ASEAN AND APEC IN 200
AND BEYOND: AN FDI ANALYSIS

ASEAN and APEC in 2000 and Beyond: An FDI Analysis

by

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With the Compliments of

Introduction

Sources of Trade Liberalization Among ASEAN Nations

Before the Bogor Declaration on November 15, 1994, a draft was formerly delivered to each member country of the Asia Pacific Economic Cooperation (APEC) on November 1, 1994. The most important part of the Declaration was the one in No. 6:

With respect to our objective of enhancing trade and investment in Asia Pacific, we agree to adopt the long-term goal of free and open trade and investment in Asia Pacific. This goal will be pursued promptly by further reducing barriers to trade and investment and by promoting the free flow of goods, services and capital among our economies. We will achieve this goal in a GATT-consistent manner and believe our actions will be a powerful impetus for further liberalization at the multilateral level to which we remain fully committed.

We further agree to announce our commitment to complete the achievement of our goal of free and open trade and investment in Asia Pacific no later than the year 2020. The pace of implementation will take into account the differing levels of economic development among APEC Economies, with the industrialized economies and newly industrializing economies achieving the goal of free and open trade and investment no later than the year 2010 and developing economies no later than the year 2020.

We wish to emphasize our strong opposition to the creation of and inward-looking trading bloc the would divert from the pursuit *of global free trade. We are determined to pursue free and open trade and investment in Asia and Pacific in a manner that will encourage and strengthen trade and investment liberalization in the world as a whole. Thus, the outcome of trade and investment in Asia* and Pacific *will not be the actual reduction of barriers among APEC economies. In this respect we will give particular attention to our trade with non-APEC developing economies to ensure that they will also benefit from our trade and investment liberalization, in conformity with GATT/WTO provision.*

The most important part contains in the second paragraph setting the date for complete trade liberalization for all APEC members. The draft was prepared by the host country, Indonesia, who refused to make significant changes. In the actual Declaration, only one change was made by replacing the phrase "*industrialized economies and newly industrializing economies*" to that of "*industrialized economies*" (Mcbeth an Kulkani, 1994, p. 15).

The move to set the definite time for complete trade liberalization was strongly opposed by Malaysia and China for two different reasons. Malaysia was wary of Washington using APEC as a

political tool against the European Union. China was concerned that too drastic a liberalization of trade could lead to bankruptcies of domestic small businesses (Asahi, 1994). But Indonesian President Suharto, the host of the summit, persuaded them to change their mind. After the Declaration was made, at the end of APEC ministerial meeting, Datuk Seri Rafidah Aziz, Malaysia's representative announced her intention for Malaysia to host the 1998 APEC's summit (Mcbeth and Kulkani, 1994, p. 14). The sign indicated Malaysia's approval of the Declaration, finally.

Doubt has been cast of whether President Suharto was fully aware of the implication of the Bogor's Declaration on future development on his own Indonesian economy, as he urged members of the APEC especially the indecisive ones to sign. To answer this question in a more systematic manner not just only for Indonesia but for all members of the Association of South East Asian Nations (ASEAN), at least three related issues must be investigated. They are development approach, rapid increase in t foreign direct investment (FDI), and restructuring of industries.

Development Approach: The issue is whether each nation in the region will benefit more from complete trade liberalization or the right mix between perfect competition and government intervention. There has been a long debate on this issue among most ASEAN nations. Consensus of most nations, except for both Singapore and Brunei Darussalam who favor trade liberalization from almost the very beginning, was for the right mix. Indonesia and to some extent the Philippines stood more strongly against complete trade liberalization. Malaysia and Thailand were on the side of pushing a little more for rapid pace of the liberalization. It should be brought to additional notice that when Malaysia had the tendency to oppose the draft of the Declaration, she was not against the trade liberalization but more against her perception of excessive influences over the ASEAN by the United States. The fact that Indonesia took the lead in pushing for trade liberalization during the Bogor's summit in November 1994, implies that she too was ready for it.

Rapid Increase in Foreign Direct Investment (FDI): Direct foreign investment especially from Japan started pouring in the region in significant amount, right after the Plaza Accord in September 1985 resulting in steep appreciation of the yen. The timing coincided with the economic downturn in the region in 1985. The situation led the policy-makers in ASEAN to seek for alternatives in their development strategies by exporting more to the United States, Japan and Europe, and to look more closely at the potential of the ASEAN market (Rieger, 1986, p. 58). At the same time Japan was looking for opportunity to move some of her production bases overseas for cheaper costs in order to enhance her competitive edge crippled by strong yen. ASEAN has been one of the most favorite regions for Japanese investors for many reasons.

Among them were low cost, not so strong currency and the acquisition of the General System of Preferences (GPS) provided by the United States (Yaptenco, 1993a, p. 1).

Land and labor costs and intermediate products in the region were low for Japanese investors. According to Fortune magazine in October, 1992, quoted by Domingo (1993, p. 4), while average daily compensation for Japan was 14.41 U.S. dollar, the rate for Singapore, Malaysia, Philippines, and Indonesia were, 4.38, 1.19, 0.42 and 0.40 U.S. dollar, respectively. Also, with the exception of Singapore, the currency in the region was not as strong as that of Taiwan and Korea. As a result, direct foreign investment from Japan increased sharply. While direct foreign investment from Japan in 1984 and 1985 were, 10,155 and 12,127 million U.S. dollar, respectively, the figures jumped to 22,320, 33,364, and 47,022 million U.S. dollar in 1986, 1987 and 1988 accordingly. The peak was in 1989, with the amount of 67,540 million U.S. dollar (MITI, 1992). From ASEAN side, since 1985, investment from Japan has either ranked first of second in their investment sources (Atienza, 1995).

Japan invested heavily in ASEAN countries. With the exception of Singapore, Japan transferred industries no longer competitive at home to ASEAN. The huge inflow of Japanese investment in chemicals, metal products, electrical and electronic products, machinery and transport equipment diverted some ASEAN labor from unskilled labor-intensive light industries. According to a study by the Center for Pacific Business Studies of the Sakura Institute, ASEAN's industrial competitiveness in 1986-1989 widened to include a new edge in industries in which Japan invested heavily. Giving each other stiff competition in these industries, each country had to be better than the others in terms of labor productivity, lower unit of labor costs and higher value added or contribution by labor. Indonesia rated highest in labor productivity for the 27 manufactured products in the study. Malaysia was best in terms of unit of labor costs, while the Philippines outranked the others in terms of high value-added (Yaptenco, 1993b, p. 2).

In addition to rapidly stepping up direct investment into ASEAN, Japan also served as one major outlets for their manufacturing products. There was significant restructuring of imports to Japan during 1985 to 1990. Manufactured imports showed a sharp increase from 31 to over 50 per cent of total Japanese imports (ESCAP, 1991, P. 15). In 1988, Japan was the main market for ASEAN-4 (Indonesia, Malaysia, Philippines, Thailand) and absorbed 25 per cent of the group's combined exports. Although, the bulk of these exports was still accounted for by oil and other primary commodities (ESCAP, 1991, P.24).

As foreign direct investment (FDI) from Japan since 1986 did provide ASEAN countries with upgraded technology in manufactured production, improved their labor productivity, the confidence in their ability to compete internationally was enhanced. Logically followed, trade liberalization becomes more appealing for them. Nonetheless, without successively restructuring of industries in ASEAN countries, given some varying degrees in their industrial development initially, as well as elsewhere in the world, especially among the newly industrialized economies (NIEs), Korea, Taiwan, Hong Kong including Singapore, as well as industrialized countries like Japan and to a certain extent the United States and Europe, rapid increase in intra-ASEAN and external trades will not be possible. Trade liberalization among them has become a critical instrument to stimulate both intra-regional and external trade for ASEAN.

Restructuring of Industries: Global restructuring of industries, particularly in Japan, the NIEs and the ASEAN-4 (Indonesia, Philippines, Malaysia, and Thailand) themselves has been instrumental for intra-regional trade within ASEAN as well as with outside. According to the Economic and Social Commission for Asian Pacific (ESCAP), industrial restructuring is a process of change in industrial sector of the national economy which can take various dimensions: changes in the value added contributions of specific industrial sub-sector; change in ownership of industrial enterprises; change in the size distribution of firms; change in the degree of competition in industrial input and output markets; changes in the inter-industry structure via linkage effects (1991, p. 1). The ones to be emphasized more in this study are the latter two, namely, changes in the degree of competition and changes in the inter- industry structure.

The factors affecting relative competitiveness of different industrial sectors are changes in real exchange rates, interest rates and credit policy, trade policy, and domestic technological capabilities. Of these factors, the change in competitiveness of ASEAN is caused by changes in real exchange rates, especially those of Japan and the NIEs, trade policy and domestic technological capabilities. Among ASEAN nations, trade liberalization policy is now instrumental to force greater domestic competition in order to enhance external competition. The policy, in turn, will result in restructuring of industries and upgrading technological capabilities.

With the exception of Japan that already started upgrading her technology sine the early 1950's, the Asian NIEs started from limited endowment of natural resources had no other choice but to start from labor intensive industries in the 1960's, while most ASEAN nations depended primarily upon exports of their primary products. According to the ESCAP's study, until the 1970's the ASEAN countries, including Singapore, relied mainly on exports of primary commodities. During the 1970's, they also began to increase

exports of semi-skilled labor intensive goods. The shares of these goods, including clothing, textiles, footwear, and other light manufactures, are still increasing in exports of ASEAN countries (1991, p. 14).

In the 1970's, Japan already specialized in exporting human capital-intensive and technological intensive goods. In the 1980's, export share of these products remained high in Japan. The United States, in contrast, has less comparative advantage in human capital-intensive goods, but continues to maintain comparative advantage in technological intensive sectors, especially in the area of information and communication technology. The NIEs began to export technological intensive goods by the end of the 1970's and by the late 1980's were becoming stronger competitors in the area (ESCAP, 1991, p. 15).

Labor shortage resulting in rapid increase in wages starting from Japan down to the NIEs is one of the main reasons for constant upgrading of technologies in those countries. In general, the ASEAN-4 follow the footsteps of the NIEs rather closely, taking the advantage from the tight labor markets of the NIEs to produce labor intensive manufactured products for industrialized countries, the markets previously opened by the NIEs.

Among the ASEAN-4, Thailand took an early initiative in implementing a number of austerity and liberalization measures to restore economic stability caused by the prolonged depression since 1980 as well as to deal with the balance of payment problem. One of the swift measures was the devaluation of the baht currency from that of 23.53 baht per one U.S. dollar in 1984 to that of 27.19 baht per one U.S. dollar in 1985, allowing freer flow of foreign capital in order to lower domestic interest rates. As direct foreign investment from Japan started flowing in 1986, growth rate began to surge rapidly and reached a record of two digit rates of 13.3, 12.2, and 11.6 in 1988, 1989, and 1990, respectively (EIU, 1995a, P.13).

In case of Malaysia, following the oil price increase of 1979 and 1980, the government initiated an ambitious program of infra-structural development and investment in heavy industry with the aim of speeding up growth to attain the New Economic Policy objective of raising the well-being of the Bumiputras or the indigenous Malay. Unfortunately, the sharp down turn in oil price in 1986 added more burden to the already heavy fiscal and current account deficits. The measures adopted by Malaysian government to solve the problems that cause the severe economic downturn were by the combination of cuts in government expenditures, a stepped-up privatization program, depreciation of the ringgit, liberalization of foreign investment code (ESCAP, 1991, p. 23). As a result,

growth rates in Malaysia rebound to the level of 8.9, 8.7, and 9.8, during 1988 to 1990, respectively, and remain in the rage of 8 to 9 per cent throughout the early 1990's (EIU, 1995b, p. 15).

For both the Philippines and Indonesia, heavy foreign debt burden prevented them from liberalizing their trade at the time both Thailand and Malaysia began their actions. Political instability during the martial law regime of Marcos (1972-86), hampered the situation further. However, the success demonstrated by both Thailand and Malaysia convinced both the Philippines and Indonesia to follow the suit in the late 1980's. For the Philippines, the fall of Marcos followed by Aquino (1986-92) and Ramos (1992-present) has resulted in significant change in the country's economic policy. The Philippines has become much more competitive and able to maintain sustained growth for her own economic viable than before. As a result, there have been some slight difference in stage of industrial development among the ASEAN-4.

Malaysia, because of her long political stability and being a relatively resource rich country with smaller size of population of 19 million in 1993, take the lead, followed by Thailand. Indonesia, another relatively resource rich nation but with a much larger size of population of about 190 million in 1994, and also a long stable government, but starting the liberalization process later, ranks the third. The Philippines is now trailing a little behind currently. Slight difference in the level in industrial development among the ASEAN-4 also stimulates intra-regional trade and investment further. Rapid growth of the whole Asian region during the 1980's (the average growth rate of 7 per cent during 1982-90, in comparison with the average global rate of growth of 2.9 per cent during the same period), together with less favorable situation of markets in industrialized countries in the future, resulting in the effort at expanding regional market becomes much more worthwhile. Of course, one necessary condition among many others for such expansion, is more trade liberalization among those countries themselves.

Apart from the said set of logic and empirical evidences, ASEAN members also found out that trade liberalization among themselves also encourage investors of transnational corporations (TNCs). For example, Toyota Motors has its following production networks scheme; Singapore base for overall coordination and management; Indonesia for gasoline engines and pressed parts, Philippines for transmissions; Thailand for diesel engines, pressed parts and electrical parts; Malaysia for steering gears and electrical parts (Yaptenco, 1993a, p. 3). This year (1995), Malaysia and the Philippines join hands to expand the production of Mitsubishi's Proton Saga of the original Malaysian base to the Philippines. Increasing trade liberalization together with the fact of slight difference in level of industrial development among different ASEAN nations, have made such plan and action to be

executed with ease. Such dynamic situation also help reinforce continual restructuring of industries among these countries. Consequently, their competitive abilities are also continually enhanced.

Coverage of the Study

The discussion above is only designed to provide quick explanation to a seemingly contradicting but swift action taken by President Suharto for his initiation to set a deadline for trade liberalization for all APEC members at the Bogor summit on November 15, 1994. Part of the explanation lies on the comparative development and trade performances of members of the ASEAN in relation to those of the APEC. The explanation only touches on a surface of few related but fundamental factors explaining how ASEAN has come to taken the said trade liberalization stand, while the focus of this study will be on future performances of ASEAN within the APEC setting. Special emphasis will be made on the role of foreign direct investment (FDI) on possible performance of individual ASEAN member in the face of continual adjustment of industrial structure among all APEC members. Some limitation on growth prospect of members of the ASEAN in term of energy consumption will be also discussed.

Given the rational trade liberalization and the past performance of ASEAN economies, one would expect ASEAN to perform well within the said APEC setting. However, before such conclusion can be reached, one must begin with some brief historical development of ASEAN and APEC in order to gain deeper understanding from the said development. The two topics will be discussed in the following two sections. The third section will discuss the existing economic structure of each ASEAN member and its future prospect. The following section will discuss the impact of direct foreign investment under trade liberalization environment followed by some possible limitation on energy and final conclusion.

Brief Historical Development of ASEAN

History of ASEAN can be traced back to the origin of the now defunct organizations of the South East Asia Treaty Organization (SEATO) initiated by the United States during the Manila conference on September 6-8, 1954, followed by the Association of Southeast Asia (ASA) in August, 1961. The former was designed for both military and economic cooperation between the United States and some Southeast Asian nations especially the Philippines, Malaysia and Thailand against the expansion of communism into the region. Since both Thailand and the Philippines were already military allies of the United States, the SEATO was not very active and was finally scrapped in favor of the new bilateral defense treaty between the United States and Thailand known as Thanat-Rusk Agreement in 1962. In order to keep closer tie with the anti-

communist neighbors, in absence of the SEATO, the ASA was organized in Bangkok (Puntasen and Chenvidyakarn, 1988, p.60). Its members were Malaysia, the Philippines, and Thailand. Its focus was on economic, social, cultural, scientific, and administrative concerns (Palmer and Reckford, 1987, p. 6).

ASA activities were hindered by its limited membership and the exacerbation of Malayan and Philippines relations that took place in 1963 over the Philippines claim to North Borneo (Sabah). The formation of Malaysia in 1963, by the inclusion of the former British possessions in Borneo-Sabah and Sarawak - led to a deterioration of Malaysian relations with Indonesia. President Sukarno of Indonesia then launched his campaign on Crush Malaysia. During 1963-65, Thanat Khoman the Thai foreign minister then had sought to mediate both the Malaysia-Philippine Sabah dispute and the Malaysia-Indonesia confrontation. After Marcos was elected as the President of the Philippines in 1965 and the swift reduction of Sukarno after the failure of the attempt coup in Indonesia later in the same year, the two conflicts were subsided (Palmer and Reckford, 1987, p. 7).

The subsidence of conflicts gave rise to the resumption of cooperation among these countries. As a result, ASEAN was formed by the Bangkok Declaration of August 8, 1967, signed by foreign ministers of Indonesia, Malaysia, the Philippines, Singapore and Thailand. Brunei became the sixth member in February 1984. Vietnam became seventh member on July 28, 1995. Laos and Cambodia now receiving observer status. Myanmar, after the military dictatorial regime of the State Law and Order Restoration Council (SLORC) released the democratic leader of Aung San Suu Kyi after being placed under house arrest more than 6 years, will be expected to gain an observer status next year. Both Laos and Cambodia are expected to gain full membership status in 1997. It can be anticipated that ASEAN will finally has ten members in the near future.

A Road Towards Trade Liberalization

Among the broadly stated of seven aims and purposes set forth in the declaration, three of them will be reiterated here:

- *To accelerate the economic growth, social progress, and cultural development in the region through joint endeavors in the spirit of equality and partnership in order to strengthen the foundation for a prosperous and peaceful community of Southeast Asian nations;*

- *To promote active collaboration and mutual assistance on matters of common interest in the economic, social, cultural, technical, scientific, and administrative, field;*

- *To collaborate more effectively for the greater utilization of their agriculture and industries, the expansion of their trade, including the study of the problems of international commodity trade, the improvement of their transportation and communication facilities, and the raising of the living standards of their people;*

Not like its predecessors of both the SEATO and ASA, the ASEAN appears to stress more on economic cooperation especially through the expansion of trade. In spite of the determination of the ASEAN leaders at the promotion of intra-regional trade, not much progress was made until after 1985. This can be shown by the figures of percentage of trade flow out of and into each ASEAN country.

Intra-Regional Trade Flows among ASEAN Nations (1975-85)
Unit: per cent

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Indonesia											
Exports to ASEAN	10.1	8.7	10.3	12.4	13.8	11.3	11.1	15.5	16.2	11.4	10.8
Imports from ASEAN	8.4	13.5	13.8	9.2	11.0	11.9	12.4	19.1	23.2	14.0	10.3
Malaysia											
Exports to ASEAN	23.7	21.1	18.5	18.0	19.5	21.7	25.5	28.9	27.8	25.9	26.1
Imports from ASEAN	15.0	14.1	14.4	14.1	14.3	16.2	17.7	19.6	19.6	19.5	22.9
Philippine											
Exports to ASEAN	2.7	3.1	4.0	6.0	4.1	6.4	7.1	7.1	7.0	9.7	11.4
Imports from ASEAN	4.7	6.4	6.2	5.4	5.6	5.9	6.4	6.3	8.2	11.6	14.2
Singapore											
Exports to ASEAN	14.5	13.9	13.5	12.2	12.9	15.1	17.1	24.6	26.7	29.3	24.3
Imports from ASEAN	19.9	22.0	23.3	22.9	25.0	23.5	20.7	23.6	24.5	22.3	20.4
Thailand											
Exports to ASEAN	16.6	16.6	17.5	15.2	16.5	16.0	14.4	15.2	13.7	14.1	14.4
Imports from ASEAN	2.7	3.3	4.2	5.7	7.4	9.5	9.9	11.7	13.9	13.7	14.6

Source: Sahathavan Meyanathan and Ismail Haron, 1987, "Asean Trade Co-operation: A Survey of the Issues", in Noordin Sopiee, Chew Lay See, Lim Siang Jin, eds., ASEAN at the Crossroads, Institute of Strategic and International Studies (ISIS) Malaysia, Kuala Lumpur, Malaysia, pp. 46-52.

It can be observed from the table above that there was closer trade relations between exports from Malaysia and imports of Singapore. Most of them were primary products. Also, exports from Thailand to the rest of the region were much higher than the imports basically because Thailand exported rice to most countries but bought only little from them during the 1970's. The Philippines had little trade relations with the whole region until the early 1980's. Major obstacle stemmed from basic structures of most ASEAN economies.

Major Obstacles Against Trade Liberalization

As already pointed out in their separate studies by Wong (1979, p. 38) and Tan (1987, p. 66), namely, with the exception of Singapore most countries pursued the development strategy of import-substitution whereby protection of domestic industries was deemed to be necessary. At the same time their economic structures were competitive rather than complementary. As a result, the agreement on ASEAN Preferential Trading Arrangement (PTA) signed in February 24, 1977, was not very effective (Tin, 1987, pp. 57-58) because the margin of preferences offered was too low, in some case the offer served no practical purpose, and long list of sensitive items excluded from the PTA. Such half-heartily committed to more trade liberalization by most ASEAN members then reflected the nature of their economic structures discussed earlier.

