Since China has entered into the World Trade Organization, China will exercise its promise to open the financial market to foreign investment gradually according to the timetable agreed upon. In fact, Chinese financial market is under the way of integrating into the world market to a larger extent. Consequently, the financial innovation will take place soon and more and more innovative financial products will come to the financial market to enrich the diversity of Chinese financial instruments. Furthermore, this potential change may affect Chinese taxation, accounting and financial activities significantly.

In general, domestic tax legislation lags behind developments in the financial markets, with the consequence that domestic tax treatment of financial instruments is often uncertain. In the case of China, tax rules and policies that were developed to address more traditional financial instruments are not suitable to deal with modern financial instruments. This posts considerable challenges for Chinese taxation systems and reform of the relatively rigid taxation system becomes not only imperative but also possible.

Overview of Innovative Financial Transaction

Financial innovation consists of a broad group of financial instruments, referred to as “derivative” contracts. Financial derivatives call for specified cash flows to be made between the counter parties overtime. Unlike traditional debt and equity securities, the derivatives generally do not involve a return on an initial investment. Rather, they are constructed and priced by reference to values “derived” from an underlying security, index, commodity, or other asset, and their value fluctuates with the market movement of that referenced asset.

The basic building blocks of derivative instruments—futures, forward contracts, options and swaps—can be combined in any number of ways as specified by the counter parties. In particular, derivative contracts can separate each of the discrete economic attributes of a particular position or recombine them into new forms. Significantly, they can also be constructed to replicate any specified set of economic attributes in a variety of ways.

In general terms, derivative instruments are constructed from two basic types of contracts: (I) contracts that provide for fixed contractual rights that will be executed in the future are referred to as “forward contracts”, “futures contracts” and “swap”; (ii) contracts that are contingent on one party’s decision to execute in the future are referred to as “option contracts”. These basic building blocks are used in both developing and pricing the numerous derivative products available on the financial market today.

An agreement consisting of a series of options can provide for multiple payments depending on movements in the underlying asset during specified periods. In a “cap” agreement, the purchaser will receive periodic payments whenever the underlying asset price rises above the level specified in the agreement. Similarly, a “floor” agreement will provide the purchaser with payments whenever such value drops below the specified level. A “collar” agreement protects both parties through a combination of a cap and a floor.

In addition, certain notional principal financial arrangements, such as equity swaps, are designed to have the general economic effect of a leveraged purchase of underlying securities. When the index referenced in the swap consists of a single stock, the contract challenges the notion of whether the holder should be treated as an “owner” of the underlying stock itself for tax purposes. Such contracts can also be used by the counterparty to offset the economic benefits and burdens of equivalent shares that the counterparty continues to hold, similarly raising ownership question.

Not surprisingly, at the heart of the financial innovation is the aggregation and disaggregation of some basic types of rights and obligations to create new sets of rights and obligations. For example, an interest rate swap is economically equivalent to a series of cash settled interest rate forward contracts; caps, collars and floors are options based on interest rates; a swaption is an option on a swap and so on so forth.

Together with “physical” securities such as debt and equity, forward contracts and option contracts form the basic building blocks for financial transactions. The rights and obligations involved can be combined in various ways with the result that cash flows can, for example, be (i) certain as to amount, timing and direction; (ii) certain as to timing and direction but not amount; (iii) certain as to timing but not direction or amount; (iv) contingent on a specific event.

Furthermore, under the “put-call parity” theorem[1], there is a fundamental relationship among the value of debt, stock, and put and call options with respect to the stock. That theory leads to the following relationships:

Equity + Put Option = Debt + Call Option

This put-call parity framework is central to the pricing methodology for swaps and other derivatives. The ability to “replicate “ one instrument type through a combination of others presents a significant challenge to any tax system that bases the income tax treatment of financial products on tradition classifications.

The Challenges for Chinese Taxation Systems

Innovative financial instruments raise a number of issues and problems for the development and administration of an income tax system. They not only present new challenges with respect to the Chinese tax issues of character, amount, timing and source; in addition, they raise wholly new questions regarding the most basic classifications on which Chinese tax rules are based. Moreover, unique issues are presented by the need to eliminate artificial tax barriers on the legitimate use of risk management tools, while at the same time reducing potential tax arbitrage opportunities.

Chinese income tax issues of character, source, and the timing and amount of income are based on an initial classification of the type of income in question. These systems of categorization are difficult to maintain and administer given the emergence of instruments that can mirror economic attributes of investments in any number of diverse forms. Similarly, the fundamental distinctions in Chinese income tax systems between debt and equity are challenged by instruments providing for returns and risks that are economically equivalent to the financial attributes of debt and equity investments, or any "hybrid[2]" combination thereof.

Perhaps the most fundamental challenge to Chinese tax systems from the use of innovative financial instruments is their ability to replicate the economic properties of other instruments. A combination of financial products that closely reproduces the economic attributes of an existing instrument is generally referred to as a "synthetic[3]" tool of the existing instrument. Similar issues are presented by transactions that combine only selected attributes of different instruments to create new "hybrid" forms of financial transactions.

To the extent such strategies can be implemented, they present the possibility that any distinction for tax purposes between traditional classifications will be fully elective for taxpayers. In other words, instruments can be designed to replicate any desired set of economic attributes. Tax attributes, however, could be independently crafted into the instrument to obtain the most advantageous results.

These potential advantages would be particularly clear where the parties to the synthetic or hybrid instrument were not subject to offsetting tax constraints. For example, if one of the parties was a tax-exempt entity or had losses that could fully absorb current income, it would be easier to implement a transaction that shifted tax benefits to the other party resulting in a reduction of the total tax obligation. Similarly, where the rules of two jurisdictions classify the transaction differently, cross-border instruments can be structured to maximize tax advantages with respect to both taxation systems.

The critical issue of determining the "owner" of an instrument for tax purposes is also tested by contracts that replicate, shift or eliminate some or all of the returns and risks of an investment. On the other hand, securities lending and repurchase arrangements that transfer legal title but retain economic attributes of an investment present similar problems of identifying the "tax owner" of a financial position.

Chinese tax system is will also be challenged by two broad and sometimes competing concerns: A. Removing artificial tax barriers to effective risk management strategies; B. Limiting the opportunities for tax arbitrage[4].

Specifically, tax arbitrage involves taking advantage of differences in the tax treatment, either of persons undertaking transactions or of the transactions themselves, where these differences arise either as a result of the asymmetries within or between tax systems or as a consequence of the specific tax position of the persons themselves. In many cases, tax arbitrage transactions are entered into merely to obtain tax benefits, and have no significant business or financial effects apart from such benefits. Accordingly, the term "arbitrage" broadly refers to any type of abusive transaction that may be available with respect to each of the categories of issues described above. If Chinese tax system does not include adequate rules to prevent such abuse, taxpayers could easily construct arbitrage transactions to maximize the tax benefits of character, timing, source, ownership, or hedging rules.

As a matter of fact, innovative financial transactions have expanded the opportunities for tax arbitrage. Particular concerns are presented by synthetic and hybrid instruments that carry tax attributes of one classification of investment, but provide the economic risks and returns of a different classification.

Chinese Tax Policy Goals

The aim of Chinese tax system is to raise revenue as neutrally, simply and equitably as possible in order that the government has a sound financial base to stimulate the growth of the national economy. To be specific, Chinese tax system is targeting the following goals[5]:

Neutrality and Equity

Tax neutrality fundamentally requires that transactions with the same economic substance attract the same tax treatment. Non-neutrality is evident when tax laws are based on the legal form rather than the economic substance of the transaction. This is particularly so for financial transactions, which can be easily structured in many different ways, without altering their non-tax economic effects.

Efficiency

The goal of efficiency should take into account the ease or difficulty in administering the law as well the taxpayers' costs in complying with it. Compliance by taxpayers is affected by the degree of certainty in the law and the clarity of the concepts. Cost of compliance is also affected by the amount and type of information that taxpayers must keep or produce to meet their tax obligations, as well as the degree of difficulty for tax authorities to verify taxpayers' claims.

Government Revenue Enhancing

Chinese government has broader obligations than other that of many other countries, for example, the United States. Government revenue plays a crucial role in supporting Chinese government to pursue its macroeconomic policy objectives. In order to enhance government revenue, the tax rules must be certainty and robust. Tax rules must also be both broad and flexible in order to address new transactions and variations of existing transactions. To the extent the rules are crafted to reflect the general economic structure of the transactions at issue, they are more likely to impose an appropriate level of income tax on the parties with respect to new transactions as well. The ideal is a set of broad rules that are sufficiently flexible to reflect market activity and facilitate innovation, yet resistant to easy manipulation for taxation advantage.

Chinese Taxation Policy Options

Tax systems that have addressed the financial innovation issues have adopted a number of different approaches, which could serve as the alternatives of policies for Chinese tax system when determining appropriate methodologies to cope with these challenges. The taxation reform approaches can be classified as follows:

Reliance on Financial Accounting Rules

Aligning the tax and financial accounting treatment of innovative financial transactions can in some cases offer greater consistency and reduced the compliance costs involved in the taxation process. Financial accounting standards, however, are far from settled in this area, and in some circumstances allow greater subjectivity and discretion than would be acceptable for tax purposes.

Bifurcation[6]

Tax bifurcation approach relies on the disaggregation of financial instruments, treating each of their discrete economic components separately for income tax purposes. The purpose is to isolate and identify each element with the goal of applying tax rules consistently to the particular components. This goal is often frustrated in practice, however, since there is relatively little agreement on the appropriate method of bifurcation, or on the taxation of the constituent elements.

Integration

Some tax systems allow taxpayers the election to "match" the tax attributes of their "hedging[7] instruments" with the attributes of specified business or investment transactions. By integrating two offsetting positions, the income tax system permits the hedging strategy to be effective on an after-tax basis. Similarly, some tax systems impose mandatory integration of certain offsetting transactions to prevent potential abusive transactions. In each case, integration of transactions raises difficult issues regarding scope of the rules and identification of appropriately “matched” transactions.

Mark-to-market Systems

Many of the timing and classification problems can be avoided to the extent that a mark-to-market system applies for income tax purposes. Under such an approach, financial instruments are treated for income tax purposes as if they are sold at year-end, and all resulting gain or loss is taken into account. Difficulties in making such systems work in practice include valuation of illiquid positions and the cash flow problems resulting from imposition of tax effects in advance of market transactions.

However, where a mark-to-market system is limited to particular sectors that have adopted the method for accounting purposes, its expansion to cover taxation may offer an appropriate measure of profits and losses without the numerous practical concerns associated with bifurcation and integration methods.

Anti-Abuse Measures

Some tax authorities have applied broad anti-abuse rules that impose “substance over form” rules to combat tax arbitrage. To the extent such rules target specific abuse transactions they are often adopted too late to be effective. On the other hand, broad rules that give tax authorities discretion to consider the “facts and circumstances” may result in uncertain and inconsistent administration of the rules.

As long as asymmetries of tax treatment exist within and between tax systems there will be scope for tax arbitrage arrangements between unrelated persons. Governments will therefore need to continue to police their system and react to the taxation abuses. The governments can also consider taking more positive steps to restrict tax arbitrage opportunities to the extent that these activities involve obtaining treaty benefits.

Conclusion

Innovative financial transactions have become essential tools of investment and risk management. Through their ability to separate, replicate, and recombine economic attributes into new forms of transaction, financial instruments enable the financial participants to shift and redistribute their financial risks. Indeed, the growing sophistication of these transactions has been driven by the demands from business and financial markets for more effective risk management.

These developments, however, raise serious challenges to Chinese income tax systems, involving issues of the character and source of income, the timing of income and deductions, treaty classification of payment streams, and identification of the owner of financial instruments. Moreover, the greater flexibility afforded to taxpayers by such transactions has expanded opportunities for tax arbitrage, which could undermine the financial market efficiency.

All of the above taxation reform approaches should be considered, either individually or in combination, in developing Chinese appropriate responses to the challenges present by innovative financial transaction. Particularly, bifurcation and integration appear to be contrasting processes: bifurcation divides transactions into small components; integration combines transactions into a composite whole. Yet they derive from the same logic: to establish what, in substance, is happening in terms of the debt/equity/derivative trichotomy. Accordingly, they can logically operate together in appropriate circumstances.

New tax rules designed to meet these challenges must address the overall tax policy objectives of neutrality and equity in order to promote the efficiency of the financial markets as a whole and protect the revenue base for government at different levels at the same time.

It is important to be clear that this must be accomplished, however, with appropriate attention to the goals of certainty and administrability. Moreover, as the use of new financial products continues to expand, they will inevitably test the viability of the fundamental rules and classifications on which income tax systems and international tax agreements are currently based.

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References

[1] Beijing Economics College, Fiscal and Finance Department, *The Evolution of Chinese Taxation System*, Tianjin People's Publishing House, 1984.

[2] Charles W.Smithson, Clifford W. Smith,Jr., D Sykes Wilford: *Managing Financial Risk*, IRWIN Professional Publishing, 1995.

[3] C.Jayachandran and Lin Guijin: "The Managerial Process and Impact of foreign Investment in Greater China: An Overview", *Advances in Chinese Industrial Studies*, Volume 6, 1999.

[4] Cookson, Richard, and Lilian Chew: "Things Fall Apart." *Risk*, October 1992.

[5] Furbush, Dean, and Michael Sackheim: "U.S. Hybrid Instruments: Evolving Legal and Economic Issues." *Butterworth's Journal of International Banking and Financial Law*, September, 1991.

[6] Grindal, Izabel: "Flexible Risk Control and Arbitrage." *Futures and Options World*, June, 1988.

[7] Haiwen Zhao: "Establishing a scientific taxation operating system", *Management World*, 1,2001, PP201-2.

[8] James G.S. Yang and Huiqin An: "International Joint Ventures in China: Taxation and Accounting Aspects", *Advances in Chinese Industrial Studies*, Volume 6, 1999.

[9] Jordan, James; Robert Mackay; and Eugene Moriarty: "The New Regulation of hybrid Debt Instruments." *Journal of Applied Corporate Finance*, 1990.

[10] Junkun Hu: "The Future Trends of Enterprise Income Tax", *Taxation*, April, 2001, pp7~9.

[11] Kleinbard, Edward D.: "Equity derivative Products: Financial Innovation's Newest Challenge to the Tax System." *Texas law Review* 69 (May):1319-68,1991.

[12] Liu Xiaochuan, *National Taxation*, Nanjing University Publishing House, 1999.

[13] Liu Zhicheng, *National Taxation: Theories and Practices*, Chinese Fiscal and Economics Publishing House, 1993.

[14] Teweles, Richard J., and Frank J.Jones: *The Futures Game*, 2nd ed. McGraw-Hill, 1987.

[15] Wilkie P.J.: "Corporate Average Effective Tax Rates and Inferences about Relative Tax Preferences." *Journal of American Taxation Association*, Fall, 1988.

[16] Zhou Xiaochuan, Yang Zhigang, *Chinese Taxation System: Issues and Solutions*, Tianjin People's Publishing House, 1992.

End Notes

1. Put-call Parity theorem states a fundamental relationship between debt, stock, and options to purchases or sell such stock. It lies down the foundation for financial analysts to integrate or disintegrate innovative securities for form a new financial instrument with the desired economic attributes. For the derivation of this theorem see Charles W.Smithson, Clifford W. Smith,Jr., D Sykes Wilford: *Managing Financial Risk*, pp293-96.
2. A hybrid security is created by combining two types of securities: typically a standard debt or equity security and an OTC derivative—a forward contract, a swap, or an option. For example, puttable bond is a hybrid security, which consists of a standard bond and a put option.
3. Synthetic instrument is created by two or more existing financial tools to obtain the attribute of a desired security. For example, a long call option together with a short stock gives out a long put option.
4. Tax arbitrage enables the firm to earn a risk-free profit by exploiting differences in tax environments. For example, with the introduction of swaps, a Chinese firm could issue a yen-denominated debt in the Eurobond market, structure the issue to receive favorable tax treatment under the Japanese tax code, avoid much of the Chinese securities regulation, and yet still manage the firm's currency exposure by swapping the transaction back into RMBs.
5. For more details of Chinese tax policy goals see Chapter 2: The Functions, Roles and Principles of Taxation, pp35-61, Liu Xiaochuan, *National Taxation*, Nanjing University Publishing House, 1999.
6. Under a bifurcation approach, each of the elements would be valued and subject to income tax separately.
7. Hedging refers to the investment in an asset, usually a derivative instrument, to offset the risk of the underlying asset in order to reduce the overall risk of a portfolio.

