

Sixth APEC Investment Symposium

*Restructuring Foreign Direct Investment in the Age of Information
Technology*

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Investment Experts Group

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Sixth APEC Investment Symposium

Restructuring Foreign Direct Investment in the Age of Information Technology

Opening Remarks

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APEC EC Chair

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Good Morning, Ladies and Gentleman!

It is my great honor and privilege to speak in front of the esteemed guests from the APEC economies and leading international institutions here today. I could not have thought of a better place to deliver these opening remarks than Cheju Island, one of the most beautiful landscapes in the world. I would like to take this opportunity to give special thanks to the Governor of Cheju Province, Woo Keun Min for his warm hospitality.

As all of you are well aware, after its establishment in 1989, APEC embarked on one of the central concerns of the APEC community, the liberalization and facilitation of trade and investment. APEC has continuously set out broad policy directions that have led to substantial progress in investment liberalization in the APEC region. To these ends, APEC established the Investment Expert Group, which has played a core role in stimulating APEC's investment liberalization efforts. In particular, the IEG for the past six years, has worked to hold the symposium as an annual event to discuss ways of enhancing the

investment environment of the Asia Pacific region.

At the symposium, businessmen, scholars, investment experts and officials from APEC economies have taken a cohesive approach and have worked to exchange views on the challenges faced by APEC in liberalizing investment. I strongly believe the symposium has strengthened APEC's ability to integrate the views that reflect the member economies' concerns about investment liberalization.

The Sixth APEC Investment Symposium, under the theme of "Restructuring Foreign Direct Investment in the Age of Information Technology," aims to exchange views on the challenges and opportunities of investment liberalization for the APEC region in the 21st century. In particular, I am confident that the symposium will produce useful outcomes on how to face the new challenges in investment areas and restructuring foreign direct investment for new demands.

It has been widely reported that the impact of IT on economic development has been growing in importance recently. International institutions such as the OECD estimate that the market size of e-commerce was 26 billion dollars in 1998, and predicts that this will grow to one trillion dollars by 2005. If we look at the Korean Internet market, it has grown equally rapidly, though it is still small compared to the largest markets of the world. E-commerce in Korea grew from almost nothing into a 14 billion dollar market in 2000, which makes it the sixth largest in the world. Now, about one-third of Korea's total population is online, and e-commerce represents about 1.6% of total industrial activity. Korea's knowledge intensive sectors in general seem to be growing at an unprecedented rate. While sectors such as

telecommunications and broadcasting, financial and business services grew by 13.7% annually between 1991 and 1999 on average, more traditional sectors grew only by 4.1% during the same period.

Certainly, the development of information and telecommunication technology has brought tremendous changes around the world. Most of these changes, I believe, are positive. They lead to lower transaction costs, which in turn facilitate greater trade and investment. They also facilitate the sharing of information and knowledge across borders, at a level unheard of before.

Unfortunately, however, developments in these sectors occur so rapidly, that by the time one talks about these changes, they might have already passed, and we hardly know how to react. Only yesterday, or so it seems, the Economist pointed out that the Wall Street acclaimed a new economic paradigm. Old equity valuation methods and concerns about earnings all seemed old fashioned, and the American "New Economy" finally seemed to have done away with business cycles. But now we face warnings from the seemingly endless "dot-com carnage." Last month, an industry commentator wrote this about business to business e-commerce:

"Live long enough - and this might be quite short these days - and you begin to see a few patterns in life. The economy rises and falls, certain friends will never find love, and some technologies are destined to fade away ..."

What can we surmise from all these events? That the world economy is not only undergoing a one time transition, but that it

is in a perpetual motion, moving well ahead of analysis. Indeed, we are dealing with a moving target.

It is all the more important, then, to distinguish those changes and trends that are here to stay from those that will only come and go briefly as fads. In this sense, the Symposium being held here today is forward-looking, where renowned speakers and practitioners attempt to delineate the true paradigmatic shifts in the world economy from spurious ones, and how they impact upon business, giving rise to new patterns of FDI. This concerns assessing new opportunities and risks; establishing new business principles and relationships between economic entities; and detecting changes in volumes and directions of capital flows that have emerged as a result. We will also discuss what these changes and emerging patterns portend for international cooperation and the necessary legal environment that must be forged to accommodate these changes.

Finally, I would like to conclude by stating that I hope you find this symposium fruitful and constructive, but most of all, forward looking for both business and policymakers, as well as academics. I also hope that the symposium provides a practical and useful environment for exchanging views in regards to the establishment of the New Investment Paradigm of the IT revolution.

Thank you for your attention.

Chairman's Report

By Chua Eng Seun-Session I

1. The first session dealt with 3 general topics, namely:
 - Evaluation and the current state of IT
 - Increasing importance of E-Commerce in the world economy, and
 - New international business patterns

2. on the evolution of IT and current state of development of the IT industry, the forces driving this development have been attributed to monetary rewards arising from new market demands, the relative ease of entry with the infusion of venture capital in a creative capital market, and to some extent, the guidance and support by government

3. the evolution of IT and the high speed transmission of worldwide information have brought about several changes. In particular, some of three changes are changes in business practice and corporate culture, changes in business behavior including changes in transaction pattern; changes in investment concept and investment targets as well as changes on human life in areas such as education, entertainment, shopping pattern and communication. It is important for us to understand these changes in order to be able to cope with them.

4. two problems currently encountered by the IT industry were identified. One is the lack of new emerging industries to assume the role of the PC industry, which has now moved to maturity, although the mobile phone industry may still have a growth potential in the long term. The other problem is the cooling down of the capital market, as reflected in the poor performance of the NASDAQ composite index and the IPO market.

5. With regards to the future trend of IT, the views are rather optimistic. It is foreseen that there will be the creation of new demand with IT products playing an important role in improving our work efficiency and satisfying more of our living needs. There will also be the creation of new industries. Industries such as the Internet Multimedia industry, the Internet Appliance industry, the wireless communication

industry and the E-commerce industry would have the most potential for future development.

6. on the increasing importance of ECommerce in the world economy, discussions now focused on recent trends in E-Commerce, the benefits and problems associated with E-Commerce, whether it is a necessity in business and how do we strike a balance on-line and off-line.
7. Forrester research has come out with a number of interesting and optimistic projections, up to the year 2004 based on surveys they had carried out. These included projections on growth of worldwide E-Commerce, growth of global internet and E-Marketplace exports, extent of penetration by E-Commerce in business and consumer markets and the destination of regional internet exports. For example, E-Commerce had been projected to total 86% of total sales in 2004. In the absence of information on the types of companies surveyed, doubts were expressed as to the reliability of such projections.
8. These are obviously many benefits that can be desired from E-Commerce. However, there also exist many problems which are associated with its application. Due to its broad scope, the focus of E-Commerce has to be viewed from a number of different perspectives. It was concluded that E-Commerce is not a panacea to development. Although business can be transacted across a common IT platform, more information would give buyers a better bargaining power. E-Commerce is here to stay, but its impact needs to be mitigated. The growth of E-Commerce would certainly require the support of both public policy and infrastructure.
9. On the emerging international trade and investment patterns, discussions were general in nature and not specifically focused on the aspect of Information Technology.
10. The impact of Transnational Corporations (TNCs) on world economy and global FDI is clearly demonstrated by the number of their foreign affiliates and the sale volume undertaken by these affiliates worldwide. Among other emerging patterns, it was pointed out that while the size of international FDI has risen significantly, the FDI flow has not been evenly distributed being mostly limited to a few countries. For example, according to Mr. Wayward, just 10 countries received 74% of the

global FDI flows in 1999 and only 10 developing countries received 80% of the total FDI flows to the developing world.

11. Another emerging pattern is for global FDI flows to increasingly take the form of cross border and acquisitions rather than Greenfield investment. Other areas of concern in recent international business development is the international flow of hot money and the changing employment pattern, which shows an increasing number of better educated and experienced workers emigrating to more buoyant economies. It was also pointed out that in order to attract FDI, there is an increasing need for transparency and information as well as changes in the regulatory environment.
12. Some specific issues were raised during the open discussion. The first concern was the role of government in the promotion and development of IT. There were mixed views regarding the role of government. While some participants felt that government should not intervene in business and should adopt a laissez-faire approach, others felt that government should facilitate. As the IT industry is now searching for another heyday, the government's role has become more crucial.
13. Government needs to increase communication with industries and understand their needs in order to formulate forward working policies to spur private enterprises to move ahead. In addition to making improvements in the field of communication, education and security, government needs to create a conducive environment, especially in terms of providing suitable infrastructure such as broad bandwidth internet network.
14. By the same token, private enterprises should make known to government their changing behavior towards investment, especially with regards to their decision making process, in order for government to make improvements on their policy framework. The issue concerning role of government was also discussed in subsequent sessions.
15. The second issue concerns digital divide and global divide. In order to diminish the digital divide, it was pointed that a country must strengthen her relations with the rest of the world, pay close attention to the development of industries in other regions and seek cooperation opportunities towards mutual prosperity. However, it was feared that given the nature of the IT industry, where obsolescence rate is

high, cost of upgrading is high, coupled with the trend for migration of knowledge workers to the advanced economies, the gap between the developed and the less developed economies will further widen. Nevertheless, some participants felt that the private sector will always find ways to bridge the digital divide. In the IT industry, there is a good possibility to leap frog by adopting the latest state of the art technology.

16. The last issue relates to the increasing number of frauds in the IT industry. It was cautioned that government should be wary of this negative aspect and take measures to address this issue.
17. Finally, there was also a suggestion that APEC should look into the possibility of having virtual conference in future symposiums to enable those who are not able to be present physically to also participate in the symposium.

Thank you.

Sixth APEC Investment Symposium

Evolution and Current State of Information Technology

By Mr. Kenneth Kung-Ming Lin, Chairman & CEO
Premier Venture Group, Chinese Taipei

20 March 2001

I. Evolution

1. Significance and Speed

With new technology development in a view, the pace of development is usually far behind the application. The popularity of Internet did not start soaring until 1994, a 20- year lag after its initial development. Modern technology such as Visual Information, Internet, Photonics, Biotech, Gene Engineering requires lightweight, cost performance. The market adoption based on consumer recognition is subject to technique maturity and timing. In the past 10 years, with active government involvement and rapid new business emergence, the deferral time for market adoption has been shortened. For example, in Local Area Network, transmission speed has increased from 10M/Ethernet in 1987-1988, 100M/Ethernet in 1995-1996 to 1G/Ethernet in 1999-2000. Internet transmission speed has also accelerated from modem (9.7K – 14.4K – 28.8K – 33.6K – 56K) to ADSL or Cable modem (hundreds of K). The hard disk storage capacity in mainstream PC exceeded 10G in 2000 from several hundred M in 1990.

A survey by *Business Week's Asian edition* disclosed that the number of IT companies on the world top 10 list surged from 0 in 1996 to 2 in 1997/1998, with Microsoft and Intel both on the list, and then further jumped to 4 in 1999, when IBM and Cisco joined the team. The same year, Ford and GM were excluded from the world top 10 list. The phenomenon well demonstrated how fast the industry had been evolving.

After a period of rushing into the market for faster and more powerful computers and related products, and as most businesses and consumers have been equipped with highly efficient hardware, there is a higher demand for businesses to acquire substantial profit from technology. Information technology used to provide tools for people to handle their

work with convenience. Nowadays, the appeal for future technology development has been to apply technology in our daily life so as to improve the quality of life and create profit for business. Therefore, no matter it is the IT technology, which has been closely knitted to our daily life, or life science, which is the integration of IT technology and biotech, the development of technology has come to a pivotal point.

2. Main Driving-force

(1) Innovation and Enterprise split

New technique gives an imagination room for new demand – new business start-up

In the development of IT industry, foreseeing the potential market demand has been the main incentive for businesses to invest in R&D. With such an anticipation, high efficiency, easy application, better security and low cost become significant for product development. Although all the objectives may not be realized at once, the final goal may still be achieved by persistent R&D effort. Therefore, investors with technique are willing to pour in capital to ensure a dominant stance in the market. While experiencing management deficiency such as slow decision-making, bureaucracy or red-tape, in large corporations, corporate elites become motivated to set up their own shops.

R&D personnel's value recognition – Start-up operation

Most large corporations often fail to satisfy conceited employees, in terms of monetary reward and the sense of achievement. R&D personnel with expertise tend to branch out or start up new businesses. There have been a good number of examples in which start-up companies are set up by R&D personnel from large corporations. However, the above-mentioned elements are still preliminary and conditional.

(2) Venture Capital Infusion

Investors with technique and innovation will still need initial equity funding to venture for business start-up. Take the US for example: as Figure 1 presents venture capitals increased from US\$1.5 billion in 1991 to US\$85 billion in 2000, giving a compound annual growth rate of approx. 57% in the past nine-year period. Venture capital fund provides start-up companies with a favorable environment to grow, which also accelerates the

development of IT industry. As the development of technology steers market growth, the flow of venture capital also leads the way for IT development.

(3) The Role of the Government

To play the role as an infrastructure constructor

In well-developed economies, the government takes on a laissez-faire approach, and decreases its interference on business to the minimal level. The role of the government is to create a favorable environment for business development. The “favorable environment” translates into a sound infrastructure, which includes transportation and communication, education, social security and political stability. Transportation and communication advances efficiency in business operation; education incubates IT manpower; and a secure and stable political environment attracts capital infusion. These are the essential elements for businesses to progress efficiently.

To play the role as a good administrator

In developing economies, in addition to infrastructure, with the precondition of creating a liberalized economy, it is indispensable for the government to sketch plans for economic development, playing the role of an administrator and guidance provider. Common government measures include tax deduction, assistance in market development, preferential loans for start-up business and assistance in eliminating barriers to investment. The rapid growth in Southeast Asian economies serves as the best example of government involvement. The guidance of financial policies is also a key character. The best example would be the Federal Reserve Board of the U.S. government for its successful maneuver on interest rate in the past 10 years, which results in a stable financial market and indirectly contributed to the development of IT industry.

(4) Prosperity of the Capital Market

The evaluation of a company in a market is reflected on its return on investment (ROI), and market evaluation adjusts as the market fluctuates. In a bull market, capital influx and new start-up businesses become relatively active. Figure 2 shows the NASDAQ composite index plunged over 2,000 points within 1 year with an average correction of about 40% after a 10-year upward trend. In Figure 3, American IPO (Initial Public

Offering) amount illustrates a similar trend. Companies, who are not listed, can still acquire rational market evaluation through Merger and Acquisition. Such means provides businesses and venture investors an alternative for capital channeling-out as well as the motivation for start-up business.

With highly motivated investors and equity funding, new businesses emerge and grow prosperously. Companies accelerate development in technology to ensure a leading position in the marketplace, which also bring in a revolutionary change in the IT industry.

3. Impact on different aspects

(1) Change in Business models

Emphasis on new decision-making models

There is a saying that the market itself is a battlefield. As the market grows more complex without following specific rules, especially when corporations expand, decision-making retardation often occurs. With widely flowing capital around the globe, rapidly changing economy, unpredictable consumer preference and high-speed transmission of worldwide information, business owners are compelled to make quick and precise decisions with certain information within limited time. Meanwhile, businesses need to be more innovative to establish new operational model and added value in order to adjust themselves to the fast changing market order.

New decision-making model is based on new communication approach. In old days, corporations used to rely on face-to-face or telephone conversation for internal communication, and fax transmission, telephone or correspondences for external contact. As we enter the era of Internet, business climate becomes dominated by e-business practices. E-mail has replaced the traditional ways of correspondence; video conferencing minimizes business traveling costs, time and human fatigue. Business practices in different cities can be advanced in terms of performance and efficiency. ERP (Enterprise Resources Planning) and SCM (Supply Chain Management) help organizations integrate upstream and downstream resources, keep information fresh, mobilize internal resources more effectively, and make better decisions.

To create a corporate culture with transparent use of information and knowledge-sharing

The key point for knowledge-based economy lies not in knowledge itself but on how to transform knowledge into profit. A group of creative and talented people will overthrow the rules of the game in old economy and become the main impetus for economic progress. Just as capital accumulation, to accumulate fortune in the knowledge-based economy is by the means of accumulating knowledge. For businesses, who set priority in knowledge sharing, will expedite their knowledge accumulation. For corporate employees, knowledge-based economy means an encouragement for research and development effort, and knowledge spreading. For business alliances, knowledge-based economy means resource complements, information sharing, mutual market sharing, then passing on of their value to customers.

Two driving-forces in knowledge-based economy are IT application and innovative business operations mentioned in the introducing paragraph;

the pace of IT application did not accelerate until now; the development of knowledge-based economy will start soaring soon. Innovative business operation, through business computerization in the 60's and business reengineering in the 90's, is affecting every aspect of business – from routine record keeping and e-conferencing to business partnership management, product and service sales and delivery. It also affects how people spend their days. Computing, shopping, socializing, doing business, and entertainment are all being profoundly impacted as a consequence.

Industry Diversification and Strategic Alliance

Faced with the rapid and pervasive changes in a competing market, it is inevitable that businesses need to identify and focus on their dominant specialties and that industries develop more differentiated to elevate their competitiveness. Product design, production and marketing segmentation depends on the company's dominant position in the industry diversification scale, cooperation among companies still remains active. Integration and cooperation are gaining more and more attention from businesses to develop total-solution oriented products or services. Strategic Alliances has become a common trend in the industry development.

(2) Change of Business Behavior

The value of creating new products or new services

Under the business practice pattern of New Economy, only the forerunner in the market will have a better chance to expand his market share by taking

advantage of the Internet's social group media character. Service will become another business product, and as the evolution of technology continues, the Internet will become the most important sales channel because of its proliferation. The two-way communication between vendors and consumers on the Internet will eventually be realized. By then, companies will be forced to change their business practice, and to focus on the services instead of products. This will build a closer relationship between customers and companies.

Because of the more and more intense competition among companies, the product margin will decline. As a result, income generated from "maintenance" and service will become the major revenue for the companies. For example, telecommunication companies might give free cellular phones to their customers and charge customers mainly on related services. As printer prices drop further, a printer cost less than \$100 may come with an ink cartridge priced for over \$30.

Change of Transaction Pattern

E-commerce has been blooming through the Internet. Currently, more than 20% of individual stock investors in the U.S. make on-line stock transactions. 40% of car shoppers collect information on mobile homepages, and 3% of them place orders directly on the Internet. Amazon.com has long become the most famous Internet bookstore in the world. More and more e-commerce activities are emerging, which makes the e-commerce circle more complete.

To match sellers and buyers more efficiently, an electronic market place has emerged. The main goals for electronic market place are to standardize production and process, to achieve economy-of-scale procurement, and to gain more bargaining leverage, to adjust prices of some specific products such as electricity or steel according to their seasonal demands, and to integrate various brokers. Market Place makes all supply prices transparent for buyers to find the best prices. It also simplifies the complicated bidding process for procurement and increase the competitiveness of producers.

(3) Change of Investment Concepts

Change of mainstream evaluation model

Finance textbook teaches us the method of finding out the value of a company is to discount its future cash flows to make them the present value of the company. This method can hardly be applied to IT industry. Since

the technology and products change very fast in the IT industry, the market values of high-tech companies often fluctuate dramatically in a short period of time. However, because of the rapid growing potentiality in the IT industry, people are still willing to invest in IT companies. As the market anticipates the high growth pattern of IT industry, investors are willing to invest in those IT companies who are still in deficit.

The Rapid Change of Investment Targets

Taking the VC in the U.S. for example, we can see from Figure 4 that in the early 1980s, computer hardware companies were the main targets for VC investment. 33.6% of VC capital was invested in computer hardware companies, however the percentage dropped to 2.7 in 1999. From 1983 to the late 90's, VC investment on communication, computer software & services companies had grown into the mainstream position. Began in 1994, **Internet** business became a very popular sector to attract VC influx. In 1998, USD 3.28 Billion, 19.10% of the total amount invested by VC, giving it the third place only next to computer software & services and communication for VC disbursements. And in 1999, the VC disbursement on **Internet** business soared to 38.53% amounted US\$ 18.5 billion with an amazing annual growth rate of 463.62 %. This performance made **dot.com companies** the first investment target for venture capitalists. However, it is expected that the business investment will continue to decline after the correction in 2000. It is obvious that the '**Internet** investment craze' was brought by the terrific high return on investment in venture capitalists' past experience . People who invested in **dot.com companies** have one thing in common: they no longer pursue long-term return on investment, they would rather risk for higher return in a shorter period. If this situation continues, venture capitalists need to invest in companies that are ahead of the market trend to maintain the glorious tradition of high return performance.

(4) Change on human life

Education and entertainment

The development of the Internet to date has re-landscaped our modern lives. Rapid improvement in broadband technology makes on-line games more pervasive, game players from different regions meet on the Internet. Learning does not only happen in schools; students can follow desired programs through on-line educational institutions. Libraries, newspapers, TV programs are not the only ways for information access. Library index,

movie guide/time table, instant news and stock information are just at our fingertips. With the VOD system set-up, films and TV programs for home entertainment can be chosen any time.

Consumer shopping pattern

Consumers need not to “shop” in stores; on-line shopping offers abundant and convenient shopping choices including home delivery. We not only can order PC through Dell on the Website, but also fresh groceries from local supermarket. We may even try out selected garments on the Internet.

Communication

E-mail, a paper-free and stamp-free system, is environmental-friendly and cost saving. Video telephoning and PC Camera shorten the communication distance.

II. Future Development of IT

1. Problems currently encountered by IT industry

(1) A lack of new emerging industry while PC industry matures

Figure 5 shows that the growth rate of PC industry in 1999 doubled the rate in 1998 under the Y2K crisis. However the PC industry growth rate is anticipated to decline during the year 2000 to 2004. The downward trend of growth rate delivers a message that the PC industry is losing the progressing impetus as it moves to maturity.

It also can be seen from figure 6, the Wireless Communications industry, in the past five years, has grown radically to take PC industry's place to be the investors' favorite target, especially the Mobile Phone sector for its potentially lucrative market.

With the rising penetration of mobile phones in many countries, there is not much room for the market of voice transition service to expand. 2 of the world's 3 major mobile phone companies, Motorola, Ericsson, experienced a decline in their operation in the fourth quarter of last year. The only exception was Nokia. It is believed that the data transition service, i.e. 3G services, will usher in a new demand in the mobile phone market. However, due to the enormous 3G licensing charge and the high cost of building 3G-service infrastructure, investors become more cautious when it comes to 3G infrastructure investment, which will result in a delay in marketing 3G-service.

From the above presentation, we can tell that PC and Mobile Phone industries are two main driving forces for IT industry, and that there is little chance for the PC industry to reach another peak. As for the mobile phone industry, though there is still great potential for growth in the long run, for the time being, high uncertainty is caused by lack of confidence in the market as to whether 3G service vendors are able to make profit. To sum up, the IT industry is running out of fuels without knowing where the next gas station is.

(2) Capital market is cooling down

According to a survey conducted by *Venture Economics*, the fund generated by Venture Capital in the States was around US\$80-90 billions in year 2000. However it is expected to raise only around US\$40-50 billions this year

because of the impact of unperformed NASDAQ composite index and IPO market. A shrink in fund sources poses as a threat to the development of IT industry.

Although the development of IT industry has been shrouded by pessimism, since the demand for better life quality prevails, there will still be new industries to keep the momentum for economic growth. We therefore can say that we are now in one of many economic cycles; as long as global economic recession, which contracts overall consumption, stays away, there is still optimism for a bright economic future.

2. Future Trend of IT

(1) Creating New Demand

In the past, the PC's main function for business was data processing. Home PC did not change much of our lives until the prevalence of the Internet. Future IT products will play an important role in improving our working efficiency and satisfying more of our living needs. As a result, our daily activities such as shopping, clothing, transportation, and recreation will be improved greatly.

Imagine in the future we will be able to access the Internet through many electronic devices to transfer pictures, voices, and words; human life will enter the so-called "Evernet Age". At this age, human life will be changed even much more. These electronic products include cellular phones, watches, PDAs, calculators, electronic dictionaries, TV sets, refrigerators or even jackets.

We can foresee some changes:

- When we shop in the supermarket, we can check the refrigerator at home through our cellular phones (which is linked to the refrigerator) to see what kinds of food we lack. Also, we can use our refrigerator to access the Internet to order food we need and ask the supermarket for immediate home delivery service. When we shop for clothes, we can just buy them at home by surfing the Internet apparel shops, simply by inputting the size, we can see the overlook of ourselves with the clothes on through screen image to decide whether we want them or not.
- These electronic products can also be linked to home security guards to provide better protection to our homes. For example, when we are away from home, we can check through our watches or cellular phones, which

are linked to the monitoring system at home to see if our children or elders are safe at home.

--Smart cars may become our offices in the future. For example, we can arrange all the business in the car. VOD and other electronic appliances will make our car a mobile house. The GPS system in the car will provide security with guiding function.

--This age will change even more in the medical aspect. For example, we can implant in patients some special chips as those in physical detectors, GPS, wireless transmitters. With physical detectors we can detect patients' physical conditions. With GPS, we can prevent those patients with mental disability from getting lost. Also, by wireless transmitters, we can transmit data of their physical conditions to doctors' computers and help doctors observe their patients.

--We will not need to go out to theaters for movies any more. Through VOD we can choose all the TV programs and movies from other countries at home. Gameboys can no longer satisfy users, we can choose thousands of games through the Internet. And we will be able to participate in one game with thousands of other players at the same time.

--We will not need to depend on internet to bring about all living conveniences. In the future, most appliances will be built with voice recognition function. We can initiate all these appliances by talking to them. For example, we can turn on lights, radios, and TVs simply by saying "light", "radio", or "TV"; we even will not need remote controls any more.

All the above mentioned may no longer be dreams; and, actually, some of them are being realized right now. These products will become our living necessities in the future. From these future demands, we think the combination of Internet and mobile telecommunication will become the mainstream industry of the future.

(2) Creating New Industries

From the above forecast of IT development, we can summarize that the industries with most potential for future development include Internet Multimedia industry (vs. games, recreation), Internet Appliance industry (vs. traditional appliance), wireless communication industry (vs. wire communication), and e-commerce industry (vs. traditional commerce).

However, there are still difficulties for e-commerce to be realized with popularity; There is not only the issue of how money could be collected with e-commerce; a new set of after-sale services must also come along. Also by adding the application of VOIP, on-line transaction can be attached with voice consulting. Such e-commerce mechanism will include almost all services that can be provided by companies. And this kind of full service will make the e-commerce more complete in scale.

The Internet Appliance industry is booming. However, leading mainstream products have not yet emerged. As human demand always leads the way for the development of industries, Thin Client, Net TV, Screen Phone, Smart Handheld Devices will definitely have a lot of growing potential since these products do meet people's needs.

There are some breakthroughs to be made regarding image compressing techniques in wireless telecommunication industry. Currently, a Japanese company, Docomo, has provided live image transmitting service by cellular phones through I-mode system. Although there are some drawbacks in image quality, the future trend of cellular phone development has grown clear: other than voice mail and short message, instant picture is the next step for cellular phone development.

Internet Multimedia will be applied in education and recreation. There will be more and more companies providing on-line education service, which will help schools and parents greatly in children's education. On-line games have become a very competitive field, which makes picture more vivid and real. It is no longer a dream for many people to play in a game simultaneously on the Internet.

These four industries are being developed with velocity and their changes are making our world different each day. Whether or not an environment in which consumers may get familiar with the application of those devices can be created decide the future of those industries. And in the age when products are diversifying and their functions getting more complicated, integration of technology and service becomes the key to success for companies to survive in this competitive world.