In spite of the difficulty resulted from their economic structure against closer economic cooperation, members of ASEAN did try very hard to achieve the set of aims and purposes discussed above. Two years after its inception, the Foreign Ministers of ASEAN commissioned a study of economic co-operation in ASEAN to be conducted by the Department of Economic and Social Affairs of the United Nations in collaboration with the Economic Commission for Asia and Far East (ECAFE), the Food and Agriculture Organization (FAO) and UNCTAD. The report was completed in 1972 and was used as a blueprint for economic cooperation among the ASEAN nations. The report presented many ideas and proposals that were later adopted by ASEAN nations, including such suggestions as trade liberalization through selective or product-by-product tariff negotiations, package deal arrangements for large industrial projects and financial cooperation (Castro, 1980, p. 54).

Internal Pressure on Trade Liberalization

Because of the said intrinsic nature of their economic structures with the exception of Singapore, in spite of their great efforts, little was achieved in the way of economic cooperation among ASEAN nations. Naturally, Prime Minister Lee Kuan Yew of Singapore became less patience when the time was coincided with the cease-fire negotiations between Vietnam and the United States, after her full escalation into the Vietnam war since 1964. His main concern at that time was that there would eventually be some shift in power balance among the supper powers, and ASEAN should be ready for it, by cooperating more closely for strengthening and expanding their national economies with a view to increase the economic and political stability of the region (Palmer and Reckford, 1987, p. 40).

Other pressure on speeding up the process of trade liberalization among ASEAN nations came from private sectors. Actual activities on intra-regional trade and investment must be

finally taken by private sectors. It is a well known fact that private sectors, has always been instrumental in business and industrial development in most ASEAN economies. Established in 1972, the ASEAN Chamber of Commerce and Industry (CCI) has always been representing private sectors in its cooperation in trade and industry. The ASEAN-CCI has several working groups that cooperate among themselves and work with ASEAN trade and industry officials (Akrasanee, 1987, p. 104).

The fact that trade liberalization and industrial cooperation, where perceptions of national interests are most positively engaged was painfully slow progress, the ASEAN-CCI was impatient with what it views as official tardiness and lack of political will to cooperate meaningfully since 1976 (Chng, 1985, p. 31). By May 1980, ASEAN-CCI had petitioned the economic ministers to be permitted to attend meetings of the five ASEAN economic committees. The economic ministers agreed to this request at their May 29-30 meeting. By that time the ministers already agreed among themselves to explore approaches that would strengthen the cooperation. The expert task force was recommended to be set up to undertake an in-dept assessment of the organization.

Anand Panyarachun, the president of the ASEAN-CCI at that time, was appointed as the task force chairman. Its report was presented at the 1983 foreign ministers ministerial meeting in Bangkok. Some high lights of the report are as follow: In the area of trade cooperation, the report recommended that items in the preferential tariff exclusion lists should be kept to the minimum. On industrial cooperation, the report recommended free imports and exports of raw materials for ASEAN Industrial Projects (AIP). As for the AIP, the approval process should be streamlined and speeded up, and that a zero tariff rate be established. In the area of finance and banking, the report recommended a liberal policy to enable more commercial banks of ASEAN countries to operate in member countries. As expected, the task force's report was not well received by the ASEAN foreign ministers (Palmer and Reckford, 1987, pp. 111-16).

Nevertheless, some pressure on closer economic cooperation and trade liberalization on part of the private sectors had been exerted on the ASEAN ministers. Of course, the real conflict stemmed from the fact that existing economic structure of each ASEAN country was not in a ready position to accommodate more trade liberalization. Interesting development took place in 1992 after direct foreign investment from Japan started pouring into the region since 1986, accompanied by restructuring of industries discussed earlier. The time was coincided with that of the premiership of Anand Panyarachun, the former president of ASEAN-CCI in 1982 and the chairman of the expert task force appointed by ASEAN ministers in 1983, who became the Prime Minister of Thailand since early 1991.

During the economic minister meeting in Kuala Lumpur in October 1991, Thailand already propose the idea of ASEAN Free Trade Area (AFTA) in order for the region to turn to be a free trade area within a specified time. During the fourth summit on 27-28, January, 1992 held in Singapore, the ASEAN heads of government committed to set up an ASEAN free trade area within 15 years beginning from January 1, 1993. "*What we have achieved here during the past two days is more than just building on our past successes. We have enlarged the vision of what ASEAN is all about,*" said Thai Prime Minister Anand Panyarachun (Vatikiotis, 1992, p. 10). His effort to move ASEAN on the path of trade liberalization during 1982-83 finally bore the fruit.

Also not insignificance has been good prospect of sub-regional development. Several growth sub-regional areas have been envisaged. Among them is the growth triangle involved Singapore, Jahor in Malaysia and the Riau Province of Indonesia. The second triangle comprises northern Sumatra in Indonesia, the northern state of Malaysia and southern Thailand. Yet, the other quadrangle involves Mindanoa in the Philippines, eastern Indonesia, eastern Malaysia and Brunei (Atienza, 1995). These sub-regional areas cannot be effectively developed without sufficient degree of trade liberalization among countries involved. Local Chamber of Commerce and Industries in each country keep pushing local government official to take positive actions in the area where the gain from mutual cooperation is rather obvious. These actions also amount to another source of internal pressure for quickening the process of trade liberalization in ASEAN.

Pressure from Outside

After the rapid surge of FDI from Japan into the region since the second half of the 1980's, and more political stability in the Philippines after the presidency of Corazon Aquino in 1986, followed by continual restructuring of industries in the region, ASEAN was more ready for regional trade liberalization than any time before. Additional pressures from outside only result in hastening process of the development. Among them were the establishment of the European Union (EU) into single market on January 1, 1993, the expediency development of a North American Free Trade Agreement (NAFTA) on 12 August, 1992 and rapid increase of direct foreign investment to China since the beginning of the 1990's.

A single market in Europe has created a general fear among ASEAN members that their opportunities for further penetration into the market would be greatly reduced. The countries must prepare to enlarge the intra-regional market among themselves. The flows of FDI into the region from Europe would be diminished, if the market was only limited to that of the host country, and exports that must

finally encounter some forms of trade barrier from importing countries or regions. In order to overcome such clearly foreseen dangers, trade liberalization within the ASEAN region was the only solution.

NAFTA also presented some threats to ASEAN from slightly different angles. One of the three founding members was Mexico whose economic structure was in direct competition with most of ASEAN members with the exception of Singapore and Brunei. The crucial element in NAFTA for Asian producers was not that tariffs against products from the rest of the world would rise under the new agreement. They would stay the same, while tariffs inside North America would fall. They concerned more about the regulations of "country of origin" (Awanohara, Rowley and Paisley, 1992, p. 50). Country-of-origin regulations refer to requirements that must be met in order to qualify as local content in the NAFTA area. Motor vehicles and electronic products, and textiles will be subjected to country-of-origin requirements under NAFTA than under the current U.S.-Canada Free Trade Agreement for the benefit of Mexico (Naito, 1993, p. 9).

The implication of such regulation is to force relocation of the said three industries into relatively cheaper labor cost of Mexico. At the same time, it will prevent exporting parts of the products from other third countries with similar to, or cheaper labor cost than Mexico. This will in tern encourage the diversion of direct foreign investment in the third countries to that of Mexico. For example, in case of the NAFTA, the local content ratio for motor vehicles at first will be 50 per cent. However, the ratio will be raised to 62.5 per cent by the ninth year (Naito, 1993, p. 9). This requirement will affect Japan directly and may indirectly deprive ASEAN from direct foreign investment from Japan. In case of electronics products and textiles, the regulation will affect ASEAN more directly. NAFTA is effective in January 1, 1994. The complete abolition of tariffs will be within 15 years or in the year 2009. The anticipation for adverse consequence in term reduction in both market and direct foreign investment motivates ASEAN to take swift action on trade liberalization.

Under the pre-AFTA setting, China, Japan, and the United States are each major trading bloc within its own in the Pacific region. China with her open door policy for the FDI, with rapid rate of growth in recent years , together with her industrious population of 1,200 million and relatively cheap labor cost, is a gigantic trading bloc on her own. In absence of the ASEAN free trade area, there would be a high possibility that outside investment as well as investment from within the ASEAN region to be diverted to China. The move to set up AFTA can be viewed as an

attempt to redirect some resources that would otherwise flow to China to ASEAN region. Also, in term of regional security, the move of AFTA and the expansion of ASEAN into the ASEAN-10, is also deemed to be necessary (Endo, 1995).

Up-to-Date Development

Since its inception in 1967, ASEAN has made progress towards trade liberalization, though gradually in the beginning. The First ASEAN summit was held on 23-24 February, 1976, in Bali, Indonesia. The main concern then was insecurity in the region since Vietnam just won the war of liberation of her own country over the United States in 1975. It was natural that the anti-communist ASEAN must feel insecure against the Vietnamese victory. Two documents were signed then; a Treaty of Amity and Co-operation in Southeast Asia and a Declaration of ASEAN Concord. In economic field, the Declaration outlined the following programs:

- A cooperation on basic commodities, particularly food and energy.

- Industrial cooperation by establishing large scale ASEAN industrial plant in each member country to meet regional requirements of essential commodities.

- Cooperation in trade by establishing the preferential arrangement as a long term objective.

The first two programs reflect concerns on economic security of the region. For the reasons discussed earlier, none of the three programs produce any satisfactory results.

A Move Towards AFTA since 1986: The economic slow down especially during 1984-85 in ASEAN provided significant impetus for most countries in the region to switch to export-oriented industrialization policy, very important change in attitude more in line with trade liberalization policy that otherwise would not be possible (Akrasanee, 1987, p. 99). The 1985 Plaza Accord resulted in rapid appreciation of the yen, followed by massive influx of direct foreign investment in the region, made the decision for the policy switch a perfect timing. Rapid rate of growth in the region together with rapid development globally fueled the regional changes further. The prospect of setting up the EU on January 1, 1993 and the NAFTA to be effective on January 1, 1994 were among factors generating quicker development of AFTA for ASEAN.

During the Fourth ASEAN summit held in Singapore on 27-28, January, the commitment to set up AFTA was made by leaders of ASEAN countries. The followed meeting of ASEAN Economic Ministers (AEM) in Manila on 22-23 October, 1992, further agreed on schedule of tariff cuts that starting from January 1, 1993 and to be completed within 15 years by the year 2008, one year before the effective and

ending dates of NAFTA. The key ingredient for achieving the free trade has been through the introduction of a Common Effective Preferential Tariff (CEPT) for processed agricultural and manufactural goods made and trade within the region. The goal was to have a common tariffs of up to 5 per cent of these goods within 15 years from the launch of the scheme on January 1, 1993.

Tariffs were to be reduced in two stages. In the first stage goods with tariff rate of more than 20 per cent before January 1, 1993, must be reduced within the first 5 to 8 years to the rate of 20 per cent. The rate of reduction was left to each individual member to decide. Based on the average tariff on manufactured product in ASEAN of 24 per cent, with the exception of Singapore and Brunei whose average rate was 1.2 per cent before 1993, the proposed cuts were not too deep. The purpose for making such flexible rule in the first phase, was to ease potential conflict between those who wanted to move rapidly in order to enhance their competitive position and those who wished to continue protecting their industries a little longer. In second stage the rate must be further reduced to 0 to 5 per cent within the range of the remaining 8 to 10 years.

Being anxious to achieve the goal quickly, members agree to speed up tariff cut for 15 product categories. Included were cement, chemical, pharmaceutical, fertilizer, vegetable oil, and plastics. Total value of intra-regional trade annually of these commodities amounted to 10 billion U.S. dollar or about a third of total regional trade. Designated products with current tariff of no more than 20 per cent, the tariff must be cut to 0 to 5 per cent within 7 years. Those with current tariff of more than 20 per cent must be reduced to 0 to 5 per cent within 10 years. At that meeting more details were to be discussed on what products were to be excluded from the accelerated schedule and what items should be left out of AFTA entirely. Malaysia then was aiming to exclude some electronic goods, while the Philippines would like to protect her textile and coconut industries. Indonesia indicated certain types of chemical products to be excluded from the list. The new body of AFTA's Council, was created to oversee the smooth process of creating free trade area.

Further Move after 1992: Rapid advancement of APEC during the Seattle summit in 1993 and the prospect of Bogor Declaration in November 1994 as well as rapid advancement of the establishment of the World Trade Organization (WTO) in replacing the General Agreement on Trade and Tariff (GATT), in the meeting in Chiangmai on September 22-23, 1994, the AEM decided to advance the time frame for the complete implementation of AFTA from 15 years to 10 years, or from 1 January 2008 to that of 1 January 2003. As a result, the old time frame must be further revised.

For products under the normal track, those with tariff rate above 20 per cent must be reduced to 20 by January 1, 1998, and subsequently to 0 to 5 per cent by January 1, 2003. Products with original rate of tariff at 20 per cent or below, must be reduced to 0 to 5 per cent by January 1, 2000. For products under the fast tract, those with tariff rate above 20 per cent must be reduced to 0 to 5 per cent by January 1, 2000, while those with tariff rate at 20 per cent or below must be reduced to 0 to 5 per cent by January 1, 1998.

In addition to the said agreement, unprocessed agricultural goods, kept out of the original AFTA agreement, would fall within the AFTA bailiwick once formal approval was obtained from the ASEAN heads of state. Each country could retain the right to keep some sensitive agricultural products out of AFTA. Moreover, products currently in temporary exclusion list would be included in the CEPT list in five equal installment of 20 per cent beginning January 1, 1995. The first installment is to be completed by January 1, 1996 (Schwarz, 1994, p. 14).

During the AEM meeting in Bandar Seri Begawan on September 7-8, this year (1995), the joint statement noted that Brunei Sultan, Hassanal Bolkiah, urged ASEAN in an opening address to achieve AFTA by 2000. The cooperation should also be broaden to encompass other important areas besides trade. ASEAN countries were requested to expand the number of items with tariff rates reduced to that level by 2000 instead. The economic ministers were also requested to revive, by the next AEM meeting, their schedule of accelerated tariff reduction, so as to maximize the number of items to be reduced to zero per cent tariff level by the year 2000. At this meeting ASEAN has also finalized a framework agreement to move faster than the rest of the world in freeing trade in services and will sign the pact during ASEAN summit in Thailand in December, 1995.

In his opening address, Hassanal Bolkiah explained his sense of rush, " *The European Union is considering expansion to include the countries of eastern and central Europe. The United States and European Union are exploring a transatlantic free trade area with a combined market of 750 million consumers. AFTA must move faster than other free trade areas.*" (Asahi Evening News, September 11, 1995). Given such strong competitive spirit prevailed among most ASEAN leaders, it can be anticipated that ASEAN will have firm footing in APEC at least by the time of the deadline for complete trade liberalization in 2020.

Brief Historical Background of APEC

Not like ASEAN, APEC is a rather young organization. It was only formed six years ago in 1989 compared with ASEAN which was organized in 1967. Its origin can be traced few years back both from the Japanese and Australian side. From the Japanese side, it was the initiation of the former MITI Minister, Hajime Tamura who proposed the idea of a regional forum at a quadrilateral meeting of trade ministers of Japan, the United States, Canada, and the European community but only to find cool response. The implicit agenda behind this proposal is to regain the U.S. interest in the area. From 1987 to 1988, the United States was focusing her diplomatic attention on Europe to cope with the imminent collapse of the cold war structure and the European Community's accelerated move towards integration. On the Asia-Pacific front, meanwhile, so called newly industrialized economies (NIEs) were yet to attract the full attention of the world, and the region was far less vigorous than its current performance. At the same time the United States was concentrating her efforts and energies on the formation of NAFTA. Through a series of discussions on such occasion as ministerial meetings between Australia, however, APEC finally took shape (Ito, 1994).

From the Australian side, as one of the major exporters of primary products and not well developed manufacturing industries, the prospect of increasing trends of protectionism as well as the increasing trends of trade blocs, in Europe, North America, and the ASEAN, while Australia was left out. The only way that Australia could break into those markets was through the GATT facilities on trade liberalization. While the protracted Uruguay Round of GATT was negotiating, if there was an organization to strengthen the multilateral trading system and helped put pressure on the conclusion of the Uruguay Round, there would be more hope for Australia to survive the current situation of economic isolation. Japan was the ideal partner for Australia by being the major purchaser of Australian primary products, especially her mineral resources. With joint effort of both Australia and Japan the First Ministerial meeting of APEC was organized in Canberra, Australia, during 6-7, November, 1987. A person who engineered the arrangement was Robert Hawke, the Australian Prime Minister then.

The Dawn of APEC

Because of the said background especially from the point of view of Australia, APEC has been originated, as part of the call by Robert Hawke, for an "Effective Asia and Pacific Economic Cooperation" to Strengthen the multilateral trading system and to support a success conclusion of the Uruguay Round of GATT. This could be done through a thorough investigation of opportunities and

obstacles to increase trade and investment within the Asia-Pacific region (APEC, 1989).

From the above theme of the meeting, the ministers representing 12 countries, Australia, Brunei, Canada, Indonesia, Japan, Republic of Korea, Malaysia, New Zealand, Philippines, Singapore, Thailand and the United States, agreed on the following points:

- *An open multilateral trading system is crucial to rapid economic growth.*
- *Close ties between APEC and ASEAN is essential.*
- *APEC will not become a trading bloc, but will embrace global interdependence.*
- *APEC economies should reduce impediments to trade among member economies, without discriminating against the others.*
- *Great diversity exists among the member economies, including differing social and economic systems and disparate rate of development.*
- *Sound economic policies and market-oriented reforms have served well as engines to growth.*
- *Bottlenecks in trade must be identified.*

The ministers voiced their support helping less developed economies in the regions, and warned against protectionism. The meeting also took note of the importance of the People Republic of China, Hong Kong, and Taiwan and would consider the participation of the three economies in APEC (APEC, 1987).

It should be observed that although Australia and Japan were instrumental in organizing APEC, ASEAN has close ties with APEC from the beginning. Among the 12 founding members, all six ASEAN members were part of them. Since ASEAN at that time already tried to reduce trade barriers among themselves, related experiences learned by ASEAN could be readily applied to APEC. As a result, ASEAN could play a leading role in APEC.

At the Second Ministerial meeting on 29-31 July 1990, in Singapore, Prime Minister Lee Kuan Yew in his opening address reiterated his stand on free trade " *All countries have grown faster because of GATT-IMF free trade.....APEC countries should set themselves up as examples of good GATT abiding citizens of the world and oppose the formation of trading blocks*" (APEC 1990). Not much happening took place after then since trade liberalization among ASEAN nations did not advance as much either. Many ministers were more concerned about bridging the existing economic disparities as a means to accelerate regional development, as a precondition for trade liberalization.

Nonetheless, in that meeting the ministers agreed that APEC should cooperate with other institutions to avoid duplication of

effort. APEC working groups should collaborate closely with the private sector. The accomplishments of the Pacific Economic Cooperation Council (PECC), and the Pacific Basin Economic Council (PBEC), were singled out for praised by the ministers. The meeting reconfirmed the invitation of People Republic of China, Hong Kong and Taiwan to join consultative meetings during the APEC meeting in 1991 (APEC, 1990).

Not much progress was made during the Third Ministerial meeting of APEC in Seoul during 12-14 November, 1991. Perhaps, the main reason then was that although all members recognized the benefit of free trade, not like ASEAN where economic gap among members was not so large, the gap among APEC members was very wide, many members from developing countries were not certain whether free trade should be more emphasized than reducing economic disparities first. If emphasis should be placed on reducing economic disparities first, then other forms of economic cooperation would be much more important than just promoting trade liberalization alone. In this meeting China, Hong Kong, and Taiwan also joined the meeting but not as full members.

Significant Progress

Significant progress was made during the Fourth Ministerial meeting of APEC in Bangkok, Thailand, on 10-11 September 1992. By that time ASEAN leaders already agreed to set up AFTA during the Singapore summit on January 27-28, 1992. It was clear among ASEAN members then that they would push ahead with their trade liberalization program. Reducing economic disparities could result from rapid growth through the promotion of trade liberalization. In his keynote address, Anand Panyarachun, the Thai Prime Minister then, stated that *"APEC is poised to play a central role in promoting growth and prosperity among its participants. APEC may one day serve as a bridge between major sub-regional free trade areas, thereby helping to integrate economic organizations"* (APEC, 1992).

During this meeting two important bodies were formed, an Office of APEC Secretariat and the appointment of a small Eminent Persons Group (EPG). The fact that the office of secretariat was established implied that APEC began to be more serious about the work they were doing. The EPG played very important role within APEC setting. They were ordered to enunciate a vision of trade in Asia-Pacific region until the year 2000, identifying issues and constraints to be considered by APEC. They were the ones who were responsible for producing the policy guideline for APEC, at least during its critical development period in 1993 and 1994. Also, in this meeting, China, Hong Kong and Taiwan became full members.

At the Fifth Ministerial meeting of APEC in Seattle, Washington, the United States during 17-19 November, 1993, Former APEC Chair and the current Chairman of the ASEAN Standing Committee, Thai Foreign Minister then, Prasong Soonsiri, declared that the priority task of APEC must be to push for successful conclusion of the Uruguay Round and further enhance technical cooperation and trade facilitation. Trade liberalization must be attained through open regionalism and the principles of GATT (APEC, 1993). Since the APEC meeting was just one month before the Uruguay Round, and APEC was organized to strengthen GATT, it was only natural for all APEC members to fully cooperate for the successful conclusion of the Uruguay Round. As expected, the Uruguay Round was finally concluded after a long protracted negotiation for seven years. One main purpose for organizing APEC was fulfill. The successful conclusion of the GATT in December 1993, provided solid ground for both APEC and AFTA to advance further in 1994.