The Indian Response to Transfer Pricing

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Abstract

The growing pace of globalization of the economy has placed a number of challenging issues on the schedule of the Indian companies. One such issue is TRANSFER PRICING, which is the price for which tangible or intangible properties are sold and services provided to the associated enterprises. In line with the international norms, the Finance Act, 2001 introduced transfer pricing (TP) provisions in the Income Tax Act, 1961 under Chapter X and Sections 92 to 92F. The new TP provisions deviate very little from the one by the Organization for Economic Co-Operation and Development (OECD) in their Report on Transfer Pricing and Multinational Enterprises. The paper reviews the provisions of transfer pricing together with the latest amendments made in the Finance Act, 2002. Although the provisions provide a statutory framework that can lead to computation of reasonable, fair and equitable profits and taxes in India but there are some crucial issues which need to be addressed. The paper concludes by highlighting the areas of concern, which require urgent attention and action on the part of the government. On the part of the companies it is advocated that they should address transfer pricing as an important aspect in corporate strategic planning and decision-making.

Introduction

The growing pace of globalization of the Indian economy has placed a number of challenging issues on the schedule of the Indian companies today. Deregulation of financial and capital markets has opened the Indian markets to foreign lenders and borrowers alike. There has been increasing participation of multinationals in the economic activities of the country. Companies previously confined to their domestic markets are now exposed to the competitive international market place resulting in increasing pressure on the profit margins. National boundaries have blurred with consumer taste becoming more homogenous. Further, the Indian companies are expanding rapidly to become multinationals with subsidiaries and affiliates in foreign countries. One of the most daunting tasks faced by the multinational companies whether Indian or foreign is determining the prices at which goods, services, and technology are traded between associated enterprises in different countries. "**Transfer Pricing**" is the term used to describe the determination of these internal prices. Having seen the impact the transfer pricing policies of associated enterprises can have on the tax revenues, the Indian government introduced detailed transfer pricing legislations. These legislations are a very important step taken by the country to curb tax avoidance.

Regime Prior To Transfer Pricing Regulations

The Indian Income Tax, 1961 (I-T Act) was very conspicuous for the lack of comprehensive transfer pricing legislations. Certain provisions addressing the transfer pricing issues had to be construed from the various sections of the I-T Act. These included Section 40A (2) which empowered the Assessing Officer (AO) to examine the appropriateness of expenditure incurred where the payment was made to specified related parties. Section 92 of the I-T Act provided for the determination of profits that could be reasonably derived by a resident where he undertakes transactions with a non-resident with which he has close connection. India entered into Agreements for Avoidance of Double Taxation with various countries. These treaties generally included specific Article(s) (generally Article 9) dealing with Associated Enterprises. While Article 9 had fairly wide magnitude, its applicability in India was suspect because its effect got considerably diluted in terms of the provisions of Section 92 of the I-T Act. A need was thus felt to incorporate in the I-T Act a specific chapter on transfer pricing.

Current Regime

With a view to provide a statutory framework which would lead to computation of reasonable, fair and equitable profits and tax in India, transfer pricing legislations were introduced in India in line with the prevailing international norms. The methods and principles set forth in the Organization for Economic Co-operation and Development (OECD) Report on Transfer Pricing and Multinational Enterprises form the basis for detailed regulations issued in India.

The Finance Act 2001

The Finance Act, 2001 introduced transfer pricing regulations (TPR) in India with effect from 1stApril 2001 corresponding to the assessment year 2002-03. The sections and rules under the Income Tax Act, 1961 which deal with TPR are Sections 92 to 92F and rules 10A to 10E and Sections 271(1)(c), 271AA, 271BA and 271G. The provisions are:

- **Section 92** seeks to provide that income arising from international transactions (between associated enterprises) shall be computed having regard to the arm's length price.
- **Section 92A** and **Section 92B** provide the meaning of the expressions "associated enterprises" and "international transaction" with respect to which the income is to be computed under the new Sec 92.

  Rule 10A provide for the basic and the additional criteria to determine associated enterprises.
- **Section 92C** provides for the computation of arm's length price. The section prescribes the following methods as being the most appropriate in determining the arm's length price:
  - (a) comparable uncontrolled price method; or
  - (b) resale price method; or
  - (c) cost plus method; or
  - (d) profit split method; or
  - (e) transactional net margin method; or
  - (f) any other method which may be prescribed by the Board.

  In a case where more than one price can be determined by the most appropriate method, the arm's length price shall be the arithmetical mean of such two or more prices.

  Rule 10B explains in detail methods prescribed above.

  Rule 10C provides the criteria's which will facilitate the selection of the most appropriate method. Further, based on the material and information available, the Assessing Officer, in the course of the assessment proceedings, can determine the arm's length price where price is not in accordance with the proposed provisions or prescribed information is not maintained/furnished or data used for computing such price is not reliable or correct. The tax authorities shall not make any adjustments to the arm's length price adopted by the taxpayer if such price is up to 5% less or 5% more than such price determined by the Assessing Officer.
- **Section 92D** seeks to provide that every person who has undertaken an international transaction shall keep, maintain and retain such information and documents as may be specified by the Central Board of Direct Taxes (CBDT). Documentation requirements shall not be applicable in cases where the aggregate value of international transactions entered into during a year is up to Rs10 million.

  Rule 10D provide for the documents required to be kept and maintained by persons falling in Category 1 (those persons who have entered into international transactions the total value of which exceeds Rs. 1 crore) and Category 2 (those persons who have entered into international transactions the total value of which does not exceeds Rs. 1 crore).

- **Section 92E** seeks to provide that every person who has entered into an international transaction during a previous year shall obtain a report from an accountant and furnish such report on or before the specified date in the prescribed form and manner.
  Rule 10E prescribes the Form No. 3CEB for the audit report.
- **Section 92F** defines the expressions "accountant", "arm's length price", "enterprise", "specified date" and "transaction".
- With a view to ensure that multinational enterprises comply with the requirements of the new sections, **amendment** was made in Section 271 and new **Sections 271(1)(c), 271AA, 271BA and 271G** were inserted in the Income Tax Act, so as to provide for penalty to be levied in cases of non-compliance with the procedural requirements, and in cases of understatement of profits through fraud or willful negligence.

Considering the complex issues involved in transfer pricing, and with a view to avoid hardship to the taxpayers in the initial stages of implementation of the new regulations, the Central Board of Direct Taxes (CBDT) has from time-to-time issued clarifications through notifications and circulars.

The Finance Act 2002

Certain amendments were made in the Transfer Pricing Regulations through the Finance Act 2002. The amendments are effective from 1st April 2003 corresponding to the Assessment Year 2003-04. The exercise of amendment is carried out to remove inconsistencies, administrative problems and inconveniences besides widening the tax base.

- **Section 92** is amended to clarify that provision of transfer pricing shall not apply where it has the effect of reducing income chargeable to tax or increasing the loss computed on the basis of entries made in the books of account.
- **Section 92A** is amended to clear the confusion on the meaning of 'associated enterprises'. The definition of 'associated enterprises' included situations in which an enterprise was regarded as a 'deemed associate enterprise' and these conditions were very wide. It has now been clarified that if only one of the conditions in the definition of a 'deemed associate enterprise' is met, will an enterprise be regarded as an associate enterprise.
- **Proviso to Section 92C** is amended to provide that the taxpayer shall have an option in case where more than one price is determined by the most appropriate method, to opt for the arithmetical mean or price which may vary from the arithmetical mean by an amount not exceeding 5 percent of such arithmetical mean.
- A new **Section 92CA** has been inserted w.e.f. 1.6.2002. This section provides for a procedure for reference to a Transfer Pricing Officer (T.P.O.) of any issue relating to the computation of arm's length price in an international transaction. The T.P.O. has been given all the powers of an A.O. for such computation.
- Definition under **Section 92F** of 'enterprise' is widened to include person or permanent establishment engaged in carrying out any work in pursuance of contracts.
- Definition of 'permanent establishment' (PE) is inserted and shall mean to include a fixed place of business through which the business of the enterprise is wholly or partly carried on.
- Specified date of filing transfer pricing audit report is now linked to the due date of filing return provided under section 139(1) of the Act.

Crucial Issues To Be Addressed

Although the proposed provisions to be introduced in Income Tax Act will certainly provide a statutory framework, which can lead to computation of reasonable, fair and equitable profits and taxes in India but there are some crucial issues which need to be addressed.

- The definition of "associated enterprises" has many glitches like it includes multinational enterprises supplying technology to users world wide as associated enterprises. The use of technology could be by way of transfer of know-how, patents, copyrights trademarks, licenses franchises or any other business or commercial rights of similar nature. The definition excludes technology for services e.g. software from its scope.
- The definition of "international transaction" is very wide and goes far beyond the scope of transfer pricing.
- The provision requiring determination of arm's length price at an average of the price determined by the most appropriate method is unique to India only and is not consistent with the global practice.
- The provisions give a lot of power to the T.P.O. for determination of arm's length price. The entire procedure for reference to TPO is lengthy and time consuming.
- The provisions are silent about the recourse to the Advance Pricing Agreements (APA). Through an APA, a taxpayer establishes its transfer pricing policy prospectively through an agreement negotiated with one or more revenue authorities. In India, the Authority for Advance Rulings (AAR) under Section 245 Q deals with among other things, transactions involving non-residents and notified resident applicants. Bringing in transfer pricing under the purview of advance rulings will result in eliminating uncertainties and enhancing the predictability of tax treatment in international transactions.
- The provisions are silent about the reference to the Double Taxation Avoidance Agreements (DTAA). The issue here is that where the agreements contain the specific anti-avoidance rules in the nature of Article 9 would they override the general provisions of sections 92 to 92F.
- What would be the implication of the proposed provisions on the other associate laws is not clear. For example, what are the implications under the Customs Laws where there are variations in the prices of the goods imported/exported.

Conclusion

The regulations on transfer pricing were clearly inevitable and long overdue. While there can be no denial of the necessity of setting out a framework for transfer pricing there are crucial issues which require urgent attention and action on the part of the government and the CBDT. On the part of the companies it would make more sense to understand and comply with the provisions rather then being under the lens of the taxman. Companies should commit addressing transfer pricing as an important aspect in corporate strategic planning and decision-making. They should adopt a proactive approach of reorganizing business units and restructuring transactions in a manner that not only enhances the performance but also reduces legal exposure and minimizes the overall tax burden. Such an approach will provide not only immediate but long-term benefits to the company. From the tax administration point of view it would be better to move from the costly and time consuming dispute settlement mechanism to APA mechanism. The APA program has proven to enhance fiscal management operations for all the parties since each would be in a better position to predict their costs and expenses including the tax liabilities. A little willingness and flexibility on the part of the Indian government and the CBDT can go a long way in resolving inter company pricing matters amicably and efficiently.

References

[1] Agarwal, Prabhat., ‘Transfer of Provisions’, The Hindu Business Line, April 28, 2001.

[2] Baba, Steve, ‘Transfer Pricing Solutions’, http:/www.transferpricesolutions.com.

[3] Carter, W.K., Maloney. D.M. and Vranken, Van M.H., ‘The problem of Transfer Pricing’, The Journal of Accountancy, July, 1998.

[4] Choi, F.D.S., International Accounting and Financial Handbook, John Wiley and Sons, Inc., NJ, 1997.

[5] Choi, F.D.S and Mueller, G.G., International Accounting, Prentice-Hall, Inc., Engelwood Cliffs, New Jersey, 1992.

[6] Gill, Suveera, ‘Strategic Guidance on Transfer Pricing’ The Management Accountant, Vol. 36 No. 9, September 2001.

[7] Horngren, C.T., Foster, G and Datar, S.M., Cost Accounting: A Managerial Emphasis, Prentice-Hall of India, 1999.

[8] Kalloor, Roshini, ‘Arms and the Taxman’, Corporate Dossier, The Economic Times, 3-9 August, 2001.

[9] Kapadia, Sudhir and Marwaha, Kapil, ‘Local Myopia, Global Drain’, The Economic Times, 5 February, 2001.

[10] Kapoor, Pragati, ‚Transfer Pricing: I-T department demands proof for April-Aug’, The Economic Times, Aug 30, 2001.

[11] Rathore, Shirin, International Accounting, Prentice-Hall of India, 1996.

[12] Shah, P.S. and Kadakia, R.S., Law relating to Transfer Pricing, Taxmann Publications (p) Ltd., 2001.

[13] Shah, Rajiv, ‘Principles of Transfer Pricing’, The Chartered Accountant, January, 2000.

[14] Singhania, V.K., Singhania, Kapil and Singhania, Monica, Direct Taxes: Law and Practice, Taxmann Publications (p) Ltd., 2002.

[15] Smith, M.J., ‘Ex Ante and Ex Post Discretion over Arm’s Length Transfer Prices’, The Accounting Review, Vol. 77, No. 1, January 2002.

[16] Srinivasan, K., ‘Nuts and Bolts-I’, The Hindu Business Line, July 21, 2001.

[17] Srinivasan, K., ‘Nuts and Bolts-II’, The Hindu Business Line, July 28, 2001.

[18] Tuckey, Dan, ‘A Fair Price’, Accountancy, April 2002.

[19] The Finance Act, 2001.

[20] The Finance Act, 2002

The Management Accountant: Future Challenges

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Abstract

The environment and the nature of management accounting today are far different than they were fifty years ago. (Kaplan 1984, Anastas 1997) Such a transformation is to be expected given the remarkable changes in the economy, technology and society that have occurred over the past century. (Pearcy 1976) Yet, as recently as the 1980's critics were charging that all of the methods, techniques and concepts taught and used by management accountants were developed before 1920 to serve a mechanically-based manufacturing industry that is far different from the modern, diverse enterprises which employ most management accountants today. (Kaplan and Johnson 1987,Clark 1995).

There are three primary, interacting forces that have shaped the occupational roles of today's management accountants over the past century. These operate within the context of trends in a socio-political environment (E).

For the past seventy-five years or so, management accountants have joined together in professional associations. The aims of these professional associations (P) are to set standards of practice and to expand the influence and the importance of the profession and of its individual members. (Langdon 1997, Stuart 1997) Through their efforts at establishing minimum qualifications, education, research, advertising, professional standards and lobbying governmental agencies they have significantly fashioned the makeup and operation of the profession and the roles of their membership in organizations.

One hardly needs to emphasize the importance of the third force, technology (T), in changing the nature of the work and the roles of the management accountant. (Vasarhelyi 1997, Honig 1999, McClure 1992)) The career ladder of the management accountant used to start with thousands of clerks entering routine data on the books. These jobs have all but been eliminated and the jobs of the mid-level management accountant been altered dramatically.

The final force is the theory or conventional wisdom about the nature of costs and the purpose of management accounting. This conventional wisdom (W) has been shaped by a tension between academics and practicing managers. While both groups concede that decision-making support is the ultimate objective of management accounting, academics pursue the matter with regard to rationality and ideal systems while managers require methods that are primarily expedient, easily understandable and cost effective.

The Management Accountant: Future Challenges

At the dawn of the twentieth century the central financial statement was the balance sheet used universally for all types of business, which reflected the assets and liabilities of an enterprise. The conventional wisdom of the day seems to have been that if a firm were prosperous it would naturally result in a strong balance sheet in terms of expansion of assets and reduction of liabilities. A firm with a strong balance sheet could withstand financial reverses and therefore was a good candidate for loans or the purchase of its stock. A firm's success in the past would be reflected in the balance sheet. And past success, as reflected by a strong balance sheet, is the best predictor of future success.

As the years of the twentieth century passed, financial analysts tended, more and more to discount the balance sheet. In its place the importance of the income statement was gradually elevated as a gauge of how well a firm had been doing to a portent to future performance. There were a number of putative reasons for the trend from balance sheet to income statement as the principal analytic document. The great depression and the deflation of the nineteen thirties shook the confidence of balance sheet believers. It became apparent that the value of 'locked in' assets valued under a "going concern" assumption could be worth far less than book value or even market value of the previous year in difficult times in a distressed market. Many corporations sold at deep discounts to their asset values. For example in 1936 General Motors shares sold at about half their value if the company were broken up and the assets sold even at depressed prices. Shareholders could get more from a sale of assets than the shares were worth.

Many ‘games’ could be played with asset valuations. Because of inflation and demographic trends, some assets such as real property were carried at far less than market value while other assets such as transportation equipment and real property in slum areas became worth far less than book value. In addition, there was the growth of service industries whose major assets were the human assets not reflected on the balance sheet and whose fortunes were not tied to the acquisition and control of hard assets. Another reason for the rise in the importance of the Income Statement is that, far more than the creation of a Balance Sheet, the Income Statement relies on an arcane set of rules with regard to revenue and expense recognition that require the services of professional accountants. This factor greatly expanded the power of the accountancy profession and the dependence of management on their accountants.

The shift from Balance Sheet to Income Statement was accompanied by a change in conventional wisdom from the notion that a set of financial statements should mainly indicate the current financial strength of an enterprise to the notions that the most important attributes of financial statements is their use as an artifact of the enterprise by which analysts can attempt to measure the ability of management, the robustness of their business plan and their execution of it and so to predict future financial results, the so called ‘predictive ability’ criterion.