(3) The future role of VC

follow the trend of IT development, and facilitate strategic alliances and industry integration

VC has been an investment pioneer; after recognizing the trend of IT development,

VC will keep on playing the same important role in the future. As those future products are multi-functional and multi-linked, techniques from various fields have to be integrated. This can be achieved by two ways. Firstly, these techniques can be integrated by cooperation among companies. Secondly, with VC's knowledge of industries and its controlling power over the companies they invest in, VC can play a role in integrating techniques and services. Therefore, in the future VC can become the catalyst for strategic alliance and industry integration.

3. Government Involvement

(1) Intensify infrastructure, create a sound environment

As was mentioned above, the development of IT had a very close link to what the government had done. As IT industry has been searching for another heyday, the government's role becomes more crucial. In addition to continuous improvement in the above mentioned fields of communication, education and security, the construction of internet networks should be the emphasis for the visit of the new era of Internet. The top priority on the list of Internet infrastructure is bandwidth. With sufficient bandwidth, a more advanced Internet related life could possibly be realized. The existing educational system needs to be re-examined in order to foster a highly skilled talent pool. In order to create an environment with competitiveness for development, it is indispensable to set up an active mechanism for innovation and the birth of start-ups, which will bring about industrial transformation. Preventive measures must also be taken to avoid social problems arising from economic transformation.

(2) Increase communication with industries and understand their needs

Government policies always affect industrial development. Changes in industrial policies usually have impact on the operation of individual companies. Especially in IT industry, where the emergence and vanishing of a company takes place faster than anywhere else, the impact of government policy is far beyond what government officials could have imagined. It is therefore a must for the government to grasp the impulse of industrial development, to understand the needs of industries in order to apply timely financial and fiscal policies to create a favorable environment for industrial development as well as a service-oriented government.

(3) Value international relationship-- diminish digital divide

In order to develop her economy, a country must strengthen her relations

with the rest of the world, pay close attention to the development of industries in other regions, and seek cooperation opportunities towards mutual prosperity. This is where the true meaning of the existence of APEC lies. In the era of knowledge-based economy, the sustainable development of economy requires the coordination of various factors, among which human resources and capital top the list. The improvement of human resources, the sound development and reform of the financial market, a healthy legal system and sound hardware and software infrastructure are all indispensable elements. From the view of the global economy, elimination of digital divide arising from the different paces of development in respective economies is one essential measure to bring the world to economic prosperity.

In recent years, there have been interesting and profound discussions on the issues of Venture Investment and Assisting Developing Countries for Capacity Building in various APEC forums. Chinese Taipei has been proud to play an active role in the discussion of such issues. As an APEC member, realizing the importance of this trend, we presented a proposal on *“Economic Revitalization through Start-up Companies and Venture”* in 1999 and another one on *“Transforming the Digital Divide into a Digital Opportunity”* in 2000. These two proposals were included in the annual Joint Statement of Ministerial Meeting with high compliments. To cope with the upcoming of the knowledge-based economy, and to help the development of developing economies of APEC, Chinese Taipei has been making active contribution by playing the role of a pioneer. However, the support by other APEC economies of those proposals is essential for their smooth and rational development so as to create a favorable investment environment in the Asia-Pacific region and benefit the community.

**ADDRESS BY MR GRAHAM HAYWARD, EXECUTIVE
DIRECTOR OF THE SINGAPORE INTERNATIONAL
CHAMBER OF COMMERCE AT SIXTH APEC
INVESTMENT SYMPOSIUM,
20-22 MARCH 2001, KOREA**

**“New International Business Patterns: Trade and
Investment”**

The topic I have been asked to address, together with its subsidiary points, is so wide and so all embracing that a book running to several hundred pages would be necessary to do justice to it. As I have, at best, half an hour, I will therefore confine myself to some remarks at the macro level and to identifying some key areas, other than IT, telecommunications and services, where the growth of international business has had, or will have, a significant impact on our lives and our societies due to the underlying trends currently at work.

Singapore’s well known Ambassador, Professor Tommy Koh, is renowned for always making 3 key points in his speeches. However, I intend to make 10 points in the first half of my presentation, and a further 10 points in the second half. I hope that at least a few of these will hit

your particular target by stimulating some further thought on these issues.

1. First, let us quantify the impact that international business has had around the world in recent years. Let us take international production by transnational corporations (TNCs) for example. These companies now number some 63,000 parent firms with around 690,000 foreign affiliates and a plethora of inter-firm arrangements that spans virtually all countries and all economic activities. TNCs are thus a formidable force in today's world economy. The world's top 100 non financial TNCs are based almost exclusively in developed countries - Petroleos de Venezuela is the only company from a developing country to appear in this list - and the \$2 trillion in assets of their foreign affiliates accounted for one-eighth of the total assets of all foreign affiliates worldwide in 1998. The foreign affiliates of the top 100 TNCs employ over 6 million people, and their foreign sales are around \$2 trillion. Their activities are concentrated mainly in electronics and electronic

equipment, automobiles, petroleum, chemicals and pharmaceuticals.

2. The expansion of this international production has been helped in almost all countries by changes in their regulatory environment. For example, over the period 1991-1999, 94% of the 1,035 changes worldwide in the laws governing foreign direct investment (FDI) created more favourable conditions for such investment. The number of bilateral investment treaties has also risen dramatically, from 181 at the end of 1980 to 1,856 at the end of 1999. Double taxation treaties have also increased from 719 in 1980 to 1,982 at the end of 1999.

Recently, there has been an upsurge in Free Trade Agreements (FTA), particularly in the Asian region and Singapore, for example, has concluded an FTA with New Zealand, and is pursuing pacts with the US, Australia, Mexico and Japan.

3. Sales of foreign affiliates worldwide were only \$3 trillion in 1980, but have risen to \$14 trillion in

1999, and are now nearly twice as high as global exports. The gross product associated with international production is now about one-tenth of global GDP, compared to only one-twentieth in 1982. The ratio of world foreign direct investment inflows, which stood at \$865 billion in 1999, to global gross domestic capital formation, is now 14% compared to 2% twenty years ago. Finally, the number of transnational parent firms in 15 developed home countries increased from around 7,000 at the end of the '60s to approximately 40,000 at the end of the '90s.

4. It is worth noting that, while the size of international FDI and production have risen significantly over the past few decades, not all countries have participated in it to the same extent. For example, just ten countries received 74% of the global FDI flows in 1999, and just ten developing countries received 80% of the total FDI flows to the developing world. It remains a challenge for other countries to attract not only more, but also higher quality FDI, i.e.

investment with strong links to the domestic economy, export orientation, advanced technology and skill or spill-over effects. Sadly, not all countries handle their FDI flows and economic growth equally well – for example, The Economist recently reported that Zambia’s GDP per person was nearly twice South Korea’s in 1964. Yet, by 1999, South Koreans were almost 27 times richer than Zambians.

5. Another challenge posed is the ability of TNCs to internalise cross border transactions and bypass national controls and scrutiny. Thus, given that the micro economic interests of TNCs and the development objectives of host countries do not necessarily coincide, governments need to ensure that policies are in place that maximise the benefits gained from FDI. As Singapore has discovered, it is important to create dynamic locational advantages so as to attract higher quality FDI. It also means creating an integrated and coherent framework of policies, which encourage the development, and successful implementation of same, together with the

establishment of an effective framework for property rights and dispute settlements.

6. And now, a word about the main mode of entry, namely the recent wave of cross border mergers and acquisitions – M&As. Partly as a result of this trend, global FDI outflows reached \$800 billion in 1999, an increase of 16% over the previous year. The figure probably exceeded the trillion-dollar mark last year. In 1999, developing countries received \$208 billion in FDI, an increase of 16% over 1998, and an all-time high. However, recently, the share of developing countries in global FDI inflows has fallen, from 38% in 1997 to 24% in 1999.

7. Interestingly, the UK became the largest outward investor in the world in 1999 with \$199 billion, forging ahead of the United States. However, the United States was the largest recipient of FDI at \$276 billion, representing almost one-third of the world's total. Contrary to general expectations, FDI flows to East and South-east Asia increased by 11% in 1999.

Hong Kong was the second largest recipient in the region, with an increase of over 50%, to reach \$23 billion. How much of this flows through to China is uncertain, according to Mr Michael Rowse, Director General of "Invest Hong Kong".

8. It is worth emphasizing that, over the past decade, most of the growth in international production has been via cross border M&As, rather than greenfield investment. The total number of M&As worldwide has been growing at a remarkable 42% annually between 1980 and 1999, and the value of such M&As as a share of world GDP has risen from 0.3% in 1980 to 8% in 1999. Apart from traditional bank loans, the recent M&A boom has been helped by the use of such financing mechanisms as the issuance of common stocks, the exchange of stocks and corporate debt. In addition to traditional bank loans, venture capital funds have now also become a significant factor as a source of finance, enabling many small or new firms to engage in M&A activity. This trend continued last year with several mega

deals, one of which gained worldwide publicity, namely the Vodafone AirTouch takeover of Mannesmann. I believe this was the first time a hostile takeover had been successfully carried out by a foreign company in Germany, presumably opening the way for more deals of a similar nature.

9. The last point I would like to make about cross border M&As is that, in 1999, they represented 80% of the world's FDI flows, but 90% of this was carried out in developed countries. It is important to note that in the developing world, greenfield FDI is still significant.
10. This growth in M&As is one of the most important and far reaching developments in international business patterns in recent years, and they are continuing to grow rapidly in importance because they provide firms with the fastest way of acquiring assets in different countries, and because they allow firms to restructure existing operations nationally or globally, to exploit the synergy and strategic

advantages. The acquisition of a portfolio of locational assets has become a key source of competitive strength in a globalising economy. Automobiles, pharmaceuticals and chemicals, and food, beverages and tobacco were the leading industries in the manufacturing sector in terms of worldwide cross border M&A activity in 1999. Most M&As in these industries were aiming at economy of scale, technological synergies, increasing market power, eliminating excess capacity, or consolidating and streamlining innovation strategies and R&D budgets. Even firms that may not want to jump on the bandwagon may feel that they have to, for fear of becoming targets themselves.

In the second half of my presentation, I would like to draw attention to some of the more significant and consequential implications for the future that this all-conquering move towards international business will have.

1. Firstly, it must be said that the international flow of

hot money has become one of the more important international business developments in recent years, and was partly responsible for the Asian crisis in 1997. Dr Mahathir, the Prime Minister of Malaysia, gained worldwide publicity when he attacked the international currency traders, accusing them of destroying much of the work he had accomplished over 16 years to raise the standards of his people, as the value of the Malaysian currency, the Ringgit, had fallen by some 50%. He was particularly critical of American financier, Mr George Soros. Dr Mahathir continues to return to this theme. For example, at the end of February this year, he warned East Asian countries against what he called, the rise of “huge businesses which have no ethics and no morality except to make money for themselves. I’m watching how the companies are merging. It looks like they are massing up beyond our borders. Then they will march in and take over everything. I think lots of people are going to suffer.”

Singapore’s Senior Minister Lee Kuan Yew also said

last month about the 1997 crisis, that “fund managers shifted hundreds of billions of dollars from one economy to another at the click of a mouse. It caused financial chaos to the region”.

2. A second element is the increasing need for transparency and information in this new international world. Lee Kuan Yew also commented on this when he said that a lack of transparency and absence of reliable market information “compounded, if not caused in part” the collapse of international confidence in Asian markets in mid-1997. Also, the crucial role of speed of access to information in today’s international business life, is illustrated by such quotes from top executives as: “In the new economy in which we live, a year has only 50 days”, or “Speed is our friend – time is our enemy”. I am reminded that, in 1856, it took a series of riders on horseback nearly two months to carry the news from Russia to London that Britain had won the Crimean War. Today, we watch such events in full colour and in real time on CNN and other television channels.

3. Thirdly, this factor has led to the increasing vulnerability of brands in this New World. When I was a young man, I was taught at business school that “if you invent a better mouse-trap, the world will beat a path to your door”. However, our professor pointed out that this was only true if consumers were made aware of the existence of the mouse-trap, and that that was the role that advertising and marketing fulfilled. This statement is truer now than it has ever been before, as the rapid dissemination of information worldwide makes brands much more vulnerable than they have been in the past.

As Forbes magazine wrote recently, “the brand horror story of our time is Xerox”. In the ‘60s, Xerox was as hot as Cisco today, and also led the “nifty fifty” stock parade in the ‘70s. By any measure of what a brand was supposed to do, Xerox excelled. It was a name that enjoyed global recognition. Yet, within the last few years, it has been knocked off its perch by the trend I have described. How about AT&T? Again,

one of the strongest names in the world for many years, it has recently had to cope with an 80% wipe out of its margins in a core revenue stream, as the underlying price structure of long distance telephony has dropped 80% in two years due to the growth in fibre optic capacity. Wang Computers rapidly became a household name during the early days of the explosive growth of personal computers – yet its name also disappeared equally rapidly. What about Intel and Sun? – these are two of the strongest brands today, yet even they face a potential threat from the upstart Transmeta, whose chips use only 20% of the power their chips do. As a server farm uses as much power as a town of 25,000 people, think of the savings if servers were to run on these new chips.

4. The new international business world is also having a major impact on the political scene. I have already mentioned the Asian crisis, but there are several other telling examples. For instance, foreign high-

tech companies discovered, to their dismay, last year, that China had passed a law that would severely restrict the use of encryption technology. The new encryption law had originated with the Chinese Public Security Ministry, and American, European and Japanese products were obviously threatened by this law. This led to considerable lobbying, including efforts by William Daley, at that time the American Secretary of Commerce, who talked to the Chinese officials at the World Economic Forum in Davos. The Chinese weighed things up, did some sums, and took account of the trade talks pending in the US. As a result, the Chinese have now relaxed the law.

5. Another important area of impact is that on human resources in particular, and on the population generally. People such as Andrew Garner, among others, are predicting a major increase in outsourcing by corporations, which will lead to significant changes in employment patterns, particularly the further growth of service companies, as well as of self-employment. There will also be increasing

emigration by better-educated and experienced staff who will be attracted to more buoyant economies, which offer a better quality of life. I noticed earlier this month, that the Yonhap News Agency in Korea reported that 15,307 South Koreans emigrated last year, a 21% rise over the year before. These emigrants cited exorbitant costs for private tuition and excessive school competition as the impetus for their departure. Yonhap said that “with fewer skilled professionals, economic recovery (in Korea) could take even longer.”

Both German and US companies have sent teams of executive search personnel to Singapore to recruit IT staff and engineers, offering them between 70-100% more than they could get in Singapore, where such people are already well paid.

6. Another trend, which I am sure will be a major factor in Asia in the next few years, is the rise of “women power”. When I first went to live in Singapore in the

early '60s, it was extremely rare to find a lady working in senior or middle management. Today, that has changed dramatically, and many of the key players in Singapore's companies are now female. This had led to a problem, which is giving great concern to our government in that, women, who have now become well educated and financially independent for the first time in Asian history, choose not to get married and produce children – this does not mean that they are celibate, but means that they are able to choose – and discard – their partners at their own discretion! In the opinion of our Senior Minister, well-educated and talented parents generally produce children of similar calibre. The fact that a large number of such people have opted out of the marriage stakes is a cause for concern in Singapore, where our birth rate is now very low. This has resulted in the government forming a “Social Development Unit”, whose main purpose is to organise functions which bring together young unmarried people in the hope that mutual chemistry will result in more marriages.

This movement of cultural and technical talent is rather different to the earlier changes brought about by FDI flows, when manufacturing investment went to the country with the lowest labour and infrastructure costs. Thus, for example, Hong Kong, which used to have a thriving manufacturing sector, now has less than 6% of its GNP generated by such business. 85% comes from services and 9% from construction and other inputs. Last year, there were some 3,000 regional HQs and head offices based in Hong Kong, including 76 Singaporean regional offices.

7. Such developments have had a strong cultural impact on the world at large, and on Asia in particular. The growth in Asia of, what I would loosely call the “Hamburger Culture” has led, in the opinion of many, to the decline of national cultures and to a homogenisation of Asian culture generally. The Singapore Government has spoken openly of its fears in this area, and of the decline of Confucian values on which much of Singapore’s society has

been based. These movements have also led to increases in nationalistic feeling, which has not been confined to developed countries. When Japanese investors acquired the Rockefeller Centre in New York, and Film Studios in Hollywood, the US press reacted in indignation. The Vodafone acquisition referred to earlier sparked a similar reaction. Frankly, I do not see much hope that the influence of the “Hamburger Culture” is likely to decline in Asia in the near future. Talking to people concerned closely with the implementation of the forthcoming Hong Kong Disney World, I learnt that their research showed that the Chinese, both from the mainland and from Hong Kong itself, did not want an “Asianised” Disney, but wanted the real American mouse. I was also told that, in the Japanese Disney Theme Park, the attraction with the lowest attendance rate is that featuring Japanese cultural elements.

8. Despite the new trends that I have highlighted,

demographers say the world will continue to witness a huge population shift to the Third World. By 2050, the population of the less developed countries is expected to grow from 4.9 billion today to 8.2 billion, compared to the more developed countries, which will hold steady at today's 1.2 billion. Only the United States, among major industrial countries, will continue to grow markedly in population, owing to its large intake of immigrants. Mr Joseph Chamie, Director of the UN Population Division, says "these changing relationships will have enormous economic, social, and political consequences." To put this in context, India, which has a population 2½ times the size of the EU countries, is growing much faster than earlier predicted. Mr Chamie says that last year, "the EU had a natural increase of 343,000 people. India achieved this increase in the first week of 2001!!"

9. As this is an APEC event, I think it is perhaps appropriate to close with some further comments on the likely political impact of these changes. Early in the '90s, Susan Strange declared "that between the

late 1960s and the 1980s there had occurred such deep changes in the sources of structural power within the global political economy that 'a fundamental change in the nature of diplomacy' had taken place. Rapid technological change, the increasing mobility of capital and the availability of cheap and almost instantaneous transnational communication meant that, in the contemporary era, the major goal of the great game of diplomacy no longer centred around the control of territory but entailed instead a struggle for world market share." As a consequence, firstly, "while all states have suffered a loss of political authority vis-à-vis world markets, these losses have impacted less on some states than on others. As a consequence, all states have also suffered a loss of political authority to the dominant power, the US. Secondly, the very nature of states themselves has changed as all states, including the US, have, to varying degrees, found themselves forced to withdraw from some areas of social activity (most markedly, welfare provision) and to enter others (e.g. industrial policy and export

promotion). By shifting political authority 'upwards' to international organisations; 'sideways' to the market; and 'downwards' to local and regional authorities, states have enhanced the trend toward the erosion of their authority and, hence, legitimacy.'

10. As FDI restrictions are liberalised worldwide, it becomes all the more important that regulatory barriers to FDI are not replaced by the anti-competitive practices of firms. With the growing importance of cross border M&As as a mode of entry, this must be complemented by an equally pervasive culture recognising the need to prevent the anti-competitive practices of firms. This requires the adoption of competition laws and their effective implementation, paying full attention not only to domestic, but also to cross border M&As. If a reasonable balance can be achieved in this area, then international business will thrive and continue to be of considerable benefit to the peoples of the world. As the Prime Minister of Malaysia, Dr Mahathir said a few days ago "It is time to put people before profit, to

ensure that in the process of globalisation, there are many more winners and many fewer losers.”

GGH/lml

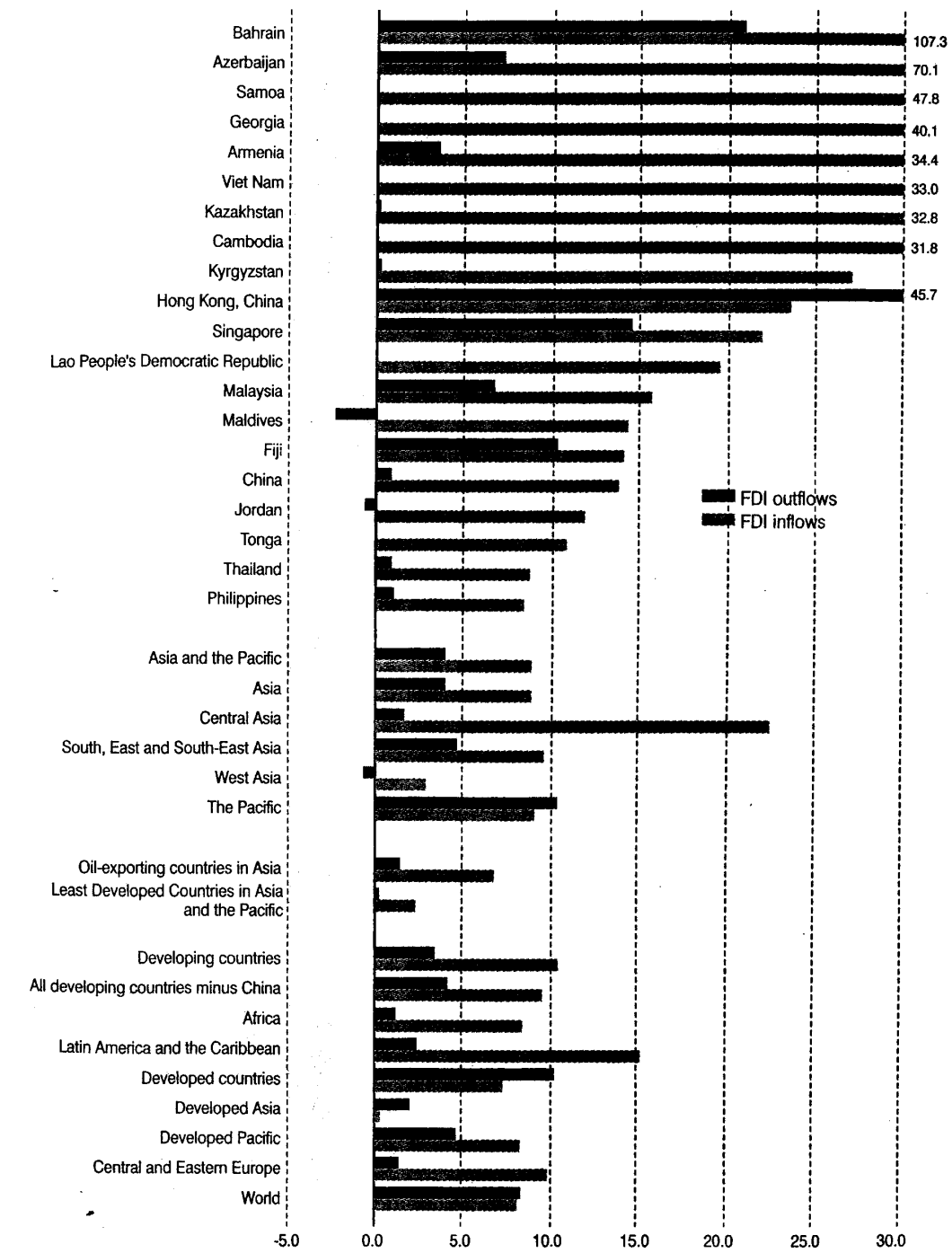
3 June, 2003

Sources of quotes and statistics:

1. *The Economist*
2. *Forbes Global*
3. *The Straits Times, Singapore*
4. *UN World Investment Report*
5. *University of Leicester – Diplomatic Studies Programme*
6. *WTO – International Trade Statistics*

TABLE 1

Asia and the Pacific: FDI flows as a percentage of gross capital formation, top 20 economies, 1996-1998^a
(Percentage)



Source: UNCTAD, FDI/TNC database and annex table B.5.

^a Ranked on the basis of the magnitude of 1999 FDI inflows as a percentage of gross fixed capital formation.

TABLE 2

The top 50 TNCs from developing economies, ranked by foreign assets, 1998
(Millions of dollars, number of employees)

Ranking by Foreign assets	TNI *	Corporation	Economy	Industry ^b	Assets		Sales		Employment		TNI * (Per cent)
					Foreign	Total	Foreign	Total	Foreign	Total	
1	34	Petróleos de Venezuela S.A.	Venezuela	Petroleum expl./ref./distr.	7 926	48 816	11 003	25 659	6 026	50 821	23.7
2	14	Daewoo Corporation	Republic of Korea	Trade	..	22 135	..	30 547	..	15 000	49.4
3	6	Jardine Matheson Holdings, Limited ^d	Hong Kong (China)/ Bermuda	Diversified	5 954	9 565	7 921	11 230	..	160 000	67.6
4	12	Cemex, S.A.	Mexico	Construction	5 639	10 460	2 334	4 315	9 745	19 761	52.4
5	35	PETRONAS - Petrolim Nasional Berhad	Malaysia	Petroleum expl./ref./distr.	5 564	26 184	3 757	11 133	2 700	18 578	23.2
6	8	Sappi Limited	South Africa ^c	Pulp and Paper	4 574	6 475	3 246	4 308	10 725	23 640	63.8
7	19	Hutchison Whampoa, Limited	Hong Kong (China)	Diversified	..	13 389	2 191	6 639	20 845	39 860	39.4
8	9	First Pacific Company Limited	Hong Kong (China)	Other	4 086	7 646	2 527	2 894	15 063	30 673	63.3
9	39	Sunkyoung Group	Republic of Korea	Diversified	3 851	36 944	12 029	38 274	2 400	29 000	16.7
10	49	Petroleo Brasileiro S.A. - Petrobras	Brazil	Petroleum expl./ref./distr.	3 700	33 180	1 300	15 520	417	42 137	6.8
11	45	New World Development Co., Limited	Hong Kong (China)	Construction	3 414	13 465	376	2 628	30	16 512	13.3
12	31	China State Construction Engineering Corporation	China	Construction	3 290	7 300	1 950	5 890	5 535	239 102	26.8
13	36	YPF Sociedad Anonima	Argentina	Petroleum expl./ref./distr.	3 278	13 146	880	5 500	1 754	9 486	19.8
14	21	LG Electronics, Incorporated	Republic of Korea	Electronics and electrical equipment	3 127	12 824	4 841	12 213	27 819	60 753	36.6
15	17	China National Chemicals Import & Export Corporation	China	Trade	3 000	4 950	7 920	13 800	510	8 415	41.4
16	43	Keppel Corporation Limited	Singapore	Diversified	2 598	17 321	376	2 127	1 700	11 900	15.7
17	24	Companhia Vale do Rio Doce	Brazil	Transportation	1 947	13 539	3 025	4 321	7 076	40 334	34.0
18	20	Hyundai Engineering & Construction Co.	Republic of Korea	Construction	..	7 094	..	3 815	..	22 787	37.6
19	15	Citic Pacific, Limited	Hong Kong (China)	Diversified	1 842	8 771	908	1 755	7 639	11 871	45.7
20	28	Energis, S.A.	Chile	Electric utilities or services	1 697	16 117	306	3 406	9 342	14 336	28.2
21	3	Guangdong Investment Limited	Hong Kong (China)	Diversified	1 695	2 577	614	812	16 015	17 330	77.9
22	26	San Miguel Corporation	Philippines	Food and beverages	1 676	3 552	287	1 811	4 338	15 923 ^f	30.1
23	40	Samsung Electronics Co., Limited	Republic of Korea	Electronics and electrical equip.	..	17 213	..	16 640	..	42 154	16.3
24	44	Shougang Group	China	Steel and iron	1 610	6 990	830	4 270	1 548	212 027	14.4
25	16	Barrow Limited	South Africa ^c	Diversified	1 574	2 624	1 734	3 769	..	27 804	43.9
26	25	Singapore Airlines Limited	Singapore	Transportation	1 517	9 944	3 284	4 508	3 115	27 386	33.2
27	7	Fraser & Neave Limited	Singapore	Food and beverages	1 473	3 993	1 069	1 507	13 037	15 082	64.8
28	10	Acer Incorporated	Taiwan Province of China	Diversified	1 449	3 304	4 192	5 267	9 373	16 326	60.3
29	18	Sime Darby Berhad	Malaysia	Diversified	1 270	3 198	1 959	3 178	..	32 490	41.3
30	3	Orient Overseas (International) Limited	Hong Kong (China)	Transportation	1 247	1 801	1 820	1 833	3 314	3 935	84.3
31	27	Perez Companc, S.A.	Argentina	Petroleum expl./ref./distr.	1 145	4 822	219	1 309	836	4 450	19.8
32	27	Gener, S.A.	Chile	Electric utilities or services	1 139	3 477	185	599	217	910	29.1
33	29	Tatung, Co.	Taiwan Province of China	Electronics and electrical equipment	..	4 483	..	2 921	..	19 719	28.1

TABLE 2 (Cont'd)

The top 50 TNCs from developing economies, ranked by foreign assets, 1998 (concluded)
(Millions of dollars, number of employees)

Ranking by Foreign assets	TNI ^a	Corporation	Economy	Industry ^b	Assets		Sales		Employment		TNI ^a (Per cent)
					Foreign	Total	Foreign	Total	Foreign	Total	
34	46	Companhia Cervejaria Brahma	Brazil	Food and beverages	..	3 862	..	2 639	..	10 708	12.5
35	23	Dong-Ah Construction Ind. Co., Limited	Republic of Korea	Construction	..	5 435	..	2 147	..	4 291	34.8
36	42	China Harbor Engineering Company	China	Construction	860	2 420	150	1 540	1 963	62 652	16.1
37	32	China National Metals and Minerals Imp and Exp Corp.	China	Trade	850	2 260	880	3 180	142	1 409	25.1
38	48	Reliance Industries Limited	India	Chemicals and pharmaceuticals	..	5 741	..	3 160	..	15 985	7.7
39	47	Compania de Petroleos de Chile (COPEC)	Chile	Diversified	842	6 459	142	2 896	485	7 841	8.0
40	11	Gruma, S.A. de C.V.	Mexico	Food and beverages	731	1 738	833	1 394	7 736	13 652	52.8
41	30	South African Breweries plc.	South Africa ^c	Food and beverages	..	3 812	2 423	5 877	11 222	49 431	27.3
42	13	NatSteel Group	Singapore	Steel and iron	685	1 296	208	885	8 598	11 695	50.0
43	22	Hong Kong and Shanghai Hotels, Limited	Hong Kong (China)	Tourism and hotel	642	2 346	58	274	3 606	6 249	35.4
44	50	CLP Holdings Limited	Hong Kong (China)	Electric utilities or services	630	7 115	180	3 101	..	4 420	4.9
45	33	Souza Cruz, S.A.	Brazil	Diversified	..	2 154	689	1 535	..	7 200	24.6
46	4	WBL Corporation Limited	Singapore	Electronics and electrical equip.	545	752	264	407	9 021	9 875	76.2
47	5	Asia Pacific Breweries Limited	Singapore	Food and beverages	544	857	618	839	3 449	3 955	74.8
48	38	Metallurgica Gerdau, S.A.	Brazil	Steel and iron	520	2 849	357	1 802	1 335	9 974	17.1
49	41	Sadia S.A. Industria e Comercio	Brazil	Food and beverages	..	1 738	..	2 204	..	22 331	16.2
50	1	Want Want Holdings, Limited	Singapore	Food and beverages	452	465	262	271	4 708	4 713	97.9

Source: UNCTAD, FDI/TNC database.