In this meeting the EPG Chair Dr. C. Fred Bergsten recommended that APEC undertake initiatives in trade liberalization, technical cooperation, and strengthen APEC as an organization. The EPG was instructed to present more specific proposals on realizing a long term vision to the coming ministerial meeting in 1994. The ministers also stressed market-driven dynamism in the region, and endorsed recommendations by the Informal Group on Regional Trade Liberalization to improve access to tariff data, reduce administrative barriers to trade, streamline customs procedures, harmonize the diverse approaches to standards and conformance issues, and encourage the flow of investment. Mexico and Papua New Guinea became new members in this meeting (APEC, 1993).

The New Breakthrough

In August 1994, the second EPG report on, Achieving the APEC Vision, was published. Trade liberalization was one among many other recommendations. The report recommended APEC members to liberalize their trade and investment barriers unilaterally to the maximum extent as possible. The more important part was for APEC to set up definite timetable for trade liberalization, the committing date, the starting date for implementation, and the completing date. The report recommended the committing date at the Bogor summit in 1994, the starting date for implementation was to be on January 1, 2000, and the completing date was to be January 1, 2020 (EPG, 1994, pp. 29-42). Other details have already been discussed earlier. The recommendations basically formed the 1994 Bogor Declaration. The most important part was the commitment of all APEC members to seriously begin to liberalize their trade. At the Bogor meeting Chile was welcome as a new APEC member.

After the Bogor Declaration, the next logical step is how to proceed further in order to achieve the result of the beginning of trade liberalization at the starting date of January 1, 2000. Japan will serve as the host of the meeting this year (1995), and

she must try to accomplish some initial agreements for actual practices. Before the ministerial meeting in Osaka during November 16-17, followed by the summit on November 19, a lot of ideas and suggestions are already floating around.

The first warming up of senior official meeting in Fukuoka during February 13-15 agreed to make harmonization of import and export practices a summit priority. In order to provide balanced proposal and not too much emphasis on trade liberalization, Japan will propose the concept of setting up a Partners for Progress center. Under the proposal, economic cooperation can occur on two levels - among developing countries and the other in the form of advanced countries playing a bridging role in supporting cooperative programs among developing countries.

The second senior official meeting was held in Sapporo during July 4-8. They further agreed on three key trade areas- harmonization of customs procedures, standardization of products and ways to facilitate investment among countries in the region. In order to facilitate investment, an approach on most favored nation treatment for both foreign and local investors should be adopted. The committee urged that APEC countries achieve harmonization of tariff systems by 1996.

Other interesting ideas floating around are those of private sectors such as the Pacific Basin Economic Council (PBEC), who has become a permanent "Business Advisory Forum" to APEC since November last year, and the Japan Federation of Economic Organization *(Keidanren)*. One interesting proposal of PBEC is for PBEC to conduct research and evaluate specific system related to trade and investment, e.g. tariff rates, import-restricted items, approval and permission conditions, custom clearance procedures, remittance procedures, investment incentives, from the standpoints of business enterprises, and to submit reports to APEC on regular basis. This kind of research and evaluation would contribute to the actual implementation of trade and investment liberalization (PBEC, 1995, p. 3).

Keidanren also proposed that Japan should commit herself to becoming a model for economic liberalization (*Keidanren,* 1995, p.1). This view coincides with that of Noboru Hatakeyama, President of Japan External Trade Organization (JETRO), who gave interview to Asahi Evening News on July 1, 1995. With strong participation from private sectors, there is a good chance that the liberalization process will be carried through finally.

Other opinion usually carried much weight is that of Fred Bergsten, Chairman of the EPG. In one of the proposal in his report, APEC should adopt a 50 per cent rule in principle - cutting in half the transition period to phase in measures agreed under the Uruguay Round of the GATT. For example, industrial member economies could choose to adopt the agreed upon reductions in their

agricultural subsidies in three years rather than six years. Developing member economies could halve the gap between their tariff rates and those agree upon under the WTO. The report also suggests that APEC members create uniform product quality standards and testing procedures so they can recognize one another's system and thus further increase trade.

There are speculations recently that APEC members will likely agree on specific collective actions to "facilitate" trade and investment. Four areas that are covered by actions to liberalize trade and investment include tariffs, non-tariff measures, services and investment. The remaining are customs procedure, standard and conformance, intellectual property rights, competition policy, government procurement, deregulation, rules of origin and dispute mediation services (Shiratori, 1995a). There has been speculations also that some developed countries who already achieved certain degree of trade liberalization will form a trade bloc inside APEC but outside the APEC setting. This action will bring pressure to other countries to speed up their process of liberalization. The countries involved are Australia, Japan, The United States, Hong Kong and Singapore.

All the actions, proposals and plans discussed above only mean to demonstrate the facts that many useful ideas for actual implementation of the Bogor Declaration are already in wide circulation. Under such circumstance, the chance for APEC to succeed in its attempt at liberalizing trade and investment among its members, within the specified time frame, is quite great. The experiences of ASEAN in this respect are quite relevant and very useful. In fact, the achievement of APEC up to this point is also due in part that ASEAN always tries to move at least one step ahead of APEC. Clear example can be demonstrated by the fact that, ASEAN already tried to move the date of liberalization forward to that of 2000. The move can be substantiated by Brunei's request for ASEAN ministers to try to do so, during the September, 1995, ministerial meeting in Brunei.

Although proportional representation of ASEAN in APEC is decreasing due to more non-ASEAN members in APEC. Nevertheless, as a bloc ASEAN can still exert considerable influences. This year former ASEAN members promise to support the application of Vietnam to be a new member of APEC. Up to present, the relationship between ASEAN and APEC are both complementary as well as competing in a positive and healthy manner. Such relationship is already proven to be quite helpful for current development of ASEAN, in the way that ASEAN must try to move at least one step ahead of APEC discussed earlier.

In the process, in order to be able to keep doing so, internal restructuring of industries within each member country must be carried out on a continual basis. So long as each member country is capable of doing that, of course with the support from favorable

environment for direct investment provided by continual progress made in AFTA and APEC, ASEAN shall succeed as a significant grouping in APEC as well as globally. For this reason, it is now appropriate to investigate past performance as well as its future potential of each ASEAN member.

Economic Profiles of Each ASEAN Member

Different form Japan in the 1950's and 1960' rapid growth in most ASEAN economies since the second half of the 1980's has been led by rapid increase of foreign direct investment (FDI) accompanied by increase in export oriented strategy supported by continual restructuring of the industries propelled by package of new technology as part of the parcel of the FDI. Structural change first took shape in Japan followed by the Asian NIEs and in the mid 1980's start shaking the rest of the ASEAN economies (Naya and Ramstetter, 1991, p.1). Evidences supporting this point will be discussed later on.

ASEAN Profiles and Some Related Issues of the FDI

After Vietnam joined the group as a new member in July 1995, ASEAN now has 7 members. The largest economy and the biggest country in the region in term of population and area is, of course, Indonesia, with the GDP in 1993 of 142,832 million U.S. dollar. With her population of 189.14 million in the same year, income per capita in 1993 was 775 U.S. dollar, with the exception of Vietnam, the lowest in the region. However, with currently strong growth performance, it is likely that she will catch up or even surpass that of the Philippines by the end of this Century, which is only 5 years from now. Of course, ranking second to the last, again Vietnam excluded in term of per capita income is the Philippines, with that in 1993 of 824 U.S. dollar. Not surprisingly the top performer of the region is Singapore with her per capita income in the same year about almost 25 times higher than that of Indonesia. This indicate the vast gap economically between the two economies. But in term of the population size Singapore is a small country with the population in 1993 of only 2.87 million.

After Singapore, in term, of per capita income is Brunei, the smallest country measured by population size of 0.3 million in 1994 but not in the size of land area. Her per capita income in 1994 was 13,424 U.S. dollar. After Brunei are Malaysia and Thailand, whose per capita income in 1993 were 2,995 and 1,885 U.S. dollar, respectively. Because income gap among Malaysia, Thailand, the Philippines and Indonesia are not so large, and their nature of economic activities are not greatly different, the four used to be known as the ASEAN-4. With Vietnam as a new member, it will be ASEAN-5 from now on. More information about them is shown in Table 1.

The next item on Table 1, is more interesting, it show the FDI per capita accumulate from 1987 to 1193. The figures show clearly that a country with the FDI per capita the highest, corresponds very well with that with the highest per capita income. The pattern is completely consistent starting from Singapore down to Indonesia with some switch in ranking between Indonesia and the Philippines. This switch in ranking of the FDI per capita between Indonesia and the Philippines, provides a concrete indication that Indonesia may be able to catch up with the Philippines or even surpass it by the end of this Century. In term of the FDI per capita, Vietnam is already doing better than the Philippines, with strong enthusiasm from outside investors for the brighter prospect of Vietnam. There is a good chance that Vietnam will be able to catch up with the rest of the ASEAN-4, not in a far distant future.

The next column shows the percentage of the accumulate FDI to the GDP. It is designed to show how much the related economy must depend on the FDI. The figures show that Singapore, the high performer, does not depend as much on the FDI like the other three economies of Malaysia, Thailand, and Indonesia. Of the three of the less than top performer, Malaysia that have higher degree of dependence actually does better than Thailand. By the same argument, Thailand also has the edge over Indonesia. Obviously, the Philippines that have least access to the FDI has not done very well in the past. This may continue to be the major problem for the Philippines for quite sometime to come in the future.

The last two columns basically provided similar set of information as the former two, but focusing directly to the FDI from Japan. The pattern is strikingly similar with little variation of specific nature of the FDI from Japan. The figures indicates that quite recently (after 1987), Singapore, Malaysia and Thailand have been on a more favorable shopping list for the FDI from Japan. Indonesia has lost some of her previous favor from Japan. While the Philippines attracts a little more attention from Japan than before. As the figure in this column shows, not like the international trend, the Philippines receives a little more attention from Japan than Vietnam. However, the situation may change before long. The last column shows relative important of the FDI from Japan to each individual economy.

The fact that Indonesia has been losing the Japanese FDI flavor recently, can be clearly shown by Table 2. Comparing the percentage distribution of the FDI from Japan to ASEAN covered the accumulation of two different time period, one from 1951 to 1994 and the other from 1987 to 1994, the percentages are improved for all countries, except for Indonesia in a more recent accumulation. Malaysia and Thailand seems to have received more favor from Japanese investors that the rest of them recently, especially after 1987, followed by Singapore and to a smaller extent the Philippines. These figures may suggest that Japan's FDI now moves into two directions. One is to the direction to countries with

upgrading technology such as Singapore and Malaysia, and to a certain extent, Thailand. On the other end of technological scale, is to move where new opportunity exists, in case of Vietnam and the Philippines. Indonesia now in the middle among the two directions suffers the loss. Table 3 shows the flows of FDI to each ASEAN economy accumulated from 1987. The data are used as basis for the calculation of the previous two Tables. The Table also reflects the trace of relatively the rapid rate of accumulation of the FDI from Japan to different ASEAN economies in comparison with the flows of total in vestment to those countries.

Growth Performance of Each ASEAN Economy

Having discussed the impact of FDI on growth, it is now appropriate to observe the growth performance of each ASEAN economy as a result of the FDI injection. In most cases, but to a varying degree, rapid expansion of the manufacturing is the main engine for growth. For this reason, it is instructive to show the GDP growth in comparison with the growth in manufacturing sector of each country. The results are shown in Table 4. One simple rule to read this Table is, if the rate of growth of the GDP of any country is the same or less than the rate of growth of its manufacturing sector, then the manufacturing sector is the engine for growth in that country. If the opposite is true, other sectors must explain the growth.

For Singapore, with the exception of 1981 as the manufacturing industries did so well, from 1982 to 1985, the GDP growth was consistently higher than the rate of growth in manufacturing sector, indicating that growth took place in other sectors. During that time construction took the lead until 1984, followed by service sector. In 1985, service sector took the lead while the manufacturing sector in Singapore did very poorly. From 1986 to 1990, the strong performance of the Singapore manufacturing industry took the lead. This time coincided with the strong inflows of the Japanese FDI to the countries. The poor performance of the manufacturing industry during 1991-92 was again offset by the strong show of construction sector during the period, supplemented to a certain extent by improved performance of service sector in 1992 and 1993 (See Appendix Table A-2).

As will be seen later on, Singapore has a very strong service sector. Her manufacturing industries are not as important as her service sector. Nevertheless, in term on manufacturing sector, Singapore must embark on most advanced technology like information and telecommunication and other high value-added industries, by utilizing her relatively more abundance of skilled workers with much higher labor costs. To this extent, the FDI from Japan, especially in advanced technology, is very much relevant to Singapore. There will be significant gain for Japan in this area too, by taking the advantage of English language commonly used in Singapore and the still relatively cheaper labor costs, there. This

is part of the restructuring process within ASEAN as well as the whole region.

For Malaysia too, in 1981 and 1982, manufacturing industries did not perform as well but was saved by good performance in construction and service sectors (See Appendix A-5). By 1983, her manufacturing sector started to turn around but only suffered from the general economic slump in the following year of 1985. Since 1986, Malaysian manufacturing has performed consistently well until currently, many thanks to the continuous inflows of the FDI both from Japan and the Asian NIEs (See Table 15). Malaysia is set definitely to join the rank of the Asian NIEs in a very near future. Another step in moving up a technological ladder for industrial restructuring for Malaysia.

Next comes Thailand. With a little deviation from Malaysia, before 1986, the manufacturing sector in Thailand perform rather satisfactory but not distinctively. The growth during 1981 to 1984 was propelled by the combination of broad service and industrial sectors. The outstanding one within the service sector was banking, insurance and real estates, with the average growth rate of 10 per cent throughout the whole period. In industrial sector, the star performer was electricity and water. Construction only started picking up in 1984 (See Appendix A-8). It was basically, an expansion in infra-structure preparing for manufacturing growth. Like most other ASEAN countries, 1985 was an economic down turn for Thailand.

The same as Malaysia, since 1986, the manufacturing sector in Thailand performs very well supported by construction boom in 1989 and 1990 as well as the real estate boom during 1987 to 1990 (Also, see Appendix A-8). The reason that Malaysia is now a little more advance than Thailand economically, because Malaysia has started to develop her manufacturing sector a little earlier than Thailand, as well as the fact that Thailand has much larger population in agricultural sector in comparison with that of Malaysia. Nevertheless, Thailand is also on the firm growth path to join the rank of the new Asian NIEs as well.

As that of Singapore during 1982 and 1983 Indonesian manufacturing sector did not perform well. After 1984, there has been a very rapid turn around in Indonesian manufacturing sector. The sector has performed considerably well without any interruption since 1984. This fact can very well explains why Indonesia stands very good chance to catch up and surpass the Philippines by the end of this Century. Somewhat like Thailand but with higher degree of severity, the sheer size of her rural population together with her topography of large scattered of the archipelagos have made it much

more difficult for Indonesian manufacturing sector to pull the rest of the economy to more rapid growth. Such obstacles serve to mark an upper limit on how a country can achieve optimal growth under such severe constraints.

For the Philippines, it will take some time before the country can pull itself out of the long stagnation economically in the past. Fortunately, the rapid growth of her neighboring countries and her close proximity with Hon Kong and Japan together with the new dynamism of the rate of industrial restructuring in the whole region, the recovering process for the Philippines does not have to be as long and arduous.

Because of her political instability during the Marcos regime until the end of 1985, her economy was completely wrecked. After the Aquino government, her economic condition started improving. Unfortunately, her manufacturing base has not been as strong yet. The problem is compound by the fact that she only received small proportion of the FDI of only 1.7 per cent in 1994 of the accumulate figure from 1987 (See Table 3). Even the late comer of Vietnam already enjoyed the share of 4.4 per cent, and a small country in term of population of Singapore had the share of 9.0 per cent. The encouraging factor is fact that, the FDI trends seem to indicate that the Philippines will do better in the future. Nevertheless she needs a strong doze of the FDI to help her recover quickly. Other factors contributed to her economic set back during 1990 to 1993 were various forms of natural calamities. It is anticipated that the country will be back on its growth path, after the reformed government of President Ramos has his way of managing the economy, since 1992.

As a new comer Vietnam is already doing very well. Her growth record since she moved to market economy in 1988 has been rather impressive. There is no comparable base of statistic for the comparison on how well performs of the country's manufacturing sector. Nevertheless her industrial growth records shown in Table 5, indicates strong performance of her industrial sector. With the rapid rate of increase of the FDI into her country, even if it is only for a short period of time (See Appendix B-18), there seems to be no room for doubt that Vietnam will not do very well economically in the near future.

From the brief analysis of economic profile of each ASEAN country discussed above, the following conclusion can be made. By and large, among all ASEAN nations, Singapore is now leading the pack with good economic performance as well as her rapid advancement in technology. Brunei seems to follow along at her own much slower pace. Within the middle sub-pack or the second division of the ASEAN league, consisting of Malaysia Thailand and Indonesia, Malaysia is leading this sub-pack. Nevertheless all of them are doing very well in term of their growth performances. The last sub-pack or the third division consisting of the Philippines and

Vietnam. Both has the potential to do very well in the future although Vietnam appears to have some leading edge over the Philippines at the moment.

The reasons for dividing the countries into these three sub-groups are also determined by current technological development in their manufacturing industries. With a prospect of rapid economic growth in all countries in the region, the dynamism of industrial restructure will be reinforced by the flow of technology from the ones of the higher echelon to the lower ones. By this process, more trade and exchanges within the region is completely possible. There is already clear evidences for each country to move to higher level of the technological echelon all the time. This subject will be discussed in more detailed later on.

The conclusion at this point is that freer flow of commodities and services and well as the FDI within the region is completely possible, and it will benefit all countries in term of their economic performance. The next logical step in the discussion is to observe economic structure of each ASEAN country in more details, together with its possible structural change in the future.

Economic Structure and Its Future Change for Each ASEAN Country

In 1993, the Singapore economy consisted with 0.2 per cent of agricultural sector, 34.4 per cent of industrial sector and 56.1 per cent of service sector and 9.3 per cent of government and other related service sectors. Within the industrial sector, manufacturing industries shared 25.4 of the GDP or a little less than three fourth of the whole sector. Singapore had relatively large and growing in its share of the GDP of finance, insurance and real estate sector followed by wholesale, retail, restaurants, hotel, etc., with 16.9 the GDP share of 16.9 per cent, followed by transportation, storage and communication with the share of 13.8 per cent (See Table 6). By an international standard, the structure of Singapore economy is already stabilized and approaching a structure of matured economy. Singapore has enjoyed the role of being a financial hub of the region and outside for quite sometime. In the future this role will be increasingly distinctive.

With the expectation that Singapore is going to boost her industrial capability with advanced technology, it is anticipated that her share of manufacturing sector will expand slightly to that of 26.8 per cent in 2000 at the cost of some reduction in construction sector. Meanwhile the financial sector will keep expanding to share 26.1 per cent of the GDP in 2000. All in all, the whole structure of the Singapore economy will not change much by the end of the prediction period of 2010. It should be also noted that the said prediction is a base line scenario, meaning

that the effect from the increasing regicnal trade and investment

caused by AFTA starting from 1993, has not yet been taken into consideration.

For Brunei, from Table 7, the GDP share of her petroleum sector in 1990 was 62.9 per cent. The non-petroleum sector consisting of agriculture, industry and services accounted for 37.1 per cent. Service was the largest sector with the GDP share of 30 per cent. The largest one in this sector was financial sector with its GDP share of 27.3 per cent. There will be a big change in future structure of the Brunei economy. The petroleum sector will be reduced in its significant in the future, replacing in significant by financial sector and gradual expansion of manufacturing and construction sector. With this picture in mind, it was not much a surprise when there was strong request from Brunei to increase liberalization in service sector among ASEAN members, in the last ASEAN ministerial meeting in September, 1995 in Brunei.

In 2000, the GDP share of petroleum sector will decrease to 47.7 per cent while that of finance will increase to 34.8 per cent. By 2010, the GDP share of the petroleum sector will reduce further to 31.5 per cent. The share of financial sector will increase to 46.2 per cent and that of transportation and communication will appear to be significant for the first time of 7.1 per cent. Meanwhile both construction and manufacturing sector will become more apparent in the Brunei economy in 2010. Again, this scenario has been predicted without taking into consideration of more free flow of services within ASEAN in the near future.

From Table 8, for Malaysia, in 1994, the GDP of her agricultural sector was 14.8 per cent. The industrial sector consisting of mining and quarrying, manufacturing and construction, the GDP share of manufacturing sector was already very high of 31.2 per cent, while that of the whole industrial sector was 41.3 per cent. The GDP share of service sector in the same year was 43.9 per cent, no particular sub-sector of services in Malaysia stood out distinctively like that of Singapore and Brunei. Malaysia will also undergo considerable change from 2000 to 2010.