The emphasis on the Income Statement led to the elevation of an ‘income number’ as the most important outcome of financial analysis. From the beginning many accountants especially academics recognized that net income was a point estimate or approximation. It was derived from a comprehensive set of thoroughly considered and agreed procedures, GAAP that at their core had an element of arbitrariness. Managers, analysts and investors too were captivated with the notion of a single, a “true” net income whose determination and trend observance indicated the financial health of an enterprise, the prowess of management and produced the best indicator of future performance. For the most part professional accountant groups and analysts as well as managers and the financial press continued to pursue the holy grail of the ‘true’ net income for every enterprise and every situation.

In these earlier days many accountants believed that if the process was refined sufficiently they could approach the “true” net income for a firm. A second rationalization was that if the procedural rules or GAAP were transparent and applied consistently over the years, errors in the estimate of income would tend to cancel out over time. Thus, by analyzing the trends in Income Statement amounts over the years it would be possible to get a valid and reliable estimate of the ability of management in devising and implementing their business plans. The final fall back position postulated for GAAP is that if the procedures applied in every instance were consistent and also they were transparent to sophisticated users by noting all questionable facts, and practices and the processes of establishing and promulgating GAAP were also transparent, well vetted and created in a process that invited a wide range of inputs, it would allow analysts to ‘see behind the financial statements’ and evaluate management and the enterprise for themselves. Thus when auditors were sued for not alerting shareholders to an impending bankruptcy, they could fall back on the defense that GAAP rules were followed. They had done all that was required of them and the shareholders had not right to expect them to immunize them from all economic risks.

By mid century it had become obvious that devotion to a single point estimate for income was flawed. For one thing a firm using accrual accounting and keeping religiously to GAAP might easily become insolvent while recording an upward trend in net income. As a stopgap remedy the funds flow or cash flow statement was introduced to supplement the other statements. However fundamental problems remained with the basic model. In the 70’s Abraham Briloff wrote the book *‘More Debits Than Credits’* where he discussed many of the devices that corporations used to manage earnings so that the trend in year-to-year income would remain in a smooth upward trend and to obscure misfortunes that they may have suffered in a given year. Later on Thornton O’Glove in his book on the ‘Quality of Earnings’ proposed that many corporations were manipulating earnings so that in many cases financial statements could not be relied upon as presenting a accurate and fair picture of the performance of the firm even if they had followed GAAP precisely. Because of these machinations statements were not only not as useful in analyzing a firm’s performance but also not as useful in comparing its performance to other firms in the industry. Brilloff and O’Glove’s expose`s as well as minor scandals and persistent other complaints were shrugged off by legislators and regulators. They as well as auditors and analysts tended to accept their premises but to regard them with a wink and a nod as long as there were no egregious scandals.

Toward the end of the twentieth century many analysts and academics expressed serious concern about the foundations of the financial accounting model expressed as the 'quality of earnings' problem. There were a number of shareholder lawsuits and financial scandals that turned on the lack of representation and perceived unfairness of financial statements for investors, employees, suppliers and the general public. The legal pressure mounted until the dam finally broke in the early twenty first century with the Enron-Anderson debacle. Along with the dot.com meltdown, investigations into many other companies such as Tyco, Worldcom and Adelphia increased the mistrust of the accounting profession and the disbelief of financial statements.

The basic problem, it seems, was not so much with the concept of GAAP as with the basic GAAP model itself and its execution. Because it was designed as a sort of one-size fits all set of principles it had to be flexible so as to be adaptable to a wide variety of enterprises. Thus, the P in GAAP stands for 'principles'. In theory, adhering to an agreed upon and 'somewhat rational' or at least defensible set of general principles would allow for tailoring precise rules and procedures for each different type of enterprise. If there were truly differences in circumstances the accounting procedures could for a given industry or firm could be modified as long as they did not violate generally accepted principles. But this resulted in a number of conceptual problems. Thus special rules were promulgated for firms exploring for oil and gas, for real estate firms and for research and development that differed but were consistent with generally accepted principles.

One problem was in the determination of just what constituted the 'different circumstances' that would justify different rules being applied. There had to be sufficient variation in specific rules so that the GAAP model could be universally flexible. This can result in two types of error. Type one error is where circumstances are similar but the corporations convince the accounting bodies to allow for different accounting treatments based on non substantial differences.

Type two errors are where rules that didn't precisely fit the situation are none-the-less imposed. For example, in many charitable and not profit organizations, funds for buildings and other long term assets and all or most of their operating revenue are contributed by a government or other sponsor. Thus there is not the same impetus to depreciate fixed assets as an offset from revenue to provide for renewal and lower taxes as there is for private profit making enterprises. Despite such obvious different circumstances the US FASB and Canadian CICA have decreed that these entities should record depreciation. They decided that it is more important to be consistent even across enterprises than it is to be accurate.

At the present time financial accounting and auditing firms and their imposed standards are under extreme stress from government enquiries and public outcry. The outcomes of these struggles have yet to be determined. US Government agencies such as the SEC are pressing for sweeping reforms while the major accounting firms are lobbying to retain the status quo. Only time will tell.

Trends in Management Accounting

Most of the concepts and techniques used in traditional cost accounting, which is the forerunner to and continues to be at the core of management accounting, were developed in the nineteenth century. However, until the nineteen twenties management accounting was not a very important function. Cost accountants, often called works accountants, were generally poorly trained, junior personnel whose main job was to go into the factory in order to gather various data for production managers and for financial accountants. Most of what is now considered within the purview of management accounting was then the exclusive domain of production manager's aides and industrial engineers with respect to product and department cost accounting. Matters of managerial strategy control and strategy were under the control of production and other management.

With the rise in importance of the income statement, cost accounting expanded into decision-making and became known as management accounting. With the expansion came an increase in status among the various functions of management. A major reason for the rise in importance of management accounting was the ability to reconcile with financial statement income numbers which became increasingly more important.

With the ad hoc cost studies or cost estimates, based on experience and some cost inputs, that had been the norm in all but the largest firms in the nineteenth century, aggregate product or department costs could not be reconciled to the Income Statement. However, with a comprehensive system of management accounting in place the cost books had to balance with the financial books. The aggregate of product costs and or department costs had to add up to the total cost on the income statement and the aggregate of product margins had to reconcile with the gross profit shown on the Income Statement.

The increased importance of the Income Statement and the power of reconciliation of cost accounting to it led to the development of the controllership function as part of the top management team of many enterprises. Just as management was demanding a point estimate for income, they were also demanding point estimates for product costs and for responsibility center costs. But it was more obvious in management accounting than in financial accounting that such point estimates were erroneous and often misleading. The problems that could not be swept under the rug were that product costs depended on the application of overhead to departments and then the arbitrary allocation of overhead to products. Thus, under the accepted model there could be no objective product cost in the sense that managers demanded them. Despite the knowledge that what they were attempting to do was impossible, management accountants continued to supply point cost because first that is what was demanded and second it increased the dependence on management accountants and thus their power and influence in the firm.

A number of solutions were proposed for the “costing problem.” Academics tended to favor cost determination based only on variable costs, which did not depend nearly as much on volume and thus would be far more stable under various conditions and from period to period. However since managers knew that in the final analysis they would have to recover full costs by selling products they demanded a cost number that would incorporate all fixed overhead costs. There were arguments to the effect that pricing decisions included many factors other than cost and that using direct cost all the had to be done was to increase margins which was managers prerogative to begin with. It was also proposed that there could be different costs for different purposed so that depending on the decision to be made the most appropriate cost estimate could be calculated from the cost of inputs. Such arguments were resisted by management and the full, single cost amount remained dominant.

More recently, as the basic Income Statement centered model came under sustained theoretical and anecdotally based attack academic theoreticians also developed solutions for the weaknesses of management accounting. In the nineteen seventies a method called ‘Activity-Based Costing’ was devised by Robin Cooper and Robert Kaplan at Harvard University. Their theory was that it is the activities needed in making products that cause costs rather than the products themselves. Therefore proper product costing depends on determining the costs of activities that then, so the theory goes, can be rationally allocated to products depending on the degree or amount of each activity they consume in the manufacturing process. The cost of activities include below the line, marketing and general costs as well so they are more comprehensive than traditional cost systems. In addition, the method requires that more of the total costs relegated to overhead in traditional systems is considered the cost of activities to ultimately be directly applied to products.

The problems with ABC is that it tends not only to be industry specific but also firm specific and depends on a thorough and detailed understanding of the productive processes of each firm. Only the general approach is transferable from firm to firm. A knowledgeable management accountant can far more easily implement and master a traditional cost accounting system than an activity based one in a new firm. Any change whatsoever in activities or sequencing of operations, which is to be expected at least every couple of years if not more often will result in a great deal of expensive revision of the system. Finally, although costs determined by ABM can be significantly different that the costs determined by traditional methods and ABC has ‘face validity’ especially in extreme cases, it none-the-less cannot be proven on a rational basis to provide superior cost numbers in all or even most normal situations.

For these and other reasons ABC was transformed to ABM or Activity-Based Management wherein it is not incorporated into the daily process of gathering and allocating costs. Rather the activity based costs of products are determined periodically and then used in making management decisions until they are revised and new costs used.

The growth of the service and non-manufacturing sectors of the economy has also undercut traditional management accounting since the model, which is based on the manufacturing process, is limited in its applicability to non-manufacturing organizations. To finesse the limitations of the income statement and to make management accounting more relevant to a wider spectrum of enterprise academics proposed the ‘Balanced Scorecard’ approach wherein various key measures of customer satisfaction, supplier performance, employee performance etc. as well as process measures are determined and used. The underlying theory is that in order to be useful, the income number must be augmented with the key measures of every critical aspects of the enterprise. It is possible to shine with respect to a single measure such as net income while if other measures such as employee morale or customer relations, if these are critical, decline it predicts future problems. Management decisions and practices that to optimize all of the measures of the balanced scorecard are most likely to yield success.

The balanced scorecard also is not integrated with the daily cost accounting process. The measures in the balanced scorecard are only computed periodically generally once per year at a significant cost that must be sold to top management as being beneficial. Although the Balanced Scorecard is also custom tailored for each individual firm, as far as accountants are concerned, mastery of the basic Balanced Scored card method is far more easily transferable to new firms. Many of the key measures used are applicable to a wide area of situations and can be obtained with similar methods.

Since both ABM and Balanced Scorecard are 'ad hoc' systems they do not necessarily reconcile to the Income Statement numbers nor can what has become the necessary work of traditional management accounting be used as the basis of either of the measures. In both cases it remains to be seen whether they will remain merely useful tools selectively applied by specialists or whether they will be further developed and become the 'bread and butter' of the management accounting professions taught as part of professional qualifications and universally used in some form in every enterprise.

The Path Ahead

Some future decisions points are clear for management accounting. Shall the profession remain a lesser subspecialty of the accounting profession or move to become more of a discreet, independent profession and if so what name should be used. With a lot of political heat and loss of credibility an argument can be made for disassociation and moving in the direction of being specialists in ABC-ABM or the Balanced Scorecard and making these and similar techniques mainstream for the profession.

If the financial accounting professions should find some fix for problems with financial reporting and retain or regain their position of power and prominence it might not be prudent to disassociate management accounting and the concomitant automatic employment of large numbers of practitioners and the prestige of association. This is like the dilemma of the Children of Israel abandoning the "fleshpots of Egypt." As long as management accounting remains tied primarily to absolute reconciliation with the Income Statement, the path of development and expansion remains limited. Practitioners will always find comfort under financial accounting umbrella to the extent that innovations inconsistent with this model will not be taken seriously.

Moving away from the Income Statement driven model currently used is fraught with difficulty. Most management accountants today have the same temperament and training as financial accountants taken in the same classes at school and often moving from financial to managerial account and back. As H. Thomas Johnston has said the training of people to be practitioners of ABC will be more akin to training industrial engineers than traditional accountants. Balanced Scorecard techniques required expertise in survey methodology and social science as well as other non-accounting skills. If salaries and costs cannot be justified on the basis that most of the work done would have to be done anyway to support the financial accounting function the new profession will have to prove its worth.

References

[1] Brinker, B.J (Editor) "Emerging Practices in Cost Management" Warren, Gorham & Lamont, 1997

[2] Hall, R.W.; Johnson, H.T. and Turney, P.B.B. "Measuring Up - Charting Pathways to Excellence", Irwin, Homewood, IL, 1991.

[3] Hayes, R.H. and Abernathy, W.J. "Managing Our Way to Economic Decline", Harvard Business Review, July-August, 1980, 67-77.

[4] Hiromoto, T. "Another Hidden Edge: Japanese Management Accounting", Harvard Business Review, July - August, 1988, 22-26.

[5] Johnson, H. T. and Kaplan, R. S. "Relevance Lost - The Rise and Fall of Management Accounting", Harvard Business School Press, Boston, MA., 1987.

[6] Kaplan, R.S. "The Evolution of Management Accounting", The Accounting Review, 59, 3, July, 1984, 390-418.

[7] Schmenner, R.W. "Escaping the Black Holes of Cost Accounting", Business Horizons, January-February, 1988, 66-72.

[8] Skinner, W. "The Anachronistic Factory", Harvard Business Review, January-February, 1971, 61-70.

[9] Turney, P.B.B. and Anderson, B. "Accounting for Continuous Improvement", Sloan Management Review, 30, 2, 1989, 37-48.

The New Horizon of Corporate Governance and Social Responsibility: A Case Study of Bhoruka Charitable Trust

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Abstract

Most of the family managed business houses in India take up the work of charity in different crisis situations like flood, famine, drought, cyclone, earthquake etc. Among these business houses, there are some, which have established charitable trusts and does charity work regularly. Over a period of time these houses have started managing their charity work in a professional way. In the present case study an attempt has been made to understand the social responsibility of corporate governance of a business house; The Transport Corporation of India (TCI) and its group of companies. The TCI and its group of companies promoted a charitable trust; The Bhoruka Charitable Trust (BCT) during 1960s planned to do charity work in few villages of their native place. The present case study tries to understand the evolution and growth of BCT taking into consideration the dynamics of its corporate governance for social responsibility.

The Concept of Corporate Governance

Corporate governance is like a backbone of any corporate house for its survival and sustainable growth. To quote, "Corporate governance is the process whereby people in power direct, monitor and lead corporations, and thereby either create, modify or destroy the structures and systems under which they operate. Corporate governors are both potential agents and change and also guardians of existing ways of working. As such, they are therefore, a significant part of the fabric of our society. This is often forgotten in the business of making money and responding to a competitive market". (McGregor, 2000:11)

Day by day Corporate Governance is becoming important in the corporate sector. It is teamwork as well as consists lots of responsibility and accountability. According to Pointer & Prlikoff (2002:2) "Governance is a team support. Boards exercise collective influence; their members have no individual power. ………. Members may disagree, they can (and should) debate and argue about issues, but if they are going to decide and act, they must do so together."

There are different levels of corporate governance. According to Pointer & Prlikoff (2002:2) "Corporate governance takes place at four levels: the level of the overall system (systematic), the level at which governing groups formally relate with each other (intergroup), the inter personal level and, finally personal governance." Similarly, there are different systems of corporate governance in different countries. "Among the most prominent systems of corporate governance in developed countries are the U.S. and U.K. models, which focus on dispersed controls, and the German and Japanese models, which reflect a more concentrated ownership structure." (Iskander & Chamlou, 2000:6)

In the present situation of globalization and liberalizations, role of corporate governance has become more important not only for the survival and growth of corporate sector, but also for social responsibility of corporate governance. To quote, "Governance structures are changing fundamentally at all levels – locally, nationally and globally. The way this transition develops will have critical implications for the abilities of communities and countries to address the challenges of economic competitiveness, social cohesion and sustainable development." (Andriof & McIntosh, 2001:213) Thus, it is clearly understood that corporate governance can meet be seen without corporate social responsibility.

The Concept of Social Responsibility

According to Shocker & Sethi (1974: 69) "The term 'corporate social responsibility' is subject to multiple interpretations, but implies considerations by the corporation of interests of groups other than those with direct ties to the firm. An ever-growing number of individuals, groups and institutions are endeavoring to monitor corporate actions and inactions for indications so socially responsible behavior and to develop strategies for exerting pressure on corporations to change their behavior in a manner that is more in accord with the expectations of one or more of these groups."

Makower (1994: 13) has explained social responsibility and according to him it stems from a deeply held vision by company leaders that business can and should pay a role beyond making money. It includes an understanding that what companies do and make has a variety of direct and indirect impacts on those both inside and outside the company, from customers and employees to communities and the natural environment. Therefore, a company goals, missions, and policies must take into account this entire range of constituencies. So, having one or more commendable programmes doesn't make a company socially responsible unless those programmes are part of a larger vision. But a company can be socially responsible without having an all-star roster of programmes and practices."

In India social responsibility my businesses is rooted in the culture from ancient time. According to Balasubramanian (1998:2) "India has a rich tradition of governance standards from ancient times. The consistence practice of dharma or righteousness in conduct has been a key commandment in the scriptures. Accountability to society at large and to its sub-sets has been a prescribed norm, though it may not always have received the level of compliance that it deserved."