- ^a TNI is the abbreviation for "transnationality index", which is calculated as the average of three ratios: foreign assets to total assets, foreign sales to total sales and foreign employment to total employment.
- ^b Industry classification for companies follows the United States Standard Industrial Classification which is used by the United States Securities and Exchange Commission (SEC).
- ^c Within the context of this list, South Africa is treated as a developing country.
- ^d The company is incorporated in Bermuda and the group is managed from Hong Kong (China).

.. Data on foreign assets, foreign sales or foreign employment were not made available for the purpose of this study. In case of non availability, they are estimated using secondary sources of information or on the basis of the ratios of foreign to total assets, foreign to total sales and foreign to total employment.

TABLE 3**The world's top 10 TNCs in terms of transnationality, 1998**

Ranking 1998 by		Ranking 1997 by		Corporation	Country	Industry	TNI ^a
Foreign assets	TNI ^a	Foreign assets	TNI ^a				
34	1	23	1	Seagram Company	Canada	Beverages/media	94.8
57	2	52	3	Thomson Corporation	Canada	Media/publishing	94.6
10	3	9	4	Nestlé SA	Switzerland	Food/beverages	94.2
82	4	74	7	Electrolux AB	Sweden	Electrical equipment/electronics	92.7
69	5	77	37	British American Tobacco Plc	United Kingdom	Food/tobacco	91.0
62	6	89	11	Holderbank Financière Glarus	Switzerland	Construction materials	90.5
12	7	18	5	Unilever	Netherlands/ United Kingdom	Food/beverages	90.1
15	8	14	2	ABB	Switzerland	Electrical equipment	89.1
71	9	94	24	SmithKline Beecham Plc	United Kingdom	Pharmaceuticals	82.3
98	10	New	New	SCA	Sweden	Paper	80.8

Source: UNCTAD/Erasmus University database.

^a TNI is the abbreviation for "transnationality index", which is calculated as the average of three ratios: foreign assets to total assets, foreign sales to total sales and foreign employment to total employment.

TABLE 4**The top five TNCs from developing economies in terms of transnationality, 1998**

Ranking by		Corporation	Economy	Industry	TNI ^a (Per cent)
TNI ^a	Foreign assets				
1	50	Want Want Holdings, Limited	Singapore	Food and beverages	97.9
2	30	Orient Overseas (International) Limited	Hong Kong (China)	Transportation	84.3
3	21	Guangdong Investment Limited	Hong Kong (China)	Diversified	77.9
4	46	WBL Corporation Limited	Singapore	Electronics and electrical equipment	76.2
5	47	Asia Pacific Breweries Limited	Singapore	Food and beverages	74.8

Source: UNCTAD, FDI/TNC database.

^a TNI is the abbreviation for "transnationality index", which is calculated as the average of three ratios: foreign assets to total assets, foreign sales to total sales and foreign employment to total employment.

E-COMMERCE: NEW DIMENSION IN ATTRACTING FDI

APEC Investment Symposium

Fang Fang

**Co-CEO
SESAMi Inc**

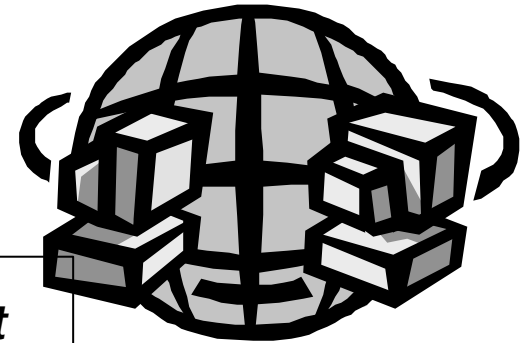
**Cheju, Korea
March 20, 2001**



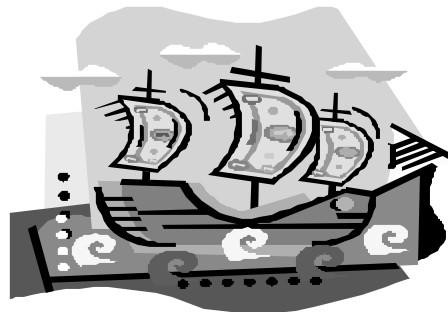
DISCUSSION AGENDA

1. How does e-commerce affect the trade pattern?
2. How does e-commerce affect the FDI pattern?
3. Are there any particular business functions in which FDI is significantly affected by e-commerce?
4. Are there any particular industries in which FDI is significantly affected by e-commerce?
5. Do you expect any significant change in the relationship between e-commerce and FDI in the near future?

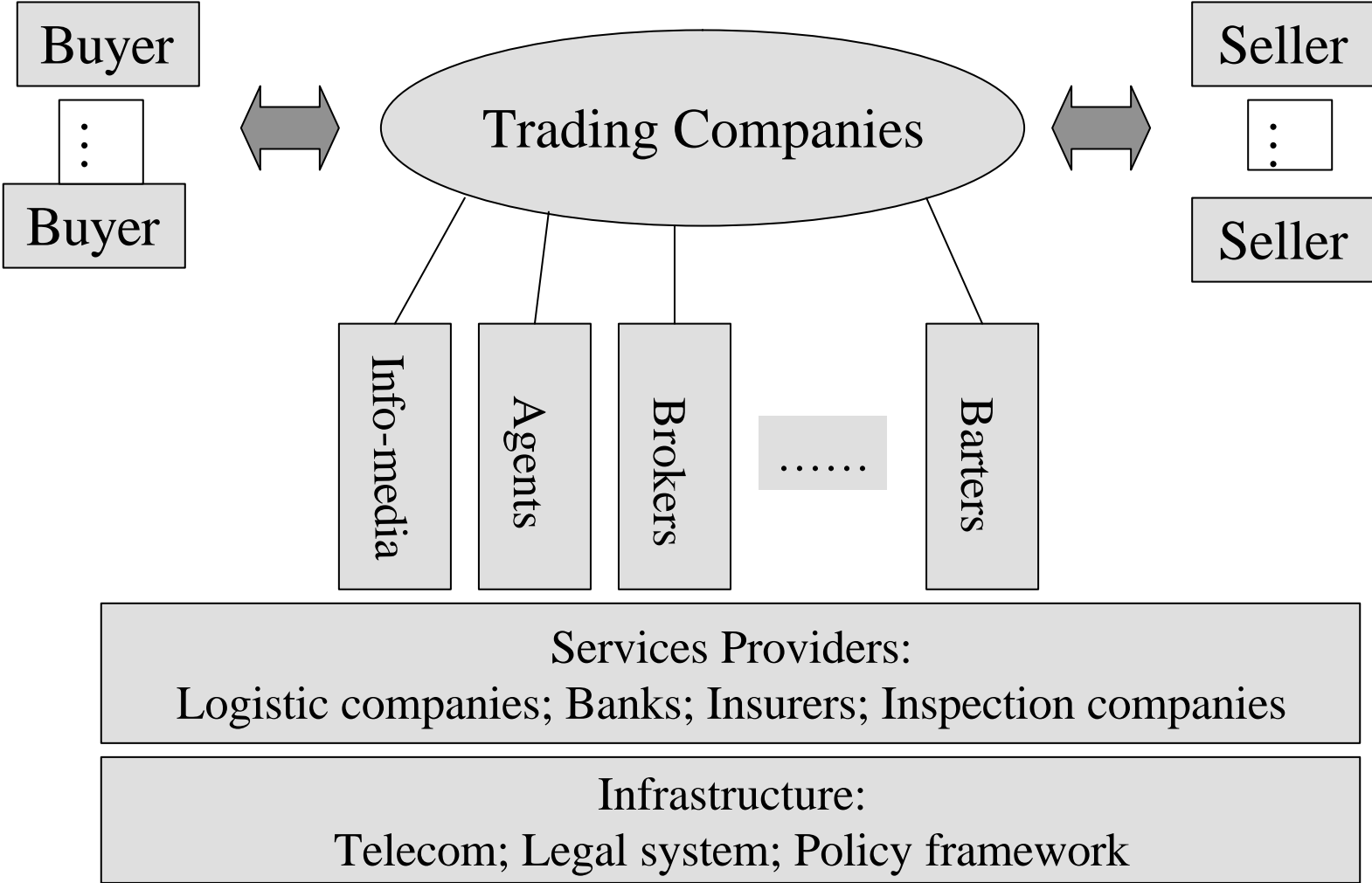
E-COMMERCE: IT IS ALL ABOUT TRADE



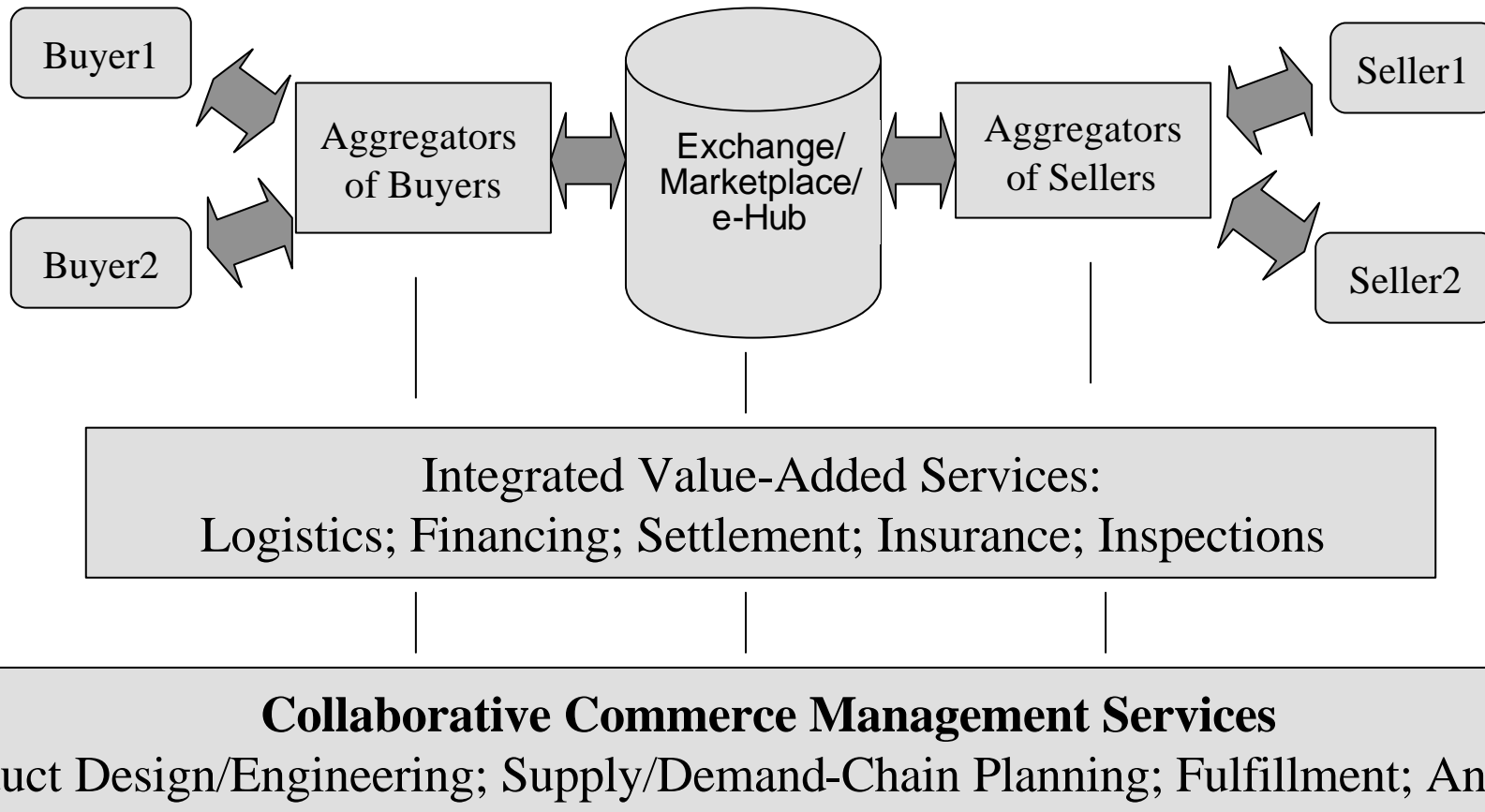
Technology is the Tool – not the Result



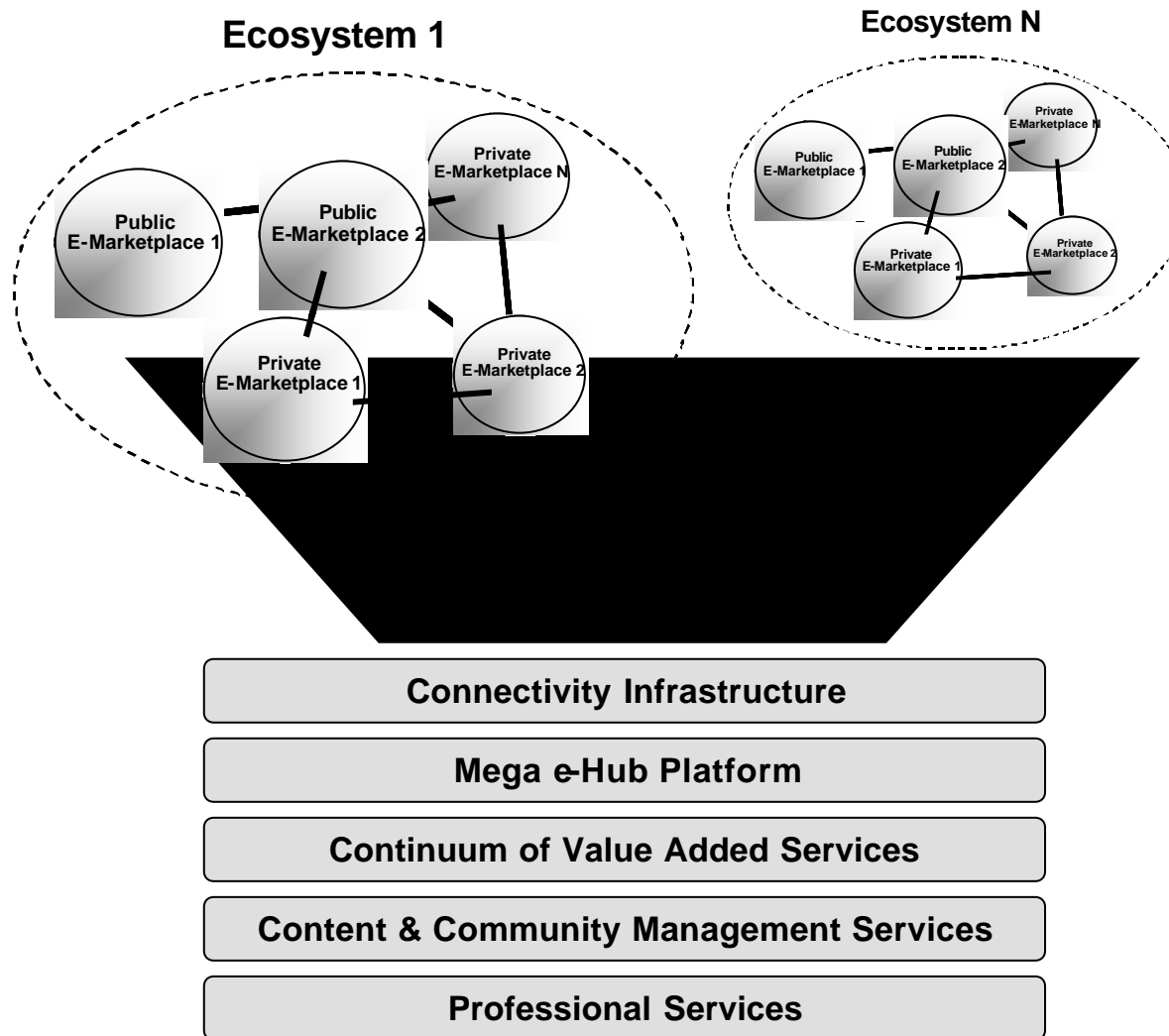
TRADITIONAL TRADING ECOSYSTEM



ROLE OF E-COMMERCE IN THE TRADING ECOSYSTEM

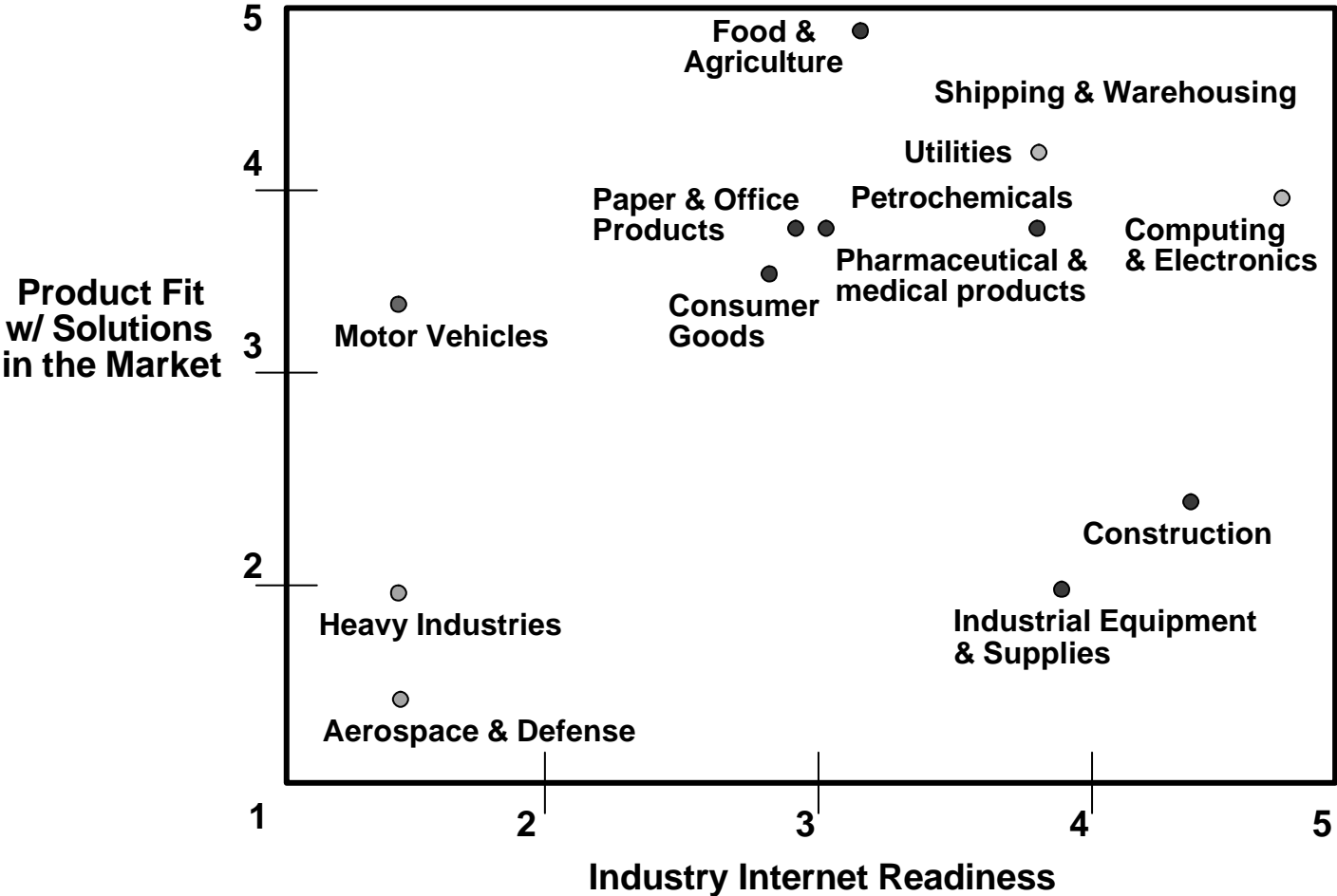


COLLABORATIVE COMMERCE SERVICES PROVIDER MODEL



- E-enable e-marketplaces, enterprise supply and demand chains
- Create collaborative ecosystems
- Mega-hub to reliably process inter-ecosystem transactions
- Facilitate trusted regional and global B2B connectivity
- Offer comprehensive continuum of value-added business services
- Content & community management services
- Business intelligence solutions
- Consulting & implementation services

INDUSTRY READINESS TO EMBRACE E-COMMERCE



Ultimate E-marketplace Saturation (% online trade)	
○	> 70%
●	> 60 – 70%
●	> 50 – 60%
○	< 50%

- Industry Readiness Criteria**
- Fragmentation
 - Susceptibility to demand shocks
 - Distribution intensity
- Product Fit Criteria**
- Standardization
 - High volume, low dollar
 - Perishability

Certain Industries Are More Ready Than Others To Adopt E-Commerce

Source : Forrester



IMPACT OF E-COMMERCE ON TRADE PATTERNS IN ASIA

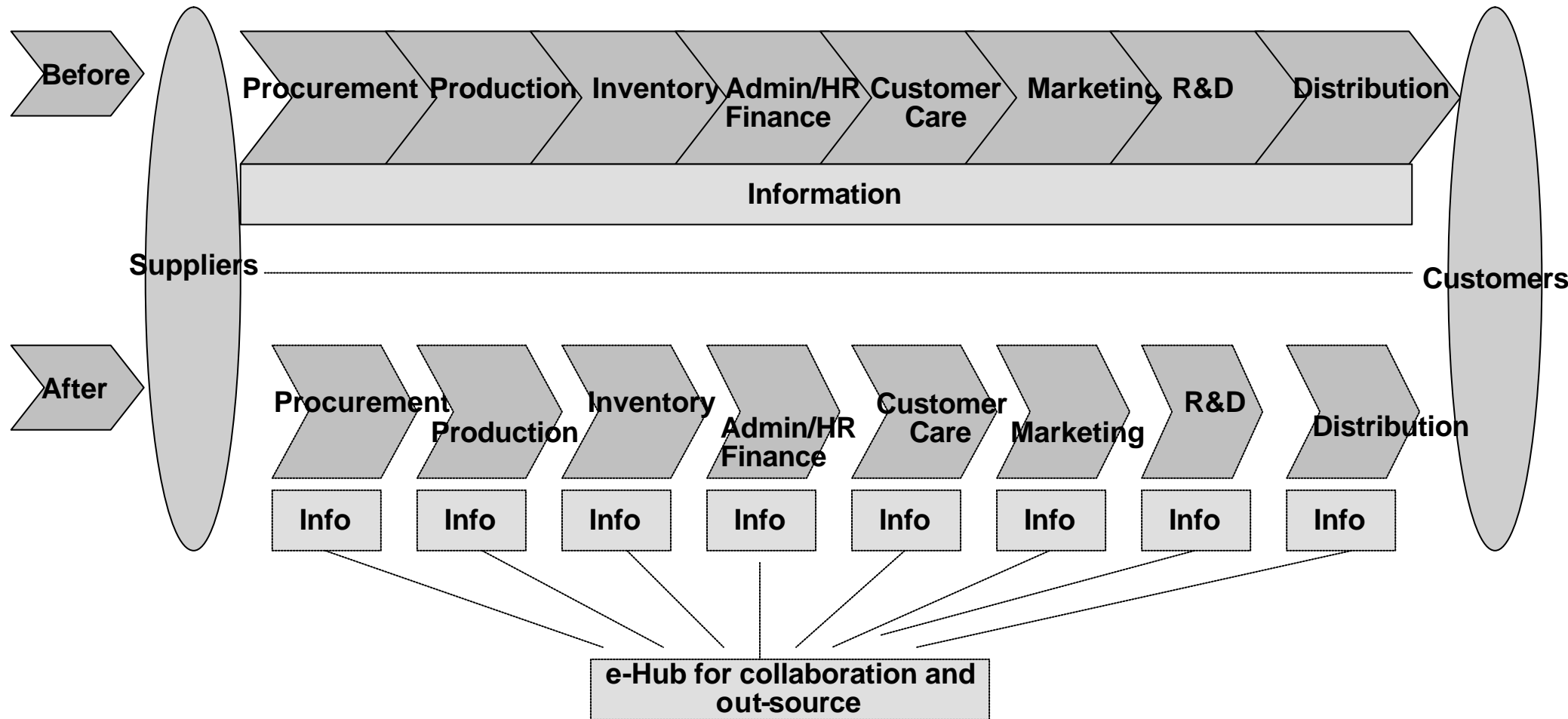
- **Underlying economic trends in the Asia Pacific region:**
 - ◆ **Fastest growing region in the world for PC and mobile phone adoptions**
 - ◆ **Migration of manufacturing facilities from Japan, Korea, Taiwan and Southeast Asia, to China and Indochina**
 - ◆ **WTO movements provide additional export & import opportunities for Asian traders/manufacturers with US and Europe**
- **Improving Asian government support:**
 - ◆ **Driven to promote e-commerce standards and macro development that best position Asia for Chapter 2 of the Internet Revolution**
- **Collaborative commerce offers fresh opportunities to streamline existing inefficient multi-level supply & demand chains:**
 - ◆ **Between final seller and buyer: ~3-4 intermediaries in Asia; ~1-2 in Europe/US**
 - ◆ **Cost effective internet-based SCM solutions can significantly reduce level of excess inventory in manufacturing-dominated Asian economies**
 - ◆ **Real-time visibility to supply & demand chains enhances trade velocity**