The main feature will be rapid reduction in the GDP share of the agricultural sector due to two opposing forces. On one hand, the forestry sector in Malaysia will be decrease very rapidly, at least the one for commercial purpose. On the other hand, both industrial sector, especially manufacturing sector, and service sector will expand very rapidly. It will be more so for manufacturing sector, given the rate of growth of the sector experienced in the past. By 2000, the GDP share of agricultural sector will be reduced to 12.5 per cent, while that of manufacturing sector will expand to 32.1 per cent and that of service will increase to 44.3 per cent, accordingly.

In 2010, the GDP share of agricultural sector of Malaysia will

be reduced further to less than 10 per cent, followed by further expansion of that of manufacturing sector to 35.4 per cent; while there will be virtually no change in the service sector. However, the change within the sector is quite significant, because the financial sector will emerge as a significant sub-sector within that of the service followed by transportation and communication as well as electricity gas and water. The rest will be diminished in their significance. This pattern of change is important for the continuation of the well performed manufacturing sector. They can be considered as an improvement in basic infra-structure necessary to maintain growth in the manufacturing sector.

By 2010, Malaysia will definitely join the rank of the Asian NIEs. For this reason, there will be no problem for Malaysia to enter the free trade arena of APEC in 2020. Again, this projection does not take into consideration the positive effect from AFTA. With such consideration, the pace of structural change in Malaysia will be must faster in the future.

From Table 9, in 1992, the GDP share of agricultural sector in Thailand was already smaller than that of Malaysia in 1994 of 12.8 per cent. The GDP share of manufacturing sector of 29.6 of Thailand in 1992 was also larger than that of Malaysia in the same year. The GDP share of service sector was 47.5 and was on the decreasing trend. Wholesale and retail was the biggest sub-service sector in Thailand with its GDP share of 16.9 per cent in 1992, while the financial sector was not as large. By 2000, both agriculture and service sector will be decreased in significance. The manufacturing sector will gain more strength as well as the construction sector.

By 2010, the GDP share of agricultural sector will further reduced to 9.0 per cent, while those of manufacturing and construction sectors will keep expanding to 35.0 and 7.8 per cent, respectively. The size of the manufacturing sector of Thailand in 2010 will be about the same size of that of Malaysia. The other interesting aspect is that, while the whole service sector of Thailand keeps shrinking, the financial sector keep expanding at a rather rapid rate and will take over that of wholesale and retail in its importance. Again, this nature of change can be viewed as necessary condition for the maintenance of healthy expansion of manufacturing sector. In 2010, the structure of the Thai economy will look very much like that of Malaysia in the same year.

The fact that the agricultural sector in Thailand reduces much slower in size than that of Malaysia is because there will be strong resistant to the rapid reduction in size of this sector. The country that used to export agricultural products for long period of time in the past, certainly wants to maintain its comparative advantage in food production, especially in view of the very possible fact that most countries in Asia, China included will soon turn to be at least the NIEs in the next Century. Maintaining a

food production capacity as her unique comparative advantage economically is not a bad idea. Since the economic structure for Thailand will be very much similar to that of Malaysia in 2010, what have already been said for Malaysia can be applied for Thailand as well.

Among this second division of the ASEAN league, in 1992 Indonesia had the largest agricultural sector. Its GDP share was 18.3 per cent. Somewhat like Brunei, in 1992 Indonesia still had rather large mining and quarrying sector of 14.6 per cent, while that of the manufacturing sector was only 20.5 per cent. As already pointed out in Table 1, even though Indonesia receive the highest share of the FDI among all ASEAN nations, her FDI per capita in 1993 accumulated from 1987 was still almost three time less than that of Thailand. This fact can clearly explain the slower development of her manufacturing sector compared with the previous two countries (See Table 10). The GDP share of service sector in Indonesia in 1992 was 40.3. The largest sub-service sector in 1992 was commerce, hotels, and restaurant business, with the GDP share of 16.1 per cent. The financial and real estate combined into one sector only share 7.3 per cent of the 1992 GDP.

As the country moves into 2000, both GDP shares of agricultural and mining and quarrying sectors will reduce, giving rise to the increase in GDP shares of both manufacturing and service sectors. Given the continuation of the well performed manufacturing sector discussed earlier, it is projected that in 2000, the GDP share of agricultural sector will reduce to 14.5 per cent and that of mining and quarrying will reduce to 9.5 per cent, while those of manufacturing and service sectors will expand to 27.0 and 42.5 per cent, respectively.

By 2010, the GDP shares of agricultural and mining and quarrying sectors will decrease further to 10.8 and 5.0 per cent, respectively, while those of manufacturing and service sectors will expand further to 32.7 and 44.8 per cent, respectively. The financial and real estate sector combined, will expand to 11.9 per cent. The pattern emerged, closely resembles of those of Malaysia and Thailand. In fact, the combined manufacturing and mining and quarrying sector of 37.7 per cent will provide significant strength to foster stronger growth for Indonesia within the first decade of the next Century.

Another factor supporting growth potential for Indonesia as well as that of Malaysia is that, currently, only slightly more than 40 per cent of the population has entered the labor market. More expansion of the labor forces into the labor market could result in significant expansion of the national economy (Shiratori, 1995b). Given the base line scenario in 2010, Indonesia may be only slightly behind Thailand and Malaysia. However, given the AFTA scenario, Indonesia also, could join the rank of the NIEs in 2010

without much difficulty.

Among the last division of the ASEAN league, the Philippines and Vietnam, in 1993 the Philippines still did rather poorly. The GDP share of her agriculture was still as high as 22.8 per cent only a little improvement from the 1981 figure of 23.5. This is because the Philippines missed the chance during the ASEAN rapid growth period since the second half of the 1980's. The GDP share of her manufacturing sector in 1993 was only 24.7 per cent and that of service sector was 42.9 per cent in the same year (See Table 11). In making future projection for the Philippines, addition assumption is made, namely, after 1993, the Philippines will return to the normal growth path experienced during 1987 to 1989 under President Aquino. This assumption is the most likely scenario given the current politico-economic development.

Given the said assumption discussed above, the size of the agricultural sector of the Philippines will reduce to 18.8 and 13.0 per cent in 2000 and 2010, respectively. Manufacturing sector will expand to 26.8 and 28.7 per cent in 2000 and 2010, respectively. Service will also expand to 44.4 and 46.9 per cent in 2000 and 2010, respectively. Having made such projection, the Philippines still will not be as close to join the rank of the NIEs within the first decade of the next Century.

In order to move much faster, the Philippines must increase her share of the FDI quite significantly in the future. The weak trend of such event has already emerged in 1994 but not strong enough to be more decisive as that of the Vietnam. Nevertheless, under the AFTA scenario, the Philippines will definitely move faster in the future given the fact of better endowment of educated manpower than some other ASEAN; such as Vietnam, Thailand and Indonesia. Under such scenario and circumstance, there is still a good chance that the Philippines may still be able to catch up with those in the second division of the ASEAN league in 2010.

The last one to be discussed is, of course, Vietnam. Given the 1992 figures, Vietnam started of at lower position of her economic structure than that of the Philippines. But, every sign, especially the FDI, has indicated that she is moving at a much faster speed than that of the Philippines. In 1992 the GDP share of agricultural sector of Vietnam was still very high by the ASEAN standard of 34.9 per cent. There is no classification of manufacturing industry at the moment, the sector is lumped together under the heading of industry, while construction is shown as a separate item. The 1992 figure of industry of Vietnam was 22.8 per cent, taking the figures of mining and quarrying and power and water supply out from industry, the true figure of manufacturing sector of Vietnam should be a little under 20 per cent. The GDP share of service sector of Vietnam in 1992 was 38.9 per cent (See Table, 12).

By 2000, the GDP share of agriculture will reduce to 25.4 and

will reduce further to 15.6 per cent in 2010. The rapid expanding sector is definitely industrial sector, with its GDP share of 35.7 and 43.8 per cent in 2000 and 2010, accordingly. Vietnam has a poor financial sector at the moment, and under the current regime of centralized control, it is rather difficult to make any conjecture about the future change in service sector. However, it is certain that without liberalizing the service sector, it will become a serious bottleneck for the growth performance of the industrial sector in the future. Much of the projection of the service sector will be left as it is now without any more verification.

Under the base line scenario, in spite of her rapid growth record, Vietnam will not be able to surpass the Philippines. She can surpass the Philippines only under two conditions. One is the continuous expansion of her industrial sector as what has been projected. The other is that there must be no bottleneck from the service sector. However, under the AFTA scenario plus very rapid increase in the FDI together with the more liberalized service sector, Vietnam should be able to perform much better than anticipated. All in all, both Vietnam and the Philippines may nearly achieve the NIEs status by 2010. It will be too ambitious to anticipate both of them to attain the rank of the second division of the ASEAN league by then.

All what have been discussed so far have been pointed to the direction that the AFTA cannot hinder the well performance of all ASEAN economies without any exception. On the contrary, it will facilitate more flows of the FDI among ASEAN members (more details will be discussed right after this part). AFTA will also facilitate more trade and technological transfer among ASEAN members because of the nature of different levels of industrial and technological structures. The growth process can be induced through continual restructuring of industries in each ASEAN country. Lastly, but most importantly, all of them will enjoy the full benefit of APEC when the time comes. They can achieve such desirable result from the simple fact that, they have already done very well economically even under the base line scenario, with the exception of few qualifications that cannot be developed into serious obstacles under normal circumstances.

An Analysis of the FDI Flows and Technological Upgrading

Tables 13 to 19 indicate the flows of FDI into ASEAN by showing the shares of FDI from all counties to each member of ASEAN during 1980 to 1994. While Table 13 focuses on the flows from ASEAN and Asian NIEs, the rest of the Tables show the detailed shares of the FDI from all over the world. Starting from Singapore in Table 13, as can be generally expected, Singapore has not received any FDI from neither the NIEs and ASEAN. The obvious reason is, of course, Singapore is at least on similar level of technology with the NIEs and that of higher level than all ASEAN countries. Naturally, Singapore must look for the FDI not much as extra

financial sources, but more as a means for the transfer of technology from the ones with higher levels.

In the early 1980's Singapore used to have stronger ties with European nations, high percentage of the FDI came from that region. For example in 1980, 40.7 per cent of the FDI of Singapore came from Europe. Of this figure, 16.5 per cent was from the United Kingdom and 18.2 per cent was from the Netherlands. The FDI from the United States was also as high as 29.5 per cent, followed by that of Japan of 16.7 per cent (See Table 14). As Singapore has moved to have closer relationship with countries in the Pacific, while European nations haves focused on closer relationship among themselves, the share of the FDI from Europe to Singapore has been declined gradually replacing in important by that from the United States. In 1994, the FDI share to Singapore from the United States rose to 39.3 per cent while that from Europe reduced to 26.3 per cent, followed by Japan of that of 25.9 per cent.

It is only natural that the FDI share from the United States to Singapore is the highest, because the United States has the most advanced technology in many areas and Singapore would simply like to have them. Japan although also has technological edge in many areas, but on the average, her technological level cannot completely match that of the United States. For that reason, the FDI from Japan to Singapore has always been second in ranking after that of the United States. Nevertheless, the relative importance of the FDI from Japan to Singapore has been on the increasing. For example in 1980 the FDI share from Japan to Singapore was only 56.6 of that of the United States. In 1994 the percentage increased to 65.7.

The figures implies that Japan has been gradually catching up in technological level with that of the United states. From the point of view of Singapore, as the financial aspect of the FDI is not as important, she always simply seek for the best technological combination for her own country. The technology will, of course, being transferred gradually to other ASEAN nations accompanying the FDI from Singapore into other ASEAN nations. The same can be said for the FDI from other NIEs to ASEAN as well.

For Malaysia in the early 1980's, she received sizable FDI from the NIEs and ASEAN. Most of the ASEAN one of 28.5 per cent in 1983 was from Singapore. That of 9.3 per cent from the rest of NIEs in the same year, basically came from Hong Kong. Another sizable share of the FDI to Malaysia in 1983 came from Europe of 21.3 per cent. The majority came from the United Kingdom, the share of 16.8 per cent. The FDI from Japan was also significant of 17.9 per cent while that of the United States in the year was only 6.8 per cent (See Table 15). Singapore was basically more attractive for the

U.S. investors than that of Malaysia during that time and continue to be so currently. By 1994, the share of FDI from ASEAN and NIEs to Malaysia increased to 47.5 per cent (See Table 13).

After 1987, Japan started to increase her FDI to Malaysia in significant amount, causing the share to increase to 29 per cent about 6.3 percentage point increase over 1986, after the reduction in the share from ASEAN and NIEs to the new level of 39.5 per cent. The FDI share from Europe also increased to 24.5 in 1987. After then, the FDI from Japan began to play important role in stimulating the Malaysian economy until 1990. After then the FDI share from Japan, though still very significant for the Malaysian economy, began to decline to 29.5 per cent in 1991 and declined further to 26.0 per cent in 1994. Since 1984, the FDI share to Malaysia from both ASEAN and the NIEs began to decline in significance gradually.

Nonetheless, the long term trend has pointed in that direction. The share of the FDI from the United States started to increase sharply in 1993, to the level of 8.3 per cent from that of 6.3 per cent in 1992. It continued to increase to 9.3 per cent in 1994. The decline in the FDI share from ASEAN and NIEs, while that from the United States increased, pointed out one significant point that Malaysia too was stepping up higher technological ladder from the beginning of the 1990's, after her major one began in 1987.

Being a much larger country, in term of population, than Singapore and also Malaysia, with no specific ties with any country, Thailand took different approach from the former two in the area of the FDI. Basically, Thailand welcome the FDI from almost any non-communist country in the past. There is no exception now. Taking the advantage from the fact that there was not much hostility towards Japanese aggression during the War, from the early 1980's, sizable amount of the FDI to Thailand came from Japan. The share was 26.9 per cent in 1980, followed by European countries of 17.2 per cent and 9.4 per cent from the NIEs, 8.6 per cent from the United States. The rest came from almost everywhere in the world. The pattern started to change slightly when Japan started stepping up her FDI to Thailand in large scale during 1989 and 1990 after the big jump start in Malaysia in 1987.

The share of FDI from Japan in 1989 rose from 26.6 per cent in 1988 to that of 37.1 per cent in 1989, very significant increase indeed. Rapid increase in the FDI share from Japan in that year resulted in suppression of the shares from other sources, accordingly. The high FDI share from Japan to Thailand continued until the end of her bubble economy in 1991. After then it began to slide sharply to the level of the mid 1980's. However, that significant amount of increase was enough to support rapid growth record in Thailand already started in 198" into the early 1990's. In fact, the FDI from Japan to Thailand began to increase significantly since 1987 but the real big jump was in 1989. The

slow down in the FDI from Japan to Thailand was replaced by rapid increase of the FDI from NIEs and that of the United States. Somewhat similar to that of the Malaysian pattern, one can view the increase of the FDI from the NIEs to Thailand, as the replacement of the FDI from Japan from the lower end of technology. The part of increase in the share of the FDI from the United States as a new step at moving up a technological ladder.

Somewhat similar to Thailand but stronger in significance, Indonesia received the highest share of FDI from Japan since the early 1980's, with 32.2 per cent in 1981. The record of high rate of the share of above 30 per cent was maintained until 1987, with the peak rate of 36.9 per cent in 1982. Since 1988, the share was dropped to 28.9 per cent further decreased to 20.6 in 1993. The other major sources of the FDI for Indonesia in 1981 was from the NIEs, with the share of 13.4 per cent and that from Europe with share of 10.1 per cent in the same year. Indonesian statistics reports a separate item called multinationals. This item keeps on expanding every year. In the last year of the report of 1993 the FDI share from multinationals rose to 26.4 per cent.

On the other hand, the FDI share to Indonesia from the NIEs kept decreasing while that of the multinationals kept increasing up to 1987. After then the share from the NIEs started jumping up to the rate of 19.4 per cent in 1988 and kept on increasing until 1993. The following can be observed, in case of Indonesia, from the point of view of technological transfer of the FDI. From the early 1980's Indonesia benefited greatly from constant technological transfer from Japan, presumably the one from her lower end and from Europe up to 1988. After the big drop of the FDI from Japan in 1988 and the gradual decline of the FDI share from Europe, the parts have been picked up by the NIEs and the multinationals. Constant technological improvement throughout the period may have come from the item of multinationals. Given the existing set of the FDI data technological upgrading cannot be clearly discussed, as the case of the previous three countries.

One major source of the FDI for the Philippines until recently have always been the United states. In 1980 the FDI share of the Philippines from the United States was 49.9 per cent, with the peak of 57.2 per cent in 1987 and was gradually decline to 48.9 per cent in 1992. In opposition to that of the United States, the FDI to the Philippines from Japan started with 19.7 per cent in 1980 and gradually decreased to the lowest rate of 13.3 per cent in 1987. After then the share from Japan started to pick up again and reached the level, achieved in 1980, in 1992 with the rate of 19.8 per cent. Roughly, the share from both countries made up about 70 per cent of the FDI to the Philippines. The other two notable sources were European countries and Hong Kong, with their respective shares of 9.6 and 5.5 per cent in 1980; and were both increased to 11.0 and 6.9 in 1992, accordingly (See Table 18).

The recent trend indicates that the FDI from Japan will become increasingly more important for the Philippines than before as well as those from the NIEs, especially that from Hong Kong. Nevertheless, the United States will continue to play dominant role on the FDI to the Philippines for quite sometime to come in the future. The initial problem of the Philippines in this regards is not much of the technological transfer aspect of the FDI, but more of the absolute amount as a source of investment fund. To this extent both Japan and the NIEs are in much better position to do so. The only question remained is whether both or either of them would like to do so. As the former four countries discussed earlier are all planning to step up to higher technological ladder in their technological ascendancy, there is increasing chance for the Philippines to receive more FDI in volume, especially from the NIEs.

Unfortunately, the Philippines seems to have suffered from the comparative disadvantage from her existing location compared with that of Vietnam in its accessibility to the main land markets of Indochina and Southeast Asia. It may has a little more advantage in location to be a production base for exporting to the markets in North America compared with the rest of ASEAN. Again, on this basis its also suffer from comparatively disadvantage from that of Mexico. As a result, the Philippines is now under a rather tough condition as far as the FDI is concerned. Nevertheless, niches of advantage here and there, may help improving the recent depressed situation of the FDI for the Philippines. In fact the trend for some significant improvement is already there (See Table 3).

The fresh start of Vietnamese FDI, in the late 1980's was mostly from private sources originally, and was quickly being replaced in its importance mostly from Europe. However, since the early 1990's, this was also quickly being taken over by the NIEs and to a lesser extent ASEAN, taking the advantage of much closer proximity (See Table 19). Sooner or later there will be increasingly competition from Japan. As formal diplomatic relationship with the United States has already been established on July 12, this year (1995), it is expected that more of the FDI from the United States will flow into the country. Not like the Philippines, future prospect of the FDI for Vietnam is much brighter. However, the immediate concern of Vietnam as well as that of the Philippines is the volume not the quality of technological level of the FDI. Nevertheless, in the end the technological part will gradually come as part of the FDI package anyhow. With few bottlenecks to be resolved in the meantime, Vietnam is definitely in a ready position to join the rank of rapid regional growth of ASEAN.

Since AFTA have already been firmly established among all ASEAN, it is the time to highlight the result of Table 13. This Table tries to pick up some faint trends observed recently. One of the reasons for unclear trends is that AFTA only has been formally

established in the late 1992 and the last set of observations in Tables 13 is 1993. Given the fact that traditional flows of the FDI among ASEAN members were quite low, rapid increasing trend within one observable period can hardly be detected.

At least the figures in Table 13 show some sign of increase in the FDI in three ASEAN countries, namely, Thailand, Indonesia and the more prominent one of Vietnam. It is also interesting to find out that the NIEs are playing increasingly important role in term of the outflows of FDI into ASEAN region. It is expected that, with rapid move of the AFTA with its ambitious attempt at achieving the regional free trade starting from January 1, 2000, at least 10 year before the official date for free trade of APEC for industrialized countries, freer flows of trade and, perhaps, investment will be taken place in the ASEAN region within few year time. By then, it will be no longer too difficult to conceive freer flows of trade within the region. However, given the fact that most countries in the region, with the exception with some reservations for Singapore, all ASEAN economies are still in need for the bulk of the FDI from outside to maintain their growth records. It will take quite some time to clearly detect the trends of increasing flows of the FDI among ASEAN members.

Further FDI Analysis and the Restructuring of Industry

This section will continue analyzing the flows of FDI into each ASEAN economy. However, this time the FDI shares classified by industry will be analyzed. The benefit from doing so is also to gain more understanding on the structural changes of industries over some period of time. It also provides some insight into industrial restructure through the process of the structural changes of industries already mentioned. The second part will analyze possible flows of the FDI in the future based on some empirical findings of sectoral GDP by sectoral FDI elasticity, and labor productivity by labor wage productivity.

Sectoral Flow of the FDI and the Restructuring of Industry

Having discussed the flows of the FDI from their countries of origin, it is now appropriate to analyze their impact on sectoral growth for each ASEAN country starting from Singapore. Singapore only reports the flows of FDI to her manufacturing sector. Perhaps, the FDI flows to other sectors is not so significant for Singapore. More than 50 per cent of the FDI the manufacturing sector in Singapore only concentrated in two industries, namely, electrical machinery and appliances, and petroleum and petroleum products. In 1980, the FDI share of petroleum and petroleum products was as high as 42.0 per cent. It began to decrease in significance gradually throughout the period and have been replaced in significance by electrical machinery and appliances.