"The pre-independence phase characterized by nationalism and the Swadeshi spirit, and based on the Gandhian tenets of trusteeship. ………… India hosted an international seminar on 'Social Responsibility of Business' in 1965. It was held under the convenorship of J.P. Narayan. The Gandhian philosophy of trusteeship - that business must regard itself as trustee of the interest of the community at large – was mooted as a viable path to secure the participation of business. The seminar adopted a statement called the *Delhi Declaration*." (P & P Group, 1996:16-17)

Linkage of Corporate Governance and Social Responsibility with Voluntary Sector

Business houses in India have a tradition and culture of giving donations for charity work. After independence some business houses that were socially sensitive came forward and established Voluntary Service Organizations. These business houses, for the governance of voluntary organizations established by them, were as good as for the corporate governance of their businesses. Tandon (2002: 215) defines the governance of an NGO as it is concerned with its effective functioning and performance in society. This is both a legal and moral obligation. Therefore, governance requires the creation of structures and processes which enable the NGO to monitor performance and remain accountable to its stakeholders."

To understand this new horizon of corporate governance and social responsibility we have case study of a Voluntary Service Organization called Bhoruka Charitable Trust that was established by a business house.

Case Study of Bhoruka Charitable Trust (BCT) the Region

Bhoruka Charitable Trust (BCT) is actively involved in integrated rural development in 300 villages of Rajgarh block in Churu district of Rajasthan, India. The geo-climatic conditions of this region are harsh and hostile. Being an integral part of the *Thar Desert*, it receives very scanty rainfall (325-350 mm annually) and there is wide variation on the temperature (3 degree Celsius in winter to 50 degree Celsius in summer). The underground water being deep and saline with high fluoride content, there is shortage of drinking water particularly during the summer months. People depend on traditional rainwater harvesting structures, called *kunds,* for drinking water. The area of Rajgarh block is also remote and is deprived of natural resources. Shifting sand dunes characterize the landscape. The people in this region are entirely dependent on agriculture for their livelihood. But the land is not productive since the ground water is highly saline. There is a lack of basic infrastructure facilities like water supply, road, electricity, post and telegraph, rural markets, transportation, veterinary hospitals, medical and health services, etc. The health status of the people is deplorable. In the absence of roads and poor means of transportation, access to available State Health Services is very badly hampered. Illiteracy has further added to the economic and social backwardness. The low status of women prevents them from availing of existing schooling facilities in the villages. Besides the discrimination against the education of girl child, the infrastructure for schooling is woefully inadequate and not conducive to the cognitive development of the children.

The Vision and Visionary

BCT was founded in May 23, 1962, by the Late Shri Prabhu Dayal Agarwal; popularly known as P.D. Ji, to address the problems of the villages of the Rajgarh block. P.D. Ji was a well-known philanthropist and the founder Chairman of the TCI – Bhoruka Group of Companies. The Trust was basically rooted in the concept of charity and registered under the Bombay Public Trust Act. At the age of 13 he left his native village, Bhorugram in Rajasthan and went to Jalpaiguri. There, he and his brothers worked in a grocery store. Shri P. D. Agarwal later moved to Calcutta and started a business in clothes. In the late 1950s, he floated the Transport Corporation of India (TCI) with just one truck. Today, it is the flagship of a group with a turnover of Rs. 750 crore.

P.D. Ji gave away large sums of money to charity without attracting any attention to him. In times of national catastrophes like floods and droughts, he instinctively came forward to render assistance to people in distress. He established educational and vocational institutions, clinics and dispensaries in interiors for the benefit of rural people. He also opened blood banks and research institutes.

P.D. Ji also insisted that one of his sons should make philanthropic work his full time concern. Today Shri Prabhu Dayal's son, Dr. Ashok Agarwal, is carrying on the good work started by his father. This 45 year old scion of the Bhoruka Empire completed his Masters in Public Health (MPH) from the Johns Hopkins Institute in Baltimore, USA in 1983. He was then expected to join the family business or set up a lucrative medical practice. Instead, he left for Bhorugram, the village from where his father and his uncles had set out in search of a living six decades ago. Dr. Agarwal gave a new thrust to the activities of the Bhoruka Charitable Trust and gave the slogan "Development through Self-Reliance". He also recruited experts from various disciplines like social work, rural management, education, sociology, health and medicine, agriculture and hydro-geology, from different States and Educational Institutions and put them in charge of the various projects of the Trust, to make it a multi-professional organization.

The Charity Phase

During the initial fifteen years of its history since 1962, the Trust concentrated on 'service-delivery' to rural communities deprived of the basic amenities of living. Among the first tasks that the Trust undertook were: providing blankets to the poorest in the villages, running a dispensary (which, over the years, has evolved into a ten bedded hospital with OT, X-Ray and laboratory facilities), laying of roads, ensuring availability of safe drinking water through provision of hand pumps, *kunds* and wells, providing drinking water through tankers during periods of drought and water shortage and making premium education available to the villagers by establishing a public school in Bhorugram, building classrooms in villages and sponsoring teachers to teach in government schools.

The Development Phase

As the development ethos changed the world over, BCT began to introspect and look for more holistic solutions. The resources for its renewed endeavors came mostly from the Government. An important component of the Trust's activities was increasing community participation in the development process. No work was undertaken without the community making a contribution, either in terms of finance or labor or decision-making. The Trust thus began to forge into areas like low cost latrines to improve the sanitary conditions of the environment, low cost housing to improve the living conditions of the economically backward classes, non-formal education for the economically backward classes and the girl child in response to the problem of gender discrimination in the field of education, providing for awareness and income generation activities for women in an endeavor to lead them through the process of empowerment to an improved status, supplementary nutrition programs for infants and pregnant and lactating mothers, providing for the cognitive development of pre-schools children, community-based wasteland development and afforestation to address the problem of environmental degradation of the region and comprehensive health improvement strategies which revolve around community level interventions through mobile medical units, female health workers at the village level, immunization, family planning and TB eradication programmes.

The Empowerment Phase

However, sustainable human development was still elusive and effective community participation was not realized. Therefore, to achieve the goal of self-reliance in rural development through genuine people's participation, the Trust began to rethink its approach. The move is towards complete 'empowerment' of the community by enabling it to take the development process into its own hands. Hence, in most villages, where the Trust undertakes project activities, the community is organized into village development societies, called *Gram Vikas Samitis,* and these societies are being made capable of undertaking development programmes, at times, even independent of the Trust. The Trust is evolving and increasing its capability as a support organization for people's organizations. Therein lies the future of Bhoruka Charitable Trust.

Thus, since 1984, the Trust has had a more integrated approach to development. The Trust has expanded its area of operation to almost all the villages of Rajgarh block. Due to the increase in the volume of the Trusts' activities financial aid was sought from agencies like Council for Advancement of People's Action and Rural Technology (CAPART), New Delhi, Ministry of Human Resource Development, New Delhi and the District Rural Development Agency, Churu and many more.

The Mission

The mission statement of BCT appears as: "The Bhoruka Charitable Trust is dedicated to Socio-economic transformation of remote rural areas of India, especially its weaker and socially underprivileged groups, through physical, social, cultural and economic development of rural people, groups and institutions".

Governance: The Board of Trustees

The Trust is governed by a Board of five Trustees, who are members of P.D. Ji family and are Managing Directors of one or the other of the Bhoruka Group of Companies. The Board members are appointed by the Trustees on the basis of their experience in the Trust-related fields. The Board of Trustees decides the policy of the Trust. Out of these five Trustees, one is the Managing Trustee who is more involved in the day –to-day affairs of the BCT and all Executives Decisions are taken by him.

The Board meets every six-month in a year. However depending on the exigency of the situation it may meet more often. The annual budget of the Trust has to be approved by the Board of Trustees. In addition to it the Board requires financial reporting by the Managing Trustee, every quarter of the year. The Managing Trustee visits the project area at regular intervals (precisely, 30 days in a year), to keep himself abreast of the activities and the progress of the work. He is required to send a monthly report to the Board about the activities of the trust.

Human Resources

The organizational structure of BCT is non-formal and not strictly hierarchical. The day-to-day operations are managed by the professional staff of the Trust, which totals to about 60 full timers. The different levels comprise of the Project Manager, who is the overall In-charge of BCT Projects. Then come the Project Coordinator, Project Officers, Assistant Project Officers, Supervisors and Grassroots Level Workers. The Trustee has delegated the executive powers to the Project Manager, and he may take decisions regarding the project to be taken up within a broad budgetary guideline. In addition, there are support staff members, recruited either through advertisements or through promotion of grassroots level workers. The professional staff may be graduate, post graduate or doctorate belonging to the different discipline such as education, health, environment, engineering and medicine.

Besides, there are about 600 volunteers who work at the grassroots level. The selection process consists of organizing a village meeting inviting all the village elders, elected representatives and school teachers. Depending on the nature of activities and project requirements, sometimes written examinations are also conducted where basic mathematics and writing skills of the candidates are judged. Before making the final selection, the acceptability and credibility of the candidates are also verified with the community. The volunteers are then selected on the approval of the community. The volunteers are based of the village level and are trained by the project staff in the field to perform the task assigned to them. The Supervisors and Project Officers coordinate with the volunteers. One supervisor generally looks after 10-12 villages in a cluster.

The grassroots level workers have regular meetings with the Assistant Project Officers, Project Officers or even with Project Managers. This is a two-way interactive process. The monthly, sectoral meetings allow the management to give information about the programmes to the grassroots workers through the Project Managers and Officers. The meeting also helps the Programme Staff in keeping themselves abreast of the ground level situation. Apart from this, the Project Officers meet every month, where each of them explain about the progress of their work and gets to know about the other projects.

In-house training programmes are organized regularly for the purpose of staff development. They are sent to various organizations for field visits and experience sharing. Staff are also sponsored to various training programmes conducted by different agencies i.e., Indian Institute of Management, Ahmedabad. Institute of Rural Management, Anand, Society for Participatory Research in Asia, New Delhi, Indian Institute of Forest Management, Bhopal), UNNATI, Ahmedabad and so on.

Finances: Initial Efforts and Sources of Income

P.D. Ji had wished that 10 percent of the profit from the TCI-Bhoruka groups should go into charitable works of BCT. But he later realized if there were no profit some year, the work would suffer. So P.D. Ji bought a 12-storied building in Mumbai for Rs. 10,000 with TCI funds. The price of this building has reached astronomical figures now. The purpose of the purchase was to utilize its rental income for the activities of the Trust. This income has progressively increased over the years. The Trust also invested money in government-approved bonds in the name of BCT. These initial steps helped BCT in gaining financial security.

The annual income of the Trust is Rs. 2, 55,26,054.46(gross), while its corpus fund stood at Rs. 1,02,56,563 during the financial year 1999-2000. A major part of its finances are met with the rental income and the interest earned from fixed deposits. The Trust is also receiving funds for its different projects from the Central and State Governments Although, BCT had acquired the FCRA way back in 1993, it has only very recently amended its broad financial policy and has started receiving foreign funds in order to keep its projects going.

Monitoring and Evaluation

All the sponsored projects are monitored and evaluated by the Project Manager and the core team of BCT comprising of the concerned Project Coordinators and Project Officers In case of its RCH project, the implementing NGOs are required to send the quarterly performance reports to the Trust. The senior level staff from the Trust visits the field to verify the reports submitted. They also monitor the implementation of the project. According to its performance, the project is either extended for a year or terminated.

Conclusion

It has been observed from the case study of BCT that the business houses, which are having strong corporate governance and corporate social responsibility, they are also successful for launching and managing a voluntary organization in professional way. “An effective system of governance enables an NGO to formulate, review and reformulate its mission in changing contexts. ‘Good governance’ ensures that programmes follow the requirements of the NGO’s mission; promotes a performance orientation and accountability in the institution; and requires that the values (integrity, participation, professionalism, quality, commitment), statutes (reporting and legal standards and procedures) and norms of socially concerned civic institutions are articulated, practiced and promoted. An effective structure and process of governance in an NGO is absolutely critical for ensuring accountability in this wider sense.” (Tandon, 2002: 221). This statement is absolutely applicable to BCT.

References

[1] Andriof, Jorg & McIntosh, Malcolm (eds.) (2001): Perspectives on Corporate Citizenship, Sheffield: Greenleaf Publishing Limited

[2] Balasubramanian, N. (1998): Corporate Boards and Governance, New Delhi: Sterling Publisher Private Limited

[3] Bhoruka Charitable Trust: Annual Report 2000-2001

[4] Bhoruka Charitable Trust: An Integrated Approach to Rural Development

[5] Bhoruka Charitable Trust: Annual Report 1994-1995

[6] Indian Institute of Health Management Research: Pragya: Partnership in Women's Empowerment (Profile of Bhoruka Charitable Trust), Jaipur: Resource and Training Centre on Women's Health, Empowerment and Rights

[7] Iskander, Madgi R. & Chamlou, Nadereh, (2000): Corporate Governance: A Framework for Implementation, Washington DC: World Bank Group

[8] Kondap, N.M. (2001): Corporate Sector – Voluntary Service Organizations: Linkages in the Field of Social Work (Summary of Ph. D. Thesis), Pune: Faculty of Commerce, Brihan Maharashtra College of Commerce

[9] Makower, Joel (1994): Beyond the Bottom Line: Putting Social Responsibility to Work for Your Business and the World, New York: Simon & Schuster

[10] McGregor, Lynn (2000): The Human Face of Corporate Governance: New York: Palgrave
Pointer, Dennis D. & Orlikoff, James E. (2002): The High - Performance Board: Principles of Nonprofit Organization Governance, New York: John Wiley & Sons, Inc.

[11] Rajesh Tandon (2002): "Board Games': Governance and Accountability in NGOs" in Michael Edwards & Alan Fowler (eds.) The Earthscan Reader on NGO Management, London: Earthscan Publications Ltd.

[12] Sampradaan Indian Centre for Philanthropy: Indian Foundations (Bhoruka Charitable Trust), New Delhi

[13] Shocker, Allan D. & Sethi, S. Prakash (1974): "An Approach to Incorporating Social preferences in Developing Corporate Action Strategies" in S. Prakash Sethi (eds.) The Unstable Ground: Corporate Social Policy in a Dynamic Society, Los Angeles: Melville Publishing Company

[14] The P & P Group (1996): Social Audit of Business and Industry, Bangalore.

Who is Responsible for the Environment? - A Comparative Study from Kuwait and the UK

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Abstract

The study reported in this paper is a comparative examination of environmental responsibility between two countries, Kuwait and the United Kingdom, exhibiting contrasting economic, social and cultural values.
It starts from a presumption, which is subsequently empirically demonstrated, that the two countries have a differing spectrum of issues, which are publicly perceived to be of environmental importance. The results demonstrate that there is a significant difference in the degree to which the populace of each country is prepared to personally shoulder the responsibility for the environment, and also important differences in their perception of the allocation of responsibility for environmental issues.

The paper discusses possible reasons. It notes many differences between the two environments which might be instrumental including; history of environmental concern, economic status, and cultural values. The conclusion reached is that there is no one correlate to the pattern of environmental concern or the question of responsibility.

Introduction

Whose responsibility is the environment? It is tempting to say it is all our responsibilities, in that it represents a backdrop to everybody's life, and hence we should all be answerable for its maintenance. This notion of overall responsibility is grounded in the conception of the environment as some form of living creature, for which society in general must bear responsibility. [1]

If one accepts there is not merely a semantic but an actual difference between being responsible and responsibility, it implies that while an individual may be responsible, responsibility may involve individual abdication for the environment, and its transference to one or more outside bodies who, on behalf of the populace, take on duties associated with the environment. It may be government, it may be industry, or it may be a triumvirate combination of all parties. [2]

The study reported in this paper examines this single question, in the comparative context of Kuwait and the UK, of who is perceived to be responsible for the environment. It is a survey dealing with perceptions, the question "should be responsible" rather than a belief as to "who is responsible". Its congruence with reality is thus incidental, it is concerned with beliefs.

The Main Contenders

There is a strong feeling among certain groups (e.g. Greenpeace), that responsibility for the environment should in large part be concentrated amongst those parties who are instrumental in causing the problem in the first place. It is a simple connection but leads to bizarre scenarios. If one takes the argument to its logical conclusion, then should one blame the oil company for producing the fuel we need to drive our transport, in turn polluting both his and our environment? In many situations we demand the benefits but are less willing to take on the responsibilities for the environmental problems they cause.

Responsibility for the environment also hinges on the issues perceived as important within each country. One might argue that were the issues identical in both Kuwait and the UK, then allocation of responsibility would be similar. The situations are dramatically different. [3]

Kuwait is a country with a very recently developed economy based totally on its oil and related product output. Its great wealth is founded on industries (oil extraction, petrochemical refining, downstream chemicals and the shipping associated with these outputs) that are notoriously pollutant. However it has to live with the industries for its income, it has few other natural resources or industrial infrastructure.