E-COMMERCE WILL FURTHER ENHANCE TRADE LIBERALIZATION

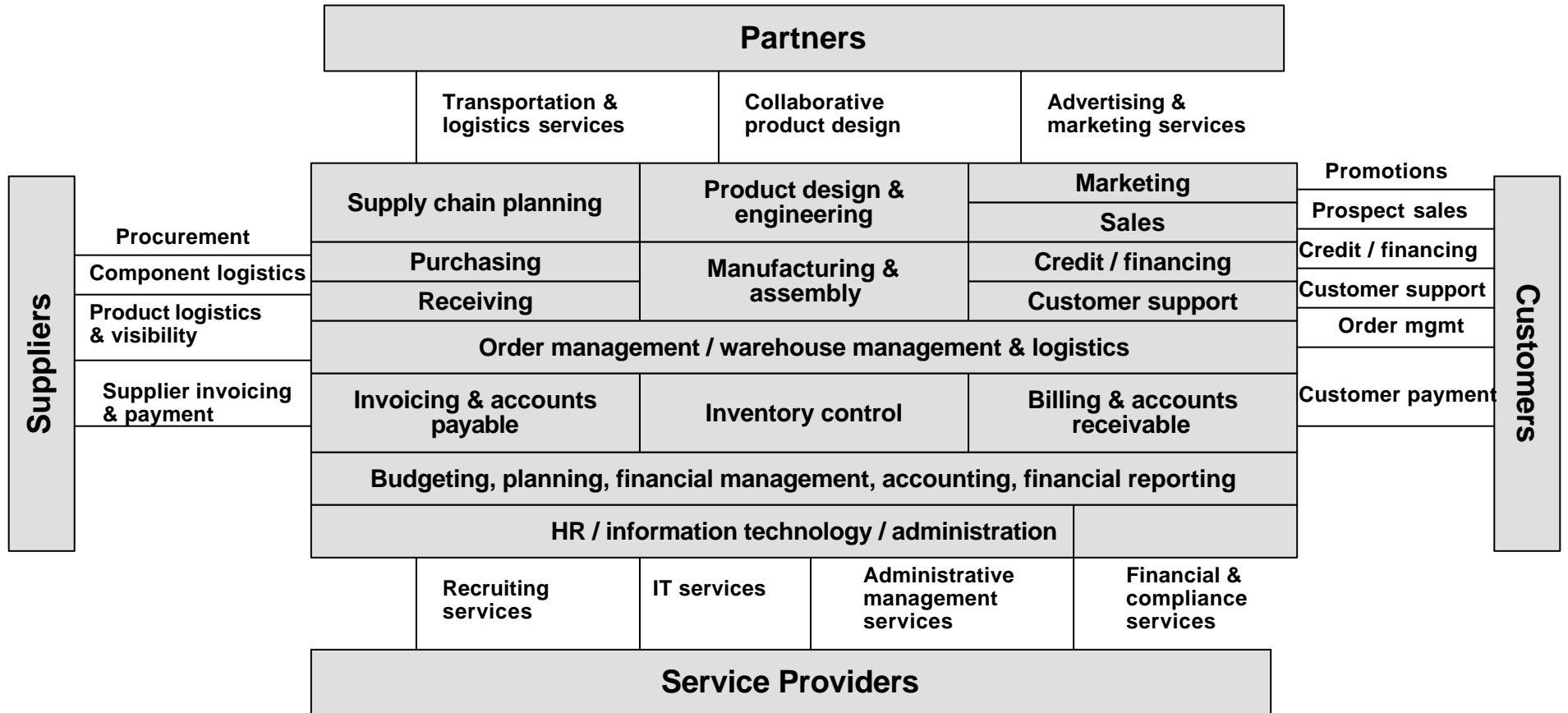
- **Collaborative commerce management services will enable trading partners to better pursue comparative advantage:**
 - ◆ **Expand everyone's market reach potential**
 - ◆ **Reduction of both external and internal transaction cost to be shared between sellers and buyers**
 - ◆ **Identify industry best practice**

- **Traditional trading hub (such as Hong Kong and Singapore) with physical concentration of information availability and value-added services (banking, legal, accounting. etc) will need to continue to innovate to find new value propositions to retain existing competitive advantages**

IMPACT OF E-COMMERCE ON BUSINESS FUNCTION



OPPORTUNITIES TO IMPROVE BUSINESS FUNCTIONS IN ONLINE COLLABORATIVE COMMERCE



— Opportunities

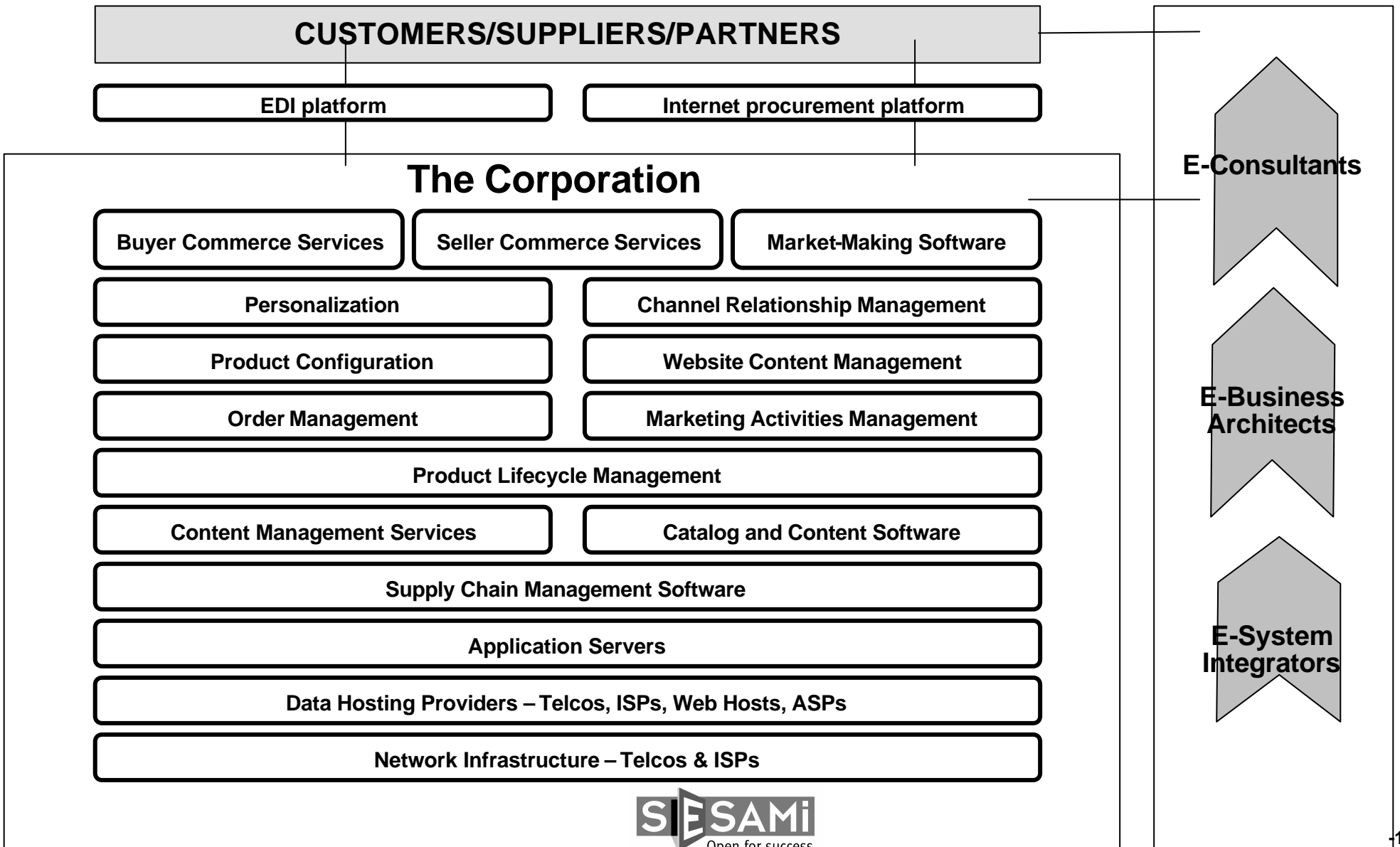
FDI FLOW CLOSELY INTERACTS WITH TRADE FLOW

- **Three driving motivations behind FDI flow:**
 - ◆ **Market access**
 - ◆ **Comparative advantage in resources and infrastructure**
 - ◆ **Financial returns**

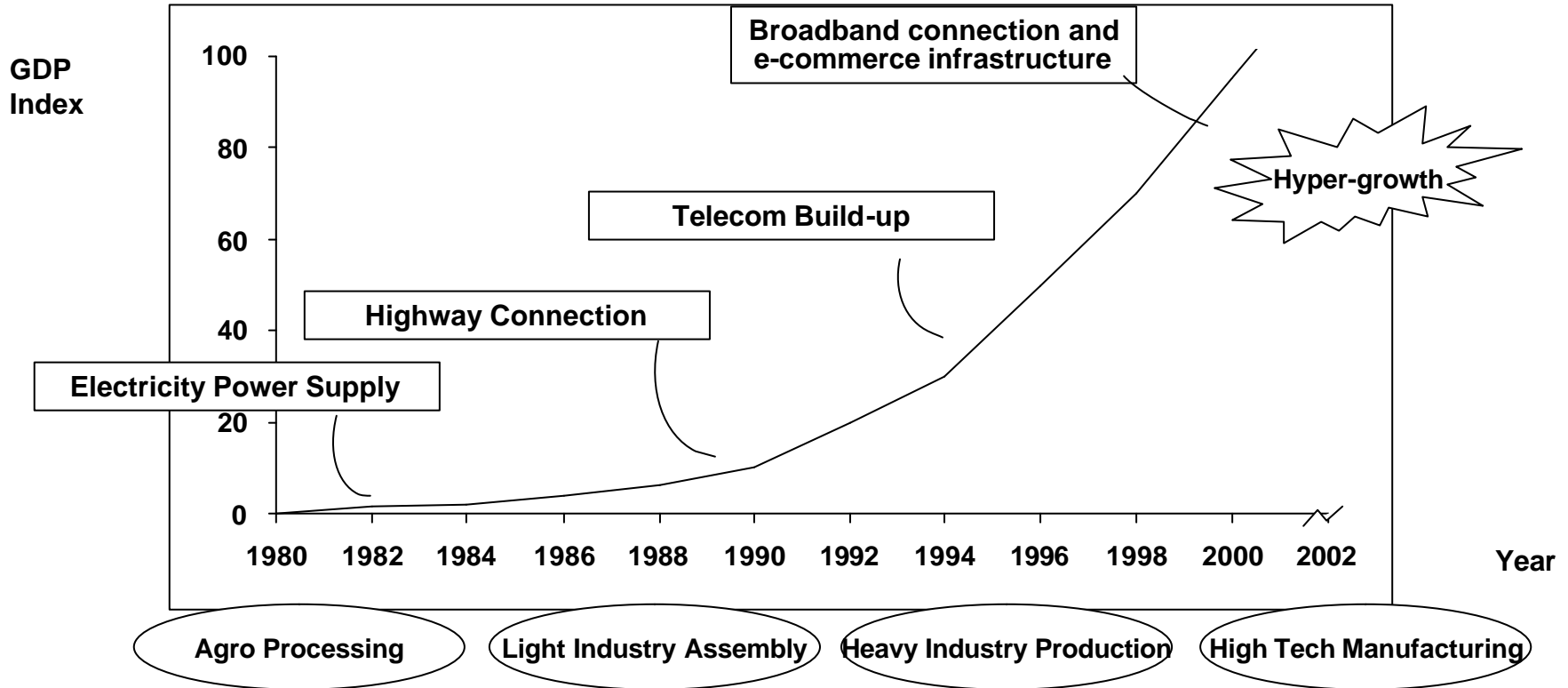
- **Countries are liberalizing access to domestic markets to attract more FDI**
 - ◆ **Approved investments jumped 50% in anticipation of China's entry into WTO**
 - ◆ **Singapore is forging bilateral trade agreements with countries in North Asia and beyond to position Singapore, and indirectly, rest of ASEAN as an alternative manufacturing base to China**

- **Countries are racing to advance their e-commerce infrastructure to maintain continuous FDI in-flow**
 - ◆ **Hong Kong**
 - ◆ **Shanghai & other economic zones, China**
 - ◆ **Singapore**
 - ◆ **Clark Field, the Philippines**
 - ◆ **KL & Penang, Malaysia**

FDI IS TO POWER THE BUILD-UP OF INFRASTRUCTURE FOR E-COMMERCE BUSINESS FUNCTIONS



CASE STUDY: KUNSHAN ECONOMIC AND TECHNOLOGY DEVELOPMENT ZONE, SHANGHAI, CHINA



Kunshan Government plans to invest in e-commerce software platform to help tech manufacturing companies to better collaborate with suppliers and brander owners globally

KEY TAKE-AWAYS

- **E-commerce facilitates trade liberalization and FDI through collaborative commerce services**
- **FDI has become focused on field of collaborative commerce infrastructure services and certain business functions**
- **Asian governments are progressing to establish effective e-commerce infrastructure to attract trade and FDI flows**
- **Asian corporations are embracing e-commerce, albeit at differing speed, to better trade, collaborate and compete with the rest of the World**



6th APEC Investment Forum
Restructuring FDI in the
Age of Information Technology

PARADIGM SHIFTS IN INTERNATIONAL BUSINESS

Speaker: Kathryn Gordon

OECD -- Division of International Investments and Multinational Enterprise

Change, Continuity and Shifts in the Business Landscape



- ◆ **Change is the one constant in OECD economic history**
- ◆ **Organisational change => large menu of organisational forms**
- ◆ **Innovations in market structure => need “visible” supports to the “invisible hand”**



Complexity and unpredictability

- ◆ **Information Age will deepen and extend existing market trends**
- ◆ **Results are likely to be unpredictable**
- ◆ **=> Need for robust public and private governance allowing countries to adapt**



... Investment Policy in the Information Age

- ◆ **OECD investment advice still valid**
- ◆ **Global governance**
- ◆ **Global culture shock**
- ◆ **Global digital divide**

FDI in Canadian Knowledge Based Industries

Andrew A. Foti
Partner – Ogilvy Renault

FDI in Knowledge Based Industries

Andrew A. Foti*
Partner - Ogilvy Renault

Introduction

Over the course of the last decade there has been a significant increase in global foreign direct investment ("FDI").¹ This growth has been paralleled by the development of the technology sector, which has in part relied on capital inflows from this form of investment. The relationship between FDI growth and the emergence of the technology sector in Canada is not likely to be entirely coincidental, though the correlation between the two does not appear to have been the subject of much analytical work to date.

The recent trends in FDI flows, coupled with international patterns of investment liberalization and facilitation, reinforce the importance of this method of investment to the development of high-tech industries. It is apparent that policy and legal environment

* The assistance of Mike Owen, Student-at-law, in the research and preparation of this paper is gratefully acknowledged.

¹ The OECD benchmark definition of foreign direct investment describes this form of investment in the following manner:

Foreign direct investment reflects the objective of obtaining a lasting interest by a resident entity in one economy ("direct investor") in an entity resident in an economy other than that of the investor ("direct investment enterprise"). The lasting interest implies the existence of a long-term relationship between the direct investor and the enterprise and a significant degree of influence on the management of the enterprise. Direct investment involves both the initial transaction between the two entities and all subsequent capital transactions between them and among affiliated enterprises, both incorporated and unincorporated.

See: OECD, *OECD Benchmark Definition of Foreign Direct Investment*, 3rd Ed. (Paris: OECD, 1996).

will be extremely important in liberalization and facilitation of FDI in the high-tech sectors.

These underlying developments in FDI in many respects are consistent with the founding principles of APEC. The Joint Statement released at the 1989 Ministerial Meeting in Canberra emphasized the importance of assessing the prospects for increased investment flows.² This principle was later expanded upon by the Declaration of Common Resolve issued by APEC leaders during their meeting in Bogor Indonesia in 1994.³ This Declaration directed APEC to pursue both the liberalization and facilitation of investment in member countries. The leaders also expressed their desire to achieve free and open investment between all member states by 2020.⁴

Trends in FDI and Technology

The growth in FDI has been dramatic in recent years. In 2000 global FDI flows are expected to exceed \$1 trillion (U.S.) an increase of over 16% over 1999.⁵ This rate of growth is actually lower than the 27% increase in FDI in 1999. Similarly, the average increase over the last decade was nearly 23%.⁶ This reflects the slowdown in outward

² Asia Pacific Economic Co-operation, Ministerial Meeting, *Joint Statement*, (1989). This statement also committed members to specifically further co-operation in the area of investment by enhancing the comparability of FDI statistics. This principle was later confirmed by the objectives outlined in the Seoul APEC declaration. See: Asia Pacific Economic Co-operation, Ministerial Meeting, *Seoul APEC Declaration*, (1991).

³ Asia Pacific Economic Co-operation, Economic Leaders Summit, *Declaration of Common Resolve*, (1994).

⁴ *Ibid.* APEC has also attempted to stimulate the development of the technology sector through the establishment of bodies such as the E-commerce Task Force and the Telecommunications Working Group.

⁵ Todd Evans, *Foreign Direct Investment Monitor* (Ottawa: Economic Development Corporation, 2000) at 1.

⁶ *Ibid.*, at 2.

FDI in the United States stemming from the recent downturn in the technology sector. Overall FDI, however, is expected to continue to increase over the next few years but at a more subdued pace.

Almost 83% of global FDI flows occurred through mergers and acquisitions.⁷ Developed countries, especially the European Union and the United States, dominated these mergers and acquisitions. The value of cross border mergers and acquisitions for developed countries reached its highest point in 1999 at \$645 billion (U.S.), a 45% increase from 1998.⁸ In contrast, mergers and acquisitions in emerging markets accounted for only 37% of FDI inflows between 1997-99, an increase of only 17% from the early 1990s.⁹ A significant portion of the mergers and acquisitions activity between developing countries reflects activity in the high-technology sector.

FDI in the Technology Sector

The increase in mergers and acquisitions in the high-technology sector in developed countries is linked in large part to a shift in the motivation for FDI.

In the past FDI was often undertaken as a method of tariff avoidance.¹⁰ However, the creation of regional trade arrangements such as NAFTA and MERCOSUR, coupled with the Marrakesh agreement, has greatly reduced tariff barriers

⁷ A direct investment enterprise is defined by the OECD as an incorporated or unincorporated enterprise in which a foreign investor owns 10 percent or more of the ordinary shares or voting power of an incorporated enterprise or the equivalent for an unincorporated enterprise. OECD, *supra* note 1, at 8.

⁸ Evans, *supra* note 5, at 4.

⁹ *Ibid*, at 5.

¹⁰ R. Barrell and N. Pain, "Foreign Direct Investment, Technological Change and Economic Growth within Europe" (1997) 107 *The Economic Journal* 1770 at 1772.

to trade. It is clear that tariff avoidance is not as important as it once was, as FDI has increased steadily, concurrent with global trade liberalization.¹¹

Another traditional explanation for FDI is the comparative advantage that other countries offer investors. Comparative advantages usually flow from the cost of factor inputs in the host country. These factors include wages, raw materials and the price of supplier inputs in the local economy. Indeed, a fair amount of FDI particularly in the manufacturing sector is motivated by low labour and materials costs in emerging markets.¹² An analysis of the comparative advantages between countries is still relevant as it reflects the motives of many investors that decide to invest in emerging markets.

Two models have been advanced to explain the recent spate of mergers and acquisitions in research and development oriented high-tech corporations: home-base-exploiting ("HBE") and home-base-augmenting ("HBA").¹³

High-tech firms attempting to develop foreign markets will be faced with a choice of licensing technology to a domestic producer, exporting the product or establishing their own operations in the host country.¹⁴ If the foreign market is large and potentially lucrative these conditions will justify the costs associated with acquiring or establishing facilities through FDI. Other factors such as a limited capacity in the home country to increase production, coupled with high transportation costs, may also influence this

¹¹ *Ibid.*

¹² J.R. Baldwin and P. Hanel, *Multinationals and the Canadian Innovation Process* (Ottawa: Statistics Canada, 2000) at 3.

¹³ W. Kuemmerle, "The Drivers of Foreign Direct Investment into Research and Development: An Empirical Investigation" (1999) 30 *Journal of International Business Studies* 1 at 3.

decision. Another advantage associated with this model is the protection it provides confidential information. This means that the affiliate and the parent are better able to maintain control of the distribution of technology in markets that it is at risk of being pirated.

Research facilities established through FDI are posited to be HBE in nature. In the high-tech sector, HBE research and development is required to adapt existing products to local needs, and to transfer knowledge and prototypes from the corporate headquarters.¹⁵ The latter requirement is particularly important in high-tech industries where constant improvements are necessitated by advancing technology. In the high-tech sector the flow of this type of information between geographically dispersed locations has been greatly facilitated by advances in technology that permit instantaneous communication and transfer of information.¹⁶ The HBE model has been criticized because MNEs frequently transfer dated technology and the amount of innovative research and development flowing from this type of investment is supposedly truncated.¹⁷ This may be true in part, but recent studies suggest that the technological benefits from this form of investment are still considerable. Consequently, HBE facilities are established to develop target markets for new technology.

Another model for FDI in research and development that is known as home-based-augmentation (“HBA”). This occurs when corporations establish facilities in

¹⁴ *Ibid.*

¹⁵ *Ibid.*, at 3.

¹⁶ Baldwin, *supra* note 12, at 2.

¹⁷ This is largely due to the technology gap between developed and emerging markets. In many instances it is impossible for MNEs to conduct leading edge technology in economies that have few

locations to take advantage of local technological advances by corporations in that region.¹⁸ These regions have been referred to as high-tech clusters. They are characterized by a stable economy with a large available workforce of well-trained scientists and professionals. These areas often have universities and government research facilities that create an environment of technological development.¹⁹ High-tech corporations are attracted to these regions to gain knowledge and participate in the technological development that is specific to that area.

The HBA model is supported by data on the U.S. high-tech sector which indicates that the decision of foreign firms to locate in the West Coast region was driven by the desire to secure joint ventures with other technology firms, as well as the availability of skilled labour.²⁰ The HBA model clearly provides a basis for the flood of acquisitions in the high-tech sector that has occurred between developed countries. Acquiring an equity interest or entering a joint partnership with firms in these developing “tech clusters” is one way in which corporations are able to quickly increase their research knowledge base.

Investment Liberalization

Another trend that is closely related to this the desire to develop high-tech industries is the increasing FDI liberalization of many countries. In the European Union, for example, the level of investments between members has risen sharply since the

engineers, scientists or other professionals. See: A.J. Glass and K. Saggi, "International Technology Transfer and the Technology Gap" (1998) 55 *Journal of Developmental Economics* 369.

¹⁸ Kuemmerle, *supra* note 13.

¹⁹ *Ibid.*

²⁰ P. Haug, "Survey Evidence on the International Operations of High-technology Firms" (1991) 30 *Management International Review* 63 at 72.

1980s with the common deregulation of national capital and product markets.²¹ Although not all liberalization of foreign investment policies has been successful, the recent reduction in barriers by China, India and Vietnam has led to an increase in FDI in all of these countries.²² Other countries such as Korea have also recently followed suit.²³

This trend is closely related to the desire of these countries to encourage high-tech FDI in their economies. Emerging economies have a more limited capacity to develop sophisticated high-tech industries in a timely manner than more developed economies. Attracting sufficient knowledge and developing these industries is extremely difficult, particularly in light of the rapid rate of obsolescence of many technologies. As a result, it has been observed that technology must frequently be captured through diffusion from other sources.²⁴ Research and development spillover is a primary method through which technology is spread in situations involving FDI. The reduction of barriers to FDI can be understood as a method by which emerging economies capture such research and development effects. For example, Mexico, Brazil, India and China all view FDI as a potential method for technology transfer.²⁵

Research and development spillover may occur in many different ways. In many cases the competition of foreign owned firms will lead to the rapid adoption of new

²¹ Barrell, *supra* note 10, at 1771.

²² N. Kumar and K.S.K. Marg, "Foreign Direct Investment and Technology Capabilities in Developing Countries: A Review" (2000) 23 *International Journal of Public Administration* 1253 at 1256.

²⁴ *Ibid*, at 1255.

²⁵ Glass, *supra* note 17, at 370.

technology and best management techniques through demonstration effects.²⁶ In essence, domestic industries will be forced to imitate the affiliate's behaviour in order to remain competitive. Local suppliers may also gain technical knowledge from an affiliate of an MNE such that they are better able to provide inputs for production. The training and knowledge that foreign MNEs provide local employees is also significant as this is indirectly passed to domestic producers when they hire these individuals.²⁷ Spillover effects also have a significant impact on a domestic corporation that is subjected to a takeover, or a merger with an MNE. In such cases the reorganization and introduction of new ideas may vitalize the corporation.²⁸

Investment Facilitation

The reduction and elimination of direct barriers to foreign investment is not the sole reason for the increase in FDI, however. There are several regulatory barriers flowing from other measures that also have an impact on the level of investment. The structure of these measures will either hinder or facilitate FDI. The most significant of these include: competition and anti-trust policies, telecommunications regulation, corporate law, and international trade agreements. The recent developments with respect to these measures have also had a significant impact on FDI.

Competition and Anti-Trust Policies

The development of competition and anti-trust measures has become increasingly important to ensuring an equitable environment for trade and investment.

²⁶ S. Globerman and D. Shapiro, *Canadian Government Policies Toward Inward Foreign Direct Investment* (Ottawa: Industry Canada, 1998) at 5.

²⁷ Barell, *supra* note 10, at 1777-78.

²⁸ *Ibid*, at 1777.

In 1999, approximately 82 countries had some form of competition regulation.²⁹ Almost 52 of these regimes, however, had been implemented within the last 10 years. Another 24 countries were attempting to draft some form of competition measures at that time. This trend was motivated, in part, by increased competition arising from the high-tech sector. As many of the technologies are knowledge based these products may compete against other products almost immediately on a regional or global level.³⁰

Other developments have occurred in the context of regional trade agreements. Under Chapter Fifteen of NAFTA, the parties are to maintain measures to curb anti-competitive conduct.³¹ The parties have also agreed to co-operate in notification, consultation, legal assistance and enforcement with respect to competition regulation. Other provisions require periodic consultations between the parties and provide for state and private monopolies in a limited number of instances.³² The provisions contained in Chapter 15, however, are not subject to the dispute settlement mechanism. There have also been suggestions by Canada and Mexico that NAFTA competition policy may be more appropriate than the current provisions.³³ Consequently, there has been some suggestion that these policies may expand under the FTAA negotiations.