In 1980, the FDI share of electrical machinery and appliances was only 16.1 per cent. By 1994, the FDI share of this industry rose to 35.9 per cent, while that of petroleum and petroleum products fell to only 18.3 per cent. At the same time, the FDI share of industrial chemicals also rose from only 1.6 per cent in 1980 to 12.7 per cent in 1994. The FDI shares of other industries that emerged as significance ones in 1994 were those of machinery except electrical, fabricated metal products, and transport equipment. Their shares ranged from 8.4, 5.9 and 5.5 per cent, accordingly (See, Table 20).

This trend indicates that Singapore has gradually moved away from heavy petroleum industries into the lighter ones with more advanced technology, especially the one of electrical machinery and appliances as well as to the more diversification of industries. Growth rates of new emerging industries in the early 1990's were rather impressive with the rates ranged from over 10 per cent annually to over 20 per cent (See Table C-3). The results in Table 20 has clearly indicated the continual restructuring of industries in Singapore caused by the directional change of the FDI from that of the concentration on heavy industry to a more diversified lighter industries, but more advance in the technological level.

Like that of Singapore, the FDI data for Malaysia only reveal those in manufacturing industries only. Not like Singapore, Malaysian manufacturing industries generated by the FDI have been spread much more evenly than those of Singapore since the early 1980's. In 1982, the four industries that constituted more than 50 per cent of the Malaysian manufacturing industries were foods, textiles, non-metallic mineral products, and electric and electronics products. In 1993, none of them except electric and electronics products continued to maintain the strong FDI share in the range of 14 per cent. The shares of the rest became less than 10 per cent in 1993 (See Table 21). The other two industries gained their strength in term of their FDI share in 1993 were, chemical products and basic metal products. The two had rather impressive growth rates of higher than 20 and 30 per cent, respectively in 1993 (See Table C-6).

Rapid increase of the FDI share appeared in that classified as "others", with the share increased from 22.6 in 1982 to 34.6 in 1993. This fact further indicates the more diversification on manufacturing industries in Malaysia. The fact that food and textile industries were decreased in significance in Malaysia, while electrical and electronics products maintained its strength and chemical products also increased its industrial strength also indicates the country's movement towards advanced industries. The diversification of her manufacturing industries, has led to the conclusion that Malaysia too is moving way from concentration on few of industries, towards more spread of industries, as well as to

implicate her attempt to step up to more advanced technology industries experienced by Singapore. However, the degree of her advancement cannot be matched the level achieved by current development in Singapore but not much far behind either.

The FDI to Thailand has been gradually moved away from manufacturing sector to services. The movement of the FDI to Thailand has been consistent with the pattern of the country's development. In 1980, the FDI share of agricultural products was 9.8 per cent, while that of manufacturing industries was 63.0 per cent and that of services was 5.9 per cents (See Table 22). The rest was in other unclassified group not reported in Table 22. Within manufacturing industries, the FDI share of the item classified under mining and manufacturing took the lead of 31.9 per cent. Major industries included in this category were textile and food products. Ranking after mining and manufacturing was the FDI share of chemical products, with the share of 20.1 per cent. Ranking the third was the FDI share of electric and electronics products, with the share of 11.0 per cent.

While the FDI share of mining and manufacturing has been eroding throughout the whole observable period (1980-1992), because of the discovery of natural gas in the Gulf of Thailand since 1980, the FDI share of chemical products increased rapidly from that of 20.4 per cent in 1981 to 25.5 per cent in 1982. The share reached its peak in 1986 of 31.3 per cent and started to decline gradually after then. Since 1984, the FDI share of electric and electronics products began to increase significantly from that of 11.7 per cent in 1983 to 14.1 per cent in 1984. During the period of rapid increase of the FDI from Japan beginning from 1987, the FDI share of electric and electronics products started to increase further to the new level of 16.9 per cent, and further increased to the new level closed to 19 per cent during 1988 to 1991.

After 1989, the FDI share of services sector began to increase rather sharply, after the successful campaign of Visiting Thailand Year 1987 that resulted in rapid increase of tourists to Thailand, the share increased from 7.0 per cent in 1988 to 14.2 per cent in 1989. The share continued to increase at very rapid rate since then and reached 31.5 in 1992. Services sector in Thailand has been dominated by tourist industry and wholesale and retail business. However, in the early 1990's banking, insurance and real estates began to emerge in significance in the service sector.

Growth rates of the FDI in three industries in Thailand during the late 1980' to the early 1990's were very much impressive. The three industries were electrical and services sector. They began to grow very rapidly since the late 1980's, while chemical products and services did very well in the early 1990's (See Table C-9). In term of manufacturing industries, Thailand also moved in the direction of industrial composition like that of Malaysia. The difference is that while Malaysia tends to diversify more of her

manufacturing industries, Thailand tends to increase her share of services sector where she normally has the comparative advantage over her neighboring ASEAN countries. Such difference in the stages of industrial development as well as different in industrial structure are factors stimulating trade within the region.

Like most ASEAN countries, the FDI to Indonesia also concentrate on manufacturing sector. However, since mining and quarrying sector in Indonesia has also been one of the most important sectors to the Indonesian economy with its GDP share in 1983 of 20.7 per cent, the FDI share in this sector is also significant. The combined FDI share of mining and manufacturing sectors for Indonesia in 1981 was 79.9 per cent (See Table 23). The FDI share of agricultural sector was 5.6 per cent in the same year. The rest were distributed among the remaining sectors. Within manufacturing sector, five industries listed to have significant shares of the FDI in 1981 were textiles, chemicals, metal products, basic metals, and non-metallic minerals. Their share ranged from 17.8 per cent for metal products, 16.6 per cent for chemicals, 12.7 per cent for textiles, to 6.6 for metal products and 6.4 for non-metallic minerals, respectively.

Somewhat similar to the pattern emerged in Thailand but to a lesser degree in significance was the strong emergence of the tourist sector. Such development was reflected by rapid increase in investment in hotels. The sector expanded at rather rapid rate in the early 1990's. In 1981, the FDI share of services sector of Indonesia was only 6.4 per cent, already larger than that of Thailand in the same year. By, 1993 the share rose to 20.7 per cent, a very significant increase for the period of 12 year. Yet, the figure was still less than that of Thailand with her sectoral share of 31.5 per cent in 1992 due largely to steep increase within only one year of the 1992. Such strong increase in the FDI in services sector of Indonesia indicates that Indonesia too is gradually moving away from manufacturing sector.

Similar pattern of industrial shift in manufacturing industries also took place in Indonesia. While textile and basic metals industries lost their strength gradually, chemicals and metals products gained their strength considerably. The FDI share of chemical industries rose from 16.6 per cent in 1981 to the peak of 24.1 per cent in 1989 then stabilized around 20 per cent in 1992 and 1993. That of metal products rose very sharply from 6.6 per cent in 1981 to 12.2 per cent in 1982, and rose further to the peak of 16.2 in 1987. After then the share was stabilized between 9 to 10 per cent during the early 1990's (See Table 23). The said changes, in the pattern of the FDI flows to Indonesia, also implicate that Indonesia too is undergoing structural changes of

her industries to the ones with more advanced technology. At the same time, the country is also gradually move to increasingly rely on services sector. However, the pace of such movement is a little slower than that of Thailand.

Not like Thailand and Indonesia, the FDI share of industrial sector of the Philippines since 1985 has been stabilized around 76 per cent, while that in services sector fluctuated between 20 to 22 per cent since 1982 (See Table 24). This fact indicates that not much industrial structural changes taken place in the Philippines in the last 10 years, resulting mainly from the slow rate of increase of the FDI flows into the country (See Table B-14). Under such circumstance, technological gap, between the Philippines and those in the second division of the ASEAN league, must be considerable.

More trade and investment flows into the Philippines in the future are entirely possible, provided that the country shows the sign of moving back to the growth path. Since 1992, under the reformed government of Fidel Ramos, it is more likely that the Philippines is currently doing just that. Given the new optimistic environment, it is anticipated that the volume of the FDI to the Philippines will increase significantly during the second half of the 1990's. Unfortunately, the disadvantage due to the location of the Philippines discussed earlier, will act as a barrier to the possibility of strong inflows of the FDI into the Philippines for many years to come.

It is rather pre-mature to discuss about the industrial trends of the FDI to Vietnam, while the flows just began in 1988. Nevertheless, the industrial shares of the FDI in 1993 already provide interesting pattern. In 1993, the following four industries were the ones that received significant shares of the FDI. Heavy industry received 25.3 per cent, followed by hotels and tourism whose share of the FDI was 26.6, followed by petroleum and gas and light industry whose shares were 16.8 and 16.7 per cent, respectively (See Table 25). Such distribution of the FDI shares reflect the national priority as well as development strategy of Vietnam.

The trend clearly indicated that heavy industry received high priority in the country's development. The industry is expected to serve as strong foundation for industrial development for Vietnam in the long run. Hotels and tourism will also be the sector that will tap the foreign exchange flows into the country without much difficulty as long as Vietnam remain an "exotic" place to lure tourists to go there. Similar experience from Thailand during the past 8 years can be most relevant and useful for Vietnam. There has been strong tendency that the FDI share in light industry in Vietnam will surpass that of petroleum and gas. Given the existing experiences from Indonesia, the share of petroleum and gas will finally settle around 10 per cent. From the said distribution of

the FDI share of major industries in Vietnam, it appears that Vietnam is now on a firm ground on her future development and will benefit more from the freer flows of trade and the FDI in the region resulting from the AFTA, not in a too far distance future.

Elasticities and Future Flows of the FDI

Having discussed the trends of the shares of the FDI flows to each ASEAN country, it is appropriate to discuss future direction of the FDI flows into the ASEAN region based on the analysis of elasticities of sectoral GDP by the sectoral FDI shown in Table 26 and labor productivity by wage elasticity shown in Table 27. Table 26 shows the sectoral GDP by sectoral FDI of five ASEAN nations, namely, Singapore, Malaysia, Thailand, Indonesia and the Philippines. Basically, elasticities in the two sectors, manufacturing and services, are calculated for each countries. Since Singapore and Malaysia do not have their FDI in services sector. There will be no elasticities reported of the sector from Singapore and Malaysia.

Because there is some time lag between the FDI's and outputs generated by them, empirical evidences suggest that for most sectors the three year lag between the FDI's and their respective outputs will be the most appropriate time lag. For services sector, especially in hotels and tourism and investment in big department stores for retail activities normally takes about 5 year lag. As a result, 5 year lag is used for services sector. For Indonesia, mining sector is also important one and data are also available for the calculation of the elasticity in construction sectors, elasticities of the FDI of the two sectors are also computed for Indonesia. Their calculated values may provide some useful clues for other countries in the region in the future.

All calculated values of the elasticity pass the t-test for 95 per cent of confidence level with the exception of that of the Malaysia. The elasticities of sectoral GDP of manufacturing by their respective FDI are as follow: 1.2, 1.1, 1.3, 1.5, 2.4, for Singapore, Malaysia, Thailand, Indonesia, and the Philippines, accordingly. The results imply clearly, with the exception of Malaysia where the value of the elasticity is not significant, that ,in general, the marginal productivity of the FDI is higher in the country where the FDI per capita is lower. The findings support basic economic theory that the marginal productivity of capital is high when the capital is scarce.

Followed the said principle, the implication is that, if one considers the marginal productivity of the FDI alone as the criterion for future investment, among the said 5 ASEAN countries, more FDI for manufacturing sector should go the Philippines, followed by Indonesia and Thailand and Singapore respectively. The empirical results do not support any concrete statement to be made about Malaysia. For services sector, the FDI elasticities for the

Philippines, Thailand, and Indonesia, are 3.2, 2.3, and 1.8, respectively. By and large, the FDI in services sector is more profitable than its manufacturing counterparts. However, the lag or the leading time in investment is also longer. Anyway, the results clearly explain why the FDI for both Thailand and Indonesia have been gradually moving away from manufacturing sector to services sector.

Again the return to the FDI in service sector is much higher for the Philippines. However, since Thailand still has some comparative advantage edge in the services sector over Indonesia, the return to the FDI in Thailand is higher than that of Indonesia. The implication from the said results is that more FDI should go to the Philippines, Thailand, and Indonesia, respectively. As for the mining and construction sectors, there can be no cross comparison for different countries. With the elasticity of 4.3 for the FDI in mining sector in Indonesia. It is rather clear that mining sector, especially that of petroleum provides very high return to the FDI. In a way, in spite of the high rate of return to the FDI of the sector, investment is normally limited to the existing known reserves. This nature of natural monopoly in petroleum industry normally results in high return to the FDI. In case of construction sector, the return to the FDI is not high (the FDI elasticity is 1), simply because construction sector in Indonesia has not performed distinctively in the past compared with other sectors.

If the only criterion for the FDI flow is based on its sectoral GDP elasticity, then the results should have turn out in the way discussed above. Unfortunately, other factors may also contribute to the disadvantage of the Philippines. The results from Tables 27 provide additional set of information for consideration. Table 27 provides labor productivity by wage elasticities for the five ASEAN countries. The figures will serve as other necessary criterion for the FDI. It will be more likely that on the average, the FDI will flow to the country where labor productivity by wage elasticity is the highest.

Tables 27 provides the three year average of the value of the labor productivity by wage elasticity of the five countries for two period. One is during the most rapid flow of the FDI to ASEAN during 1987-1989. The other is for the slowing down period of 1990-1992. The results indicates that during the rapid growth period, the said elasticities for the five countries are as follow: 6.1, 1.1, 0.9, 0.8, 0.3, for Thailand, Malaysia, Singapore, Indonesia, and the Philippines, respectively. The results have already been discussed, namely, more proportional flow of the FDI to Thailand, Malaysia, and Singapore respectively (See, Table 2), the Philippines and Indonesia did not benefit from the FDI during that period as much.

During 1990 to 1992, the magnitude and the ranking of the elasticities change a little. They are 3.3, 1.6, 1.1, 0.6 and -0.2, for Thailand, Malaysia, Indonesia, Singapore, and the Philippines, respectively. By this ranking, Thailand is still most attractive place for the FDI than other four countries, followed by Malaysia and Indonesia. It is very clear from the above results, as well as for obvious reasons, that Singapore is not a place for the labor intensive FDI. Empirical evidences show consistent results for both periods. Although the average wage in Indonesia has always been lower than both Thailand and Malaysia, the country's labor productivity by wage elasticity is still lower than the former two. Nevertheless, the longer term trend shows gradual improvement in the productivity-wage elasticity for Indonesia. Not in a far distant future, Indonesia will definitely overtake Malaysia as the production base for labor intensive industries, while Malaysia will have to move up and compete with Singapore for the FDI in advanced technology industries. Not long after that Thailand too will lose the competitive edge in labor intensive industries to Indonesia and must compete with Malaysia on a new industrial level.

But for the Philippines, the situation is rather different. Slow and negative growth rates during the early 1990's were responsible for the negative elasticity of -0.2. Fortunately, one comfortable factor to be contemplated on, was that during the said period, the Philippines severely suffered from many forms of natural calamities. Still the Philippines must attempt to achieve better growth record in order to have the improved value of the productivity-wage elasticity high enough to attract more of the FDI. With relatively little amount of the FDI in the past. The situation can turn into the catch 22, or the no win situation. Fortunately, the other comfortable factor is the high values of elasticities of sector GDP by the sectoral FDI of both manufacturing and services sectors of the Philippines. They are the factors to induce more of the FDI for the Philippines, if she can only keep up with the regional average performance.

Having discussed potential difficulties faced by the Philippines, it is now appropriate to introduce the Yamashita's observation into consideration. According to his observation on the behavior of the FDI from Japan in the second half of the 1980's, the main purpose of the FDI flows from Japan to Asia during that period was to create primarily, manufacturing bases for export. Yet Japanese companies could not afford the time required for training local personnel from the begining. They wanted to start exporting in as short time as possible. As a result, they have come to rely heavily on automation and robots as a substitute for low-skilled local labor and have succeeded remarkably in the improvement of quality of their products (Yamashita, 1994, pp. 21-22).

Given the AFTA scenario, similar situation can easily repeat itself in the second half of the 1990's. Members of ASEAN with good endowment of primary resources, low value of land price, low labor costs, good location for better access to markets of most countries in the region, will stand a good chance of being selected as export bases to the rest of the region. Under this scenario, the Philippines will stand fairy good chance to attract some of the FDI. However, her strong competitor in the region is Vietnam. As already discussed earlier, what the Philippines badly needs now is not the FDI with quality but its volume to first boosting her growth and productivity in order to attract more of the FDI in the next round.

For an ASEAN region as a whole, the quick development of AFTA will result in strong inflows of the FDI into the region in the coming second half of the 1990's. This time it will not only be the ones mainly from Japan, although she will still maintain her supremacy of being on the top rank, not much less significance will be more of the FDI from the Asian NIEs as well as other developed APEC members such as the United States, Canada, Australia and New Zealand with the possibility of more from the multinational corporations based in Europe. By the beginging of the next Century, apart from more intra-regional trade flows among AFTA members, the flows of the FDI among themselves will be much more free than what have already achieved, currently. By that time the Philippines, the most difficult case among all ASEAN members, will definitely be able to pull herself out of the existing FDI starved trap.

The next question to be raised is what then will happen to ASEAN and APEC in 2000 and beyond. Will ASEAN perform well under the APEC setting ? What will happen to the world as a whole under the scenario of rapid growth of ASEAN ? Will ASEAN keep on growing without any limit or constraints ? These issues will be discussed in the next section.

In 2000 and Beyond

From most evidences discussed so far, the only country in the region that may not be able to meet the challenge fully in the coming Century for freer flows of trade and investment in ASEAN region, is, perhaps, the Philippines. The rest of them will be doing very well, with average regional growth rate between 7 to 8 per cent annually based on the base line scenario of the regional performance during the first half of the 1990's. However, given the AFTA scenario, it is expected that most countries, the Philippines included, will be able to perform much better than the said projection. Together with the Yamashita's observation of the nature

of the FDI to any country for specific purpose of being used as an export base, it is most likely that a lot more FDI not only from East Asian countries but from developed countries in the Pacific region and Europe will flow into the region.

A Future Prospect of ASEAN, AFTA and APEC up to 2020

Such strong inflows of the FDI from countries outside ASEAN region, will in tern generate stronger intra-region flows of the FDI, especially from those with advanced technology to the lower ones. The process is expected to trigger off from the late 1990's or in the early 2000's. Under such optimistic scenario, the Philippines too will be able of pull herself out of the FDI starved trap without much difficulty. By 2005, it is anticipated that most ASEAN economies except the Philippines and Vietnam will already join the rank of the Asian NIEs.

Without any severe economic crises within most members of developed economies of APEC, even more FDI at an accelerated rate will flow into the ASEAN region after 2005. Such rapid increase in the inflows will be induced by the fact that, by 2010 all members of the developed APEC will not have any trade barrier left. By 2010, all ASEAN members will enjoy the full benefit of free trade offered by all developed APEC member. By that time some ASEAN members, such as Singapore may already achieve the status of developed nation and a country like Malaysia will move close to that. If the Philippines has a good start in 2000, both the Philippines and Vietnam will also attain the status of the NIEs by 2010.

After 2010, ASEAN as a political bloc is still important for its members to exert some of their common political influence within the context of global politic. However, the role of AFTA will be gradually resolved to be part of the APEC system, especially as all members of the ASEAN have at least achieved the NIEs status in 2010. For obvious reason, by 2020 if APEC continue to proceed as what have been agreed upon by all member, AFTA will be no longer necessary.

Growth without Any Limitation ?

Under such optimistic scenario, it looks as though all ASEAN members can advance forward without any limitation. There are many constraints to growth without limit for almost every country. Nevertheless, this study will only discuss one of the most obvious possible limit. That is the energy consumed during the growth process. The discussion will base on the findings shown in Table 28. As each ASEAN economy grows, its per capita income will increase accordingly, at the same time one would expect energy consumption will also increase.

The results in Tables 28, calculate from the base year of

observed energy consumption per capita in 1988 in comparison with the per capita GDP of each country in that year. The relationship between per capita GDP and consumption of energy per capita can then be estimated. Assuming the base line scenario of the average growth rate in the early 1990's is used for projection. But for the Philippines, the average rate of growth under President Aquino during 1987 to 1989 is used. Given the assumed growth rates, future GDP of each country can then be calculated. The existing trends of population growth are also used to calculate population size in the future for each country. Based on both projections of the GDP and the number of population for each country, the GDP per capita can then be calculated. Consequently, per capita consumption of energy for each country in the future can be predicted from estimated relationship. Given calculated number of population, energy consumption for each country can be calculated.

In 1988, per capita consumption of energy of Singapore was 3.61 tons of oil equivalent, followed by that of Malaysia of 1.01 tons of oil equivalent. Per capita consumption of energy for Thailand, the Philippines, Indonesia, and Vietnam in the same year were 0.40, 0.24, 0.22, and 0.08 tons of oil equivalent, respectively. By 2010, energy consumption of Singapore will pass the level of that of the United States, because per capita income of Singapore will pass that of the United States. The amount of energy consumed by each person in Singapore in 2010 will be 9.22 tons of oil equivalent. Per capita consumption of energy of Malaysia will achieve the level experienced by Singapore in 1988, in 2010, with the amount of 3.27 tons of oil equivalent. Thailand will follow Malaysia close enough with the amount of 2.35 tons of oil equivalent.