The recent great wealth the population has enjoyed has also leaded to actual short term and potential longer-term environmental problems. There are more cars in Kuwait than head of population, food wastage is extremely high with the consequent problems of packaging and surplus disposal, energy and natural resource consumption (electricity, water and gas) is extremely high and growing, whilst many of the social and medical problems of Europe and the US are beginning to become issues (drug and substance abuse, traffic fatalities, and rising levels of cancer and coronary heart disease).

By contrast to Kuwait, the UK is a post-industrial society, a society where productive industry represents an increasingly small part of the economy, where the service and knowledge based sectors are dominant, and where there is more limited wealth. It is a society which is becoming increasingly aware of its environmental responsibilities and where various initiatives have proved successful in environmental improvement. We might point to recycling of waste products, decreasing water pollution, and large increases in organic food sales as evidence of this concern. However many social and medical problems continue to increase: violence and crime against the person, drug abuse, and the incidence of cancers and heart disease. [2] [4]

Responsibility for the environment hinges on what issues in the environment are perceived to be both tangible and hence important to society. Given the differences inherent in the two countries, it would seem likely therefore there would be a differing prioritisation of environmental issues between the countries, and hence a differing conception of responsibility.

Responsibility toward the environment can be assessed in two ways. Clearly by the direct question "Who do you believe should be responsible for the environment?" This might be construed as giving a view whereby the respondent distances himself from any involvement by proclaiming it is not my responsibility. A more circumspect way is through a consideration of what sacrifices a person is willing to undergo in order to maintain or enhance the environment. It may not be a direct correlation, but willingness to submit to personal sacrifice would seem to be related to the level of responsibility one feels toward the environment

So who are the potential contenders for environmental responsibility? There appear to be three: industry, government, and the population at large. It is accepted that a simple delineation in this way does not do justice to the complexity of the situation, but is used here as a short hand method of distinguishing between the possible parties involved. The interaction between the public and both industry and government is dictated ultimately by the degree to which the populace wishes, or is willing, to transfer responsibility from its own arena to either of the other two bodies. In the final analysis it is public opinion, as interpreted by their chosen representatives, which will dictate environmental policy, whether meted out to industry or the public. It may also dictate how that policy is actualised.

Changes in behaviour in accordance with a defined environmental policy can be actualised through two broad mechanisms, the classic "stick & carrot". There is an implicit assumption in these two forms of behaviour modification that mere enactment of policy guidelines is ineffective without either incentive or penalty to accompany it.

Legislation therefore to improve the environment has to carry with it a rationale that it will be capable of being enacted, that the penalties will be enforced, or that the incentives can be realised. Many of the benefits from environmental improvement are long term and not instantly recognisable. They need to be made tangible in some way. Penalties and incentives are simple ways in which improvement can be monitored and measured.

The Studies

Two parallel studies were done in the UK and Kuwait to establish what issues people in each country felt were important environmentally, what sacrifices they were prepared to make in order to improve the situation, and whose responsibility they felt it was.

Both surveys were spread over the period 2000 / 2001 and consisted of 905 personal interviews in Kuwait and 803 in the UK. In both cases samples were derived randomly on the basis of established national demographic profiles, with all fieldwork being carried out by fully trained and briefed opinion research interviewers.

All interviews were with adults in their respective countries, and were spread geographically over the country. Results were analysed along the dimensions of gender and age (both surveys) with social class and geography used solely in the UK.

The Results

Issues of importance.

There is a substantial difference in what is perceived to be an issue of environmental importance between the two countries.

Table 1: ENVIRONMENTAL ISSUES CONSIDERED TO BE OF GREAT IMPORTANCE: KUWAIT AND UK

Table 1 **ISSUES CONSIDERED OF GREAT IMPORTANCE**

UK & KUWAIT

	All Respondents	
	Kuwait	UK
	n=905	n=803
	%	
Protection of Endangered Species	17.0	32.0
Air Pollution	87.0	58.0
Water Pollution	86.0	42.0
Recycling of Packaging Waste	13.0	46.0
Conservation of Energy	41.0	53.0
Conservation of Material Resources	38.0	17.0
Education of Future Generations	31.0	51.0
Protection of Rural Environments	8.0	37.0
Action Against Smoking	21.0	47.0
Punishing Companies	22.0	30.0
Safer & More Efficient Cars	10.0	22.0
Drug and Substance Abuse	11.0	63.0
Protection of Marine Life	20	-

It would be simplistic to say the UK population considers more environmental issues to be more important than Kuwaitis. Clearly the spectrum of what is important differs. For Kuwaitis the overwhelming concern is water and air pollution. All other areas pale into insignificance. There is a feeling that these two areas have deteriorated in recent years and are the ones where remedial action is most required. For the UK population environmental concerns are more diffuse. There is a concern about air and water pollution, but areas such as drug abuse, recycling, education of future generations, and energy conservation are also major targets.

It is tempting to classify environmental concerns as of primary and secondary focus, and that as one begins to control those, which are perceived as of primary importance, so one can increasingly concentrate on those of secondary importance. These may be of lower priority, be spatially removed from the individual, or require more personal sacrifice to be achieved.

One might argue clean water and clean air are the "staples" of life (primary focus), and that once these have been achieved one can re-focus on problems more esoteric or distanced (secondary focus), such as the protection of endangered species. It is interesting how the Emir of Kuwait has championed the more unfashionable environmental causes, including the protection and development of endangered wildlife in Kuwait.

One must also set the results in Table 1.in the context of the availability, cost and usage patterns of energy production and consumption in the two countries. Kuwait is energy rich (with the notable exception of water), it is energy cheap, and has a profligate pattern of consumption. The UK is energy poor and expensive and has a consumption pattern which stresses economy (insulation, water metering, time phased purchasing of energy, etc).

Finally there is the cultural dimension to consider. Kuwait is a recently rich country with strong Islamic roots, the UK an old established declining (?) economy with a largely redundant Protestant ethic. How these differences in cultural values impact on environmental concerns is unclear, but they must surely be involved.

Sacrifices

As discussed earlier one's commitment towards an environmental problem might be judged by the sacrifice one is willing to make in order to improve the situation. Table 2 gives a summary of the comparative results along this dimension.

Table.2: SACRIFICE ONE IS WILLING TO MAKE TO IMPROVE THE ENVIRONMENT: KUWAIT AND UK

	All Respondents % In favour of this sacrifice	
	Kuwait n=905	UK n=802
Extra Taxes on Cars with More Powerful Engines	54	63
Compulsory Testing of Older Cars for Gas Emissions	90	n/a
Additional Charges for Companies Who Pollute the Environment	91	86
Banning of Smoking in Public Places	79	83
An Extra 10% Taxes to pay for Environmental Improvements	41	57
Higher Charges for Excess Household Waste Disposal over an Agreed Level	53	60

Paying an Extra 10% for Food Uncontaminated with Pesticides hormones or Non-Natural Additives	57	63
Speed Restrictions to Reduce Car Accidents	82	79
Drinking and Driving Legislation	n/a	58

Generally the UK population appears more willing to make sacrifices to protect its environment, when compared to the Kuwaiti population. In five of the seven categories where a direct comparison is possible the percentage in favour of the sacrifice involved is higher in the UK, which rises to six out of eight cases if one assumes the compulsory testing of older cars for excess emissions is 100% for the UK, where such testing is mandatory.

What we feel this says about the differing attitudinal configurations concerning the environment is that the UK is more accepting of the principle that if we collectively, as a nation, wish to have an improved environment then this can only come at a price, and that that price in part will have to be tangibly borne by the population in terms of sacrifices

This is in contrast to the Kuwaiti population, who appears less inclined to make personal sacrifices in order to improve the environment. If we assume there is a similar concern for the environment in both countries (which is by no means certain), then less personal sacrifice implies a greater reliance or responsibility being laid upon either industry and / or government to act on the population's behalf.

The crucial question as to where the responsibility for the environment lies is shown in Table 3. It confirms earlier indications that there is a significant difference between the two countries respondents as to where they perceive responsibility lies

Table.3: THE ENVIRONMENT: WHOSE RESPONSIBILITY?

	All Respondents	
	Kuwait	UK
	n=905	n=802
	%	%
Totally Government Responsibility	7	3
Joint Government & Industry Responsibility	11	8
Totally Industry Responsibility	7	4
Joint Industry/Citizens Responsibility	9	13
Totally Citizens Responsibility	*	12
Joint Citizens/Government Responsibility	6	17
Responsibility of All Three Parties Equally	60	43

Chi squared = 69.40 (with Yates Correction) significant at 0.1%

Table 4: RESPONSIBILITY FOR THE ENVIRONMENT: ABSTRACTION FROM Table 3

	Partially/totally Citizens Responsibility	No Citizen Responsibility	All Respondents
U.K	257	120	377
Kuwait	136	226	362
All	393	346	739

Perhaps the most interesting feature of both Tables 3 and 4 is how the two sets of respondents view their personal responsibility toward the environment compared to that transferred to either industry or government. The Kuwaiti perception is that my personal responsibility is non-existent; it is the responsibility of those I appoint to deal with the environment on my behalf. The UK respondent is much more active in his perception of what he is able and is prepared to do on behalf of the environment. It starts from a premise of partial rather than total abdication from responsibility for the environment. The Kuwaiti has an expectation of others without personal involvement; the UK is an assumption of personal involvement to achieve anything worthwhile.

Discussion

The difference in the nature of responsibility for the environment demonstrated between the two countries begs the question of why it has developed in this way. Are there any features in either country, which can be demonstrated as being conducive to a particular stance, or is it simply a function of historical development?

Firstly there are the differing economic and historical backgrounds to consider. Kuwait is a newly very rich country, a country where not only the population, but also the government, is economically well endowed. It is certainly able to deal, at least fiscally, with any environmental problem. Any problem whose resolution requires economic resources is not a problem. Thus any environmental problem, if deemed important enough to be solved through economic means, will be solved by a benevolent government acting on its population's behalf. It also has a short history of environmental problems, a by-product of the oil industry.

The UK by contrast has a long history of environmental problems, dating back to the Industrial Revolution. While industrialisation has only hit Kuwait in the past 40 years it has been a feature of life in Britain since at least the 1800's, whilst attempts to deal with its environmental impacts have occupied at least the past 50 years.

In sum therefore environmental concerns, at least as they are focused on industrial pollution have both a far longer history in the UK and also a longer period during which they have become recognised and proactive action taken against them.

One could argue there is good evidence here of a learning curve operating, and that whilst it took the UK some 250 years between pollution creation and active concern for it, in Kuwait the whole process has been truncated into a far shorter period.

A second feature, which might explain the difference in patterns of responsibility, is the cultural dimension. It is non contentious that Kuwait and the UK operate within largely differing cultural environments. Do the Hofstede dimensions of cultural distance provide clues? Despite many authors' reservations of the research, there are elements to its findings which may be material as an explanation of the observed differences. In particular one might point to the variation in personal responsibility versus collective responsibility.

A third and possibly crucial difference between the two countries is the relative importance attached to environmental concerns in each country. Each country has a unique spectrum of national concerns, concerns which are dynamic and which push the environment up and down some mythical scale of consumer importance.

It is impossible on the basis of this research to be conclusive as to the importance environmental issues assume in each country at any one time. Intuition suggests they may be higher up the order of importance in the UK than in Kuwait, although no evidence is presented for that assertion. The only clue might be in the vulnerability felt by many Kuwaitis consequent on their countries size, geographic position and economic wealth. The invasion and subsequent sabre rattling by Iraq has meant the country exists in a state of some stress, where survival is a primary concern, and the environment comes some way down their list of priorities

Conclusion

This paper has examined who the population perceive to be responsible for protection of the environment in both Kuwait and in the UK. It has demonstrated that the population's perception in each country varies and that UK residents are far more willing to take on personal responsibility for the environment compared to the Kuwaiti citizen, who would rather transfer that responsibility to either the government and / or industry. In both situations it was acknowledged, by a majority, that responsibility for the environment cannot be vested solely in one authority but is ultimately the concern of all.

Several reasons are put forward for the difference in perception between countries. Theories based on differences in history and economic prosperity are discussed together with issues of culture and the importance of environmental concerns to the population.

It is noticeable that what is perceived as an environmental issue differs between the two countries. It is hypothesised that there may be at least two levels of environmental issue, primary issues which affect the individual directly in terms of physical well being (air and water pollution being the most obvious examples), and secondary issues which may be more distant to the individual and come to the fore once the primary issues are contained (conservation of wild life, endangered species, etc).

It is postulated that Kuwaiti's are still coming to terms with containment of the environmental issues concerned with primary problems, and that once these are perceived to be under control the emphasis will switch toward more distanced secondary issues, which assume greater importance in the UK context.

References

[1] This is the view adopted by the United Nations, and incorporated in the Sullivan Principles, UN Handbook:2001

[2] Weidenbaum, Murray (1990): Business Government & the Public: Prentice Hall.

[3] Vogel, David (1986): National Styles of Regulation: Environmental Policy in Great Britain and the United States: Cornell University Press.

[4] Reich, Robert (1998): The new meaning of Corporate Social Responsibility: California Management Review: 40 (Winter): 8-17

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Section 9
Abstracts

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Analyzing Success Factors for Online Games in Korea

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Abstract

Online game industry is growing very fast and considered as a key strategic area to be supported by government in Korea. An online game, Lineage, is the most popular one among Korean young people. This is a game of so-called MMORPG(Mega Multi-Online Role-Playing Game) where hundreds or thousands of players could play simultaneously over the online network infra. NC soft is the firm who developed and has successfully provided the online game services and as a result enjoyed the fast growth in terms of firm value. Other online games such as Starcraft and Diablo are also very popular and successful in Korea. However, similar kinds such as Throne of Darkness and Age of Empire are barely maintaining in Korea.

This paper investigates why some online games become top games while others do not. This paper searches for the factors behind successes and fails in the online game industry. We consider three categories of factors, i.e., contents factors, marketing factors, and situational factors. Our previous analysis reveals that some games fail because of poor marketing although their contents are good, and the reverse might be true. We would like to examine the relative importance of these factors for the success or fail of online games.

In our analysis, top games are selected and compared with mediocre games to get some ideas about the success and fail. Then, we do FGI and survey to explore the success factors for online games. We will provide some managerial implications for online game developers and marketers on how to make hit games. We will also discuss how these online games can be successfully exported to other countries such as Japan, USA, China, and so on. The details will be presented at the conference.

Barriers to Export Performance: An Empirical Analysis of Small and Medium Sized Canadian Exporters

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Abstract

This paper examined the barriers to export success in the context of Canadian export industry. Through a thorough search of literature, five areas of barriers that hinder the export performance of small and medium-sized firm were identified. They are managerial barriers, marketing barriers, operational barriers, lack of government assistance barrier, and financial barriers.

The purpose of the study is to examine the interlink of these export barriers with the level of export development stages, industry sectors, company size, export destinations, and export performance, and also examine these dimensions within each export development stages. To achieve the research objectives, a survey was conducted of small sized Canadian firms, which were currently taking part in export activities. The sample elements were selected from the Business Opportunities Sourcing System (BOSS) database of Industry, Science and Technology Canada. A random sample of 1000 companies was selected with small business being defined as those companies with less than 100 employees. No effort was made to distinguish between privately-held and publicly-held companies. Questionnaires were then mailed to the export manager, or the executive officer in charge of exports, of each of these small sized exporters.

Of the 1000 questionnaires mailed out, 14 were returned due to incorrect addresses. In total, 300 questionnaires were returned, with the resultant response rate being 30%. Eight questionnaires were unusable due to incomplete information essential to the study. Respondents were asked to rate their agreement or disagreement with each of 53 statements relating to a specific export barrier ('1' Disagree to '7' Agree). A strong agreement indicated that the statement was indicative of a specific export barrier. A strong disagreement indicated that the individual did not perceive that particular statement to indicate a significant barrier. A factor analysis was conducted to group these 53 variables into 5 meaningful dimensions based on our extensive literature review. In the process, 5 original variables were eliminated due to their lack of association with any of the dimension under study. The 5 dimensions established through factor analysis were later entered into further analysis to test our hypotheses.

The preliminary results from the research show that experimental exporters do experiences greater barriers in Managerial, Financial, Operational and Marketing areas despite the fact that they do enjoy equal government assistance. Also Smaller exporters encounter more barriers than the medium exporters in the areas of management and government's assistance. Furthermore, the exporters face more barriers when dealing with less developed countries than developed countries in the area of management, operation and government assistance.

Benefits and Effects of Globalization in Mexico

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Abstract

Within the globalization process, the commercial opening and the coming about in the internationalization of markets, there are features that require special attention. To analyze various historical moments in Mexico will allow us a better comprehension and to value the economic symptoms that in occasions have generated contrasting opinions.

The movement of foreign capital in Mexico has been increased upon the entry into force of different agreements and commercial treaties. This has modified the economic tapestry and the social structure of the country. This process favored the reconstruction of the productive sectors in Mexico. The transition of the traditional sectors toward those of the new economy, demanded the update of the production plans and the ways of making business.