²⁹ Robert Pitofsky, "Competition Policy in a Global Economy – Today and Tomorrow" (1999) *Journal of International Economic Law* 401.

³⁰ *Ibid.*

³¹ M. Warner, "International Aspects of Competition Policy – Possible Directions for the FTAA" (1999) 22 *World Competition* 1 at 2.

³² *Ibid.*, at 2-3.

³³ *Ibid.*, at 3.

In addition to these initiatives there is a serious dialogue developing with respect to the potential for multilateral international controls.³⁴ In 1993 the “Munich Group” circulated the Draft International Antitrust Code (“DIAC”). This code designed as a plurilateral agreement under Annex 4 of the WTO.³⁵ Another report by the European Community in 1995 also suggested a plurilateral agreement under Annex 4 of the WTO. This report indicated that a world competition code was probably unfeasible. Instead they purposed that members ratifying the agreement would adopt “core principles” concerning competition within their domestic regulations.³⁶ These initiatives led to the development of a WTO Working Group on the Interaction between Trade and Competition Policy. These developments in domestic and international competition policy are likely to have an important impact on FDI by large MNEs.

Telecommunication Regulation

The telecommunications sector has typically been one of the most heavily regulated. At the same time, this industry is one of the most important in the global economy with estimated sales of goods in services expected to exceed \$1.25 trillion (U.S.) in 2000.³⁷ The global telecommunications sector has been subject to liberalization through both regional trade agreements and WTO measures.

³⁴ The concept of global competition policy is not new as it actually originated with the Havana Charter. Unfortunately, GATT, 1947 did not adopt the anti-trust code contained in this agreement after its failure. See: Clifford Jones, “Toward Global Competition Policy? The Expanding Dialogue on Multilateralism” (2000) 23 *Journal of World Competition* 95.

³⁵ *Ibid.*, at 96.

³⁶ *Ibid.*

³⁷ R. Bala & K. Kennedy, *World Trade Law* (Charlottesville: Lexis Law Publishing, 1998) at 1289.

The telecommunications sector was included in the initial Uruguay Round of negotiations in 1986.³⁸ These negotiations produced the *General Agreement on Trade Services* (“GATS”) that included market access and national commitments by several countries with respect to value-added or enhanced telecommunications services. Furthermore, the *Annex on Telecommunications* attached to GATS required members to permit service suppliers to access existing public telecommunications networks.³⁹ Unfortunately, the initial negotiations were not able to reach a consensus on basic telecommunications. This led to the formation of a separate negotiations group that concluded the *Agreement on Basic Telecommunications* (“ABT”) in February 1997. This agreement was supplemented by the WTO Reference Paper on Basic Telecommunications that was adopted by most signatories of the ABT by incorporating this document into their schedule of commitments under GATS. This reference paper is particularly significant because of the regulatory principles that it includes.

The division between basic services and enhanced services is not entirely certain. GATS defines basic telecommunications to include: transport networks or facilities and transport services. Transport services involve the real-time transmission of customer-supplied information between two points. In contrast, enhanced services include: electronic mail, voice mail, on-line information and data base retrieval, electronic data interchange and enhanced facsimile, code and protocol conversion and

³⁸ Chantal Blouin, *Trade in Telecommunications Services: The Results of the WTO Agreement on Basic Telecommunications*, (Ottawa: Department of Foreign Affairs and International Trade, 1999) at 4.

³⁹ *Ibid.*

online information and data processing.⁴⁰ It is debatable, however, that internet access services may fall under the definition of basic telecommunications.⁴¹ The selective nature of many of these regimes has resulted in a diverse regulatory landscape. The telecommunications provisions of *GATS* and *ABT* have been criticized for achieving only a limited amount of liberalization as many of supposed concessions pre-dated these agreements. Furthermore, a large number of members have made only limited concessions under *GATS* while abstaining from signing the *ABT*.

Corporate Law

There are a number of corporate law provisions that may also have an impact on FDI. The most important amongst these are residency requirements. The requirement of many corporate law statutes to ensure that the majority of directors are resident citizens is often a hindrance to foreign investment. Aside from these considerations the corporate law of a host country must be clear and predictable. The protection of minority shareholders will often be a desirable feature for foreign investors that are only concerned with acquiring a portion of the corporation. It should also be flexible enough to provide different alternatives for the method of FDI.

International Trade Agreements

There are two principal trade agreements that have had an impact on FDI in the high-tech sector. These agreements are *Trade Related Investment Measures* (“*TRIMs*”) and the *Information Technology Agreement* (“*ITA*”).

⁴⁰ USITC, *General Agreement on Trade in Services: Examination of Major Trading Partners Schedules of Commitments (Canada, EU, Japan and Mexico)*, Investigation No. 332-358, USITC Publication 2440 (1995) 1.

⁴¹ Canada, *Electronic Commerce and International Trade Rules*, (2000) at 9.

The *TRIMs* agreement emerged out of the Uruguay round of negotiations. It relates exclusively to investment measures. These measures are policies imposed by a government on a foreign investor that are conditions precedent to investment in the country.⁴² These measures may be positive (e.g. subsidies) or negative (e.g. local equity requirements, profit remittance restrictions, transfer of technology requirements, local content requirements). The *TRIMs* agreement builds on Article III of the *GATT, 1994*, which requires members to provide national treatment to imported products. It is also closely related to Article IX that prohibits quantitative restrictions on the importation or exportation of goods.⁴³

The *TRIMs* agreement essentially prohibits mandatory investment measures requiring the purchase or use of domestic products, limiting the purchase of local products to the volume of local products that are exported, or to tie access to exchange to an investor's foreign exchange earnings.⁴⁴ The agreement was to be implemented within 2 years for developed countries, 5 years for developing countries and in 7 years for least developed countries. At Seattle, eight developing nations applied for an extension of this time frame, but this has not been forthcoming.⁴⁵ The scope of the agreement is fairly limited as it only ensures the free import/export and sale/purchase of foreign goods. It has been reported that only 6 % of all US affiliates were beneficially

⁴² Bala, *supra* note 37, at 137.

⁴³ *Ibid*, at 136.

⁴⁴ *Ibid*, at 137.

⁴⁵ R. Schlegelmilch, "WTO: Why Still no Multilateral Rules for Foreign Direct Investment" (2000) 6 *International Trade Law and Regulation* 78 at 82.

affected by these measures.⁴⁶ As a result, the impact of *TRIMs* on FDI in the high tech sector is limited.

In contrast, the *ITA* is directly related to FDI growth in the high-tech sector and was initiated through industry pressure to reduce barriers to trade.⁴⁷ This agreement was reached in December 1996. The signatories of the *ITA* are to eliminate all duties on a wide range of high-tech products.⁴⁸ This process was to have begun on July 1, 1997 and was to be completed by January 1, 2000. The signatories comprised approximately 92.5 % of the world IT market share.⁴⁹ The benefits of this agreement will also flow to all members of the WTO regardless of whether or not they are a signatory.

FDI in Canada

The Canadian experience with FDI is illustrative of many of these trends. The implementation of the Canada-US Free Trade Agreement (later NAFTA) in 1989 caused a considerable decrease in inbound FDI in Canada as businesses consolidated their activities in their home countries. At the same time trade liberalization also led to increased FDI in other areas. The Canadian experience demonstrates that FDI is no

⁴⁶ Bala, *supra* note 37, at 138.

⁴⁷ R.E. Vicker, "Semiconductors and Information Technology" (1999) 33 *Journal of World Trade Law* 83 at 91. The Information Technology Industry Council, the American Electronics Association and other interested parties including IBM spearheaded this initiative with the U.S. Department of Commerce.

⁴⁸ Bala, *supra* note 37, at 1303. The initial cuts in electronics tariffs in the Uruguay round achieved reductions of between 50-100%. See: Vicker, *supra* note 46. The IT products included: computers, telecommunications equipment, software, semiconductors, and printed circuit boards. These categories are fairly broad. Computers for example includes supercomputers, mainframe computers, work stations, personal computers, automatic teller machines, calculators and other peripheral products.

⁴⁹ *Ibid*, at 92.

longer primarily motivated by tariff avoidance, as evidenced in part by the steady growth in net investment from the U.S. during the 1990s.

In Canada, FDI in the initial two quarters of 2000 totaled \$33 billion (Cdn) only \$4 billion short of the total FDI in Canada for 1999.⁵⁰ The majority of FDI in Canada originates in the U.S., with investors taking advantage of the favourable exchange rate between the two countries. There is also a significant amount of FDI in Canada originating from the EU.⁵¹ The majority of FDI in Canada occurred through equity exchanges. As equities in the technology sector are devalued due to the current market downturn, the level of mergers and acquisitions activity is expected to diminish.⁵² Almost all of the FDI share purchases in the second quarter of 2000 were related to the high-tech sector.

FDI in the Canadian Technology Sector

It is clear that a fair amount of HBA in Canada is related to the high-tech sector. It appears that HBA investment in the technology triangle between Ottawa, Toronto and Montreal constitutes the bulk of this form of FDI in Canada. This is substantiated by a recent study by John Baldwin and Petr Hanel concerning the research and development activities of high-tech affiliates associated with MNEs that were located in Canada.

This study suggested that the previous hub and spoke relationship between parents and subsidiaries is less applicable than it once was to MNEs. These international corporations are now developing into organizations that resemble a matrix

⁵⁰ Evans, *supra* note 5, at 11.

⁵¹ One of the largest acquisitions in the high-tech sector in Canada was the purchase of Newbridge Network's by Alcatel, which is based in France. See: Evans, *infra*.

⁵² *Ibid.*

rather than the traditional hub and spoke model that has been employed as an analogy for their structural organization.⁵³

This study found that MNEs operating in Canada are larger and tend to be concentrated in the sectors involving substantial use of technology. Affiliates or subsidiaries of foreign MNEs were also found to possess permanent research and development facilities 53% of the time, in contrast with the domestic industry that only had similar facilities 39% of the time.⁵⁴ This difference was even more pronounced when the sample was controlled for size. Among the largest corporations, 71% of affiliates of foreign MNEs had permanent research and development facilities.⁵⁵ In contrast, only 64% of Canadian MNEs and 47% of domestic corporations of a similar size had permanent research and development facilities.⁵⁶ These statistics clearly denote an HBA pattern of research and development and suggest that this is one of the motivating factors for much of the foreign FDI in the high-tech sector.

The study also found that foreign affiliates of MNEs were also more likely to have research and development partners than Canadian firms of a comparable size.⁵⁷ It appears that 41% of foreign affiliates developed research partnerships with their customers whereas only 33% of domestic corporations undertook a similar measure.

⁵³ Baldwin, *supra* note 12, at 3.

⁵⁴ *Ibid*, at 9.

⁵⁵ *Ibid*, at 11. The corporations were broken down into three separate size categories for the purpose of this study. The largest category consisted of firms with over 500 employees. Medium size firms were defined as those with 100 -500 employees while the smallest category consisted of corporations with less than 100 employees.

⁵⁶ *Ibid*.

⁵⁷ *Ibid*, at 16.

The same pattern also existed at Canadian Universities and research institutions. The only area in which domestic firms led their foreign MNE competitors was in partnerships with suppliers and competitors.⁵⁸

Other aspects of the study demonstrated that much of the research undertaken by foreign MNEs is original and innovative. This demonstrates that the local research units do function independently to produce their own ideas and products.⁵⁹ This active pursuit research and development by foreign MNEs in Canada seems to suggest that at least a portion of their FDI may be attributed to a desire to adopt a strategy of HBA. This study also supports the assertion that the research conducted in Canada in the non-technology sectors is not strictly limited to exploitation of the domestic market.

Investment Liberalization in Canada

Although there are currently few restrictions on FDI in Canada, this was not always the case.

In December 1973, the Canadian government passed the *Foreign Investment Review Act* ("*FIRA*").⁶⁰ The *FIRA* regime required that all acquisitions and the establishment of any new enterprise in Canada by a foreign entity be reviewed. If the gross assets of the Canadian entity did not exceed \$250,000 (Cdn) and its gross revenues did not exceed \$ 3 million (Cdn) then it was exempt from review.⁶¹ A new business operating in a field where there were established Canadian businesses was also not subject to review. In order to receive approval under *FIRA* a business had to

⁵⁸ *Ibid.*

⁵⁹ *Ibid.*, at 20.

⁶⁰ S.C. 1973-74, c. 46.

⁶¹ Globerman, *supra* note 26, at 19.

satisfy the government that the FDI would be of significant benefit to Canada. The *FIRA* regime did not review the expansion of an existing line of a foreign business.

The Foreign Investment Review Agency was responsible for enforcing *FIRA* to ensure that foreign investors met a number of criteria that reflected whether or not it would be a benefit to Canada. The Agency would negotiate with foreign investors in an attempt to secure economic rents. The process was subject to severe criticism because of the high transaction costs it imposed and its confidential nature. Consequently, an abbreviated process was soon adopted for smaller transactions and the minimum threshold for reviewable investments was also raised.

In 1985, the *FIRA* was replaced by the *Investment Canada Act*.⁶² Under this statute a "greenfield" operation or a business acquisition under \$5 million (Cdn) only requires notification of the transaction. If a direct acquisition exceeds \$5 million (Cdn) or an indirect acquisition exceeds \$50 million (Cdn) then it will be subject to review. The *Investment Canada Act* also permits a review of new businesses, and acquisitions that are related to Canada's cultural heritage or identity. These restrictions were further loosened in 1989 under the Canada-U.S. Free Trade Agreement. This raised the upper limit for direct acquisitions by U.S. investors to \$150 million (Cdn). These thresholds were later extended to Mexico under NAFTA. Even if the establishment or acquisition of a business by a non-Canadian in Canada does not meet these thresholds, it should be noted that notification is required either prior to or within 30 days following establishment or acquisition of the business in Canada.

⁶² R.S.C. 1985, c. 28 (1st Supp.).

The spillover effects in the information technology sector in Canada are, to a certain extent, attributable to FDI. A recent study examined spillovers in information technology and their effect on labour productivity growth in Canadian industries.⁶³ The study concluded that spillovers originated from foreign sources and were primarily international in scope. The study also determined that the spillovers in all sectors of the Canadian economy had an impact on labour productivity, but that this effect was more pronounced in the information technology sector.⁶⁴ The authors concluded by emphasizing the importance of continued FDI in developing the information technology capabilities, and through this, improving domestic labour productivity.

Another study commissioned by Industry Canada examined the impact of technology transfers and spillovers from FDI on the cost of production and total factor productivity, as well as the effect of FDI on the demand for factor inputs (i.e. capital, labour and materials).⁶⁵ This study found that FDI reduced the cost of production in all industries.⁶⁶ Similarly, the study found that FDI between 1973-1992 increased total factor productivity growth an average of 0.5 percent on an annual basis.⁶⁷ The effect of international research and development was also important. The effects of international

⁶³ Gera et al., "Information Technology and Labour Productivity Growth: An Empirical Analysis for Canada and the United States" (1999) 32 *Canadian Journal of Economics* 384 at 385.

⁶⁴ *Ibid*, at 401.

⁶⁵ Gera et al., *Foreign Direct Investment and Productivity Growth: The Canadian Host-Country Experience* (Ottawa: Industry Canada, 1999) at 2.

⁶⁶ *Ibid*, at 18. The largest gains were reported in the energy sector where every 1 percent increase in the FDI stock reduced the total cost of production by 0.5 percent in the long run.

⁶⁷ *Ibid*, at 19.

research and development spillovers also reduced demands on physical capital, labour and other inputs.⁶⁸

Investment Facilitation in Canada

In general Canada has become increasingly sensitive to the indirect impact of measures on domestic FDI inflows. As in other countries competition policy, telecommunications regulation, corporate law, and international trade agreements have all had affected FDI in Canada. As a result, measures in these areas have focused on facilitating FDI through simple structures that minimize indirect barriers.

Competition and Anti-Trust Policy

It is well established that competition policy has an important effect in FDI flows.⁶⁹

Part IX of the *Competition Act* contain several pre-notification requirements that are relevant in the context of FDI.⁷⁰ These provisions are administered by the Pre-notification Unit of the Mergers Branch in the Competition Bureau.⁷¹ The provisions under Part IX are applicable to four types of acquisition transactions when they exceed certain thresholds.

⁶⁸ *Ibid*, at 21.

⁶⁹ The first statute regulating competition in Canada was *An Act for the Prevention and Suppression of Combinations formed in Restraint of Trade*, S.C. 1889, 52 Vic., c. 41. This statute and its antecedent the *Combines Investigation Act*, S.C. 1910, 9-10 Edw. VII, c. 9. were generally considered to be ineffectual. See: C.D. Baggaley, "Tariffs, Combines and Politics: The Beginning of Canadian Competition Policy, 1888-1900" in R.S. Khemani & W.T. Stanbury, eds., *Historical Perspectives on Canadian Competition Policy* (Halifax: Institute for Research on Public Policy, 1991) 1 at 47.

⁷⁰ R.S.C. 1985, c. C-34.

⁷¹ A.M. Lally, "The Canadian and United States Pre-Merger Notification – A Comparison" (1999) Annual Fall Conference on Competition Law – National Competition Law Section at 6.

There are essentially two types of thresholds: a threshold related to the size of the parties and the a threshold related to the transaction. In order to require pre-merger notification the both of these thresholds must be exceeded.

The party-size threshold requires the parties to the transaction and their affiliates to have in excess more than \$400 million (Cdn) in gross assets or annual revenues from sales in, from or into Canada.

The transaction size threshold depends on the type of transaction. If the transaction is an asset acquisition, the business must have assets in Canada or annual gross revenues from sales of more than \$35 million (Cdn). If the transaction is a share acquisition, the business must meet the criteria for the asset acquisition. In addition, the purchaser must also acquire more than 20% of the voting shares of a public company or more than 35% of the voting shares of a private corporation. If the corporation acquiring the shares already controls in excess of 20% of a public company or 35% of a private company, then the transaction will also require notification if the control acquired exceeds 50% of voting shares. If the transaction is an amalgamation then the combined business must exceed \$ 70 million (Cdn) in gross assets or annual gross revenues carried out in Canada. Finally, if the transaction involves an unincorporated combination, the subject matter of the combination must have assets in Canada or annual gross revenues from sales in or from Canada of more than \$35 million (Cdn).⁷²

These provisions also apply to acquisitions in the interest of a partnership or other business combination if the gross book value of the Canadian assets or gross

⁷² *Ibid*, at 19-20.

revenues from sales in Canada exceed \$35 million (Cdn).⁷³ Exemptions from pre-merger notification requirements are limited, but now include a provision to exempt asset securitization transactions.⁷⁴

The pre-notification requirements act as an indirect barrier to FDI in Canada regulating mergers and acquisitions that may have an anti-competitive effect. Other provisions contained in the *Competition Act*, however, facilitate FDI. The provisions contained in section 50(1) preventing price discrimination and predatory pricing for example ensure that “greenfield” investment is given an opportunity to compete fairly against foreign and domestic rivals operating in the domestic market.

The Canadian government has also attempted to increase the amount of bilateral co-operation between the Competition Bureau and its foreign counterparts. This is demonstrated through the provisions of NAFTA Chapter 15 that necessitates co-operation on competition law enforcement, mutual legal assistance and information exchange. In addition, Canada has continued to strengthen co-operation with the United States and other countries under the auspices of the *Mutual Legal Assistance in Criminal Matters Act*.⁷⁵ This permits the Canadian government to enter into reciprocal

⁷³ *Ibid*, at 20.

⁷⁴ These exemptions include:

1. Activities that do not constitute an “operating business” as defined under section 108(1) then *Competition Act*;
2. Mergers among affiliated parties;
3. Transactions for which the Commissioner has issued an Advanced Ruling Certificate;
4. An acquisition of goods in the normal course of business;
5. Shares acquired solely for underwriting purposes;
6. Credit Transaction acquisitions; and
7. Certain unincorporated business combinations.

⁷⁵ R.S.C. 1985, M-13.6, c. 30 (4th Supp.).

assistance treaties with other countries.⁷⁶ This measure culminated in 1995 with the adoption of the *Co-operative Enforcement Agreement*. This agreement extended a previous Memorandum of Understanding signed in 1984. The *Co-operative Enforcement Agreement* is specifically designed to strengthen co-operation and co-ordination between competition authorities.⁷⁷ A similar agreement also exists with the European Union.⁷⁸ In addition to these state to state agreements Canada also has several inter-agency agreements that facilitate co-operation.

Canada has committed itself to pursuing a WTO framework agreement on competition policy. This framework would promote a level of compatibility in the application and enforcement of basic objectives and rules.⁷⁹ These “core principles” would permit member countries to maintain their own distinct competition regimes while facilitating co-operation and co-ordination. In this respect it has aligned itself with the European Union and Japan to achieve this objective.⁸⁰

Telecommunications Regulation

Another area where some efforts to facilitate FDI has occurred in Canada is in relation to telecommunications regulation. In Canada, as in many other jurisdictions, this sector was traditionally constrained in terms of foreign participation. This was situation was dramatically altered by a series of agreements.

⁷⁶ Warner, *supra* note 34, at 4.

⁷⁷ *Ibid*, at 6-7.

⁷⁸ Canada, *Working Group on the Interaction between Trade and Competition Policy - Communication from Canada*, WTO Doc. WT/WGTCP/W/146 (2000).

⁷⁹ *Ibid*.

⁸⁰ *Ibid*.

Chapter Thirteen of NAFTA applies the investment and service provisions to the telecommunications industry. The provisions of Chapter Thirteen consist of five principal obligations. Article 1302 obliges parties to ensure that public transport networks and services are available to firms from other NAFTA parties for equipment connection for intra-firm communications. The provisions of Chapter Thirteen also required NAFTA parties to authorize firms of the other parties to provide enhanced telecommunications services.⁸¹ Third, regulatory standards related to attachment of equipment to public networks were restricted to those that were necessary and the parties agreed to accept the test results conducted by each other. Monopolies on public telecommunications transport network were required to refrain from anti-competitive practices such as cross subsidization or predatory conduct. Finally, the provisions of Chapter 13 imposed transparency and technical obligations on the parties.⁸²

The liberalization of enhanced telecommunications services under Chapter Thirteen subsequently provided the foundation for many of Canada's commitments under *GATS* during the Uruguay Round.

In 1997, Canada became a signatory of the *ABT* and incorporated the 1996 Reference Paper into its *GATS* schedule of commitments. In many respects Canada's domestic legislation reflects these commitments under *NAFTA*, *GATS* and the *ABT*. Canada still maintains foreign ownership restrictions with respect to telecommunications

⁸¹ Bala, *supra* note 37, at 1300.

⁸² *Ibid*, at 1301.

services, however. This largely flows from concerns over cultural content and, to a lesser extent, national security.⁸³

Under the *Broadcasting Act* a license to operate a station will only be granted to Canadian citizens.⁸⁴

Similarly, section 16(1) of the *Telecommunications Act* provides that a telecommunications common carrier must be Canadian owned or controlled. The *Telecommunications Act* and its supporting regulations effectively impose a requirement that 80% of the voting shares of a carrier are owned by Canadians. Similarly, 66²/₃% of the voting shares of its controlling corporations must also be controlled by Canadians. According to section 16(3)(i), 80 % of the board of directors must also be Canadian.

Another set of foreign ownership restrictions is contained in the *Radiocommunication Act*.⁸⁵ This legislation governs the allocation and use of radio spectrums as well as the operation of radio apparatus. The ownership requirements prescribed under the *Radiocommunication Regulations* are essentially the same as those required under the *Telecommunications Act*.

These provisions constitute an indirect barrier to FDI by preventing share acquisitions by foreign corporations.⁸⁶ It has also been asserted that these FDI restrictions will hinder entrants into the Canadian telecommunications market by limiting their access to equity financing. Access to this form of financing will become

⁸³ D.W. Conklin, "Foreign Ownership Restrictions", in *Adapting to New Realities – Canadian Telecommunications Policy Conference*, (London: Richard Ivey School of Business, 1998) 33.

⁸⁴ S.C. 1991, c. 11.

⁸⁵ R.S.C. 1985, c. R-2.

⁸⁶ Conklin, *supra* note 85, at 36.

increasingly important as telecommunications development appears to becoming increasingly costly.⁸⁷ The limitation on foreign ownership of Canadian telecommunications carriers has also restricted the ability of large carriers to form strategic alliances that are often facilitated through equity exchanges.⁸⁸ In some instances, however, this problem may be circumvented through the exchange of non-voting shares.⁸⁹

These restrictions are, to some extent, offset by progress in other areas. Some developments recently occurred, for example, with the liberalization of foreign ownership requirements at Teleglobe and Telestat in accordance with Canada's GATS commitments.⁹⁰

Corporate Law

The provisions of subsection 105(3) of the *Canada Business Corporations Act* ("CBCA") currently require a majority of the directors to be resident Canadians.⁹¹ Furthermore, meetings of the board of directors may not proceed unless the majority of the directors present are Canadian.⁹² Finally, board committees must also have a majority of resident Canadians.⁹³

⁸⁷ *Ibid.*

⁸⁸ S.L. Schumacher, "Raising Capital in Canada for Investment in Telecommunications", in *Adapting to New Realities – Canadian Telecommunications Policy Conference*, (London: Richard Ivey School of Business, 1998) 39 at 41.

⁸⁹ *Ibid.*, at 54.

⁹⁰ Blouin, *supra* note 38, at 19.

⁹¹ R.S.C. 1985, c. C-44. A resident Canadian is defined in subsection 2(1) as being a Canadian citizen resident in Canada, a Canadian citizen not ordinarily resident in Canada that is a member of a prescribed class or a permanent resident within the meaning of the Immigration Act until one year after they became eligible to apply for citizenship.

⁹² S. 114(3).

Similar provisions are found under the laws of some provinces. For example, under subsection 118(3) of the *Business Corporations Act (Ontario)* (“*OBCA*”) also requires that the majority of directors are resident Canadian, unless there are only two in which case the statute only requires that one is Canadian.⁹⁴

It also should also be noted that special provisions concerning the sale of shares of restricted share corporations, such as Canadian telecommunications providers (as discussed in the context of Telecommunications Regulation above) are found in Part V of the *CBCA*.

The residency requirements for the *CBCA* will be altered if Bill S-19 passed into law. The residency requirement would be reduced to 25% of the board of directors. If the board had less than four directors then at least one would have to be a resident Canadian. The same threshold would apply to meetings of the board of directors under section 114. Finally, the residency requirement would be eliminated for committees of the board. This legislation would make the *CBCA* somewhat more conducive to FDI relating to or involving the use of federal Canadian corporations.

In addition to the requirements of corporations legislation, there is a requirement for businesses which are not Canadian corporations to register in Canadian jurisdictions in which they carry on business. For example, in the Province of Ontario, such registration is required under the *Extra-provincial Corporations Act* and the *Corporations Information Act*. In general, the failure to so register can result in fines for the

⁹³ S. 115(2).

⁹⁴ R.S.O. 1990, c. B-16. The definition of a resident Canadian under this statute is similar to that under the *CBCA*.

corporation and its directors and officers which acquiesce in an offence, and the inability to carry on a legal proceeding in the name of the corporation in the relevant jurisdiction.

International Trade Agreements

Although Canada is also a signatory of both *TRIMs* and the *ITA* it is also party to a unique investment arrangement. NAFTA Chapter Eleven B establishes a dispute settlement mechanism that permits investors of the United States or Mexico to submit to an international tribunal claims against the Government of Canada for breach of its obligations set out in Chapter Eleven A relating to investment.