Indonesia, the Philippines and Vietnam will be in about the same league. Their per capita energy consumption will be in the range of 0.60, 0.55 and 0.30 tons of oil equivalent, respectively. Observe also that, per capita consumption of energy also reflect the level of development of the economy. Given the said set of figures, in 2010 Singapore will already achieve the developed economy status while Malaysia and Thailand will be about that of the early Asian NIEs. Indonesia, the Philippines, and Vietnam will not reach the NIEs status as yet. However, the reader should be reminded that the above prediction is a base line scenario. The AFTA plus optimistic scenario discussed above have not been considered in the energy consumption projection. The amount of energy consumption here should be considered as the minimum level required under the base line scenario.

Having made the said projection, the total amount of energy consumption of ASEAN, Brunei excluded, in 1988, 2000 and 2010 are as follow; 106.2, 339.2 and 560.2 tons of oil equivalent, respectively. In comparison with that of the United States calculated during the same period, the total amount of energy consumption of ASEAN was about 5.3 per cent of that of the United

States in 1988. However, given more rapid growth of the whole region, the percentage will increase to that of 20.5 in 2010. In comparison with global consumption of energy, that of ASEAN in 1988 was about 1.4 per cent. The percentage is expected to increase at least to 5.3 of the world total in 2010.

Such increase will be quite substantial for ASEAN. However, in comparison with the world total, the increase still is not that large. Nevertheless, one should be reminded that the figure only represent the base line scenario. With the AFTA and optimistic scenario, the regional energy consumption could further increase in the range of 50 to 100 per cent of the calculated value in 2010. In that case, such rapid increase of the share of energy consumption for ASEAN could contribute significantly to more pressure on global energy used and its accompanied environmental consequences.

As far as energy consumption goes, the AFTA plus optimistic scenario is about as much of the upper limit that ASEAN can increase its share of the consumption. Beyond this limit, under the assumption of the known technology as well as the existing reserves of energy, there could be a problem of either global oil crisis or global environment problem such as the green house effect, or both. To advance the discussion further, beyond 2010 without any certainty of energy technology in the future can prove to be rather futile.

Thus, the conclusion must be made here. In term of the limit to growth, it can be reiterated that there will be no problem in term of energy used for ASEAN under the base line scenario. However, under such scenario ASEAN will not reach its optimal potential. Nonetheless, it can do so under the AFTA plus optimistic scenario. With this scenario, ASEAN will achieve its optimal results on growth but will face the problem of global energy limit given the known technology by 2010. Any prediction beyond 2010 will be rather shaky.

Conclusion

This study begins by raising the question of whether it is too premature economically for ASEAN, when President Suharto of Indonesia tried to convince all APEC members to sign the Bogor Declaration, binding all of them to commit to definite time table for complete trade liberalization. For developed economies complete liberalization will begin in 2010 and for developing economies it will begin by 2020. In the process of probing for the answer, brief history of both ASEAN and APEC are discussed. Although, being created since 1967 with the purpose to generate free flows of trade and investment among member nations, ASEAN did not achieve much progress in that direction until after the second half of the 1980's.

The main reason, with the exception of Singapore and Brunei, was that the rest of them pursued the same policy of import substitution as their basic development strategy. The problem was compound by the fact that the structures of their economies were of competing nature rather than complementary. Rapid change took place during 1984 and 1885, when most ASEAN economies reached the limit for further expansion resulting from the saturation of internal markets caused by the import substitution policy, together with the decline in both oil prices starting from 1984, and the consecutive declines of the world prices of agricultural products since the early 1980's. The oil exporting members suffered severely from the decrease in oil prices while those depending on exports of agricultural products had gradually lost their development strength since the early 1980's.

Most members must adjust their policy to that of export orientation of their manufacturing products. However, the policy could not be actually realized until the great influx of the FDI, especially from Japan and the Asian NIEs into the region. The FDI flows, on one hand was caused by rapid appreciation in the yen value and respective currencies of the Asian NIEs. On the other hand, they also responded to the change to export oriented policy of those countries. Foreign investors actually followed their own strategies, by using ASEAN countries as their production bases for exports. This was, in turn, due to rapid increase in production costs in their own countries, as well as the saturation of the demand in their respective domestic markets. As a result, the great influx of the FDI into ASEAN region in the second half of the 1980's came in one package with export markets, desperately sought after by most ASEAN members prior to the said period.

The package provided strong stimulant to rapid growth for most ASEAN nations, with the exception of the Philippines. The country was suffered from internal political instability followed by severely natural calamities during the said period. Hence, she completely missed the great opportunity from the rapid influx of the FDI in the second half of the 1980's. Since then, most ASEAN members began to gain strong confidence in their economic performance as well as their ability to trade and export. Being motivated by the prospect of increasing protectionist tendency, by the prospect of the single market of European Union in 1993, and NAFTA in 1984, plus increasing competition for the FDI from China, since the resumption of normal economic relationship with most nations in the early 1990's, after the severe suppression of the pro-democratic movement in China after the Tiananmen incidence in 1989, leaders of ASEAN nations decided to launch their previous economic blue print of the AFTA in early 1992 and to begin with the plan for the reduction of trade barrier among themselves by January 1, 1993.

The combination of stronger confidence, prospect of increasing tendency for increasing degree of competition and more trade blocs, together with increasing ability to trade among themselves, due to slightly differences in the levels of their technological advancement of their industries, as well as continual restructuring of their industries brought about by the FDI, majority of the ASEAN members decided to gamble on the possibility of more rapid expansion of their economies through the APEC setting. Such factors explained the move of President Suharto during the APEC summit in Bogor in 1994.

Having made such decision, it is only natural that ASEAN should always try to move one step ahead of that of the APEC development. As a result, before the 1995 APEC meeting in Osaka, Brunei, the 1995 host of ASEAN Ministerial meeting, urged ASEAN ministers to try to move the AFTA free trade date to yet another step forward to 2000, in stead of the agreed date of 2003, from the original date of 2008. By so doing, it is anticipated that more FDI will flow into the region in the second half of the 1990's, taking the advantage of the nature of rapid growth of the region as well as the prospect of free trade within the region starting from 2000.

By 2000, the ASEAN region will be ready to meet the challenge from the starting of tariff reduction among APEC members. The region can expect to gain even more flows of the FDI for the production as export bases to developed members of the APEC in the second half of the 2000's, in order to take the advantage from free trade status offered by those countries. Starting from the second half of the 1990's, the FDI's flows into ASEAN region will be no longer confined to those from Japan and the Asian NIEs, though their ascendancy will remain intact for quite some time to come in the future. More flows will come from developed economies in Pacific region and Europe. The strong inflows of FDI from these countries, will stimulate more intra-regional flows of the FDI beginning from the first half of the 2000's. By the second half of the 2000's, more intra-regional flows of the FDI within the ASEAN region will become evidence.

Given no severe economic problems as well as no severe environmental problems globally, resulted from strong growth in many regions, by 2010 at least a leading ASEAN member, Singapore will achieve the status of developed economy. The rest of the current members of ASEAN will at least achieve the status of the NIEs under the so called AFTA plus optimistic scenario. At least, both Malaysia and Thailand will definitely achieve the status of the NIEs by 2010 under the base line scenario. However, the AFTA plus optimistic scenario could exert its pressure on the upper

limit of global energy constraint. Given the known reserves of energy and the existing technology for energy utilization, any speculation beyond 2010 will be rather counter productive. Nevertheless one most certain outcome to be anticipated is that ASEAN will be doing much better than the base line scenario discussed, under the APEC setting from the second half of 1990's to 2010.

Table 1: FOREIGN DIRECT INVESTMENT (FDI) - LED DEVELOPMENT OF ASEAN PROFILES IN 1993

Country	GDP (Million US$)	Population (Million)	GDP per capita (US$)	FDI per capita (1987-93 Accumulation-US$)
Singapore	55,086	2.87	19,194	4,105
Brunei	4,027*	0.30*	13,424	n.a.
Malaysia	57,618	19.24	2,995	1,550
Thailand	110,431	58.58	1,885	728
Indonesia	142,832	189.14	775	285
Philippines	54,068	65.65	824	24
Vietnam	n.a.	70.80	n.a.	95
Total		406.58		

Table 1 (Continued)

Country	Percentage of FDI (1987-93 Accumulation) by GDP	FDI from Japan per capita (1987-93 Accumulation -US$)	Percentage of FDI from Japan (1987-93 Accumulation) by GDP
Singapore	21.4	2,059	10.7
Brunei	n.a.	413	3.1
Malaysia	51.7	225	7.5
Thailand	38.6	95	5.1
Indonesia	37.7	35	4.6
Philippines	2.9	19	2.3
Vietnam	n.a.	11	n.a.
Total			

*1994 figures

Sources: Calculated from statistics published in 1995 Statistical Pocketbook, ASEAN·Japan (ASEAN Centre), and Asia-Pacific Economic Cooperation, Osaka, 1995 by APEC Secretariat.

Table 2: TREND OF FDI FROM JAPAN TO ASEAN

	FDI (1951-94 Accumulation) in million US$	Percentage	FDI (1987-94 Accumulation) in million US$	Percentage
Singapore	9,535	21.8	6,964	23.6
Brunei	124	0.3	124	0.4
Malaysia	6,357	14.5	5,074	17.2
Thailand	7,184	16.4	6,300	21.4
Indonesia	16,981	38.8	8,308	28.2
Philippines	2,817	6.4	1,904	6.5
Vietnam	789	1.8	789	2.7
Total	43,787	100.0	29,463	100.0

Source: Calculated from each country report and 1995 Statistical Pocketbook, ASEAN·Japan (ASEAN Centre).

Table 3: FDI TO EACH ASEAN COUNTRY (1987-1994)

(Unit: Million US$)

Total Amount	1987	1988	1989	1990	1991	1992	1993	1994
Singapore	824	1,834	2,647	4,486	6,363	8,605	11,782	16,920
Malaysia	4,604	5,289	8,463	14,993	20,902	27,484	29,813	33,822
Thailand	2,138	4,613	10,166	16,641	24,200	38,414	42,649	48,519
Indonesia	2,013	4,071	11,116	21,351	31,024	45,733	53,832	77,556
Philippines	108	180	384	553	968	1,135	1,546	3,102
Vietnam	0	147	511	1,023	2,170	4,096	6,711	8,230
From Japan								
Singapore	494	1,241	3,143	3,983	4,596	5,266	5,910	6,964
Brunei	109	109	109	109	109	109	109	124
Malaysia	163	550	1,223	1,948	2,828	3,532	4,332	5,074
Thailand	250	1,109	2,385	3,539	4,346	5,003	5,581	6,300
Indonesia	545	1,131	1,763	2,867	4,060	5,736	6,549	8,308
Philippines	72	206	408	666	869	1,029	1,236	1,904
Vietnam	0	0	83	85	98	319	395	789

Source: Calculated from each country's report and 1995 Statistical Pocketbook, ASEAN-Japan (ASEAN Centre).

Table 4: GDP AND MANUFACTURING GROWTH RATE OF ASEAN COUNTRIES (1981-1994)

(Unit: Per Cent)

GDP	1981	1982	1983	1984	1985	1986	1987
Singapore	6.3	7.3	8.7	8.3	-1.6	1.8	9.4
Brunei	-19.8	3.9	0.5	0.6	-1.5	-2.8	1.1
Malaysia	7.1	8.3	6.3	7.8	-0.1	1.0	5.4
Thailand	5.8	3.9	5.7	7.1	3.5	4.9	9.5
Indonesia	7.9	2.2	4.2	7.0	2.5	5.9	4.9
Philippines	n.a.	3.6	1.8	-7.3	-7.3	3.4	4.3
Vietnam	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Manufacturing							
Singapore	9.7	-3.5	2.8	7.5	-7.3	8.4	17.3
Malaysia	4.6	3.8	8.2	11.7	-3.8	7.5	13.4
Thailand	6.4	4.4	7.3	6.8	-0.6	9.6	16.0
Indonesia	10.2	1.2	2.2	22.1	11.2	9.3	10.6
Philippines	n.a.	1.6	-0.3	-10.1	-7.9	1.8	5.6

Table 4 (Continued)

(Unit: Per Cent)

GDP	1988	1989	1990	1991	1992	1993	1994
Singapore	11.1	9.2	8.3	7.0	6.1	9.9	9.5*
Brunei	2.6	0.8	2.7	3.6	-1.0	-4.1	n.a.
Malaysia	8.9	9.2	9.7	8.7	8.5	8.0	8.6
Thailand	13.2	12.0	10.0	8.1	7.6	7.8	8.3*
Indonesia	5.8	7.3	7.2	6.9	6.3	6.5	6.7*
Philippines	6.8	6.2	2.7	-0.5	0.6	2.0	4.5*
Vietnam	n.a.	n.a.	n.a.	6.0	8.6	8.1	8.5
Manufacturing							
Singapore	18.0	9.8	9.5	5.4	2.3	10.0	n.a.
Malaysia	17.6	14.2	15.7	14.0	10.5	12.9	13.0
Thailand	17.9	16.0	16.0	11.8	10.6	n.a.	n.a.
Indonesia	13.0	8.3	12.5	9.6	9.7	n.a.	n.a.
Philippines	9.5	5.8	2.7	-0.4	-1.7	0.7	n.a.

*estimates

Sources: Statistics of each country and ECONOMIC OUTLOOK OF THE ASIAN ECONOMIES FOR 1995 (Sakura Bank).

Table 5: GROWTH RATE OF INDUSTRY AND SERVICE SECTOR OF ASEAN COUNTRIES (1981-1994)

(Unit: Per Cent)

Industry Sector	1981	1982	1983	1984	1985	1986	1987
Singapore	11.1	4.8	9.9	9.8	-9.3	-0.9	10.5
Malaysia	3.3	5.7	10.5	11.1	-3.8	4.6	6.5
Thailand	3.4	2.9	7.0	7.9	-1.0	7.1	14.1
Indonesia	8.5	-1.9	2.9	9.8	-0.5	4.9	6.7
Philippines	n.a.	2.5	1.5	-11.5	-15.7	2.3	4.0
Vietnam	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Service Sector							
Singapore	11.3	9.0	8.0	9.5	5.6	4.2	12.0
Malaysia	11.6	6.6	6.6	8.0	1.7	-0.5	5.0
Thailand	7.0	5.8	5.5	7.1	4.6	4.5	10.0
Indonesia	11.8	5.5	4.7	5.1	4.7	7.4	5.9
Philippines	n.a.	6.8	5.6	-6.5	-2.1	4.2	5.2
Vietnam	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Table 5 (Continued)

(Unit: Per Cent)

Industry Sector	1988	1989	1990	1991	1992	1993	1994
Singapore	13.1	8.3	9.2	7.8	5.0	9.6	n.a.
Malaysia	12.7	12.4	13.2	11.2	8.6	9.5	10.8
Thailand	16.4	17.5	16.3	11.9	9.3	n.a.	n.a.
Indonesia	3.9	9.1	9.8	10.2	5.4	n.a.	n.a.
Philippines	8.7	7.4	2.6	-2.7	-0.5	1.8	n.a.
Vietnam	n.a.	n.a.	n.a.	10.0	15.0	12.0	13.5
Service Sector							
Singapore	12.0	11.8	3.5	3.9	5.7	13.7	n.a.
Malaysia	7.8	8.5	11.5	10.4	9.0	8.7	8.9
Thailand	12.1	9.3	13.1	5.9	7.2	n.a.	n.a.
Indonesia	6.9	9.6	7.6	6.2	7.3	n.a.	n.a.
Philippines	7.2	7.0	4.9	0.2	1.0	2.1	n.a.
Vietnam	n.a.	n.a.	n.a.	8.2	7.3	13.0	12.5

Sources: Compiled from the statistics of each country

Table 6: SINGAPORE - GDP SHARE BY INDUSTRIAL ORIGIN

Unit: Per Cent

	1981	1985	1990	1991	1992	1993	2000*	2003*	2010*
1. Agriculture Sector	1.0	0.7	0.3	0.3	0.3	0.2	0.2	0.1	0.1
Agriculture & Forestry	1.0	0.7	0.3	0.3	0.3	0.2	0.2	0.1	0.1
2. Industry Sector	38.2	34.2	34.4	35.1	35.0	34.4	33.9	32.7	31.1
Quarrying	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Manufacturing	28.5	22.0	27.2	27.2	26.4	26.1	26.8	26.4	25.5
Construction	7.5	10.0	5.0	5.8	6.4	6.3	5.0	4.6	3.7
Electricity, Gas & Water	1.9	1.9	2.1	2.0	2.1	1.9	2.0	1.9	1.8
3. Service Sector	49.8	53.8	55.8	54.9	55.0	56.1	56.7	57.0	57.9
Wholesale, Retail, Restaurants, Hotels, etc.	17.4	15.9	16.4	16.6	16.3	16.9	16.5	16.4	16.2
Transportation, Storage & Communication	11.8	12.5	13.3	13.7	14.1	13.8	14.1	14.2	14.9
Finance, Insurance & Real Estate	20.6	25.4	26.0	24.6	24.6	25.4	26.1	26.4	26.8
Others	11.0	11.2	9.6	9.8	9.7	9.3	9.2	10.1	10.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Economic Survey of Singapore 1987, 1989, 1993.

Note: * Projection made by the authors.

Table 7: BRUNEI: GDP SHARE BY INDUSTRIAL ORIGIN
Unit: Per Cent

	1980	1985	1990	2000*	2003*	2010*
Petroleum Sector	78.9	72.8	62.9	47.7	42.7	31.5
Non-Petroleum Sector	21.1	27.2	37.1	52.4	57.3	68.5
1. Agriculture	1.0	1.4	1.9	2.6	3.0	3.7
2. Industry	2.3	3.3	5.3	7.5	9.3	11.5
Mining & Manufacturing	0.0	0.8	2.0	3.5	5.0	6.7
Construction	2.3	2.5	3.3	4.0	4.3	4.8
3. Services	17.8	22.5	30.0	39.2	45.1	53.3
Transportation & Communication	0.9	2.4	2.7	4.4	5.6	7.1
Finance, Insurance, Real Estate, etc.	16.9	20.1	27.3	34.8	39.5	46.2
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Brunei Statistical Yearbook 1987, 1990.
Note: * Projection made by the authors.

Table 10: INDONESIA - GDP SHARE BY INDUSTRIAL ORIGIN
Unit: Per Cent

	1983	1985	1990	1991	1992	2000*	2003*	2010*
1. Agriculture Sector	22.8	22.6	19.4	18.4	18.3	14.5	13.3	10.8
Agri., Forestry & Fishery	22.8	22.6	19.4	18.4	18.3	14.5	13.3	10.8
2. Industry Sector	39.7	39.7	41.0	42.4	42.0	44.1	44.9	46.8
Mining & Quarrying	20.7	18.2	15.2	15.7	14.6	9.5	7.8	5.0
Manufacturing	12.7	15.8	19.4	19.9	20.5	27.0	29.1	32.7
Construction	5.9	5.3	5.8	6.1	6.2	6.4	6.5	6.8
Electricity, Gas & Water	0.4	0.4	0.6	0.7	0.7	1.2	1.5	2.3
3. Service Sector	37.5	37.7	39.6	39.2	39.7	41.4	41.8	42.4
Commerce, Hotels & Restaurant Businesses	14.9	14.6	16.1	15.9	16.1	17.6	17.9	18.2
Transportation & Communication	5.3	5.3	5.5	5.6	5.8	6.1	6.2	6.4
Finance	3.0	3.5	4.2	4.5	4.8	7.0	8.0	10.3
Real Estate	3.0	2.9	2.6	2.5	2.5	2.1	2.0	1.6
National Defense & Securities	7.4	7.6	7.6	7.3	7.1	5.4	4.8	3.5
Other Services	3.9	3.7	3.5	3.4	3.4	3.0	2.9	2.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Pendapatan Nasional Indonesia
Note: * Projection made by the authors.

Table 9: THAILAND - GDP SHARE BY INDUSTRIAL ORIGIN

Unit: Per Cent

	1980	1986	1990	1991	1992	2000*	2003*	2010*
1. Agriculture Sector	20.2	18.2	13.6	13.2	12.8	11.3	10.6	9.0
2. Industry Sector	30.1	32.3	37.8	39.1	39.7	43.2	45.4	48.2
Mining	0.8	1.7	1.6	1.7	1.7	1.5	1.5	1.4
Manufacturing	23.1	23.4	27.8	28.7	29.6	31.7	33.3	35.0
Construction	4.6	4.8	6.0	6.2	5.9	6.9	7.3	7.8
Electricity, Gas & Water	1.7	2.4	2.4	2.5	2.5	3.1	3.3	4.0
3. Service Sector	49.7	49.5	48.6	47.7	47.5	45.5	44.0	42.8
Transportation & Communication	7.2	7.3	7.5	7.4	7.5	7.2	6.9	6.2
Wholesale & Retail	17.9	16.5	17.5	17.3	16.9	15.5	14.6	12.8
Banking, Insurance & Real Estate	3.1	3.1	5.5	5.4	6.3	8.8	10.1	14.1
House Ownership	4.7	4.0	3.1	3.0	2.9	2.0	1.6	1.1
Administration & National Defense	4.1	4.2	3.1	3.1	2.9	2.2	1.8	1.4
Other Services	12.6	14.4	11.9	11.5	11.0	9.8	8.9	7.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: NESDB, National Income of Thailand, Rebased Series, 1980-1993.