This paradigms change has sensibly impacted the quality of life in our country and its consequences in the social sector have overlapped in occasions the benefits that interchange brings along.

Globalization and the opening of markets are an irreversible reality. To conquest their benefits is a challenge in which taking advantage of their effects is the best ally.

Comparison Of Consumer Expertise: Chinese vs. United States Markets

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Abstract

The construct of consumer expertise seeks to capture the effects of prior knowledge and experience on consumer decision-making. As China completes its entry formalities to join the WTO, major marketers of consumer goods are getting ready to make significant investments to enter this vast market with fewer restrictions. A modified version of a scale developed by Kleiser and Mantel (1994) was used to measure consumer expertise among American and Chinese customers. The category chosen was cameras, since they are of common usage in both markets.

The Chinese consumer market has seen a rapid growth and development over the last decade. Even though the pace of growth has slowed in the wake of the world economic slowdown, the market continues to grow and has potential for sustained growth in the future. Cameras are chosen because of the average persons interest in photography and the wide availability of relatively similar products in both countries (at least in their urban markets. Cameras thus provide an opportunity to not only test the nature and scope of consumer expertise relative to the category, but also to examine similarities and differences in different international markets, thus adding to the marketing knowledge base and contributing to assessment of external validity of a measurement scale.

This study measures consumer expertise in the young adult segment of urban Chinese and US consumers and develops implications for future marketing strategy in this high technology market.

Developmental Strategies for Southeast Asian Countries' Digital Economies

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Abstract

Southeast Asian countries such as Thailand, Malaysia, Miyanmar etc are known to have abundant natural resources. However, the countries in this region are considered as the developing countries with low level of gross national products (GNP) and poor industrial structures. While the rest of the world has been making a big progress in digital economy and information technology (IT) since the late twentieth century, these countries have struggled to overcome the financial crisis. With this speed and direction of economic and IT development, the Southeast Asian countries will be further behind to IT advanced countries such as Japan and South Korea.

Especially, South Korea has made a quick recovery from the 1997 financial crisis and achieved a very remarkable progress in IT technology and investment. Eventually, this investment and expansion in IT is expected to increase the productivity of overall Korean economy in the future and will therefore widen the economic and digital gap with Southeast Asian countries. In this regard, we may find some valuable lessons for Southeast Asian countries from Korean success in IT development and investment.

To find some lessons for the Southeast Asian countries in IT development, this paper analyses the general indicators and policies of Korean IT industry and the digital economy. Also, it will investigate Southeast Asian countries' general economic and digital economic indicators and review policies toward IT developments and investments. Finally, the paper will elicit common problems in the digital and IT economies of Southeast Asian countries by comparing it with Korean data and experience. Eventually, the paper will finish suggesting some policy recommendations for the development of IT and digital economy of Southeast Asian countries.

Dyadic Interaction Based Consumer Ethics in Two Contrasting Cultures

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Abstract

Business ethics continues to be a major concern for businesses operating all over the world. As businesses operate in many countries simultaneously in globalized markets, they need to get concerned not only with business ethics in their home countries but also in their host countries where they operate their businesses with different degree of involvement. Traditionally business ethics in general and marketing ethics in particular have been primarily limited to various managerial aspects of ethics. In an era of large and powerful multinational corporations (MNCs) such concern with corporate ethical and social responsibility behaviors are understandable. However, in recent years focus has been shifting to considerations of consumer ethics in addition to marketers' ethics. Over time significant research stream was devoted to investigating the various aspects of consumer ethics and their implications for marketers. In recent years, with major paradigm shifts in marketing in favor of relationship marketing and global marketing, the issues of consumer ethics assumed additional dimensions for investigating the effects of interaction between marketers and consumer in diverse cultural contexts. Hence the following are the major research objectives of this study:

1. To investigate the effects of dyadic interaction between marketer and consumer on the latter's ethical behavior.
2. To investigate the effects of personal ethics related predispositions of consumer on their ethical behavior.
3. Finally to investigate the differences between two contrasting cultures (USA and Kuwait) with regard to consumers' ethics based on dyadic interaction between marketer and consumer and the latter's personal ethics related predispositions.

The empirical research for this study was conducted both in USA and Kuwait. In order to facilitate the measurement of dyadic interaction, four carefully constructed scenarios were utilized. The study findings lead us to believe that the strength of dyadic interaction plays a central in discouraging unethical behavior on the part of consumers. However, distinct differences were also found between the two contrasting cultures.

Empirical Dynamics of FDI and Growth in Developing Countries: Does Liberalization Matter?

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Abstract

Explosion of growth in FDI (foreign direct investment) over the 1990's, especially in the developing countries, has inspired a stream of literature focusing on the impact of FDI on the dynamics of growth (measured by gross domestic product, GDP in short) in the recipient country. However, no consensus has yet been reached on the permanent as well as transitional effects of FDI on growth. While one group of scholars argues that the impact of FDI on growth is highly heterogeneous across countries with relatively open economies showing statistically significant results, the other group maintains that the direction of causality between the two variables depends on the recipient country's trade regime. It is interesting to note that neither group paid any serious attention to the possibility of a bi-directional link between the two variables in reference.

The possibility of two way causal links between the two variables, however, is a real possibility and that is because of the following reason. Following popular belief, the technology transfer brought in by FDI can lead to a permanent increase in the total factor productivity of the host country through the combined impact of human capital augmentation and technological progress. Increased growth in turn would provide scope for increased bilateral trade. Growing bilateral trade would then help the home country to receive more information about the investment climate in the host countries and consequently create more FDI opportunities in those countries. One may, therefore, expect a long run steady state relationship between FDI and the level of GDP for each of the recipient countries.

The same bi-directional causality between FDI and GDP can also be expected in the short-run when the economy adjusts to its long-run equilibrium. An infusion of FDI, while bringing the economy to a higher long run growth path raises growth in the short run as well. With increased growth in the short run, the economy traverses along its transitional path. The reverse causality in the short run can arise from a diverse set of demand side factors related to opportunity and risk for the home country.

As is apparent from the above discussion, economic reasoning supports many different forms of causality between FDI and GDP: causality from FDI to GDP, from GDP to FDI, permanent long-run movements, and transitory short-run adjustments. In this paper, we explore the long and short-run two way relationship between FDI and GDP using a panel of selected developing countries. In addition, we empirically examine whether trade liberalization plays any significant role in explaining the long and short run dynamics of FDI- GDP relationship.

The panel is studied by exploiting the econometric framework of cointegration and error correction mechanism that captures two way linkages between the variables of interest. The panel includes 23 countries and the study period spans from 1978 through 1996. While being identified as major recipients of FDI flows in their respective regions, the selected set of countries provide a fair representation of all the major developing areas in the world, i.e., Asia, Africa, Latin America and Europe. The choice of the time period for our sample data is explained by the following two reasons. First, before 1970s, FDI flows to developing countries were dominated by flows of funds between multinational firms attempting to jump tariff barriers. Transportation and telecommunication breakthrough coupled with increased efforts towards trade liberalization by developing countries have changed the strategies of multinational corporations and caused a noticeable acceleration of FDI flows since late 1970s. Second, 1996 was the last period for which data on relevant variables were available for all the countries included in the sample. The annual series for net FDI flows and GDP for each of the selected countries and for each of the referred years have been collected directly from the combined sources of Global Development Finance and World Development Indicators published annually by the World Bank. The measure of degree of attained liberalization utilized in this paper is an index of trade share in GDP. The annual average indices of trade share data have been computed by utilizing the World Development Indicators database.

An analysis of the cointegration estimates suggest that there is indeed a long run cointegrated relationship between FDI and GDP for the entire panel of 23 countries. Open and closed economy classification of the countries, prepared by utilizing various indices of liberalization, yields sharp differences in short run dynamics of the relationship between the two groups of countries. For open economies, causality between FDI and GDP appears to be bi-directional for both the time periods. In contrast, causality is bi-directional only in the short run for relatively closed economies. Long run causality for relatively closed economies is uni-directional and runs mainly from GDP to FDI, implying that mutual reinforcement of growth and FDI is hindered under restrictive trade regimes.

Enhancing Environmental Governance to Cope With Globalization: The Case of the Philippines

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Abstract

Globalization is an issue which is of primary concern to the Philippines because of both its opportunities and impacts. Among the factors which will critically determine the country's successful participation in the globalization process are clear policies and a responsive and efficient governance structure which would ensure lower transaction costs. This is particularly important in terms of the environment; Environmental management has been identified as a factor which could provide comparative advantage because it develops safer, cleaner and more efficient industries.

The Philippine case is quite interesting because it comprises a motley of models and experiences, providing a glimpse of successes and failures on different fronts. From these experiences were drawn learnings which went into the crafting of new programmes to improve environmental management through enhanced policies and improved governance structures and processes.

This paper will attempt to present details of these learnings and how these have influenced new environmental management programmes, particularly interventions of the United Nations Development Programme, as it strives to assist the country achieve the Millennium Development Goals (MDGs) and pursue sustainable human development.

Exploring the relationship between rhetoric and discourse with respect to the goal of inclusiveness in organizing the G8 summit, Kananaskis country, Alberta

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Abstract

Recent summits and gatherings of world leaders have been the venues for large scale social demonstrations. The interaction between demonstrators and the authorities at these types of events has been quite confrontational, resulting in an escalation of violent behavior from both sides.

It is with respect to this escalation of violence balanced against the right for peaceful demonstration that the organizers of the G8 conference in Kananaskis country, Alberta, planned to promote a different type of conference. The focus at this event was toward a more inclusive collaborative process, with the organizing committee focusing on a process of increased transparency and inclusion. This paper explores the success of this inclusive focus with respect to the relationship between discourse and rhetoric. The paper proposes that understanding the relationship between discourse and rhetoric is a vital part of developing circumstances conducive to inclusivity and collaboration between an organization and the community.

Globalization and Regional System of Innovation: The case of a Industrialized Region in an Emerging Economy

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Abstract

As globalization of international trade and production will continue to serve as means for promoting innovation, it is important to deepen our understanding of how regions face this challenge. Innovation activities can be studied at a variety of conceptual levels. Until the early 1980s, innovation studies had concentrated almost exclusively on analyzing at enterprise level. A new approach, which considers the regional level as critical, emerged in the late 1990s. This approach considers a wide range of factors and institutions which enable a particular region to take advantage of technology, acknowledging the systemic nature of innovation. See Cooke et alt., 1998; de la Mothe and Paque, 1998).

The objective of this research is to analyze how institutions and enterprises can interact at regional level to enhance the competitiveness of the region. In order to illustrate these interactions, the research focuses on the case of Jalisco, a Mexican state which has been able to upgrade its industrial and technological capabilities in the past twenty years. This particular region presents an interesting case study because a distinctive group of firms has shown an outstanding performance, some of them had received significative FDI, and its rates of growth in both manufacturing and exports far exceeded the national average. The region can be considered a ´high technology cluster in the traditional sense of regions with high concentrations of electronics. The region has also developed a very competent manufacturing base where even small firms have adopted world-class management practices. This reflected by the following achievements: the first small enterprise in Mexico with ISO 9000 certification, an exporting base of over 200 firms and domestic firms with extensive design capabilities.

This research recounts the evolution of the Jalisco cluster, describing the elements which have contributed to upgrading the region's capabilities, and provides some conclusions and policy recommendations on the observed interactions which fostered regional technological improvement. The research is based on over 70 interviews, including 100 surveys to enterprises in three independent but related sectors: automotive, metal mechanics and electronics.

Globalization as a Two-way Street: The International Expansion of Thai Multinationals

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Abstract

Since the economic crisis of 1997, the word 'globalisation' has been viewed critically in Thailand. A growing number of nationalist critics, including the current government, have blamed 'globalisation' as a major reason for Thailand's downfall. Critics argue that 'globalisation' allowed external economic forces to lopsidedly attack Thailand's macro economy and private sector institutions. Given the overwhelming nationalistic sentiment after the crisis, it is difficult to recall that the very same forces of 'globalisation' also opened doors for Thai businesses to prosper in the global marketplace.

This paper seeks to explain the internationalisation process of Thai firms in the. Drawing upon four case studies of leading Thai multinational companies – the Charoen Pokphand, Siam Cement, Dusit Thani, and Jasmine groups – the paper explores how the symbiotic interaction of technological skills and networking capabilities is pivotal to the emergence and international expansion of these multinationals. The rise of multinationals from developing countries has thus far been largely attributed to their technological accumulation process, which in turn enhances their advantages in technological skills. The literature implies that these firms' advantages are developed internally, benefiting little from their relationships with external partners. Dominated by these views, the existing literature tends to suggest that developing-country multinationals follow an incremental internationalisation process that is driven by their improved and internally-derived technological capabilities. On the contrary, this paper demonstrates that a cross-industry group of Thai multinationals undertook rapid internationalisation, a process guided not only by these multinationals' accumulated technological skills, but also by their networking capabilities— the ability to draw from complementary resources of different partners and to turn them to the firm's benefits. Close ties to financial sources, political figures and foreign partners are three crucial networks that benefited these firms in both their domestic growth and international expansion. Although this strategy worked well in booming regional markets, its long-term sustainability remains questionable. As witnessed in the aftermath of the 1997 crisis, the rapid international expansion of these firms was stalled or even aborted. Although the majority of the paper focuses on the pre-1997 international expansion, a brief section will summarise their post-1997 adjustments and subsequent international expansion strategies.

The findings in this paper provide not only useful insights into the development of competitive advantages and on the dynamic mechanisms of the internationalisation process of Thai multinationals, but also critical reflections of the globalisation impact on Thai businesses. The paper implies that 'globalisation' is not a one-way street, in which less developed countries are disproportionately exploited by more developed ones with no means to compete. Rather, the findings in this paper confirm that 'globalisation' offers both opportunities and threats to local businesses. It should therefore be realised that while many domestic firms are now crying foul against foreign competition in the wake of Thailand's intensifying economic nationalism, they have also had their field day due to globalisation forces. Whether and how these firms have taken advantage of 'globalisation' to improve their competitiveness remains an entirely different and separate question.

Information Technologies for Higher Education in Rural Populations of the State of Jalisco, México

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Abstract

Many rural communities in Mexico lack presence of higher education. Students are forced to move to the big cities or depict the option of continuing their studies. This is the case of a region in the Northern part of Jalisco which had no presence of higher education. At the moment, higher education is possible throughout the implementation of information technologies for distance learning at the Northern University Campus (CUNORTE) with its head office in the City of Colotlan, Jalisco, Mexico. CUNORTE is a dependence of the University of Guadalajara (U.D.G.), the state public university of Jalisco. The description of the process this university is going through to provide a higher educational level throughout information technologies to the inhabitants of the region will be presented herein.

Making Sense of an Indonesian State-owned Enterprise Transformation: From Systems Thinking to a Complex Responsive Process of Relating

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Abstract

Dominant approaches to organizational transformation are based on systems thinking perspective in which organizational actions are based on shared values or mental models in forms of social structures, routines, cultures, habits, norms, etc. (e.g. Berger and Luckman 1967; Hodgson, 1998; Schein, 1997). An effective organizational has to do with change in these shared values using a kind of management intervention in order to develop openness, trust, and dialogue (Argyris, 1990; Argyris and Schon, 1998; Hirschorn, 2000; Senge, 1990). Various prescriptions have been offered ranging from improvement in organizational structures in order to remove obstacle to informal contacts (Hagstrom and Hedlund, 1998; Tsoukas, 1996), cultural change and development of inspirational leader (e.g. Schein, 1997; Pettigrew 2000). In this perspective, organizational transformation is seen as a deliberate effort of managers to move an organization as a whole from the past to the predicted future position. Less attention has been given to micro level and complexity of organizational life (Marion, 1999; Rycroft and Kash, 1999; Stacey, 1999, 2001) in the organization in one hand and to the embeddedness of the organization in wider institutional and social contexts (Dacin, Ventresca and Beal, 1999; Granovetter, 1985) on the other hand.

This paper analyzes the most recent organizational transformation initiative a leading Indonesian State-Owned Enterprise (SOE) in order to improve its competitive stance in a response to the opening up the Indonesian economy to global competition. The SOE had been officially given the monopoly rights to fulfil the domestic market and to manage the industry in which the SOE in. However, the rights has been dismantled recently allowing the SOE to compete with global competitors. The initiative, which aims to restructure the SOE's internal operative condition, comprised various modules ranging from definition of the company's formal vision and mission to cultural and change management both at corporate and business unit levels. The case will be used to point out some problems with systems thinking and to look at a more radical approach, the complex responsive process of relating (Stacey, 2001) in understanding organizational transformation. In the latter, organizational transformation is seen as an active process of relating from which continuity and potential transformation evolve at the same time. It is a social process emerging continuously and transiently in the pattern of relating with each other. Consequently, organizational transformation does not much rely on the change in the individual mental model and organizational culture but more on the quality of relating between people.