There are three requirements under NAFTA Chapter Eleven with respect to investment. Article 1102 requires the host country to extend the principle of national treatment to its investors. Article 1105 requires the minimum standard of treatment permitted under international law. Article 1110 prohibits expropriation without compensation.

Article 1102 is relatively straightforward, as it requires the host country to extend national treatment at both the federal and the state and provincial level.⁹⁵ The provisions of Article 1105 (1) oblige Canada to accord investors of the United States or Mexico treatment, “in accordance with international law, including fair and equitable treatment and full protection and security.” This minimum standard of treatment appears to include a requirement to provide a transparent and predictable regulatory framework.⁹⁶

⁹⁵ Bala, *supra* note 37, at 182.

⁹⁶ *Metalclad Corporation v. Mexico* (August 30, 2000). This case is currently under review by the Supreme Court of British Columbia. There are only two other decisions that have been issued that deal with Article 1105. See: *Azinian et al v. Mexico* (November 1, 1999) and *Myers Inc. v. Canada* (November 13, 2000). Another is expected shortly. See: *Pope & Talbot Inc. v. Canada* (June 26, 2000).

The second requirement under Chapter Eleven of NAFTA relates to Article 1110 concerning expropriation. Under this provision Canada may not expropriate an investment or take measures tantamount to the expropriation of an investment unless it is for a public purpose. There is not yet a consensus on the what measures will constitute a measure tantamount to an expropriation. It is clear that a valid expropriation claim would have to establish a very significant interference in business operations. A temporary, mild interference with business operations would not suffice.

The significance of NAFTA Chapter Eleven should not be understated. These provisions provide comprehensive protection to foreign investors against the actions of foreign governments. This type of protection is likely to be in part responsible for the Mexico's success in attracting FDI from Canada and the United States.

Policy and Legal Considerations

The recent trends in FDI have had a direct impact on Canadian policy and legal initiatives. These trends are also reflected in FDI in the Canadian high-tech sector. The liberalization of direct barriers and the facilitation of FDI also have important consequences for the continued development of high-tech industries. It is clear, that policy respecting FDI must select from competing outcomes.

Two principal policy concerns impact legislation and regulatory posture with respect to FDI: domestic economic development and national sovereignty.⁹⁷ The importance of FDI to the economic development of a country, to some extent, is to be seen as being at cross-purposes with the necessity of preventing foreign corporations from exerting an undue influence over the domestic economy. Although these policy

considerations may appear difficult to reconcile, the Canadian governments has prioritized economic development over sovereignty in terms balancing public policy.

The economic studies that have been conducted have clearly demonstrated the importance of FDI to economic growth. In Canada, over 77% of science based corporations were foreign owned in 1973. In 1993, this number had fallen to 61% of science based corporations.⁹⁸ Science-based industries still contain some of the heaviest concentrations of FDI. Nevertheless, at the same time that policies permitting FDI were becoming more permissive, and FDI was increasing, the percentage of foreign ownership in this technology sector was found to have decreased.

Attempts to balance economic growth against economic sovereignty have led to the regulation of FDI. The regulation of FDI is designed to either encourage or limit this form of investment, depending on the policy aims of the government. In order to encourage FDI, governments often employ tax incentives, public funding, or other measures to attract FDI.⁹⁹

There have been relatively few studies that have examined the impact of government funding on encouraging FDI in the technology sector. The studies of existing Canadian industries do seem to suggest that these programs are regularly

⁹⁷ Globerman, *supra* note 26, at 5.

⁹⁸ Baldwin, *supra* note 12, at 7.

⁹⁹ Analysis of the implications of tax policy is beyond the scope of this paper. By way of example, see [HTTP://e-com.ic.gc.ca/eteam/capital/](http://e-com.ic.gc.ca/eteam/capital/) for a recent submission to the House of Commons Standing Committee on Finance which provides an analysis of some tax policy measures that may be employed to encourage FDI in the technology sector in Canada with a view to promoting the development of e-commerce. See: Canada, *Submission to House of Commons Standing Committee on Finance – Capital Markets Team, Canadian E-Business Opportunities Roundtable*, (2000).

participated in by foreign affiliates of MNEs. Unfortunately, it is difficult to assess the effectiveness of these programs independently.

One recent study examined the effectiveness of trade missions in promoting regional inflows of FDI. It found that trade missions were effective in stimulating FDI in regions that were successful already in attracting this type of investment.¹⁰⁰ Unfortunately, regions that experienced little FDI did not demonstrate similar benefits. Consequently, it is likely that programs designed to encourage FDI will reinforce an investor's decision based on more fundamental factors such as the economic, legal and policy environment of the host country.

In addition to policies designed to encourage FDI, there are many formal and informal policies that attempt to control or limit the scope of FDI in the host country.

Formal investment barriers are reflected in a host country's laws or regulations that impede FDI.¹⁰¹ These formal barriers may be further broken down into absolute or non-absolute restrictions. The absolute barriers typically impose direct restrictions on the amount of foreign ownership and control permissible through FDI. In this manner, they are similar to quotas on imports. Restrictions in Canada's *Telecommunications Act* discussed above are an example of such a barrier. In contrast, non-absolute barriers will impose increasing costs on acquiring or establishing a presence in the host country market. In essence, these non-absolute barriers to investment attempt to transfer economic rents from the FDI to the domestic government.¹⁰² Restrictions on directors'

¹⁰⁰ T.J. Wilkinson and L.E. Brouters, "Trade Shows, Trade Missions and State Governments: Increasing FDI and High-Tech Exports" (2000) 31 *Journal of International Business Studies* 725 at 729.

¹⁰¹ Globerman, *supra* note 26, at 3.

¹⁰² *Ibid.*

residency requirements discussed above in the context of Canadian corporations law are an example of such a requirement.

Informal investment barriers may be categorized as any government inspired change in the economic, political or cultural institutions of a host country that influence the prospective profitability of FDI. These policies have a significant indirect impact on FDI, but are often designed to address other problems unrelated to investment.¹⁰³

FDI in the Technology Sector

Trends in FDI flows lead to several important legal issues. The extent of HBE and HBA research and development associated with FDI is dependent on several factors. The strength of domestic intellectual property laws will probably be one of the primary concerns to foreign investors. Although confidential technologies may be distributed to other domestic corporations, such as suppliers, a high-tech investor will be concerned with maintaining control of confidential technological information. A host country must have effective laws and enforcement mechanisms to protect the high-tech patents of a foreign investor.

Another important element includes would be laws designed to prevent "guerrilla capitalism". This phenomenon occurs when former employees that have signed confidentiality agreements make use of technological secrets of their former employer in breach of the agreement. Host country legal systems must provide a mechanism to enforce such agreements. For example, the enforcement of basic copyright laws with respect to software piracy is also important.

¹⁰³ *Ibid.*

Investment Liberalization

The impact of government policies regulating the flow of FDI is somewhat unclear. Absolute limits on the amount of FDI similar to those imposed in many emerging markets will restrict FDI directly. In the Canadian context, there is some evidence to suggest that non-absolute government policies such as *FIRA* had minimal impact on inward flows of FDI.¹⁰⁴ At the very least, however, *FIRA* imposed additional legal and administrative costs on foreign investors while increasing uncertainty about whether the investment would be permitted to proceed.¹⁰⁵ The *FIRA* regime had a disallowance rate for foreign investments of 7%. This rejection rate is relatively high when compared to Australia's rate of 2.7% over the same period.¹⁰⁶ The impact of the *Investment Canada Act* on FDI was also found to be insignificant. The only major shift in FDI flows occurred during the period of trade liberalization associated with CUSFTA. In this period, both inward and outward direct investment increased between Canada and the United States. The outward flow of investment was largely due to the relocation of many affiliated firms to the United States.

These studies seem to indicate that restrictive government policies will have to be fairly stringent in order to limit investor decisions concerning FDI. These types of policies will impose additional transaction and enforcement costs. They also may, at the margin, eliminate desirable FDI in situations where the investor is unsure of its decision to acquire or establish a domestic presence.

¹⁰⁴ S. Gliberman and D. Shapiro, "The Impact of Government Policies on Foreign Direct Investment: The Canadian Experience" (1999) 30 *Journal of International Business Studies* 513 at 524. The study undertaken indicated that *FIRA* had a small negative effect, but the effect was statistically insignificant.

¹⁰⁵ *Ibid.*, at 516.

¹⁰⁶ *Ibid.*

Investment Facilitation

There are several legal considerations that are relevant to situations involving FDI. A number of studies that indicate that the domestic legal system of a country will have a direct impact on the amount of FDI. This has resulted in the creation of a theoretical construct of an ideal paradigm for attracting FDI through a legal system. This theory may be utilized as a starting point for a general analysis of other legal considerations such as competition policy, telecommunications regulation, corporate law and international trade agreements.

The ideal paradigm posits that foreign investors have two principal requirements in a host country legal system: efficiency and certainty.¹⁰⁷ In respect of efficiency, it is argued that investors will be attracted to legal systems with modern equitable laws that will minimize legal transaction costs. Furthermore, an efficient court system and an effective bureaucracy that is well compensated is also important. Adequate infrastructure and other resources are also important considerations. These characteristics should operate together to produce an efficient system which will operate to resolve problems foreign investors face in a timely manner.¹⁰⁸

The other major concern of foreign investors is uncertainty. This usually arises in a legal context through the legislative process, public administration and enforcement and the judicial interpretation of the law.¹⁰⁹ It is argued that a predictable legal system must have predictable and stable laws where discretion of government officials and the

¹⁰⁷ A. Perry, "An Ideal Legal System for Attracting Foreign Direct Investment? Some Theory and Reality" (2000) 15 American University International Law Review 1627 at 1629.

¹⁰⁸ *Ibid*, at 1630.

¹⁰⁹ *Ibid*.

state is limited. The elimination of corruption is also another crucial factor in achieving predictability. In particular, establishing the independence of the judiciary would appear to be a prerequisite to eliminating uncertainty in the host countries legal system.¹¹⁰

This paradigm has been criticized as being overly simplistic. At least one study of general FDI in Sri Lanka seems to indicate that many of the characteristics related to efficiency and uncertainty were not significant in the minds of foreign investors. The study found that the foreign investors viewed the system as both inefficient and uncertain, but that 76% of them would still have invested in Sri Lanka if they had foreknowledge of the system.¹¹¹ It appeared that at least some of the investors were content with their apparent ability to manipulate the domestic system to achieve their ends.

There are several reasons that indicate that this study is not easily applied to FDI in the high-tech sector. In the first instance, the majority of the investors in the Sri Lanka study were involved in general FDI from other Asian countries. The FDI in the high-tech sector flows predominantly from the United States, the European Union and Japan. It is more likely in this context that there are different views of this FDI paradigm. FDI flowing from industrialized countries that are more familiar with an equitable legal system is probably more sensitive to deficiencies in host country legal systems. Conversely, FDI originating in countries with legal systems not modeled on the paradigm are less likely to be sensitive to this distinction. As much of the high-tech FDI originates with OECD countries with more developed legal systems, it would appear

¹¹⁰ *Ibid*, at 1632.

¹¹¹ *Ibid*, at 1642.

that host countries should be sensitive to efficiency and certainty promoting characteristics of their domestic legal systems with a view to encouraging FDI in the technology sector.

Competition and Anti-Trust Policy

The increasing development of Competition measures demonstrates the reservations that many countries have concerning the dominance of some MNCs. Although pre-notification requirements associated with merger review operate to discourage FDI, there is some doubt as to the severity of the burden this imposes on large MNCs.¹¹² The necessity of filing in with eight or ten authorities, however, does impose real costs and may discourage high-tech HBA investment that is often achieved through mergers and acquisitions. Nevertheless, simple and predictable competition regulation is not a significant barrier to FDI. Furthermore, effective regulation of anti-competitive practices should encourage FDI by protecting fledgling investment from predatory behaviour by established participants in the domestic market.

These costs may also be minimized if multilateral competition policies are established through regional trade agreements or the WTO. Unfortunately, it appears unlikely, that a consensus on a unified anti-trust code will be achieved in the immediate future.¹¹³ The expansion of the mandate of the WTO Working Group on the Interaction between Trade and Competition Policy in this direction is also uncertain. Although the WTO has been successful in liberalizing trade, many have suggested that the WTO is

¹¹² D.K. Tarullo, "Competition Policy for Global Markets" (1999) *Journal of International Economic Law* 445 at 447.

¹¹³ Jones, *supra* note 31, at 98.

not the most suitable forum for competition policy development.¹¹⁴ These observations have been premised on the fact that the WTO process is inherently adversarial in nature whereas any multilateral competition policy would have to emphasize co-operation. Furthermore, the WTO is primarily concerned with relations between states and has limited direct participation by private entities.¹¹⁵ The United States also appears to be opposed to any formal type of competition code.¹¹⁶ This does not preclude the adoption of some form of international principles at the upcoming millennium round as favoured by Canada, Japan and the EU.¹¹⁷ Although there are formidable obstacles to the development of a consensus, convergence in competition policy should be pursued to minimize the transaction costs associated with FDI.

Telecommunications Regulation

There are still a few remaining barriers to FDI in the telecommunications sector. The ongoing GATS 2000 round of negotiations will also examine several unresolved issues with respect to the ABT. Although almost 93% of the world's telecommunications services were included in this agreement, the membership of the ABT is likely to continue to expand. Furthermore, some type of formal agreement with respect to accounting rates should be reached to replace informal agreements now in existence.

¹¹⁴ Tarullo, *supra* note 33, at 450.

¹¹⁵ *Ibid.*

¹¹⁶ Jones, *supra* note 31, at 97-98.

¹¹⁷ *Ibid.*

The foreign ownership reservations under *ABT* were made by several countries to preserve domestic control of the telecommunications system.¹¹⁸ These ownership restrictions are of some concern as they inhibit equity financing for new entrants. At the same time, the restrictions also make it more difficult for larger corporations conclude strategic alliances with their foreign counterparts. Furthermore, the access provisions contained in the *GATS* Annex on Telecommunications will not apply to private high-speed cable networks. This will place independent ISP providers at a disadvantage in the provision of these services in domestic markets.¹¹⁹

Conversely, the *ABT* was successful in establishing the right of foreign investors to build their own telecommunications infrastructure in other countries.¹²⁰ This coupled with the access provided to domestic telecommunications infrastructure through the Telecommunications Annex will ensure that FDI will proceed apace.

The reference paper on telecommunications will also provide important regulatory rules for telecommunications. In particular, the first section of the reference paper is designed to limit anti-competitive actions initiated by more established domestic firms. An example of the potential application of these provisions is related to the division over whether Internet access services fall under the ambit of this agreement. If Internet access services are subject to the reference paper, such content providers could be held pursued for cross-subsidization under the provisions of the

¹¹⁸ Conklin, *supra* note 78, at 34. These countries include: Belize, Brazil, Canada, Columbia, France, Ghana, Hungary, India, Indonesia, Israel, Japan, Korea, Malaysia, Mexico, Morocco, New Zealand, Philippines, Poland, Portugal, Singapore, Slovak Republic, South Africa, Tunisia and the USA.

¹¹⁹ Canada, *supra* note 41, at 7.

¹²⁰ N. McMillan, "Trade in Telecommunications: The WTO Agreement" in P. Rutledge, I. MacVay & A. Masa'deh, eds., *Liberalisation and Protectionism in the World Trading System* (London: Cameron May, 1999) 175 at 177.

reference paper. It has often been suggested that these content providers charge a premium for this service while undercutting prices for internet access.¹²¹ This measure if successful could stimulate investment in provision of Internet access services.

International Trade Agreements

Although *TRIMs* appears to have had limited impact on investment liberalization, other international trade agreements have been more influential. The elimination of tariffs through the *ITA* has undoubtedly led to an increase in FDI flows. The elimination of these barriers would only limit FDI flows designed to avoid tariff barriers. As this no longer appears to be the principal motivation affecting investment in large portions of the technology sector, it is unlikely that the removal of these tariffs will significantly increase outflows. At the same time, the *ITA* does not appear likely to have a direct impact on HBA investment. The impact on HBE investment may be more favourable. The elimination of tariff barriers may encourage high-tech companies to locate in foreign countries. Although low labour costs and proximity to market would be important factors, they would not operate in isolation. The *ITA* would ensure that components that were difficult to procure in developing countries could be imported by an affiliate from a parent at only the cost of transportation. Consequently, these reduced trade barriers may lead to an increase in high tech FDI offshore. Other regional agreements providing greater investment protection from the actions of domestic governments such as the provisions of Chapter Eleven of NAFTA will also increase the likelihood of foreigners investing offshore.

¹²¹ Canada, *supra* note 41.

Bibliography

- Asia Pacific Economic Co-operation, Economic Leaders Summit, *Declaration of Common Resolve*, (1994).
- Asia Pacific Economic Co-operation, Ministerial Meeting, *Joint Statement*, (1989).
- Asia Pacific Economic Co-operation, Ministerial Meeting, *Seoul APEC Declaration*, (1991).
- Baggaley, C.D., "Tariffs, Combines and Politics: The Beginning of Canadian Competition Policy, 1888-1900" in R.S. Khemani & W.T. Stanbury, eds., *Historical Perspectives on Canadian Competition Policy* (Halifax: Institute for Research on Public Policy, 1991) 1.
- Bala, R., & K. Kennedy, *World Trade Law* (Charlottesville: Lexis Law Publishing, 1998).
- Baldwin, J. R. & P. Hanel, *Multinationals and the Canadian Innovation Process* (Ottawa: Statistics Canada, 2000).
- Barrell, R & N. Pain, "Foreign Direct Investment, Technological Change and Economic Growth within Europe" (1997) 107 *The Economic Journal* 1770.
- Blouin, Chantal, *Trade in Telecommunications Services: The Results of the WTO Agreement on Basic Telecommunications*, (Ottawa: Department of Foreign Affairs and International Trade, 1999).
- Canada, *Electronic Commerce and International Trade Rules*, (2000).
- Canada, *Submission to House of Commons Standing Committee on Finance – Capital Markets Team, Canadian E-Business Opportunities Roundtable*, (2000).
- Canada, *Working Group on the Interaction between Trade and Competition Policy - Communication from Canada*, WTO Doc. WT/WGTCP/W/146 (2000).
- Clark, I.D., "Legislative Reform and the Policy Process: The Case of the Competition Act" in R.S. Khemani & W.T. Stanbury, eds., *Historical Perspectives on Canadian Competition Policy* (Halifax: Institute for Research on Public Policy, 1991) 227.
- Clark, W.S., "Tax Incentives for Foreign Direct Investment: Empirical Evidence on Effects and Alternative Policy Options" (2000) 48 *Canadian Tax Journal* 1139.
- Conklin, D.W., "Foreign Ownership Restrictions", in *Adapting to New Realities – Canadian Telecommunications Policy Conference*, (London: Richard Ivey School of Business, 1998) 33.
- Evans, Todd, *Foreign Direct Investment Monitor* (Ottawa: Economic Development Corporation, 2000).
- Gera et al., "Information Technology and Labour Productivity Growth: An Empirical Analysis for Canada and the United States" (1999) 32 *Canadian Journal of Economics* 384.
- Gera et al., *Foreign Direct Investment and Productivity Growth: The Canadian Host-Country Experience* (Ottawa: Industry Canada, 1999).
- Glass, A.J. & K. Saggi, "International Technology Transfer and the Technology Gap" (1998) 55 *Journal of Developmental Economics* 369.
- Globerman, S. & D. Shapiro, "The Impact of Government Policies on Foreign Direct Investment: The Canadian Experience" (1999) 30 *Journal of International Business Studies* 513.

- Globerman, S., & D. Shapiro, *Canadian Government Policies Toward Inward Foreign Direct Investment* (Ottawa: Industry Canada, 1998).
- Haug, P., "Survey Evidence on the International Operations of High-technology Firms" (1991) 30 *Management International Review* 63.
- Jones, C., "Toward Global Competition Policy? The Expanding Dialogue on Multilateralism" (2000) 23 *Journal of World Competition* 95.
- Kuemmerle, K., "The Drivers of Foreign Direct Investment into Research and Development: An Empirical Investigation" (1999) 30 *Journal of International Business Studies* 1.
- Kumar, N. & K.S.K. Marg, "Foreign Direct Investment and Technology Capabilities in Developing Countries: A Review" (2000) 23 *International Journal of Public Administration* 1253.
- Lally, A.M., "The Canadian and United States Pre-Merger Notification – A Comparison" *Annual Fall Conference on Competition Law – National Competition Law Section*, (1999).
- McMillian, N., "Trade in Telecommunications: The WTO Agreement" in P. Ruttley, I. MacVay & A. Masa'deh, eds., *Liberalisation and Protectionism in the World Trading System* (London: Cameron May, 1999) 175.
- OECD, *OECD Benchmark Definition of Foreign Direct Investment*, 3rd Ed. (Paris: OECD, 1996).
- Penny, A., "An Ideal Legal System for Attracting Foreign Direct Investment? Some Theory and Reality" (2000) 15 *American University International Law Review* 1627.
- Pitofsky, Robert, "Competition Policy in a Global Economy – Today and Tomorrow" (1999) *Journal of International Economic Law* 401.
- Schlegelmilch, R., "WTO: Why Still no Multilateral Rules for Foreign Direct Investment" (2000) 6 *International Trade Law and Regulation* 78.
- Schumacher, S.L., "Raising Capital in Canada for Investment in Telecommunications", in *Adapting to New Realities – Canadian Telecommunications Policy Conference*, (London: Richard Ivey School of Business, 1998) 39.
- Tarullo, D.K., "Competition Policy for Global Markets" (1999) *Journal of International Economic Law* 445.
- USITC, *General Agreement on Trade in Services: Examination of Major Trading Partners Schedules of Commitments (Canada, EU, Japan and Mexico)*, Investigation No. 332-358, USITC Publication 2440 (1995) 1.
- Vicker, R.E., "Semiconductors and Information Technology" (1999) 33 *Journal of World Trade Law* 83.
- Warner, M., "International Aspects of Competition Policy – Possible Directions for the FTAA" (1999) 22 *World Competition* 1.
- Wilkinson, T.J. & L.E. Brouters, "Trade Shows, Trade Missions and State Governments: Increasing FDI and High-Tech Exports" (2000) 31 *Journal of International Business Studies* 7259.

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New FDI Patterns and Economic Development



Mari Pangestu

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Outline

- New FDI patterns
 - “supply” of FDI?
- FDI and development: revisit
 - “demand” for FDI from LDC perspective
- Appropriate policy responses
 - accounting for supply and demand

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New FDI Patterns?

- What are the new trends in the pattern of FDI to developing economies?
 - Continued growth or stable despite crisis
 - M &A in crisis economies -- restructuring
 - internationalization of production, accelerated by new economy and way of doing business -- looking for best match between mobile or fixed assets and immobile assets (infrastructure, skill, agglomeration, supporting services)

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FDI and Development

- Role of FDI in development
 - Traditional view of package of capital, management, technology, know-how, skills, and market access
 - Differences between LDCs, but trend of liberalization pre and even more so post crisis -- e.g. dramatic shift in Korea
 - Benefits of FDI in terms of contribution to exports, spillovers etc. when more open, etc.

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FDI and Development

- Broader role for FDI in development, and in particular to participate in new economy
 - **recovery and restructuring:** role of MNA for restructuring private corporations, banks, and state owned assets/companies
 - **maintaining competitiveness: dynamic CA**
 - value added, including high tech exports but also how to upgrade traditional industries

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FDI and Development

- **Participate in opportunities of new economy**
 - IT industry, including exports of high tech products
 - segments of IT industry which are labor intensive such as software development and data entry
 - infrastructure to be connected: telecommunications, payment system, HRD

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Appropriate Policy Responses

- NATIONAL
 - comprehensive approach
 - role of FDI in overall development; role of participation in new economy for overall development (instrument for development):
 - identify needs
 - identify potential concerns and issues
 - how best to respond, avoid ad hoc reactions

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Appropriate National Policy Responses

- “Traditional policy responses” insufficient: relax ownership and sectoral restrictions, tax incentives, general promotion efforts.
- M&A specific issues:
 - effective bankruptcy and legal procedures for exit
 - clear policy on privatization
 - state assets because of crisis
 - of public goods and infrastructure: pricing & regulatory agency
 - competition policy and corporate governance issues
 - capital markets

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Appropriate National Policy Responses

- Provision of complementary or immobile assets: HRD, infrastructure, supporting services, supporting industries
- Merits of a proactive policy: target certain sectors/industries, companies, activity? Confine to generic policies vs. traditional indust. pol intr?
 - Pros can be effective to address specific needs
 - Cons can be suboptimal in absence of vision and capability to administer

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Appropriate National Policy Responses

- Don't underestimate national or popular pressures (operating under diff. Political context), digital divide within economy: how to anticipate, respond
- How to get from here to there? Most problematic
 - Implementation -- sequencing
 - Credibility
 - certainty&predictability: value of external discipline (IMF program, WTO commitments, RTAs, signatory to international cooperation on standards etc)

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Appropriate Regional Responses

- Is there anything that can be done in APEC?
 - **TILF agenda:**
 - peer pressure, confidence to continue concerted unilateral process of opening up
 - cooperation to facilitate “connectedness” e.g. standards, moratorium on tariffs on e-commerce

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Appropriate Regional Responses

– **Capacity building - great potential**

- sharing of experiences and lessons
- e-economy issues: HRD training - identify needs, infrastructure
- using e-economy for development: SME etc

Prospects for New Patterns of FDI in the Asia-Pacific Region

**Hwy-Chang Moon
Taeho Bark**

**The School of International and Area Studies
Seoul National University**

Contents

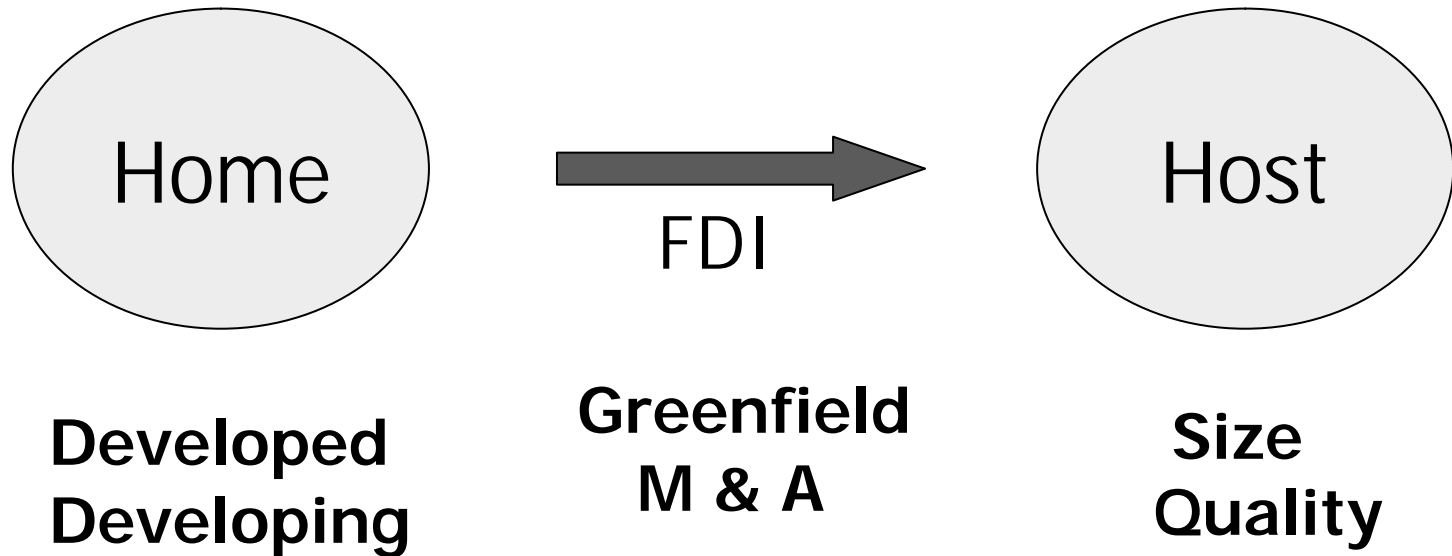
- Recent trend of FDI
- New patterns and challenges
- APEC member economies
- eBusiness
- Conclusions

Recent trend of FDI

WIR 2000 (1999 data)

- Increasingly important
 - Sales of foreign affiliates (\$14 trillion) are twice as high as global exports
 - Gross product associated with FDI is one-tenth of global GDP
 - The ratio of FDI inflows (\$865 billion) to global gross domestic capital formation is 14 per cent.