Note: * Projection made by the authors.

Table 8: MALAYSIA - GDP SHARE BY INDUSTRIAL ORIGIN
Unit: Per Cent

	1980	1985	1990	1991	1992	1993	1994	2000*	2003*	2010*
1. Agriculture Sector	23.4	20.9	18.7	17.1	16.5	15.7	14.8	12.5	11.3	8.8
Agri., Fishery & Forestry	23.4	20.9	18.7	17.1	16.5	15.7	14.8	12.5	11.3	8.8
2. Industry Sector	37.0	37.0	40.5	41.7	42.0	42.2	43.5	45.7	47.1	50.1
Mining & Quarrying	10.3	10.6	8.1	7.7	7.3	6.6	6.1	6.7	7.2	6.9
Manufacturing	20.6	19.9	26.9	28.2	28.8	29.9	31.2	32.1	32.8	35.1
Construction	4.7	4.8	3.6	3.8	3.9	4.0	4.1	4.3	4.4	4.6
Electricity, Gas & Water	1.4	1.7	1.9	2.0	2.1	1.7	2.2	2.5	2.7	3.2
3. Service Sector	39.6	42.1	40.8	41.3	41.5	42.1	41.7	41.8	41.6	41.1
Transportation & Communication	5.9	6.4	6.9	7.0	7.1	5.8	7.0	7.7	7.9	8.3
Wholesale & Retail	12.4	12.1	11.1	11.7	11.9	9.7	12.4	11.3	11.0	10.3
Finance, Insurance & Real Estate	8.4	9.0	9.8	10.1	10.2	10.1	10.8	11.6	12.1	13.1
Government Services	10.5	12.3	10.8	10.4	10.1	8.6	9.4	9.2	8.8	7.9
Other Services	2.4	2.3	2.1	2.1	2.1	7.9	2.1	1.9	1.8	1.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Ministry of Finance, Economic Report 1985/86, 1989/90, 1993/94.
Note: * Projection made by the authors.

Table 11: PHILIPPINES - GDP SHARE BY INDUSTRIAL ORIGIN
Unit: Per Cent

	1981	1985	1986	1987	1988	1989	1993	2000*	2003*	2010*
1. Agriculture Sector	23.5	24.6	24.6	24.4	23.6	22.9	22.8	18.8	17.1	13.0
Agriculture	16.9	18.3	18.0	17.4	17.5	17.3	17.8	15.1	14.6	11.7
Fishery	4.0	4.7	4.9	5.0	5.0	4.2	4.5	3.2	2.0	1.0
Forestry	2.6	1.6	1.7	2.0	2.0	1.3	0.5	0.5	0.5	0.3
2. Industry Sector	41.0	35.1	34.7	34.6	35.2	35.6	34.3	36.8	37.9	40.2
Mining & Quarrying	1.5	2.1	2.1	1.8	1.8	1.6	1.6	0.6	0.5	0.2
Manufacturing	27.1	25.2	24.8	25.1	25.7	25.6	24.7	26.8	27.3	28.7
Construction	10.1	4.8	4.8	5.1	5.0	5.7	5.3	7.8	8.7	10.4
Electricity, Gas & Water	2.3	3.0	3.0	2.6	2.7	2.7	2.8	1.6	1.4	0.9
3. Service Sector	35.5	40.4	40.7	41.0	41.2	41.5	42.9	44.4	44.9	46.9
Transportation, Communication & Storage	4.9	5.5	5.6	5.7	5.8	5.8	5.9	6.6	7.6	7.7
Trade	12.6	14.5	14.7	14.6	14.5	14.7	15.3	14.5	14.6	14.9
Finance	3.3	3.0	3.1	3.5	3.6	3.9	4.1	6.6	7.1	8.8
Private Services	5.4	6.8	6.8	6.8	6.9	6.8	6.9	7.0	7.1	7.3
Government Services	4.3	4.9	4.9	4.8	4.9	4.8	5.0	4.6	4.4	4.2
Other Services	5.0	5.7	5.6	5.6	5.5	5.5	5.7		4.1	4.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: National Statistical Coordination Board, Philippine Statistical Yearbook 1994.
Note: * Projection made by the authors.

Table 12: VIETNAM - GDP SHARE BY INDUSTRIAL ORIGIN
Unit: Per Cent

	1990	1991	1992	2000*	2003*	2010*
1. Agriculture Sector	38.9	41.2	34.9	25.4	20.6	15.6
2. Industry Sector	23.1	22.8	26.8	35.7	40.1	43.8
Industry	19.3	19.5	22.8	30.4	34.2	37.6
Construction	3.8	3.3	3.9	5.3	5.9	6.2
3. Service Sector	38.0	36.0	38.3	38.9	39.4	40.6
Transportation & Communication	3.2	3.8	4.2	4.2	4.3	4.2
Commerce & Supply of Goods	13.3	12.7	12.4	12.7	12.7	13.1
Finance, Banking & Insurance	1.7	1.5	1.7	1.6	1.7	1.6
National Management, Science, Health, Education, etc.	10.1	9.2	10.2	10.3	10.5	10.6
Housing, Tourism, etc.	9.7	8.7	9.8	10.1	10.1	11.1
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Nien giam thong ke, 1992, pp. 26-27.
Note: * Projection made by the authors.

Table 13: TREND OF SHARE OF FDI AMONG ASEAN COUNTRY FROM ASEAN AND NIES

(Unit: Per Cent)

From ASEAN	1980	1984	1987	1990	1992	1993
Singapore	none	none	none	none	none	none
Malaysia	n.a.	28.5	22.5	19.2	16.8	15.9
Thailand	3.5	5.9	5.2	5.3	6.2	6.3
Indonesia	n.a.	3.4	2.0	2.9	3.6	n.a.
Philippines	none	none	none	none	none	none
Vietnam	none	none	none	none	2.7	5.4
From NIEs, Singapore Excluded						
Singapore	none	none	none	none	none	none
Malaysia	n.a.	19.0	17.0	11.8	21.4	19.5
Thailand	8.1	9.8	10.2	13.5	23.9	21.2
Indonesia	n.a.	13.8	12.1	20.3	19.3	19.7
Philippines	5.5	5.6	6.2	6.8	6.9	n.a.
Vietnam	none	none	none	23.2	41.3	46.5
From ASEAN and NIEs						
Singapore	none	none	none	none	none	none
Malaysia	n.a.	47.5	39.5	31.0	38.2	35.4
Thailand	11.6	15.7	15.4	18.8	30.1	27.5
Indonesia	n.a.	17.2	14.1	23.2	22.9	26.0
Philippines	5.5	5.6	6.2	6.8	6.9	n.a.
Vietnam	none	none	none	23.2	44.0	51.9

Sources: Calculated from Tables 14-19.

Table 14: SINGAPORE - FDI SHARE BY COUNTRY

Unit: Per Cent

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
United States	29.5	31.0	32.3	32.9	32.8	35.4	36.6	35.9	35.9	35.6	36.8	37.1	37.9	38.7	41.0
Japan	16.7	16.7	16.8	17.1	22.6	22.3	24.0	25.0	26.6	27.2	27.7	27.8	28.3	27.9	27.0
European Countries	40.7	40.8	39.6	38.3	34.1	34.3	32.8	31.0	30.1	30.4	29.4	29.2	28.3	28.4	27.4
United Kingdom	16.5	16.7	17.1	16.7	14.3	13.8	13.0	11.8	11.0	11.0	10.3	10.0	10.1	10.3	10.5
Netherlands	18.2	16.9	15.4	14.2	12.6	12.6	11.9	11.0	10.4	10.4	9.7	9.6	8.8	7.9	7.4
Germany	2.0	2.3	2.2	2.2	1.9	1.9	1.9	2.3	2.3	2.3	2.8	2.8	2.9	3.3	3.1
France	0.8	1.0	1.0	1.0	1.1	1.4	1.5	1.4	1.8	2.2	2.3	2.3	2.2	2.4	2.3
Italy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.4
Switzerland	1.6	1.4	1.2	1.2	1.0	1.0	1.0	1.0	0.9	0.8	0.8	0.7	0.6	0.8	0.7
Sweden	0.6	1.3	1.3	1.2	1.0	1.0	1.0	0.9	0.8	0.7	0.7	0.6	0.5	0.5	0.4
Other EC	0.7	0.9	1.1	1.4	1.8	2.1	2.1	2.0	2.2	2.3	2.1	2.2	2.0	1.9	1.7
Other European Countries	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.6	0.6	0.7	0.8	1.0	0.9	1.1	1.0
Others	13.1	11.6	11.3	11.6	10.3	8.0	6.6	8.0	7.3	6.8	6.2	5.9	5.6	5.0	4.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Economic Development Board (EDB)

Notes: 1) Based on the cumulative amount.
2) Only manufacturing projects granted approval.
3) Germany: Figures before 1989 are those of W. Germany.
4) Other EC: 1993 and 1994 figures are those of EU (European Union).

Table 15: MALAYSIA - FDI SHARE BY COUNTRY

Unit: Per Cent

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
United States	6.8	6.6	7.1	6.8	6.3	5.9	6.4	6.0	5.4	6.3	8.3	9.3
Japan	17.9	19.6	20.3	22.6	29.0	31.8	31.2	31.2	29.5	28.1	26.0	26.0
Australia	2.5	2.5	2.4	2.1	1.9	1.8	1.6	1.4	1.1	1.4	3.1	3.0
India	1.4	1.4	1.4	1.2	1.3	1.4	2.4	2.9	3.1	3.6	3.1	3.0
China										0.4		
Panama								0.3				
Bahamas	0.4	0.3	0.5	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2
NIES	37.5	37.1	37.0	33.0	29.0	27.2	27.6	29.7	33.6	35.0	31.2	30.9
S.Korea	0.03	0.03	0.05	0.06	0.09	0.08	0.08	0.39	1.15	2.53	2.22	2.19
Taiwan	0.001	0.005	0.02	0.04	0.2	0.3	1.9	5.2	12.3	14.0	13.1	13.2
Hong Kong	9.3	9.0	8.7	7.5	6.7	6.6	6.6	6.2	5.3	5.0	4.2	4.1
Singapore	28.2	28.1	28.3	25.4	22.0	20.2	19.1	17.9	14.9	13.5	11.7	11.5
Other ASEAN Countries												
Indonesia	0.3	0.4	0.4	0.5	0.5	0.6	0.9	1.3	2.4	3.3	3.2	4.2
European Countries	21.3	20.6	20.4	24.7	24.5	24.4	22.8	21.8	18.1	15.8	19.1	18.8
United Kingdom	16.8	16.2	16.1	20.0	20.2	20.4	18.8	17.3	14.5	12.6	11.7	11.1
W. Germany	2.8	2.8	2.7	2.4	2.2	2.1	2.1	2.3	1.8	1.5	1.2	1.2
Netherlands	1.6	1.5	1.3	2.0	1.7	1.4	1.3	1.2	1.0	0.8	0.8	1.1
France											3.7	3.5
Italy												0.01
Denmark	0.04	0.05	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.4	0.7
Switzerland	0.1	0.1	0.1	0.2	0.3	0.5	0.5	0.4	0.4	0.4	0.3	0.4
Finland	0.0	0.0	0.01	0.01	0.02	0.04	0.1	0.3	0.3	0.2	0.2	0.2
Ireland											0.7	0.6
Others	1.9	1.8	1.9	2.0	2.0	2.3	4.5	4.8	8.2	10.1	9.2	9.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Malaysian Industrial Development Authority (MIDA)

Notes: 1)Only manufacturing projects granted approval.
2)Germany - Figures before 1990 are those of West Germany.
3)Based on the cummulative amount since 1982.

Table 16: THAILAND - FDI SHARE BY COUNTRY
Unit: Per Cent

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Japan	26.9	25.0	23.4	23.1	24.7	24.3	20.5	24.0	26.6	37.1	35.4	32.7	25.6	23.8
United States	8.6	8.5	8.5	8.9	9.4	10.2	19.1	16.6	15.8	12.8	11.6	12.4	15.5	14.0
Australia	0.9	0.9	1.1	1.3	1.2	1.2	6.4	5.5	4.7	3.4	2.7	2.2	1.7	1.6
India	5.1	4.9	4.7	5.4	4.9	4.7	4.2	3.7	3.2	2.4	2.0	1.6	1.2	1.1
Panama	1.1	1.1	5.3	5.4	4.8	4.6	3.9	3.5	3.0	2.2	1.7	1.4	1.0	0.9
Israel	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1
European Countries	17.2	20.4	22.2	22.9	21.2	20.4	17.3	15.5	14.4	12.5	14.3	15.6	13.8	18.5
United Kingdom	5.2	6.8	8.5	8.7	8.2	7.8	6.6	5.6	5.8	4.6	6.5	7.7	6.6	10.1
Germany	1.9	1.8	2.1	2.1	2.0	2.0	1.7	1.4	1.3	1.0	0.9	0.7	0.5	0.5
Swwitzerland	2.8	2.9	2.8	2.8	2.6	2.4	2.1	2.0	1.8	2.3	2.0	1.8	1.4	1.3
Netherlands	4.2	5.6	5.8	6.2	5.5	5.2	4.3	3.7	3.0	2.5	2.5	2.7	2.1	2.2
Portugal	1.4	1.5	1.4	1.5	1.4	1.5	1.2	1.0	1.0	0.8	0.6	0.5	0.4	0.4
France	1.6	1.5	1.4	1.4	1.3	1.2	1.0	0.8	0.7	0.7	1.3	1.4	1.9	3.1
Italy	0.1	0.1	0.1	0.3	0.3	0.4	0.5	0.9	0.8	0.6	0.5	0.8	0.8	1.0
NIES	9.4	10.4	14.0	14.2	13.5	14.7	13.1	13.2	14.8	14.2	17.2	18.1	27.9	25.4
S.Korea	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.6	0.6	0.5	0.5
Taiwan	3.7	4.2	6.8	6.7	6.1	7.0	6.2	5.8	6.4	6.2	7.0	7.1	6.2	5.5
Hong Kong	3.3	3.1	3.4	3.4	3.4	3.7	3.2	3.9	4.0	3.7	5.9	5.6	17.3	15.2
Singapore	2.2	3.0	3.6	3.8	3.7	3.7	3.3	3.0	3.9	3.9	3.7	4.8	4.0	4.2
Other ASEAN Countries	1.3	1.4	1.6	1.8	2.2	2.7	2.4	2.2	2.1	1.9	1.6	1.8	2.2	2.1
Indonesia	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2
Philippines	0.4	0.4	0.4	0.4	0.4	0.7	0.6	0.6	0.7	0.5	0.5	0.4	0.4	0.4
Malaysia	0.6	0.7	0.8	1.0	1.5	1.7	1.4	1.3	1.1	1.1	0.9	1.2	1.6	1.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Board of Investment (BOI)
Notes: 1)Based on the cumulative amount since 1960.
2)Germany: Figures before 1990 are those of West Germany.

Table 17: INDONESIA - FDI SHARE BY COUNTRY
Unit: Per Cent

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
United States	5.5	5.6	8.1	8.3	8.1	7.8	7.2	8.2	7.1	5.7	5.2	4.3	5.5
Japan	32.2	36.9	34.7	33.9	33.7	33.2	34.3	28.9	25.4	24.9	23.6	20.7	20.6
Canada	8.2	7.3	6.0	5.8									
Australia	2.0	1.8	1.5	1.4	1.5	1.5	1.5	1.2	2.2	2.2	2.0	2.0	2.2
India	0.6	1.3	1.3	1.3	2.1	2.2	2.2	1.8	1.7	1.5	1.4	1.3	1.4
Panama					0.7	0.8	1.0	1.1	1.1	1.1	1.0	0.0	0.0
NIES	13.4	13.5	13.6	15.4	15.6	15.6	14.7	19.4	20.2	23.0	23.6	22.5	25.5
S. Korea	0.8	1.0	1.0	1.0	1.3	1.4	1.3	2.0	3.3	4.8	4.6	4.7	5.4
Taiwan	1.1	1.0	0.8	0.9	0.9	0.9	0.8	4.9	4.5	6.0	7.0	6.2	6.0
Hong Kong	10.2	10.1	10.5	12.3	12.1	11.8	10.9	9.9	9.6	9.6	8.7	8.3	8.4
Singapore	1.4	1.4	1.2	1.3	1.4	1.6	1.7	2.6	2.8	2.6	3.3	3.3	5.8
Other ASEAN Countries	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.4	0.5
Thailand	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
Malaysia	0.05	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.4
European Countries	10.1	13.3	12.8	12.7	15.2	14.9	16.7	19.5	16.1	13.5	13.2	12.1	14.6
United Kingdom	1.1	2.4	2.5	2.5	4.3	4.2	3.9	3.2	2.4	1.9	2.9	3.9	4.1
Germany	2.0	2.5	2.7	2.7	3.2	3.2	5.0	8.5	6.5	4.8	3.8	3.0	2.9
Netherlands	3.1	4.7	4.4	4.4	4.5	4.3	4.9	5.2	5.0	5.1	4.4	3.6	6.0
Switzerland	1.4	1.3	1.1	1.1	1.1	1.1	1.0	0.9	0.7	0.5	1.0	0.9	0.8
France	1.2	1.1	1.0	1.0	1.1	1.1	1.0	0.8	0.7	0.6	0.5	0.4	0.4
Belgium	0.8	0.7	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.3	0.3	0.3
Denmark	0.7	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.3	0.2	0.2	0.1	0.1
Multinationals	14.6	13.9	12.1	12.5	12.9	16.0	16.3	14.5	22.4	23.1	27.8	24.5	26.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Badan Koordinasi Penanaman Modal (BKPM)
Notes: 1)Based on the cumulative amount since 1967.
2)Germany: Figures before 1990 are those of West Germany.
3)Australia: 1981 figure includes New Zealand.

Table 18: PHILIPPINES - FDI SHARE BY COUNTRY

Unit: Per Cent

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
United States	49.5	49.0	48.3	51.5	55.7	56.4	57.0	57.2	56.8	55.3	54.1	49.6	48.9
Japan	19.7	17.5	18.0	16.5	15.4	14.0	13.7	13.3	13.6	14.4	15.3	16.3	19.8
Australia	0.2	2.1	2.0	2.0	1.9	1.7	1.7	1.6	1.6	1.8	2.0	1.8	1.7
Canada	3.2	2.6	2.2	2.0	2.0	1.8	1.7	1.7	1.7	1.6	1.6	1.4	1.4
Hong Kong	5.5	6.6	6.0	5.9	5.6	6.2	6.0	6.2	6.5	6.6	6.8	6.7	6.9
European Countries	9.6	11.0	12.7	12.0	12.5	11.9	12.2	11.9	11.7	11.7	11.8	10.9	11.0
United Kingdom	3.2	3.9	3.7	3.3	3.5	3.4	3.7	3.6	3.5	3.4	3.5	3.3	3.4
Netherlands	1.4	1.9	4.2	4.2	4.7	4.6	4.6	4.6	4.5	4.8	4.6	4.2	4.1
Switzerland	3.6	3.1	3.0	2.7	2.6	2.3	2.3	2.2	2.2	2.2	2.3	2.2	2.2
France	1.4	2.1	1.9	1.8	1.8	1.6	1.5	1.5	1.4	1.4	1.3	1.2	1.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Central Bank of the Philippines

Note: Based on the cumulatie amount since 1970.

Table 19: VIETNAM - FDI SHARE BY COUNTRY
Unit: Per Cent

	1988	1989	1990	1991	1992	1993
United States						0.003
Japan		16.2	8.3	4.5	7.8	5.9
Australia	1.1	0.5	8.8	7.8	7.0	6.6
Malaysia				3.3	2.2	6.5
European Countries	7.1	34.8	22.3	14.5	14.9	11.8
United Kingdom		23.2	11.6	5.7	7.1	4.3
Netherlands	4.8	1.4	5.3	5.7	3.1	2.1
France	2.2	10.2	5.4	3.2	4.7	5.4
NIEs	6.8	10.8	23.2	44.1	41.3	46.5
S.Korea				1.9	3.6	7.7
Taiwan		0.2	10.7	27.4	22.5	19.8
Hong Kong	6.8	10.6	10.5	13.3	12.4	13.6
Singapore			1.9	1.6	2.7	5.4
Others	84.9	37.7	37.3	25.7	26.7	22.7
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: JETRO
Notes: 1)Projects granted approval.
2)Based on the cumulative amount since 1988.