The paper is mainly based on my own reflexive process participating in the initiative (Easterby-Smith and Araujo, 1999) before taking a fulltime research in the university. This is a different position from the traditional and dominant, quantitative approach in the management and organization research (Guba and Lincoln, 2000; Johnson, 2000) within which researchers are detached from the process being investigated. My position directly links to the ontological and epistemological issues which could influence the way of conceiving and undertaking management and organizational research (Johnson and Duberley, 2000). In addition, two fieldworks has been done within which more traditional research approach such as interview and participant observation were used (Bryman, 1988; Reason, 1996).

Multidimensional Economic Crisis In Indonesia: Would There Be A Solution?

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Abstract

One week after the bomb blast in Bali (13 October 2002), the Political and Economic Risk Consultant (PERC) published the escalation of Indonesian country risk perception, to such a level, which was even worst than ever before. The trust from international business partners is totally deteriorated. The perception index towards all risk factors – domestic political risk, risk of the outburst of social conflict, external risk up to systemic risk are all increased. The Indonesian country risk increased significantly up to 8.49 point, as compared to 8.10 in September.

It was apparent that the drastic change from the rupiah currency crisis into economic and monetary crisis in 1998, was primarily caused by the poor national economic fundamental, while the slow recovery from the crisis was caused by the worsening of the political condition, horizontal and vertical social unrest and poor law and order upon the step down of the former President Soeharto and the enactment of the national reform movement in May 2002. These non-economic factors are very important aspects in determining the country risk, which will be the basic consideration for the foreign investors in making any further investment in Indonesia.

Furthermore PERC indicated that the most significant increase of the country risk also come from the external risk factor. The Bali blast has caused immediate suspense of investment from potential business partners especially from Singapore, Malaysia, Australia, and moreover also from Japan, United States and Europe. The increase of the country risk has directly followed by the decreased of foreign direct investment. In the first quarter of 2002, the foreign direct investment was decreased up to 90% with only US $ 292 millions, as compared to US $ 2.4 billion in the same quarter of 2001. If this is the case, Indonesia, with its current huge foreign debt of more than US $ 138 billions, will continue and increase its dependency to foreign debt.

Could this multi-dimensional crisis be solved? In the Edward Norton Lorenz' (Professor of Meteorology, MIT, 1962) "*Butterfly Effect*" theory, whatever complicated any crisis is, it could always be solved. The "*Butterfly Effect*" theory, which was further developed into chaotic theory, explain the sensitive interdependency of the system with any minor change in its very initial conditions. With only a very minor change in its initial stage, will enable to create drastic change in the long-term behavior of the system. Lorenz *Butterfly Effect* theory indicates that chaotic and complicated system always has its possible solutions. Lorenz indicated that statistically chaos illustrates stocalistic behavior from a deterministic system. A deterministic system, which is simple with only one solution, if were piled one over the other will become stochastic, complicated with multi solutions. The Lorenz theory is an alternative solution to disentangle multidimensional and complicated or stochastic crisis into deterministic, simple with possible solution. Would this be soluble to Indonesia crisis?

Paradigm Shift In Corporate Human Resources Practices

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Abstract

The turn of the century and millennium has witnessed many topsy-turvy changes in the business and economic world. Many developing economies in order to develop had to reorient their development plans. As a result, vast business opportunities and global practices became the oceans where to swim or sink has become the challenge for the corporate world, be it small or large.

In the unprecedented changed situation, every organization based on its business plan is redefining their human resource management. The multi-faceted focus is on HR policies, strategies, Performance Management, empowerment, concept of flat organization structure, fragmentation, capsule training interventions, self learning, pro-active environment building, competency building and competency mapping, cross-cultural interactions, casual corporate heads training (learning on fun locations), business ethics and values, assessment centre approach, I v/s we management approach, JITs & JIPs, KRAs, SBUs, etc.….. the list is unexhaustive.

Definitely, the waves of change are creating both opportunities as well as the pressure of threat on the human resource. The survival of fittest, fastest, and finest is the buzzword. Gone are the days of fat organizations, hierarchy, secured job and time scale promotions, rather day by day the demand for six sigma quality and productivity is what is expected of each and every individual in the organization.

In the uncertain and turbulent socio-techno-eco-moral environment, it is a wake up call for many corporates for the inevitable adoption of paradigm shift in the human resource management scenario.

Population and Economic Development in Indonesia: Ageing process and its Impact on Socio-economic Development

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Abstract

The Republic of Indonesia, which consists of approximately 17,000 islands, is located between 6 degrees north and 11 degrees south , and from 95 to 141 degrees east longitude. The Indonesia archipelago lies between Asia and Australia . The are five major islands: Sumatra in the west, Java in the south, Kalimantan staddling the equator, Sulawesi and Irian Jaya bordering Papua New Guinea on the West.

Indonesia is the world's fourth populous nation, after China, India and the United States. In the last more five decades, the population of Indonesia has increased from 75 million in 1945 to 205.2 million in 1994.

Population growth rate has declined from nearly 2.32% in 1971-1980 to around 1/7% by the period 1997-1998.

The age structure of Indonesia population is still young and about 30% of the total population below 15 years.

Compared with developed countries the percentage of elderly population remains low. However, Indonesia has gradually growing in number of elderly people. Socioeconomic development, better education and prevention-oriented health system have given Indonesian improved health status and longer life expectancy. Overall life expectancy at birth has improved from 47. 2 years in 1971 to 63.5 years in 1995 (Biro Pusat Statistik, 1996).

The aged population (65 and older) in Indonesia has increased from 3.2% in 1980 to 4.6% in 1994 (Central Bureau of Statistic, 1995). Torrey (1987) has estimated that in 2025 the elderly population in Indonesia will increase by 300% from the existing level of 1985. However, Hugo (1992) suggests that Indonesia has neglected to formulate a policy for aged population. According to his study , Indonesian government's resources are not enough to cover formal support to the elderly, such pensions and insurance. If this happens elderly personal saving will be not enough for self- support. The current formal support or social security through pension and insurance both in central Java and Bali remains inadequate. Only a few people receive pension or insurance, mostly government or army officers.

This study focuses on elderly current situation in Indonesia, formal and informal support.

The resolution of elderly problem in Indonesia requires the combined efforts of family, community and state. The government should make clear regulation for non-government or army officers. With regard to housing for elderly (panti jompo), Indonesian government has also to improve the current situation, to promote more panti jompo system and services for the elderly.

Private Access to the Dispute Settlement System of the WTO

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Abstract

The GATT and the WTO are inter-state agreements and as such are binding upon those states, which have ratified the agreements. Consequently there has been much debate concerning the rights of member states to the WTO agreements but little has been mentioned of what this means for citizens within a member country. In an increasingly interdependent global economy, the cornerstone of such debate has focused on the fact that companies and individuals not states are the primary vehicles for conducting international trade. It is individuals or companies that are directly affected by the outcome of the decisions of the Dispute Settlement Body ("DSB"). The legitimacy, therefore of a dispute settlement system, which does not allow access to such key players in international trade has been questioned.

This paper considers the following issues:

- **How and when a member state may an action bring before the DSB, and the role, if any, of Non Governmental Organization's ("NGO") and individuals to influence the course or conduct of such actions;**
- **The rights or availability of access to the DSB by non governmental officials;**
- **The recent history of how NGO's and individuals have sought to exercise their rights or availability of access to the DSB.**

This paper will discuss recent WTO decisions of the Appellate Body addressing private access to dispute resolution. Discussion will begin with the EU –Bananas case[i], where amongst other things, the Appellate Body considered St Lucia's right to be represented by private rather than government counsel. Small and developing countries when bringing cases before the WTO require substantial legal support from private non-government lawyers. The crux of St Lucia's argument was based on the principle of customary international law that a sovereign's right to decide whom it may accredit as officials and members of its delegation cannot be limited. The Appellate Body ruling in the EU Bananas case permitted government representation by private counsel in oral hearings before the Appellate Body. Since this ruling two panel decisions[ii] have also allowed private counsel to participate in oral hearings[iii].

This case is of further interest because United States participation in the case was due to successful lobbying by Chiquita[iv], who like the states of Ecuador, Guatemala, Honduras and Mexico, stood to lose market share and profits due to the EU-ACP arrangement[v].

Another case to be considered at length is the United States-Import Prohibition of Certain Shrimp and Shrimp Products in 1998, which led to the WTO Appellate Body addressing the procedural issue of private or non-member organization's submission in briefs in WTO proceedings[vi]. The Appellate Body ruled that attaching a brief or other material submission of either appellant or appellee, no matter how or where such material may have originated, renders that material at least prima facie valid and an integral part of that participant's submission. The amicus briefs submitted by three groups NGO's as an appendix to the United States submission, were allowed notwithstanding the fact that the appended briefs contained legal arguments different from those submitted by the United States.

The paper will end by drawing conclusions on the following:

- **What rights (if any) individuals and NGO's have in initiating or joining actions under the WTO and Dispute Settlement Understanding ("DSU") Agreements;**
- **The WTO /DSU procedures which individuals or NGO's can use to initiate or join actions before the DSB.**

End Notes

[i] WT/DS27/AB/R
[ii] Indonesia Certain Measures Affecting the Automobile Industry (Indonesia-Autos): WT/DS54/R (July 2, 1998).
[iii] See P. Lichtenbaum, Procedural Issues in WTO Dispute Resolution, 19 Mich. J. Intl L. 1195, 1205 (1998).
[iv] R. Sekhri, Chiquita's Battle over EU Practices May Hurt Retailers, Bus. Courier, Nov.30.
[v] The ACP states are the African, Caribbean and Pacific States, which are signatories to the Lome Convention of 1989 with the EC. According to EC Regulation 404/93, twelve states have traditionally exported bananas to the European Union: Cote D'Iviore, Cameroon, Suriname, Somalia, Jamacia, Saint Lucia, St. Vincent and the Grenadines, Dominica, Belize, Cape Verde, Grenada and Madagascar.
[vi] WT/DS58/AB/R (Oct. 12, 1998).

Privatization in Southeast Asia: Progress, Problems, and Lessons

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Abstract

Privatization is both a political and economic process that involves the transfer of ownership and control from the public to the private sector. Typically, privatization is one aspect of a policy package that involves deregulation, economic liberalization, and opening of the markets to foreign producers and investors. The objectives of privatization include increasing efficiency of the economy, attracting foreign investment, balancing budget deficits, reducing public debt, broadening share ownership among the public, and encouraging entrepreneurial initiatives. At times, privatization is one part of a broad set of structural reforms imposed by external funding agencies such as the World Bank and the IMF. The process of privatization can be achieved through a variety of mechanisms such as management contracts, outright sales to a domestic or foreign investor, joint ventures with private investors, auctions, and initial public offerings. Each of these mechanisms has their own strengths and weaknesses.

During the last decade Southeast Asian countries have embarked on significant privatization. The Asian financial crisis of the late 1990s provided added impetus to the drive towards privatization. However, like many other developing countries, Southeast Asian countries have also experienced significant internal resistance to privatization. This has often resulted in significant slow down in the privatization process as well as a failure to realize its beneficial economic results.

The objective of our paper is to study the progress of privatization efforts in Southeast Asian countries. Our paper will involve an inter-country comparison of motivations, internal and external impetuses for privatization, a review of the progress achieved so far, major obstacles encountered, and governmental responses to these obstacles. Our review of progress will survey two dimensions of privatization success: speed and depth. Speed focuses on the pace of privatization whereas depth deals with the extent of privatization both in terms of the number of public sector firms privatized as well the percentage ownership retained by the government. In trying to explain speed and depth of privatization, we will evaluate factors such as political stability, economic stability, and public support or acceptance. Obstacles to privatization include factors such as resistance by organized labor, nationalistic and ideological objections to sales of government property, and occasionally even objections by domestic capitalists about sale of assets to foreign investors. As for governmental efforts to overcome these obstacles, our study will focus on job guarantees, retraining programs, cooptation of other stakeholder groups, as well as measures to increase public ownership of shares as a means for enhancing public acceptance.

Our effort will be to draw some generalizable conclusions based on individual country studies. Hopefully, these generalizations will not only contribute to a grounded theory of privatization but may also provide some useful lessons for policy makers regarding how both the speed and depth of privatization can be increased in each country.

Restructuring Japan's Banking Sector to Avoid a Financial Crisis

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Abstract

Japan's banking sector is in a crisis despite the denial of the Japanese authorities. The decade-long simmering systemic banking crisis is an obstacle to the recovery of the Japanese recession of about the same length. In the beginning of 2002, Japan experiences a severe deflation with the stock market plunging to an eighteen year low. The symptoms of a financial distress include a close to zero interest rates, massive bank bad debt problems, politicization and bureaucratic paralysis of crisis resolution, a mounting government debt and widespread down grading of government securities, and a contracting GDP output. When the banking problems are unresolved the financial system distorts the allocation of credit and undermines the intermediation functions unless the government, through the central bank and regulatory body, steps in to take aggressive and decisive actions.

This paper examines the causes of the Japanese banking crisis, focusing on policy and restructuring efforts. First, I describe the structure of the Japanese financial system. Next, I look at the ascent of the Japanese banks as the top global banks, in contrast to their present status as the one of the world's weakest banks. Third, I examine the causes of the banking crisis and the inability of the policy makers to provide decisive resolutions to the banking crisis, unlike the U.S. Savings and Loan crisis. Fourth, I look at the restructuring effort and lastly, I suggest policy recommendations to avoid a full-blown financial crisis.

Banking crises are widely viewed as particularly pernicious and damaging because of its possible contagion effect to other financial functions and markets. Financial inefficiencies manifest themselves primarily in three harmful ways. First, financial instability discourages capital lending and investment leading to recession and deflation. Second, contracting capital availability denies healthy companies the opportunities to grow, adversely affecting the real sector. Third, savers are denied saving opportunities with close to zero rates of return, lowering consumer confidence and spending. The Japanese banking crisis has threatened to develop into a national financial crisis that will have adverse implications not only for the Japanese economy but because of Japan's status as the world's second largest economy, also for the global economy as well (Sugisaki 1998, Kurlantzick 2001). Kaufman and Seelig (2002) identified five potential sources that increase the costs to the depositors, to the government, and to the economy in resolving a banking crisis: poor disclosure rules, regulatory forbearance, insufficient information and processing delay, bad market conditions after resolution, and inefficient receiver. Recognizing and therefore, resolving the banking crisis should be of the highest priority for the Japanese government to minimize costs and to avoid a full-blown financial crisis.

The Japanese banking crisis, which began in the early 1990s, has several causes. First, and foremost, is the innate banking structure itself that was developed to protect the banks against competition leading to imprudent loan speculation and the massive bad loan problems. Second, the Japanese financial markets were unprepared to compete in the global financial markets when the Japanese financial markets globalized. Third, the Japanese interlocking "*keiretsu*" corporate relationship tends to foster interdependence between the banks and the corporations. Credit is usually allocated for non-risk management consideration, which may include corporate or political connections. Part of the financial inefficiencies concern information transparency when the banks are not subject to public scrutiny and discipline. Fourth, policy makers contribute to the financial inefficiencies with lax accounting and disclosure requirements. Political paralysis and indecisions have characterized the Japanese policy makers in resolving the banking crisis. The results are huge government spending and unprecedented budget deficits while income growth continues to shrink as the economy deflates. What this author calls the "*ostrich syndrome*" of the government only exacerbated and prolonged the banking crisis and financial distress.

Banking crises can be overcome and a healthy recovery can be achieved as the experiences of the U. S. Savings and Loans Crisis and the British banking crisis have shown. Implementing reforms and policies in restructuring the Japanese banking, financial and corporate sector concurrently would create an environment conducive to recovery from the "bubble". The encouragement of foreign presence and competitors will go a long way in helping the Japanese banks' road to recovery although this prospect faces an uphill obstacle in the traditionalist sentiments of avoiding "a foreign takeover" by foreign banks. The difficulty in arriving at a solution to the Japanese banking crisis is not so much a

solution is lacking as much as in implementing the solution where tradition and culture is strongly rooted and hard to change.

The Mexican Crisis: Lessons for Education, Employment and Entrepreneurship

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Abstract

When growth of economy depends on the coordination performance of a large number of agents, the level of interaction can become a deciding factor. We propose an equilibrium selection process where the level of coordination is endogenously determined.

The method is used to provide a novel explanation for low harmonizing between higher education and employment opportunities in the actual economic structure of Mexico (after the 1994/95 crisis).

The emphasis in the discussion is that the education workforce must resemble the changes in the industrial structure and generate high developed human capital.

The conclusion is that a country's politico-socio-economic environment influences the state of confidence of economic agents, thus not only affecting the decisions of young people to seek educational opportunities but also the decisions of entrepreneurs to invest in new technologies.

Why Global Supply Chain Measurement Systems Fail ?