New patterns and challenges



Investing firms: Patterns

- Two directions
 - MNCs from developed economies
 - MNCs from developing economies
- Different motivations
 - To exploit existing advantages
 - To get access to new advantages

Investing firms: Challenges

- Traditional perspectives: Multidomestic
 - Hymer 1960 (1976)
 - Buckley & Casson (1976), Rugman (1981)
 - Dunning (1979)
- New perspectives: Global
 - Teece (1986)
 - Dunning (1995)
 - Moon & Roehl (1993, 2001)

Host economies: Patterns

■ Attitude

- Less favorable

- More favorable

- During 1990s, 94% of the 1,035 policy changes were favorable.

■ Vision

- Narrow: R-transfer and FDI size

- Comprehensive: linkage effects

Host economies: Challenges

- Traditional perspectives
 - Dependency theory
 - Financial/economic theory
- New perspectives
 - More variables for quality FDI
 - Pros and cons

FDI: Patterns

- Two types
 - Greenfield FDI
 - Cross-border M&As
- Significance of M&As
 - 80% (\$720 billion) of total FDI
 - Greenfield FDI still dominant in developing economy

FDI: Challenges

- Larger benefits of M&A to MNCs
 - Speed
 - Access to complementary asset
- Smaller benefits of M&A to host economies
 - Bring foreign K, but Tech, Employment?
 - Anti-competitive result
- Counter-arguments
 - No alternative
 - Sequential investment

FDI Impacts on Host Economies

Issue	Positive Effects	Negative Effects
Factor Condition	Bring foreign resources Upgrade domestic resources - K, T, jobs, environment	Cost of foreign resources Exploitation - wrong kind, inappropriateness
Demand Condition	Import substitution Export promotion	Import of intermediate products Cut off exports by domestic firms
Related Sectors	Spill-over on suppliers International linkage - parts, related products	Import from foreign suppliers Cut off existing linkage
Market Structure	Efficient market Crowding-in of other firms	Anti-competitive practices Crowding-out of domestic firms
Government	Tax revenue Political openness	Transfer pricing Loss of sovereignty
Culture	Cultural openness	Unacceptable values

Individual action plans by APEC member economies

Bark and Moon, 2000

- “Openness” Group
 - Hong Kong, Singapore, Malaysia
- “Aggressiveness” Group
 - Japan, Taiwan
- “Attractiveness” Group
 - China, the Philippines, Indonesia, Thailand
- “Conservatism” Group
 - Korea

Table 1. The world's top 25 TNCs, ranked by foreign assets, 1998

Corporation	Economy	TNI (%) [*]	Corporation	Economy	TNI (%) [*]
General Electric	U.S.	36.3	Wal-Mart Stores	U.S.	37.2
General Motors	U.S.	30.9	ABB	Switzerland	89.1
Royal Dutch/Shell	Neth/ U.K.	58.0	Mobil Corporation	U.S.	58.6
Ford Motor Company	U.S.	35.4	Diageo Plc	U.K.	76.7
Exxon Corporation	U.S.	75.9	Honda Motor Co.	Japan	60.2
Toyota	Japan	50.1	Siemens AG	Germany	53.6
IBM	U.S.	53.0	Sony Corporation	Japan	59.3
BP AMOCO	U.K.	74.9	Renault SA	France	61.8
DaimlerChrysler	Germany	50.4	News Corporation	Australia	78.7
Nestle SA	Switzerland	94.2	BMW AG	Germany	59.9
Volkswagen Group	Germany	53.8	Mitsubishi Corp	Japan	32.7
Unilever	Neth/U.K.	90.1	Nissan Motor Co.	Japan	42.6
Suez Lyonnaise	France	45.6			

Source:UNCTAD, World Investment Report 2000

^{*}TNI is the abbreviation for 'transnationality index,' which is calculated as the average of three ratios: foreign assets to total assets, foreign sales to total sales and foreign employment to total employment

Table 2. Top 25 TNCs from developing economies, ranked by foreign assets, 1998

Corporation	Economy	TNI (%) [*]	Corporation	Economy	TNI (%) [*]
Petroleos de Veneauela	Veneauela	23.7	YPF	Argentina	19.8
Daewoo	Korea	49.4	LG Electronics	Korea	36.6
Jardine Matheson Holdings, Limited	Hong Kong/ Bermuda	67.6	China Chemicals	China	41.4
Cemex, S.A.	Mexico	52.4	Keppel	Singapore	15.7
PETRONAS	Malaysia	23.2	Companhia Vale do Rio Doce	Brazil	34.4
Sappi Limited	South Africa	63.8	Hyundai Eng&Cons	Korea	37.6
Hutchison Whampoa	Hong Kong	39.4	Citic Pacific	Hong Kong	45.7
First Pacific Co.	Hong Kong	63.3	Enersis S.A.	Chile	28.2
Sunkyong Group	Korea	16.7	Guangdong Invest	Hong Kong	77.9
Petroleo Brasileiro	Brazil	6.8	San Miguel	Philippines	30.1
New World Dev.	Hong Kong	13.3	Samsung Electronics	Korea	16.3
China State Construction Eng.	China	26.8	Shougang Group	China	14.4
			Barlow Limited	South Africa	43.9

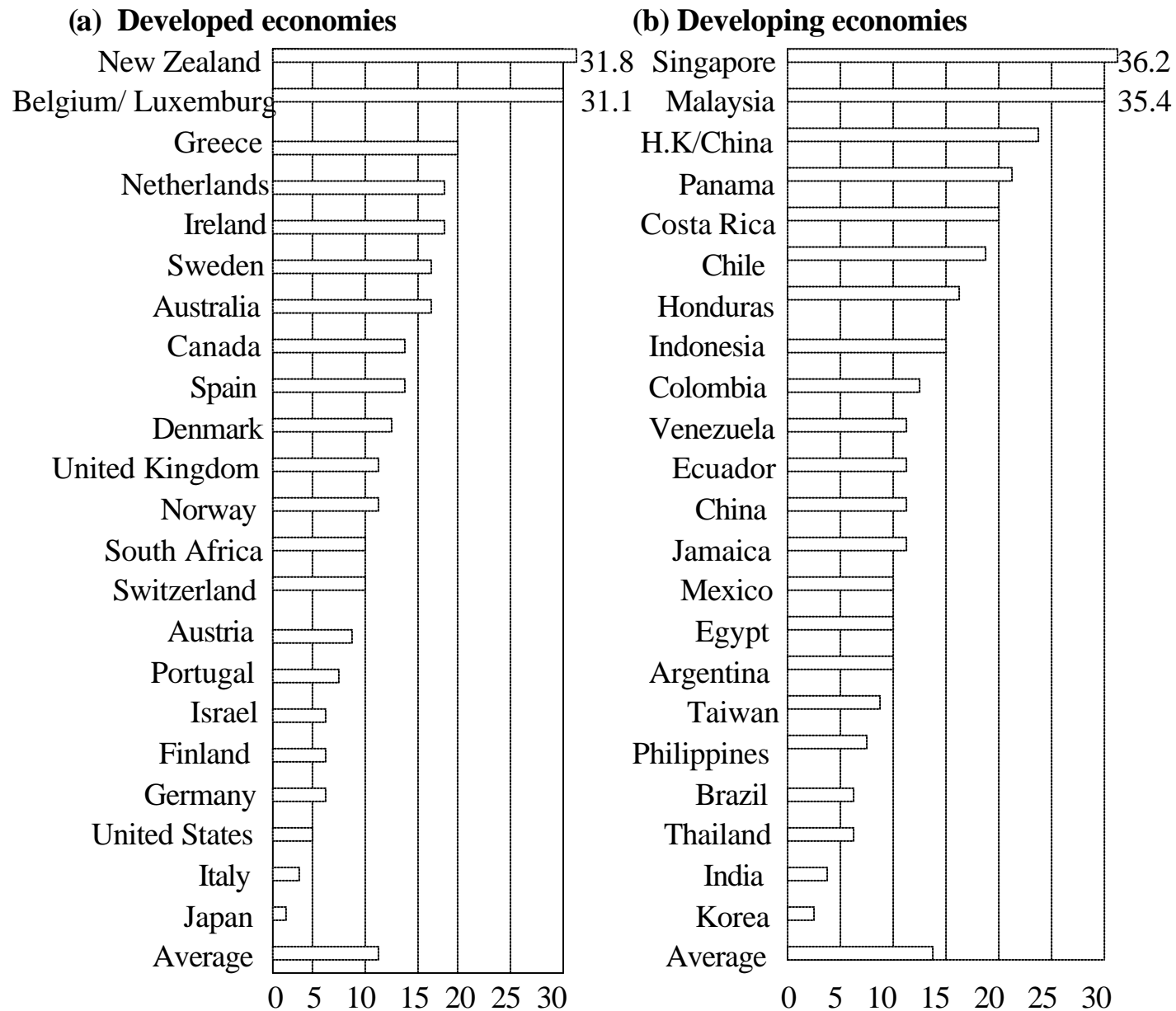
Source:UNCTAD, World Investment Report 2000

^{*}TNI is the abbreviation for 'transnationality index,' which is calculated as the average of three ratios: foreign assets to total assets, foreign sales to total sales and foreign employment to total employment

Transnationality Index of host economies

- Average of the four shares
 - FDI inflows as a % of gross fixed capital formation for the past 3 years
 - FDI inward stocks as a % of GDP
 - Value added of foreign affiliates as a % of GDP
 - Employment of foreign affiliates as a % of total employment
- Only the economies for which data for all of these four shares are available were selected

Figure 1. Transnationality Index^a of Host Economies^b,1997



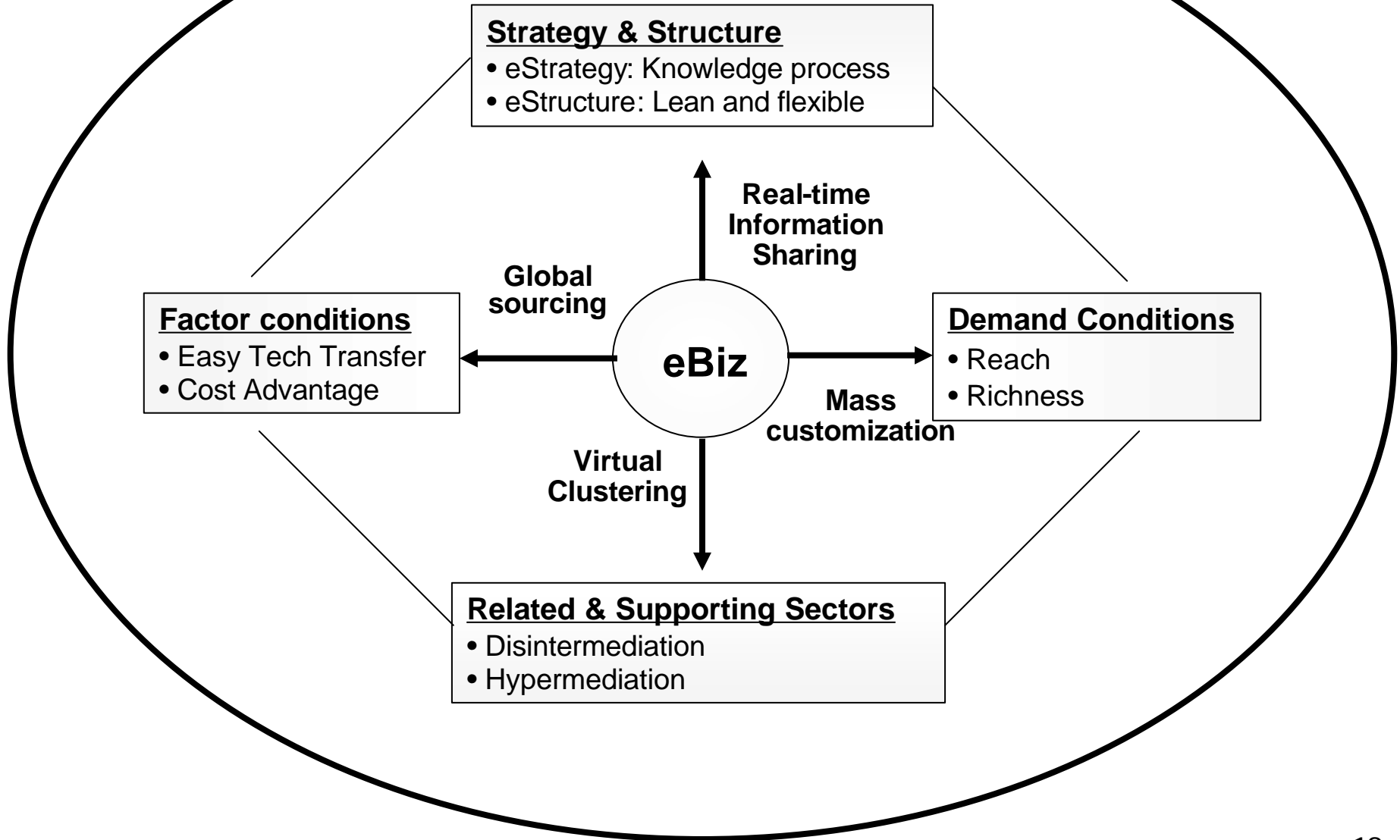
FDI flows to East and South-East Asia

- Total FDI flows to
 - the region: \$93 billion (11% increase)
 - Korea: \$10 billion
- Cross-border M&As in
 - the five countries (Indonesia, Malaysia, the Philippines, Korea and Thailand): \$15 billion
 - Korea: \$9 billion (the largest amount in developing Asia)

Impacts of eBiz on FDI

- Factor seeking
 - Tech transfer is easier than trade
- Market seeking
 - Reach and richness
- Virtual clustering
 - Multinational network
- Strategy and structure
 - Diverse and flexible

Rapid Shift of Environment



Conclusions

- Challenges
 - FDI patterns
 - eBusiness

- Policy implications
 - New paradigms
 - Immediate need but long-term view
(East and South-East Asia)

A Better Future for APEC

Saeki Hidetaka

(APEC Senior Official Member)

Deputy Director-General

Ministry of Economy, Trade and Industry

Japan

Three points to achieve the better future of APEC

- **Be more responsive to the changing circumstances**
- **Keep the delicate balance between its “flexibility” and “principles”**
- **Improve the image of the public or the media**

Be more responsive to the changing circumstances

APEC needs a mechanism to continuously address the important issues in the region and develop them into further APEC activities.

Keep the delicate balance between its “flexibility” and “principles”

- *Overemphasis on the “principles” causes APEC to limit its activities and achievements.*
- *Try “what we can do” voluntarily and flexibly.*
- *Flexibility could be considered as one of the crucial keys for revitalizing APEC activities.*

Improve the image of the public or the media

- *Make the best use of the media and public opinion.*
- *Improving the public image strengthens APEC's relevancy to the practical needs within region, and facilitates a better mechanism.*

More Organic Link to Our Societies

Three points have not been carried out satisfactorily.

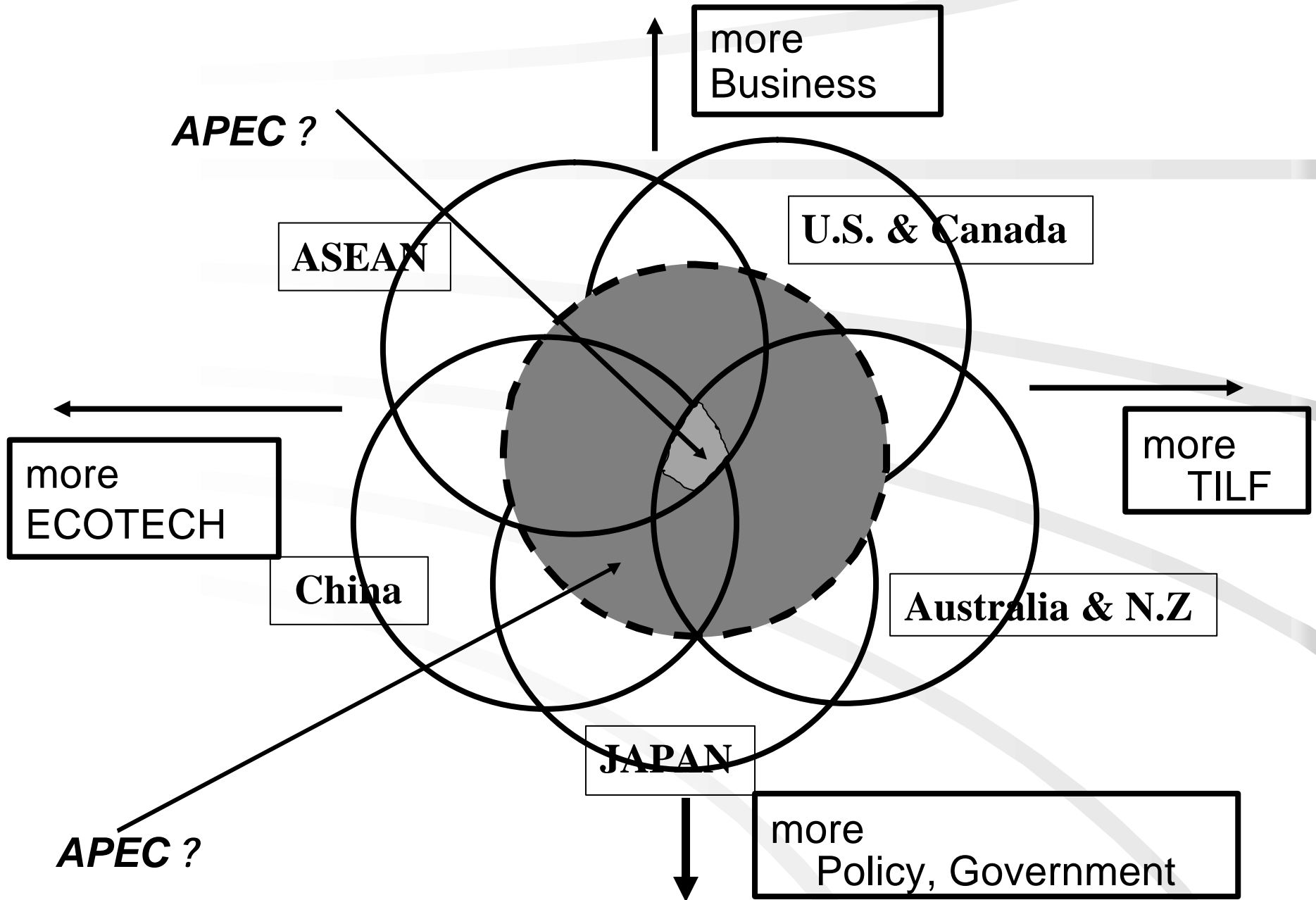
More organic links to our society will play an essential role to revitalize APEC activities.

A Better Future for Investment Experts Group

*The constructive inputs from business are
crucial to achieve the three points
properly.*

*The vitalized cooperation in investment area
is expected to lead to a better future for
APEC.*

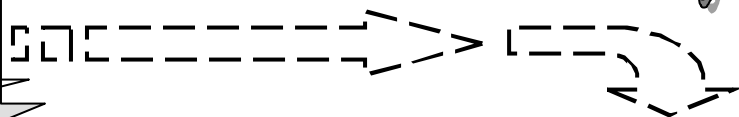
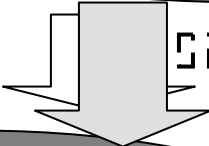
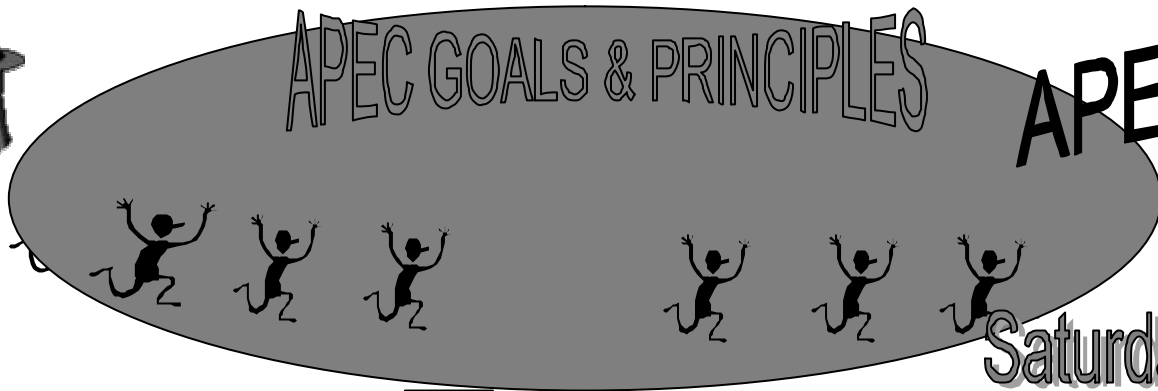
MAP of different "EXPECTATION"



APEC GOALS & PRINCIPLES

APEC BEFORE

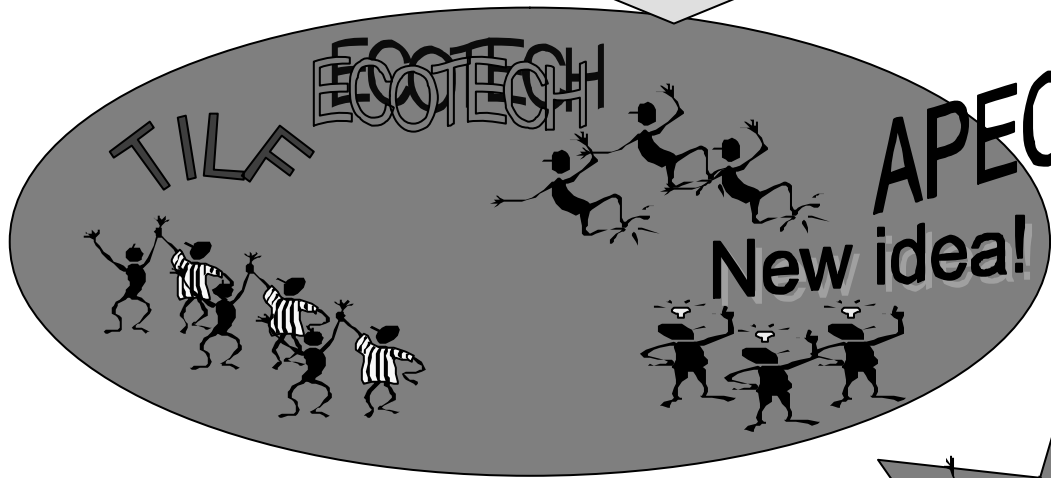
Saturday Night Fever!!



TIFA ECOTECH

APEC NOW

New idea!



APEC DISINTEGRATED!?





Thank you !

6th APEC Investment Symposium

20-22 March 2001

Cheju Island
KOREA

Wednesday 21 March 2001
2.00pm

Hon. Warwick Smith

SESSION TOPIC:***“New Investment Environment: Home Economy Perspectives”*****Background**

It is with much pleasure that I have an opportunity to both participate in -- and this afternoon to address -- the 6th APEC Investment Symposium.

From my former ministerial roles in the Australian Federal Parliament and my current position as an Executive Director at Macquarie Bank, I have a long association with APEC.

In fact, the very theme of this Symposium -- the “Restructuring of Foreign Direct Investment in the Age of Information Technology” -- is extremely relevant to Macquarie Bank, as a full service investment bank headquartered in Australia and operating in more than 22 locations globally.

As Co-Chair of the Bank’s Telecommunications, Media and Technology Group, I am integrally involved in building Macquarie’s M&A capacity in Asia, with a strong focus on the telecommunications and technology sectors. In addition, Macquarie is increasingly involved with direct investment and financing activities offshore, so that almost a third of all income is derived offshore – mostly in Asia.

SLIDE ONE IN HERE:

In Korea alone, Macquarie Bank is involved with project and structured finance advisory services (in a joint venture with the Shinhan Bank of Korea). It has also entered into an agreement with the Kookmin Bank to develop a treasury derivative business, and is actively facilitating FDI into Korea through the provision advisory services for the introduction of foreign investment into property opportunities.

Given these activities, Macquarie Bank is an active participant in the new investment environment underpinning foreign direct investment (FDI). This investment environment is clearly being shaped by technological development, such as the Internet, and it is against this background that I wish to discuss FDI from a “home economy” perspective.

In short, I intend:

- examining the trend of outward FDI from home economies;
- considering the benefits and costs of outward FDI to the home economy;
- reviewing the current investment environment from a home economy perspective; and

- proposing ways in which we can effectively improve the outward investment environment.

SLIDE TWO IN HERE:

Foreign Direct Investment (FDI) – Home Economy Perspective

FDI has become an increasing phenomena in our globalised economy, where national boundaries are becoming less economically and financially distinct. Organisations such as the WTO, OECD and APEC, to name a few, are becoming increasingly crucial in shaping the investment environment that underpins FDI.

According to the United Nations, *World Investment Report 2000*, FDI worldwide reached a staggering \$860 billion in 1999, and was forecast to exceed \$1 trillion for the first time in 2000. Only 10 years ago FDI stood at \$210 billion, up from \$60 billion 20 years ago.

FDI, however, extends beyond what respected Oxford University Professor Alan Rugman describes as the international investment “triad” of North America, Europe and Japan.. Australia, therefore, is an interesting case in point.

In 1947, Australia attempted to declare itself a “developing country” at International Trade Organisation negotiations. As a geographically large nation with a relatively small population to finance its infrastructure, Australia has historically relied on current account deficits to finance its economic growth. This scarcity of domestic capital has made FDI critical to the development of Australia’s natural resources, from mining through to manufacturing, services and farm output. Indeed, such a reliance on foreign investment has seen Australia suffer several “debt crises” between the 1880s and 1980s.

Paradoxically, though, despite these debt problems Australia is increasingly looking offshore for business opportunities and dramatically lifting its FDI presence. This is partly a result of a more globalised economy and increasingly competitive domestic business environment.

In short Australia is evolving from a major FDI recipient to an originator of foreign direct investment. How did this happen?

SLIDE THREE IN HERE:

Outward FDI Market Trends

Since the early 1980s, successive national and state governments have attempted to revitalise the economy by opening protected sectors up to international competition and privatising public instrumentalities such as banks, airlines, railways, telcos, electricity grids and other utilities.

Coupled with a determination to provide secure and deep capital markets, many industries that were protected from domestic rivals by state (provincial) boundaries have been opened up to interstate competition.

Financial deregulation in 1984, including the floating of the Australian dollar, allowed for the opening up and expansion of the Australian capital market to international competition.

As a result, Australia now provides an attractive launch pad for international companies wishing to invest in Asia.

SLIDE FOUR IN HERE:

Having restructured the economy to make it possible for Australian companies to pursue offshore ambitions, many corporations have vigorously accepted the FDI challenge – such as News Corporation, BHP, Telstra and Macquarie Bank.

Almost universally, outward FDI has grown in response to the presence of mature domestic markets for those companies and a desire to diversify their asset bases.

In some cases this may also include the relocation or expansion of production and processing facilities, in response to cost pressures at home. However, it may also involve the offshore acquisition of businesses by Australian firms to encourage economies of scale and the synergy of complementary assets.

Finally, having personally participated in many trade missions overseas with the Australian Government, from my former ministerial days and in my current role with Macquarie Bank, I am quite familiar with the promotional impetus of trade organisations such as Austrade. Australia's \$1.3 billion annual aid program also acts as an important leverage in establishing business partnerships with host companies

SLIDE FIVE IN HERE:

However, like any business arrangement, the right conditions need to exist on both sides of the exchange. For outward FDI flows, host countries have to structure attractive and reliable trading conditions.

Chief among these are the openness and fairness of foreign markets and the development of capital markets and legal institutions. Further, the standards of probity of corporate governance and transparency are vital in promoting long-term business investment.

Likewise the international rollback of government involvement and ownership in specific industries is a welcome move. One need go no further than the move away from public telecommunications monopolies in favor of private capital structures, and the introduction of competitors, to witness the benefits for investment and business. Inevitably such moves lead to a lowering of input costs for all businesses and a corresponding rise in FDI attractiveness.

SLIDE SIX IN HERE:

Cost-Benefit Analysis

Using Australia as an example, this table graphically shows how economies can be net importers of capital, while simultaneously contributing importantly to outward FDI.

In the long run, FDI benefits both investing economies and the host countries. The recognition of these benefits has driven the increasing levels of FDI globally over the past few years and resulted in the liberalisation of many regulatory environments relating to foreign investment.

Turning to a home economy view point, outward FDI confers a number of benefits to the host economy, and corporates undertaking this activity. Benefits arising from outward FDI include:

- access to new and broader investment opportunities (as opposed to restricting investment within a home economy bounds);
- an ability to create a global business/activity and through greater economies of scale, increase returns;
- market specialisation, with tailoring of investment in offshore locations to optimise supply and demand characteristics; and
- generating potentially larger returns in economic and financial terms to the home economy from expanded offshore activity.

SLIDE SEVEN IN HERE:

Building on the cost-benefit analysis of FDI this graph presents two key findings;

1. Australia is a small to medium FDI player in the global context, and
2. owing to its history and heritage Australia has a tradition of investing in Europe. But this is beginning to change, with a new focus on South East Asia.

From a cost viewpoint, the challenges to outward FDI include:

- understanding and working within new cultural, regulatory and political bounds;
- creating credibility within new FDI markets offshore and perhaps being a small/niche player in these markets, whilst being a dominant player in the home economy;
- the extent and nature of supporting infrastructure required to optimally undertake FDI offshore, in terms of ongoing oversight, regulatory requirements and market expectation commitments; and

- increasing awareness of actual FDI opportunities for the home economy and pursuing niche markets accordingly.

Macquarie Bank has undertaken the philosophy in moving offshore to do so only where it can add special value within a market – that is undertaking a niche player expansion. Therefore, while Macquarie operates in Asia, for example, from Korea, Hong Kong, Singapore, Malaysia, Japan and China – it does not currently have bases in the Philippines or India. At this point in time, Macquarie considers the costs of it participating in FDI in those latter markets outweigh the benefits to it – from an economic, financial and political viewpoint.

It is important to remember, however, that any cost-benefit analysis of outward FDI will only be relevant at the point in time conducted and not necessarily hold true for any medium-term. Clearly, political contexts change, market conditions change and regulatory regimes alter – all influencing the investment environment supporting FDI.

SLIDE EIGHT IN HERE:

Investment Environment Status

From a home economy viewpoint, the current investment environment is most conducive to outward FDI. Australia is undertaking an increasing number of ministerial trade missions, particularly Asia, to further facilitate and enhance outward FDI opportunities. Australian corporates are actively participating in outward FDI across a diverse range of sectors including information technology, transport and infrastructure, natural resource sectors and service/tertiary sector activities.

As I have noted earlier, the information revolution is driving FDI, particularly via the Internet. Australia, as a nation, and certainly many Australian corporates are very focused on being global players by capturing greater economies of scale and participating in specialist investment activity that can provide value adding benefits to shareholders in Australia.

Through international organisations such as the WTO, OECD and specialist regional groups such as APEC, greater understanding and awareness, together with facilitating a truly global framework to support FDI is being created.

In Asia alone, there has been considerable liberalisation of earlier foreign ownership restrictions and general attitudes to FDI. This has become particularly evident following the 1997 Asian economic crisis. Australia and corporates such as Macquarie Bank have actively sought to pursue outward FDI globally and in Asia to an increasing extent in recent times. Such expansion is a reflection of the global FDI opportunities on offer and also a recognition that growth for any corporate within the home economy can expand to the point of saturation.

With Macquarie Bank, for example, over 30 per cent of the Bank's income was generated from offshore activities for the 6 months to 30 September 2000. This contribution is

expected to grow in line with Macquarie's increasing expansion into select international markets and businesses, where Macquarie can add genuine value.

SLIDE TEN IN HERE:

Improving the Outward FDI Environment

As with any investment environment, there can always be improvements made and greater efficiencies gained. This is true when considering the outward FDI environment.

Considerable ground has been made in recent years in the outward FDI market from a political, regulatory, cultural and overall attitudinal approach. While historically, outward FDI was not fully embraced by all potential host countries (with highly regulated and protective markets and substantive foreign investment restrictions), there has been a strong movement away from this "protective walls" approach.

This movement or liberalisation towards a supportive FDI environment (both inward and outward) has benefited both host and home countries.

In moving forward, international organisations such as the WTO, for example, will continue to play a vital role in driving further market reform that will do much to enhance the FDI environment. Economies, such as China, for example, will be fundamental to participating in global market initiatives if FDI is to be optimised and further opportunities created.

From my own viewpoint, an ideal outward FDI environment requires greater regional coordination of trade and industry representations, uniform regulatory and legislative standards, and domestic policies aimed at encouraging the expansion of Australian multinationals.

As participants with a direct interest in APEC and the FDI environment, we can all do much to further advocate the advantages and net benefits of FDI to the community, to industry and to governments. In those countries where the FDI environment may be more constrained (through substantive foreign investment restrictions), an educative process is required. It is only by capturing the enthusiasm of the mass community in such countries, will there be sufficient grounds and political will to liberalise the regulatory regimes that may prohibit or hinder FDI development.

Continuing information technology developments will also act as catalysts for further reform to the FDI environment (encouraging even more interest in undertaking FDI and support for organisations such as the WTO, OECD and APEC).

Certainly, Macquarie Bank has first hand experience of the outward FDI environment in many international locations and, particularly Asia. From this experience, it is apparent that a liberalised regulatory regime is not the only requirement for a supportive FDI environment. Regulatory transparency is a critical factor that impacts on foreign investors' confidence levels and accessibility to furthering FDI opportunities. Hierarchical corporate structures

and a lack of transparent corporate decision making also limits foreign investment, especially in mergers and acquisitions.

From a suggestive position, and home economy view point, a FDI market would be greatly enhanced by countries:

- streamlining foreign investment procedures;
- strengthening investment incentives;
- establishing a one-stop service system; and
- introducing an ombudsman system for foreign investor complaints.

INSIGHTS – MACQUARIE BANK EXPERIENCES

Having examined the current FDI market, from a home economy perspective, and outlined suggestions for improvements in this environment, I must emphasise that Macquarie Bank is enjoying enormous benefit from FDI activity.

As our corporate advisory (M&A) and financing activities expand in Asia and across the globe, Macquarie is continuing to learn from its experiences in new markets. Importantly, Macquarie recognises the value in participating in unique forums such as this to facilitate informed debate and to seek strategies for the path ahead – that is of interest to us all.

The FDI environment has certainly come a long way in recent years, with more liberalised and enthusiastic approaches being displayed. Market and technological developments will continue to influence the nature of our FDI environment, but notwithstanding, we all have a responsibility to assist in shaping the new investment environment for FDI. This is a challenge that both I and Macquarie look forward to continuing to pursue, along with all of you.

Thank you.



ASIA-PACIFIC ECONOMIC COOPERATION

VI APEC INVESTMENT SYMPOSIUM

NEW INVESTMENT ENVIRONMENT: HOST ECONOMY PERSPECTIVE

Luis A. Cervantes M.

Cheju, Korea, March 2001

Jáuregui, Navarrete, Nader y Rojas, S.C.



New Investment Environment

INTRODUCTION

- Social and Political Scenario
 - Transition to democracy
 - President elect Vicente Fox
 - Equilibrium of forces in Congress
votes and law making ability

- Economic Scenario
 - Growing domestic market
 - Deflation
 - Security and transparency
 - Deregulation of economy
 - New Foreign Investment Law (1993)
Open Investment Regime
 - Implementation of liberalization policies
 - Opening of energy sector
 - Tax reform



New Investment Environment

FDI Policy in Mexico

- Globalization
 - 1986 General Agreement on Tariffs and Trade and WTO (1994)
 - 1993 Asia Pacific Economic Cooperation APEC
 - 1994 Organization for Economic Cooperation and Development
 - 1994 North America Free Trade Agreement NAFTA
 - 1995 G3 Colombia, Venezuela and Mexico
 - 1999 European Union
- 13th Economy worldwide
- 8th Exporter worldwide¹
- 1st Latin America exporter
- 2nd USA commercial partner
- 3rd recipient of FDI among emerging economies

¹ Considering the European Union as one economic block



New Investment Environment

FDI Policy in Mexico

- Concluded Free Trade Agreements
 - USA/ Canada NAFTA
 - Colombia and Venezuela G3
 - Costa Rica
 - Bolivia
 - Nicaragua
 - Chile
 - Guatemala, Honduras and El Salvador
 - Israel
 - European Union

- Concluded Bilateral Investment Treaties
 - Spain
 - Switzerland
 - Argentina
 - Netherlands
 - France
 - Finland
 - Denmark
 - Italy
 - Portugal
 - Austria
 - Germany
 - Belgo-Luxembourg Economic Union
 - Uruguay
 - Sweden
 - Korea
 - Greece

¹ Considering the European Union as one economic block

Source: World Bank, WTO, U.S. Department of Commerce



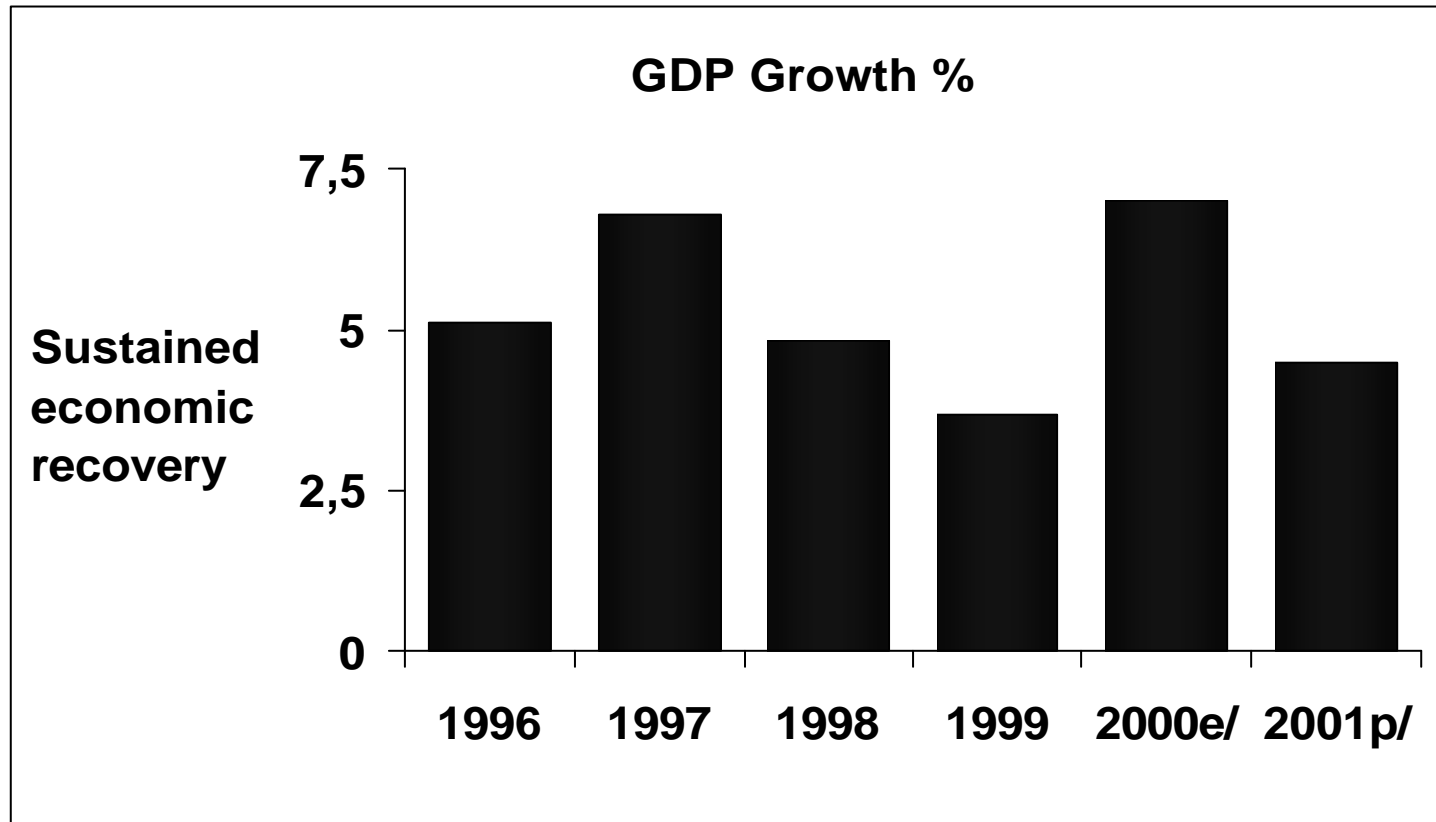
New Investment Environment

Results and Benefits of Mexico FDI Policy

- Protection of Investment
- Open Investment Regime
- Increase in FDI and Commerce Flows
 - Mexico has become a strategic place for FDI
 - Between 1994 to 2000, Mexico received 65,697.3 million dollars of FDI
 - Since the entry into force of NAFTA, annual average of FDI in Mexico has increased in almost 300%
 - 20% of formal employment is located in enterprises with FDI
 - Growth on employment in enterprises with FDI was higher than the total employment
 - FDI produces better paid jobs.

New Investment Environment

MAIN MACROECONOMIC INDICATORS 1996-2001

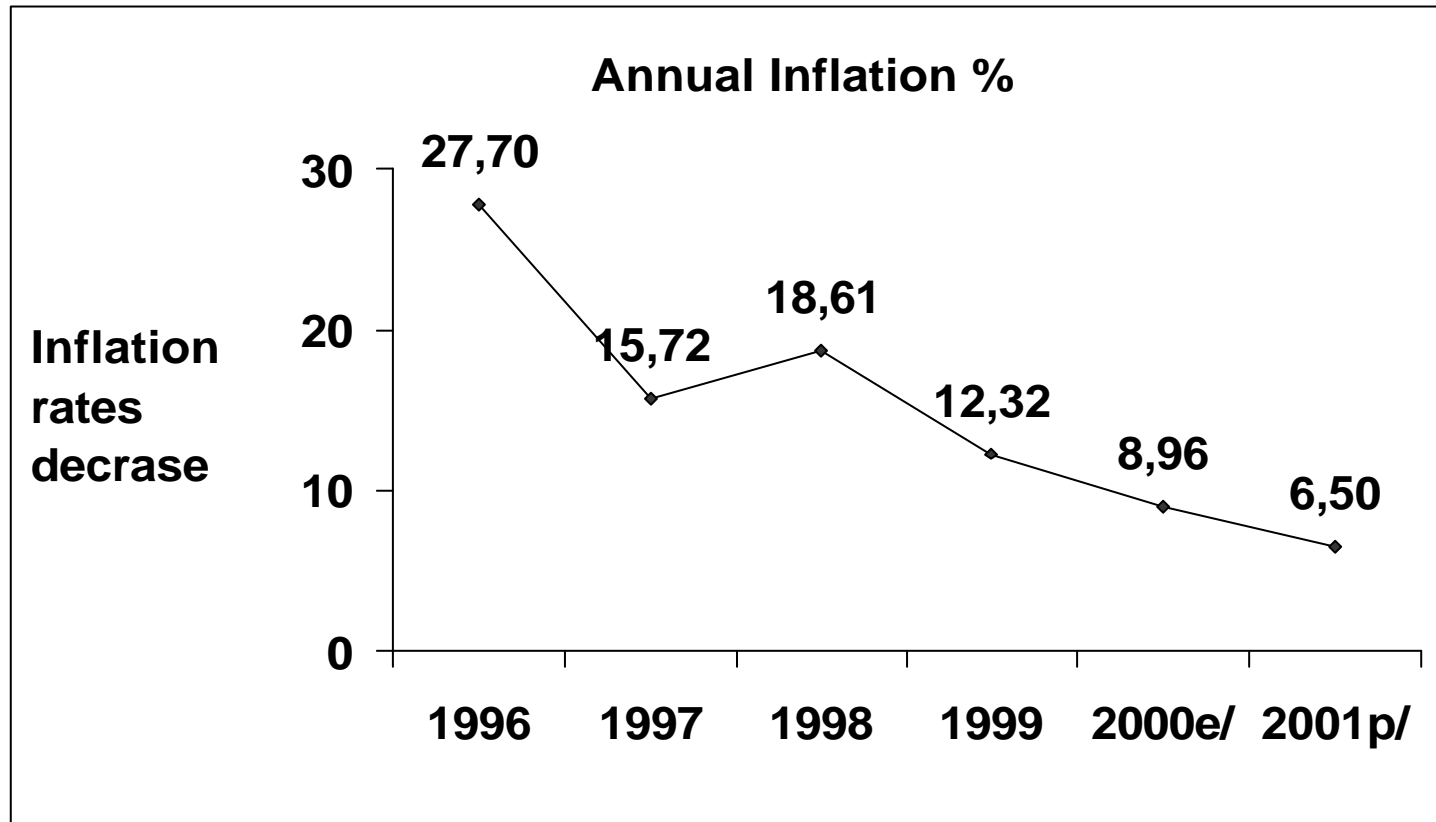


e/ Estimated
p/ Projected

Source: Ministry of Finance and Public Credit ("SHCP")

New Investment Environment

MAIN MACROECONOMIC INDICATORS 1996-2001



e/ Estimated
p/ Projected



New Investment Environment

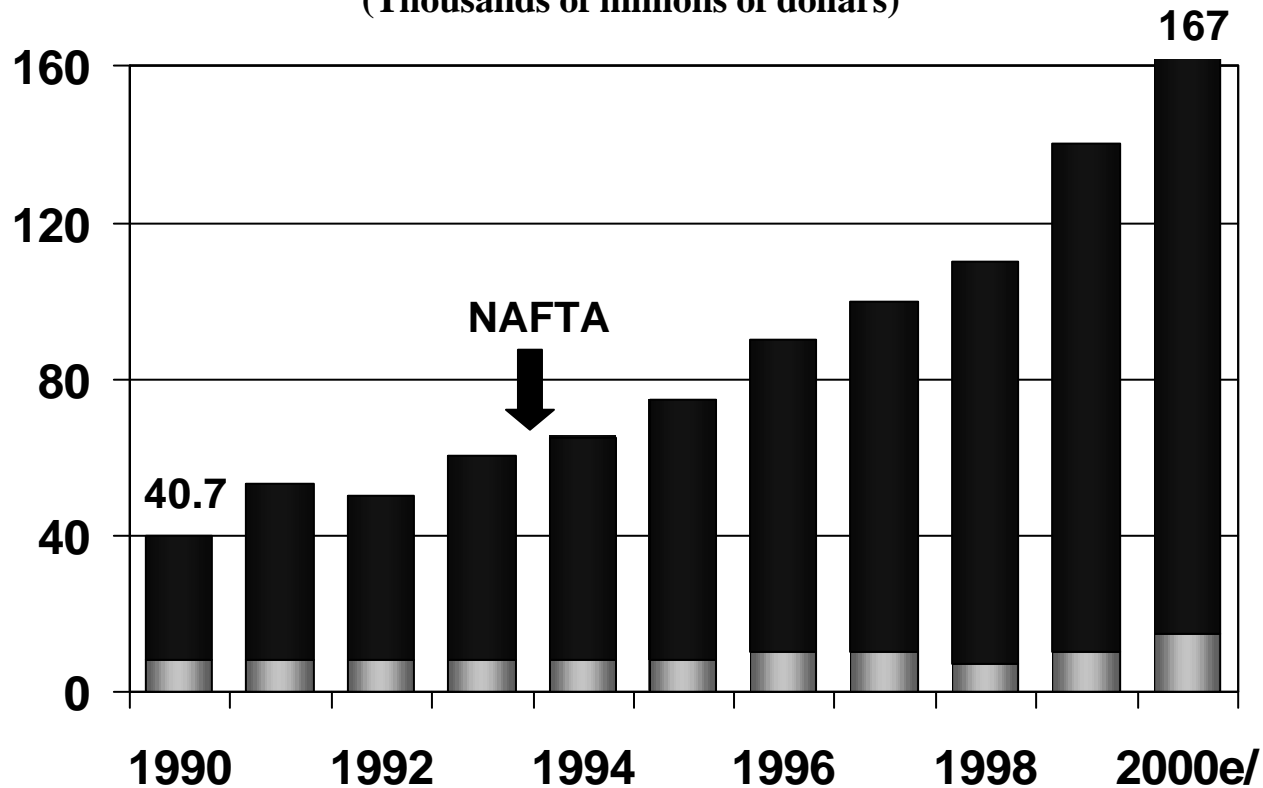
EXPORT SECTOR DEVELOPMENT

• Average annual growth 1995-2000	17%
• Participation in GDP	28%
• Number of exporters	38,500
• Creation of industry employment	
Total	40%
New employment	70%

New Investment Environment

EXPORTS GROWTH WITHIN THE LAST DECADE

Total export 1990-2000
(Thousands of millions of dollars)



e/ Estimated

Source: Banco de México

■ Non-oil

■ Oil



New Investment Environment

MEXICO MOST IMPORTANT COMMERCIAL PARTNERS

Country	Exports (million dollars)	Imports (million dollars)
1. USA	109,750	95,798
2. Germany	1,943	4,662
3. Japan	646	4,636
4. Canada	2,117	2,613
5. Korea	146	2,665
6. Spain	870	1,189
7. China	119	1,716
8. United Kingdom	687	1,042
9. Italy	136	1,492
10. France	267	1,279

New Investment Environment

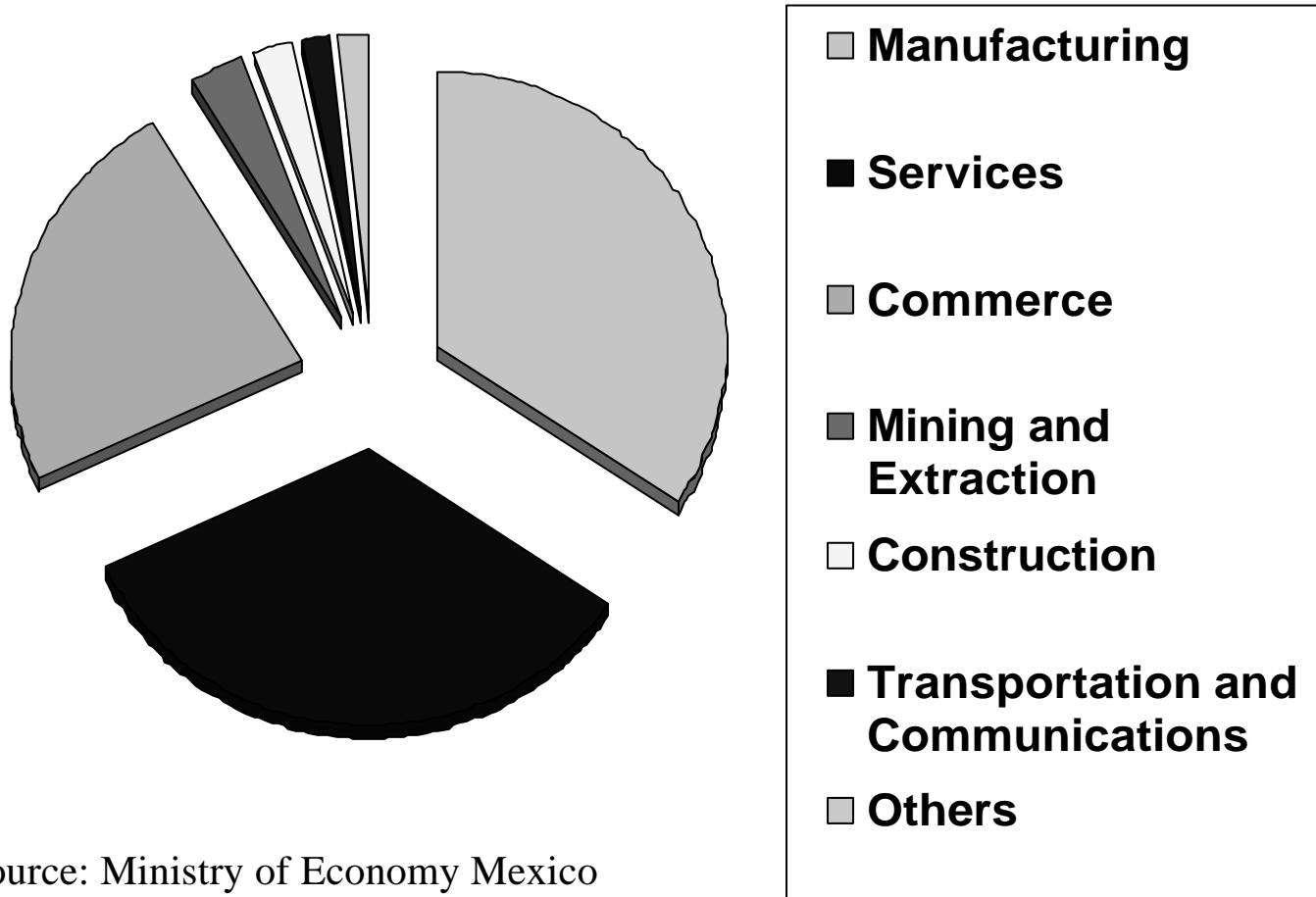
Investment in Mexico of APEC Members

- As of September 2000, 14,337 Mexican companies have APEC Members investment, which represents 73.2% of all Mexican enterprises with foreign investment.
- In 86.7% of such companies, the APEC Members investment represents the majority of their capital stock.
- Between January 1994 and September 2000, the FDI in Mexico amounts 65,697.3 millions of dollars. The 71.5% of such FDI came from APEC Members.



New Investment Environment

Investment in Mexico of APEC members by sectors



Source: Ministry of Economy Mexico

New Investment Environment

Mexico's challenges for XXI Century

- To strengthen institutions that encourage free trade and free investment in order to:
 - Continue to increase and diversify exports and production of Mexican goods and services
 - Remain as one of the most attractive destinies for FDI
 - Produce more and better paid job