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Abstract

Several studies on logistics and supply chain performance measurement have been conducted over the last two decades. Which of these activities are measured and how they are measured has not changed dramatically. A review of the literature reveals that a significant number of global firms fail to capture relevant logistics measures. Moreover, many of those firms capturing logistics measures often fail to take appropriate action indicated by the measure captured. What accounts for this condition? This paper identifies and explains six problem areas that confront global business organizations in establishing effective logistics and supply chain measurement systems. The problem areas associated with these measures relate to their purpose, capture, quality, usefulness, administration, and focus. Understanding and overcoming these measurement problems will enable managers to improve logistics performance.

Section 10
Keynote Speech

Strategies for Sustainable Development: Business Responses to the Doha Development Agenda

Dr. Kipkorir Aly Azad Rana**,** *Deputy Director-General, World Trade Organization, Geneva*

WORLD TRADE ORGANIZATION
ORGANISATION MONDIALE DU COMMERCE
ORGANIZACIÓN MUNDIAL DEL COMERCIO

"STRATEGIES FOR SUSTAINABLE DEVELOPMENT: BUSINESS RESPONSES TO THE DOHA DEVELOPMENT AGENDA"

Keynote speech
by

Dr. Kipkorir Aly Azad RANA
Deputy Director-General
World Trade Organization
Geneva

at the

7th International Business Conference on Global Business and Economic Development

Bangkok, 8-11 January 2003

"**Strategies For Sustainable Development: Business Responses To The Doha Development Agenda**"

Ladies and Gentlemen,

I am very happy to take part in your conference. The subject of your meeting is very close to my heart and, as undoubtedly you know from daily press and other media, the subject is also very much a part of discussions in the World Trade Organization. It is only a year ago that the WTO Member countries assembled in Doha, Qatar, at the 4th Ministerial Conference to launch a new Round of trade negotiations. As you undoubtedly also know, the Doha Ministerial was an extraordinarily successful meeting. Not only did Trade Ministers agree to launch a new Round - not a minor achievement considering the fiasco of the previous Ministerial Meeting in Seattle – but they also agreed to address issues in the next round that are of considerable interest to developing countries. No wonder that the countries agreed to call the Doha Declaration the Doha Development Agenda.

What I would like to do in my talk today is to highlight three simple points on how the Doha Development Agenda can contribute to sustainable development and - how a business community like yours – can respond and what role it can play.

- First, international trade is a powerful engine of economic growth and that is one important reason why the results of Doha must be taken very seriously.
- Second, the Doha Development Agenda has created favourable conditions to address concerns and interests of developing countries, and
- Third, the business sector in developing countries has a particularly important role to play in the process. Its successful response to new market opportunities will require a closer cooperation with its government authorities.

Trade as an Engine of Economic Growth

The successful outcome at Doha brings an end to the uncertainty, loss of momentum and lack of confidence which were created by the spectacular failure at Seattle two years earlier. I have personally experienced the scepticism, the loss of confidence and, in general, the concerns about the international trading system, about the WTO and its ability to address problems of poverty and development. I still recall the demonstrations which followed Seattle in different parts of the world – in Washington, Prague, Genoa and elsewhere. The WTO was heavily criticized, and we were vulnerable. Another failure at Doha would have been quite likely fatal for the WTO. It was remarkable that despite all the adversity and the fact that decisions in the WTO require full concensus, the deal was struck.

Another failure at Doha would have been also detrimental for developing countries. The international trading system – despite its shortcomings – has worked well for countries including many developing countries! I do not think that you – in Thailand – need much convincing about the importance of international trade. But it never hurts to remind ourselves about the progress that has been made so far. Let me start with a simple, but powerful statistic - world trade has been growing over the last few decades much faster than world output. This suggests that world markets have been one of the major sources of demand for merchandise and that international trade has been a powerful engine of economic growth. The share of developing countries in world trade has increased to around 30 percent and could undoubtedly grow further.

Economic growth, in turn, has perhaps been the most important reason why poverty around the world has dropped significantly over the last three decades. Let me give you few examples.

- The share of people in developing countries with access to clean water increased from 30 percent in 1970 to 80 percent in 2000.

- The share of people with access to sanitation more than doubled over the same period.

- Thirty years ago, workers in Chinese Taipei earned USD 7.50 a month, now they are earning 7.50 per hour.

- Thirty years ago industrial wages in South Korea were roughly on the level of those of industrial workers in Zambia. Today, GDP per capita in South Korea is about 12 times higher than that of Zambia, which reflects substantial growth of relative wages in South Korea.

The potential for further gains for developing countries is enormous. The World Bank estimates in its *Global Economic Prospects 2002* that abolishing all trade barriers could boost global income over a ten-year period by US$ 2.8 trillion. Of this, developing countries stand to gain more than half of that amount. The growth of income would lead to an additional reduction in global poverty by 320 million people by 2015. These are, of course, only rough estimates based on many assumptions including, in particular, the assumption about the ability of countries to fully grasp their new opportunities. But the big point that is made by these forecasts is that the gains could be substantial and that these gains would provide the foundations for the path to a sustainable development.

Let me put the argument into a rather different perspective – by comparing gains from trade with foreign aid. For example, meeting the targets for the seven (7) Millennium Development Goals – in health, education, poverty etc. - would require considerable resources which many developing countries do not simply have at their disposal. The only possibility of meeting the targets would be either by increased foreign assistance or through additional income generated by new growth opportunities such as from trade. The estimates of the "resource gap" -

the amount of additional resources needed for this task - vary and they range between US$ 50 – 100 billion per year. But whatever the estimates, they are dwarfed by the additional income which developing countries could gain from more trade which could be generated by the removal of trade barriers. Moreover, if economic development and economic growth are to be truly sustained, they cannot be based on foreign aid but they must originate in the growth of economic activities stimulated by trade.

It has become almost a cliché to argue that many countries in Asia provide the best examples of the importance of international trade. True, the transformation of countries such as Singapore, Hong Kong, Chinese Taipei, South Korea, Malaysia or Thailand from relatively poor and under-developed countries to more or less sophisticated industrial countries has been remarkable. But these are not isolated examples. In Latin America, Mexico, Chile and Costa Rica have too been successful in raising their standards of living and turning their economies into thriving industrial democracies. Mexico, together with South Korea, have even joined the exclusive "club" of developed countries when they became members of the OECD. In Central and Eastern Europe, the formerly communist and centrally-planned economies of the Czech Republic, Hungary, Slovakia, Poland, Lithuania, Latvia and Estonia are just about to be fully integrated into the European Union, and the first four countries have already joined the OECD. These changes are happening only 12 years after the fall of the "iron curtain" – another remarkable achievement.

What is common to all these countries is their strong commitment to international trade and to measures that make these countries more competitive in world markets. This obviously begs the question about policy measures that made these gains possible. Open trade policies and trade liberalization are an important element of these strategies. More competition stimulates a better utilisation of resources in existing uses and reallocation of resources to their most productive uses. At the same time, elimination of trade barriers eliminates an *anti-export bias* created by import restrictions. In brief, trade liberalization is a necessary condition for success, but I hasten to add that it is not a sufficient condition.

It will not be surprising to you to hear me say that the WTO plays a crucial role in this process. Successful rounds of trade negotiations have played an important part in the opening of markets and stimulating international trade. But I again hasten to add that trade liberalization is not the exclusive domain of the WTO. As shown in a recent study of *Trade Policy Developments in Emerging Markets*, written by one of my WTO colleagues, many developing countries have liberalized their trade regimes independently of the WTO. This autonomous trade liberalization was pursued by governments in recognition of the tremendous potential for economic growth originating in more liberal trade policies.

Doha Development Agenda

The new Round launched in Doha is in many respects different from previous Rounds. What is important to emphasize in a meeting like yours is the extent to which the Ministerial Declaration addresses the concerns and interests of developing countries, the extent to which it placed development issues at the heart of the WTO work. In my judgement, this feature is unique in the history of the WTO and its predecessor – the GATT. Let me touch on few areas where progress in the negotiations of the Doha Agenda would make a considerable impact in developing countries and enhance their potential for sustainable development.

- *Tariff peaks and tariff escalation*. Industrial tariffs have been dramatically reduced in developed countries. This is partly due to successful negotiations in the previous Rounds and partly due to various unilateral or plurilateral initiatives. As a result, average tariffs in most developed countries are now significantly below 5 percent and quotas, with some exceptions, have been eliminated altogether. However, relatively high tariffs still remain in developed countries on some – *sensitive* – products in which developing countries may be competitive. Moreover, the structure of existing tariffs in developed countries may be sometimes biased towards protecting industrial activities with higher level of processing. The latter – the so-called *tariff escalation* – prevents developing countries from moving away from dependence on a few primary commodities to industrial diversification. Tariff peaks and tariff escalation should be brought down by negotiations if developing countries are to fully exploit their competitive potential, and to reduce their vulnerability and exposure to instability in commodity markets.

- *Textiles and clothing*. Perhaps the most sensitive among the "sensitive" products are textiles and clothing. As we have seen from one developing country after another, many of these countries are highly competitive and could become suppliers with far greater shares in world markets if they were not facing serious external obstacles to their exports. These are currently regulated under the terms and conditions of the Agreement on Textiles and Clothing. The WTO Members have re-affirmed their commitment to the full implementation of the Agreement by 2005 but – even after the full implementation – the scope for further liberalization will be substantial.

- *Agriculture*: Agriculture is and has always been the critical sector in most developing countries. The majority of population lives in rural areas in these countries and is actively employed in subsistence or commercial agriculture. Many developing countries are also exporters of agricultural products. Unfortunately, agricultural markets around the world are heavily protected, especially those in developed countries. There is probably not a single economist who would not agree that agricultural protectionism is highly trade-distorting. Various studies of agricultural markets have shown that phasing-out agricultural restrictions would lead to substantial income gains for many developing countries. In addition, subsidy policies are also not sustainable – the OECD countries spend some US$ 1 billion per day on agricultural subsidies alone.

- That is how far the theory would take us. The problem is, however, that many developing countries are also food importers. In fact, 105 out of 149 developing countries were net food importers at the turn of this millennium. It will be, therefore, important or, I should say, critical, that developing countries be in the position to adequately respond to agricultural liberalizations and to new market opportunities. Otherwise, many may not benefit from the improved conditions in world markets and some may even get hurt.

- *TRIPS:* The Agreement on Trade-Related Intellectual Property Rights is an area in which measures directed towards sustainable growth can have a particularly significant effect on sustainability of economic development. Many developing countries have been plagued by diseases and health – related problems – some man–made others not – but in each case access to affordable medicine is critical. This is also an area in which, I am happy to report, the Trade Ministers have been able to reach an agreement stating that the WTO's TRIPS Agreement "does not and should not prevent Members from taking measures to protect public health". In this Ministerial Declaration on TRIPS, the Ministers acknowledged the need for boosting global efforts to address the public health problems afflicting many developing and least-developed countries, especially those resulting from HIV/AIDS, tuberculosis, malaria and other epidemics.

These are some of the measures which have been agreed in Doha, and which have the potential of becoming powerful instruments helping the cause of developing countries. There are, of course, more measures that I could list here but that is not necessary at this point. The message, which I am hoping to convey is simple – Doha has created conditions for the next Round of trade negotiations which, if successfully concluded, will provide improved trade opportunities for developing countries and make themselves more attractive to foreign investors.

Responses by the Business Sector

Now, let me turn to the role of the business sector in this post-Doha process. We, in the WTO, have been saying for some time that the Doha Development Agenda is not the answer to every problem. It should not, therefore, be seen as the main answer to the problem of poverty and of sustainable development either. Market access and trade rules are only one part of the puzzle – the domestic economic environment is another. I would even suggest that - for quite a number of developing countries – a poor supply response is probably even a more serious impediment.

When we discuss the supply problems of developing countries, we typically refer to problems of education such as the shortage of educated labour force, to problems of health such as malnutrition, disease, infant mortality or to natural calamities. We may be also concerned about poor government policies and their effect on economic incentives or about problems of infrastructure in transport, energy or communications. All of these will be seen as the origins of poor countries' competitiveness in the international market place. However, what I want to bring up with you in the rest of my talk is the role of the business sector in helping to make the supply response more effective and, at the same time, making the international trading system more effective. As surprising as this might be for some of you, a WTO official addressing the private sector does not happen very often, and as much as we would like. This is not by design or for reasons that we do not understand the important role of the business sector. On the contrary! But the reality is that the WTO Agreements are Agreements among States, and it is, therefore, only logical that our "first port of call" is always government.

It is clear that the business sector plays a critical role in the WTO system. A change in government policies, including those arising from the WTO Agreements, directly affect the way in which the business sector works and prospers. A reduction in trade restrictions will directly affect competition in markets. Rules agreed under the WTO umbrella - another important feature of the WTO Agreements - are also extremely important for businesses. For example, they affect the way in which firms market their merchandise - such as the rules under the SPS and TBT Agreements – and, therefore, the costs of their operations. They affect ways in which businesses may seek protection from governments. They affect government policies on subsidies and hence the ability of firms to call on government resources. In brief, the vital interests of businesses are closely related to what is contained in the WTO Agreements.

Unfortunately, we cannot be always happy about the involvement of the business sectors in developing countries in the WTO process. When I travel to different parts of the world, or whenever I talk to business leaders in my own country or elsewhere in Africa, I am struck by how little information about the WTO filters down from government agencies to the country's business sector. This is very surprising to me since the principal targets of the WTO Agreements – that is the beneficiaries of those agreements or those who pay for the costs of these Agreements - are private sector firms, households and consumers!!! Businessmen are often poorly informed about the Agreements, what concessions if any have been made by their governments and what the implications of these commitments are for the way governments will be going about their business and for the activities of private and public companies. That is obviously not the best way for governments to mobilize domestic political support for their negotiations as well as for their concessions in the WTO!

This is a fundamentally different picture from the one that we can observe in developed countries. There, the business sectors tend to be very interested in international negotiations on economic and financial issues, especially in situations in which the negotiations are directly affecting their operations. Many large companies even go as far as establishing their offices near the centres of international negotiations, such as in Geneva or Brussels, with the main purpose of following closely the negotiating process and to be in contact with the negotiators. I know that this is an expensive option – one which is not "on the cards" for most developing countries - but surely a closer working relationship with government officials should be possible to make sure that businesses are better informed.

But the problem may also work in the opposite direction – from firms to government. In many developing countries the business sector remains relatively passive expecting their governments to pursue the best national interests. There may not be a formal linkage between the business sector and the relevant government agencies when it comes to negotiating the WTO matters. Unfortunately, the participation of the private sector in the preparation of negotiations is rare! This, too, is fundamentally different from what one observes in developed countries, where governments typically work – hand-in-hand - with the business community. As you might know, the US Trade Representative is required by law to consult, through an elaborate process, the business community before finalizing their negotiating positions. The stories about lobbying firms operating out of Washington to influence the US Congress or the US Administration are well known. Perhaps less known are examples when even more direct instruments of contacts and pressures are applied, such as travel by US firms to the Ministerial Conferences, as was the case in Seattle, with the aim of influencing and putting pressure on the US delegation. I am not, of course, advocating that each country imports the US legal process, but a close working relationship between governments and the private sector is certainly very desirable in order to reflect the private sector's business interests.

Let me repeat that a closer relationship between government and the private sector is critical to ensure that businesses respond well and effectively to commitments made by governments in international agreements. The relationship is also important in order to ensure the best possible preparation of issues which will have to be negotiated by the government and to give governments the most clear signals on negotiating positions. And, as I have already mentioned, the political support for government negotiations by the business sector is critical.

Let me now conclude by indicating the way in which the business sector could more effectively participate in the whole WTO process started in Doha, and how it could respond to the challenges of the Doha Development Agenda.

The question is - why is the Doha Development Agenda important for you and especially for the business community and what can the business community – such as yours - do ?

♦ ***Believe in "Doha"***. The successful outcome of the "Doha" Round should make the market opportunities attractive particularly for developing countries if the negotiations fully address the development dimensions of the negotiating agenda.

♦ ***Be informed***. Make sure that you are fully informed about your government's negotiations in the WTO! What the government is negotiating in the WTO has direct consequences for the business sector. It is, therefore, in your interest to be fully "in the picture".

♦ ***Do your homework***. The Doha Declaration has prepared the ground for developing countries to seek concessions from developed countries in areas of great importance to them. The business sector will have to identify in each sector the important areas of its interest and make sure that these areas are properly translated into the government negotiating positions. For example, each developing country should be, therefore, in the position to identify markets with peak tariffs and tariff escalation. It should also understand the implications for domestic farming sectors and consumers of agricultural liberalization.

- ***Be pro-active***. Given the complexity of the Doha Development Agenda, the governments have their hands full and may not be focussed on their relations with their business sector. The private sector should also request an appropriate mechanism for consultation with the government for the duration of the whole Round.

Conclusion

These are no great words of wisdom but simple common sense. Yet, one is frequently surprised how often matters that are so obvious in theory can be so difficult in practice. But if you – the leaders of the business community – remember my simple message of today – believe me, your activities will greatly strengthen the negotiating hand of your government and, as I have tried to indicate, further protect your interests.