Table 20: SINGAPORE - FDI SHARE BY INDUSTRY
Unit: Per Cent

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Food & Beverages	3.4	3.6	3.8	3.5	3.0	3.0	2.9	3.5	4.2	4.0	3.8	3.6	3.5	3.4	3.5
Textiles	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4
Wood Products	1.6	1.4	1.2	1.2	1.0	1.0	1.0	1.0	0.9	0.8	0.8	0.7	0.6	0.7	0.6
Electrical Machinery & Appliances	17.1	17.3	18.9	19.7	21.1	23.7	23.2	25.9	28.8	30.4	32.8	34.7	34.1	32.5	33.5
Petroleum & Petroleum Products	44.6	41.6	40.6	38.8	33.1	31.8	30.7	28.0	25.3	23.2	22.5	20.6	20.3	18.4	18.1
Industrial Chemicals	1.7	2.1	1.9	6.5	9.0	9.2	9.2	8.4	8.3	9.1	9.4	9.8	9.8	11.4	11.6
Machinery except Electrical	7.9	8.4	8.1	8.0	6.9	6.9	7.9	7.6	7.6	8.1	8.1	8.9	9.3	9.4	9.0
Fabricated Metal Products	3.7	3.7	3.7	4.0	6.3	6.3	6.1	6.0	6.5	6.6	6.4	6.3	6.2	6.0	6.3
Paper Products & Printing	1.4	1.6	1.4	1.5	2.1	2.1	2.0	1.9	2.4	2.7	2.8	2.9	3.0	3.0	3.4
Precision Equipment	2.2	2.1	2.1	2.1	2.1	2.2	2.1	2.6	2.7	3.0	2.8	2.6	2.9	3.0	2.6
Non-Metallic Mineral Products	1.8	1.6	1.7	1.8	2.3	2.5	2.4	2.1	2.2	2.5	2.3	2.2	2.3	2.5	2.2
Basic Metals	0.8	0.9	0.8	0.7	0.6	0.6	0.6	0.6	1.3	1.2	1.1	1.0	1.0	1.1	1.0
Transport Equipment	4.8	5.0	5.1	4.7	4.0	3.9	3.7	3.6	3.4	3.5	3.7	3.8	4.1	4.8	5.8
Plastic Products	1.4	1.5	1.6	1.6	1.6	1.7	1.8	1.8	2.3	2.3	2.1	2.3	2.5	2.4	2.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Economic Development Board (EDB)
Notes: 1)Based on the cumulative amount.
2)Only manufacturing projects granted approval.

Table 21: MALAYSIA - FDI SHARE BY INDUSTRY
Unit: Per Cent

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Food	17.1	16.0	14.8	13.4	12.2	11.1	11.0	13.1	10.7	9.2	7.9	7.7	7.0
Textiles	10.9	10.6	10.2	9.3	8.5	7.9	7.5	6.9	6.6	5.9	6.0	6.1	6.5
Wood & Wood Products	4.0	4.1	4.1	3.8	3.5	3.2	3.2	4.1	3.9	3.8	3.4	3.5	3.9
Chemical Products	7.2	7.3	7.4	7.4	7.5	7.8	8.4	8.4	8.7	9.1	8.8	9.9	9.9
Non-Metallic Mineral Products	10.0	9.6	9.1	9.6	9.9	9.9	9.0	7.9	6.4	7.2	6.4	6.1	6.2
Basic Metal Products	4.5	4.6	4.7	4.3	5.7	7.7	8.0	7.2	11.1	12.7	11.4	11.4	10.8
Fabricated Metal Products	3.4	3.5	3.6	3.4	3.1	2.9	2.9	3.1	2.8	4.0	3.5	3.4	3.2
Machinery	1.6	1.6	1.6	1.5	1.4	1.2	1.4	1.5	1.5	1.6	1.6	1.6	1.7
Electric & Electronics Products	14.6	13.2	11.6	10.2	9.1	8.2	9.5	11.9	13.9	13.7	12.3	13.3	15.7
Transportation Equipment	4.0	4.2	4.4	4.1	4.9	5.9	6.7	6.3	5.3	4.6	4.0	4.0	3.9
Others	22.6	25.4	28.6	33.0	34.1	33.8	32.3	29.2	29.1	27.9	34.4	32.9	30.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Malaysia Industrial Development Authority (MIDA)
Notes: 1)Only Manufacturing projects granted approval
2)Germany - Figures before 1990 are those of West Germany.
3)Based on the cumulative amount since 1982.

Table 22: THAILAND - FDI SHARE BY INDUSTRY
Unit: Per Cent

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
1. Agricultural Products	9.8	9.8	9.7	10.0	9.6	9.4	8.0	7.5	8.0	7.3	6.8	6.3	4.8	4.9
2. Mining & Manufacturing	31.9	31.2	28.8	28.0	25.1	23.5	24.4	20.5	17.0	16.0	16.6	15.3	11.6	11.7
3. Chemical Products	20.1	20.4	25.5	27.6	25.7	25.0	31.3	29.2	28.4	23.3	21.3	20.5	22.9	23.0
4. Electric & Electronics Products	11.0	11.9	11.6	11.7	14.1	15.0	13.9	16.9	18.6	18.5	18.8	18.6	15.0	14.8
5. Services	5.9	5.6	9.4	9.5	8.9	8.5	7.1	7.6	7.0	14.2	15.9	20.9	31.5	31.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Board of Investment (BOI)
Note: Based on the cumulative amount since 1960.

Table 23: INDONESIA - FDI SHARE BY INDUSTRY

Unit: Per Cent

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Agri., Fishery & Forestry	5.6	5.2	4.7	5.1	5.2	5.5	5.5	4.6	4.1	4.5	3.7	3.2	3.4
a. Agriculture	2.2	2.1	2.0	2.2	2.2	2.4	2.4	2.1	1.9	2.8	2.3	1.9	2.0
b. Fishery	1.5	1.4	1.2	1.2	1.3	1.3	1.3	1.0	0.8	0.7	0.6	0.5	0.5
c. Forestry	1.9	1.8	1.6	1.7	1.8	1.9	1.8	1.5	1.4	1.0	0.8	0.8	0.9
Mining	12.7	11.4	10.4	10.1	10.1	10.0	10.0	8.1	10.3	8.5	7.0	9.5	9.7
Manufacturing	67.2	69.9	74.6	75.3	74.1	73.1	71.8	75.5	75.0	72.0	66.6	59.8	60.5
a. Textiles	12.7	11.5	9.6	10.4	11.3	12.1	12.4	11.6	10.0	8.3	7.9	6.9	7.1
b. Chemicals	16.6	18.8	15.4	14.9	15.4	16.5	15.2	19.6	24.1	23.2	21.1	20.4	20.4
c. Metal Products	6.6	12.4	14.9	15.3	15.7	15.7	16.0	13.3	10.7	9.0	9.6	8.8	10.1
d. Basic Metals	17.8	15.8	19.5	22.9	23.7	23.2	21.5	17.6	13.9	10.8	9.1	7.0	6.7
e. Non-Metallic Minerals	6.4	6.0	5.2	5.1	5.0	4.8	5.1	5.1	4.6	4.4	4.6	4.9	4.9
Construction	1.5	1.4	1.2	1.3	2.1	2.2	2.4	1.9	1.5	1.4	1.2	1.0	1.1
Real Estate	1.3	1.5	1.5	2.0	3.7	3.6	3.4	2.8	2.4	4.3	4.3	3.8	5.6
Hotels	2.6	2.5	2.3	2.4	2.5	2.5	3.4	4.2	3.8	5.3	12.7	11.1	11.0
Transportation	1.2	1.3	1.3	1.6	1.6	1.6	2.3	1.9	1.4	3.0	3.1	2.4	2.4
Services	0.4	0.5	0.7	0.7	0.7	0.9	1.1	0.9	1.3	1.0	1.4	1.3	1.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Badan Koordinasi Penanaman Modal (BKPM)

Note: Based on the cumulative amount since 1967.

Table 24: PHILIPPINES - FDI SHARE BY INDUSTRY
Unit: Per Cent

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Agriculture Sector	2.4	2.2	2.0	1.8	1.7	1.7	1.7	1.6	1.6	1.5	1.6	1.5	1.4
Industry Sector	68.0	69.7	72.4	69.4	72.6	76.4	76.2	76.5	76.0	75.8	75.4	75.9	75.9
Mining	15.0	17.4	21.4	22.7	24.4	26.5	26.9	27.2	27.5	26.5	26.0	24.0	23.2
Manufacturing	51.7	51.2	50.0	45.9	47.4	49.1	48.5	48.6	48.3	48.6	48.6	51.3	52.0
Construction	1.3	1.1	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.6	0.7
Service Sector	26.5	25.0	22.4	20.1	20.1	20.6	20.8	20.5	21.[illegible]	21.3	21.7	21.5	21.6
Commerce	6.3	5.8	4.9	4.3	4.3	4.3	4.1	4.1	4.3	5.0	5.3	5.3	5.4
Services	3.2	4.4	4.0	3.5	3.6	4.0	3.9	3.9	4.4	4.3	4.3	4.6	4.6
Finance	17.0	14.8	13.4	12.3	12.3	12.3	12.8	12.5	12.3	12.0	12.2	11.6	11.6
Public Utilities	1.7	1.5	1.3	1.2	1.2	1.3	1.3	1.3	1.3	1.3	1.3	1.2	1.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Central Bank of the Philippines
Notes: 1)Projects granted approval.
2)Based on the cumulative amount since 1970.
3)Agriculture sector consists of agriculture, fisheries and forestry.

Table 25: VIETNAM - FDI SHARE BY INDUSTRY
Unit: Per Cent

	1988	1989	1990	1991	1992	1993
Heavy Industry	4.1	9.6	6.6	14.2	22.6	25.3
Light Industry	4.1	2.0	7.2	19.5	16.4	16.7
Petroleum & Gas	76.0	44.6	40.1	24.3	25.1	16.8
Agriculture & Forestry		0.6	6.4	5.1	4.5	3.9
Fishery	10.9	3.1	3.8	3.0	2.0	1.4
Transportation, Communication & Postal Services	0.3	8.4	13.2	7.5	4.7	7.3
Hotels & Tourism	2.8	30.7	21.3	22.7	19.4	20.6
Finance			1.0	0.5	2.7	2.3
Construction				0.2	0.3	1.6
Culture, Health Services & Education				0.2	0.1	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: JETRO
Notes: 1)Projects granted approval.
2)Based on cumulative amount since 1988.

Table 26: SECTORAL GDP BY SECTORAL FDI ELASTICITY

(Unit: Per Cent)

		Manufacturing	Services	Mining	Construction
Singapore	elasticity	1.2	-	-	-
	period of observation	1982-1993	-	-	-
	R^2	0.976	-	-	-
	t-test	1.46E-04	-	-	-
	year of lag	3	-	-	-
Malaysia	elasticity	1.1	-	-	-
	period of observation	1984-1989	-	-	-
	R^2	0.949	-	-	-
	t-test	0.89	-	-	-
	year of lag	3	-	-	-
Thailand	elasticity	1.3	2.3	-	-
	period of observation	1980-1992	1980-1992	-	-
	R^2	0.954	0.982	-	-
	t-test	7.42E-04	4.54E-07	-	-
	year of lag	3	5	-	-
Indonesia	elasticity	1.5	1.8	4.3	1.0
	period of observation	1983-1992	1983-1992	1983-1992	1983-1992
	R^2	0.744	0.952	0.939	0.843
	t-test	9.99E-04	6.45E-07	1.27E-02	1.50E-09
	year of lag	3	5	4	3
Philippines	elasticity	1.5	3.2	-	-
	period of observation	1981-1993	1981-1993	-	-
	R^2	0.892	0.944	-	-
	t-test	7.34E-13	5.02E-11	-	-
	year of lag	3	5	-	-

Sources: Calculated from the statistics of each country.

Table 27: LABOUR PRODUCTIVITY BY WAGE ELASTICITY

AVERAGE WAGE ELASTICITY OF LABOUR	1987-1989	1990-1992
Singapore	0.9	0.6
Malaysia	1.1	1.6
Thailand	6.12	3.3
Indonesia	0.8	1.1
Philippines	0.3	-0.2

WAGE ELASTICITY OF LABOUR	1987	1988	1989	1990	1991	1992
Singapore						
Labour Productivity Growth Rate (%)	8.2	9.9	7.9	7.1	6.1	5.0
Average Wage Growth Rate (%)	9.5	9.8	9.5	9.6	9.6	9.7
Wage Elasticity of Labour	0.86	1.01	0.83	0.74	0.64	0.52
Malaysia						
Labour Productivity Growth Rate (%)	3.2	6.0	6.5	6.9	6.3	5.1
Average Wage Growth Rate (%)	8.5	4.3	4.2	4.0	3.8	3.7
Wage Elasticity of Labour	0.38	1.40	1.56	1.73	1.66	1.37
Thailand						
Labour Productivity Growth Rate (%)	7.3	11.0	9.7	9.6	5.2	5.2
Average Wage Growth Rate (%)	9.5	1.2	1.2	14.7	1.1	1.1
Wage Elasticity of Labour	0.76	9.31	8.29	0.65	4.56	4.58
Indonesia						
Labour Productivity Growth Rate (%)	3.0	2.7	5.8	4.9	4.3	3.7
Average Wage Growth Rate (%)	6.2	4.7	4.4	4.3	4.0	3.9
Wage Elasticity of Labour	0.48	0.57	1.32	1.14	1.08	0.97
Philippines						
Labour Productivity Growth Rate (%)	1.8	4.2	3.6	0.5	-4.0	-2.8
Average Wage Growth Rate (%)	12.1	12.2	7.7	18.6	16.7	7.1
Wage Elasticity of Labour	0.15	0.34	0.47	0.03	-0.24	-0.39

Sources: Calculated from the statistics of each country, ASIAN DATA HANDBOOK 1992 (The International Center for the Study of East Asian Development), and World Labour Report 1990 (International Labour Organization).

Table 28: ENERGY CONSUMPTION OF ASEAN COUNTRIES AND ITS FORECAST

1.Per Capita Energy Consumption	1988	2000*	2003*	2010*
(Unit: Tonnes oil equivalent)				
Singapore	3.61	7.30	8.84	9.52
Malaysia	1.01	1.72	2.07	3.27
Thailand	0.40	1.11	1.39	2.35
Indonesia	0.22	0.40	0.45	0.60
Philippines	0.24	0.39	0.43	0.55
Vietnam	0.08	0.20	0.23	0.30
U.S.A.	8.11	8.20	8.53	9.22
2.Gross Energy Consumption				
(Unit: Million tonnes oil equivalent)				
Singapore	9.4	22.6	28.3	32.4
Malaysia	17.1	37.1	47.3	83.7
Thailand	21.8	76.2	100.3	193.8
Indonesia	38.5	88.8	106.7	165.3
Philippines	14.4	31.4	37.2	56.0
Vietnam	5.1	16.4	19.4	29.3
Total of ASEAN-6	106.2	272.6	339.2	560.5
	(1.4)**	(3.0)**	(3.6)**	(5.3)**
U.S.A.	1997.5	2244.1	2390.8	2733.3
World Total	7544.4	9061.2	9487.8	10483.4

* Projection made by the authors.

** Figures in parentheses are the share in the world total (Unit: Per Cent).

Sources: Calculated from INDUSTRIAL RESTRUCTURING IN ASIA AND THE PACIFIC 1991 (United Nations), BP Statistical Review of World Enegy 1994 (British Petroleum), and ASIAN DATA HANDBOOK 1992 (The International Centre for the Study of East Asian Development).

APPENDIX A

-GDP AND ITS SECTORAL GROWTH OF EACH ASEAN COUNTRY-

Table A-1: SINGAPORE - GDP BY INDUSTRIAL ORIGIN
Unit: Millions of S$ - at constant 1985 prices

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
1. Gross Domestic Product	31,603.0	33,772.0	36,537.0	39,573.0	38,923.5	39,641.4	43,387.4	48,223.7	52,669.6	57,072.7	60,884.0	64,415.9	71,211.9
2. By Industry													
Agriculture Sector	319.0	303.0	311.0	327.0	292.3	260.0	234.0	205.4	191.8	177.3	160.6	161.7	158.5
Agriculture & Forestry	319.0	303.0	311.0	327.0	292.3	260.0	234.0	205.4	191.8	177.3	160.6	161.7	158.5
Industry Sector	12,423.0	13,018.0	14,313.0	15,717.0	14,258.6	14,124.2	15,610.0	17,660.8	19,127.7	20,885.4	22,519.1	23,638.3	25,915.9
Quarrying	84.0	104.0	122.0	120.0	111.3	94.3	93.4	88.1	89.4	81.4	89.3	76.0	54.6
Manufacturing	9,291.0	8,965.0	9,216.0	9,908.0	9,184.3	9,955.8	11,673.2	13,773.2	15,121.5	16,565.6	17,458.2	17,868.2	19,649.1
Construction	2,428.0	3,299.0	4,267.0	4,927.0	4,167.0	3,234.2	2,916.8	2,787.4	2,830.9	3,034.7	3,690.5	4,340.6	4,761.6
Electricity, Gas & Water	620.0	650.0	708.0	762.0	796.0	839.9	926.6	1,012.1	1,085.9	1,203.7	1,281.1	1,353.5	1,450.6
Service Sector	16,461.0	17,939.0	19,376.0	21,225.0	22,423.5	23,355.6	26,151.9	29,299.5	32,752.6	33,891.0	35,206.3	37,220.8	42,324.8
Wholesale, Retail, Restaurant, Hotels, etc.	5,755.0	6,092.0	6,374.0	6,739.0	6,636.3	6,593.7	7,335.4	8,551.8	9,257.4	9,977.3	10,677.1	11,033.9	12,752.5
Transportation, Storage and Communication	3,897.0	4,352.0	4,678.0	5,132.0	5,234.5	5,679.5	6,137.6	6,786.4	7,426.4	8,079.2	8,758.4	9,562.0	10,427.2
Finance, Insurance & Real Estate	6,812.0	7,495.0	8,324.0	9,354.0	10,552.7	11,082.4	12,678.9	13,961.3	16,068.8	15,837.5	15,770.8	16,624.9	19,145.1
Others	3,578.0	3,908.0	4,219.0	4,459.0	4,676.6	4,837.2	5,060.3	5,230.8	5,472.0	5,793.1	6,279.9	6,596.5	6,971.7

Source: Economic Survey of Singapore 1987, 1989, 1993.

Table A-2: SINGAPORE - GDP GROWTH RATE
Unit: Per Cent

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
1. Gross Domestic Product	6.9	8.2	8.3	-1.6	1.8	9.4	11.1	9.2	8.4	6.7	5.8	10.6
2. By Industry												
Agriculture Sector	-5.0	2.6	5.1	-10.6	-11.1	-10.0	-12.2	-6.6	-7.6	-9.4	0.7	-2.0
Agriculture & Forestry	-5.0	2.6	5.1	-10.6	-11.1	-10.0	-12.2	-6.6	-7.6	-9.4	0.7	-2.0
Industry Sector	4.8	9.9	9.8	-9.3	-0.9	10.5	13.1	8.3	9.2	7.8	5.0	9.6
Quarrying	23.8	17.3	-1.6	-7.2	-15.3	-1.0	-5.7	1.5	-8.9	9.7	-14.9	-28.2
Manufacturing	-3.5	2.8	7.5	-7.3	8.4	17.3	18.0	9.8	9.5	5.4	2.3	10.0
Construction	35.9	29.3	15.5	-15.4	-22.4	-9.8	-4.4	1.6	7.2	21.6	17.6	9.7
Electricity, Gas & Water	4.8	8.9	7.6	4.5	5.5	10.3	9.2	7.3	10.8	6.4	5.7	7.2
Service Sector	9.0	8.0	9.5	5.6	4.2	12.0	12.0	11.8	3.5	3.9	5.7	13.7
Wholesale, Retail, Restaurant, Hotels, etc.	5.9	4.6	5.7	-1.5	-0.6	11.2	16.6	8.3	7.8	7.0	3.3	15.6
Transportation, Storage and Communication	11.7	7.5	9.7	2.0	8.5	8.1	10.6	9.4	8.8	8.4	9.2	9.0
Finance, Insurance & Real Estate	10.0	11.1	12.4	12.8	5.0	14.4	10.1	15.1	-1.4	-0.4	5.4	15.2
Others	9.2	8.0	5.7	4.9	3.4	4.6	3.4	4.6	5.9	8.4	5.0	5.7

Source: Economic Survey of Singapore 1987, 1989, 1993.

Table A-3: SINGAPORE - GDP AVERAGE GROWTH RATE
Unit: Per Cent

	1982-84	1985-89	1990-93
1. Gross Domestic Product	7.8	6.0	7.8
2. By Industry			
Agriculture Sector	0.9	-10.1	-4.6
Agriculture & Forestry	0.9	-10.1	-4.6
Industry Sector	8.2	4.3	7.9
Quarrying	13.2	-5.5	-10.6
Manufacturing	2.3	9.2	6.8
Construction	26.9	-10.1	14.0
Electricity, Gas & Water	7.1	7.4	7.5
Service Sector	8.8	9.1	6.7
Wholesale, Retail, Restaurant, Hotels, etc.	5.4	6.8	8.4
Transportation, Storage and Communication	9.6	7.7	8.9
Finance, Insurance & Real Estate	11.2	11.5	4.7
Others	7.6	4.2	6.3

Source: Economic Survey of Singapore 1987, 1989, 1993.

Table A-4: MALAYSIA - GDP BY INDUSTRIAL ORIGIN
Unit: Millions of Ringgit - at 1978 market prices

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
1. Gross Domestic Product	43,510	46,580	49,492	52,604	56,814	56,739	57,991	61,514	66,992	73,323	80,584	87,678	94,719	102,396	111,170
2. By Industry															
Agriculture Sector	10,189	10,684	11,375	11,302	11,623	11,914	12,389	13,311	13,933	14,768	14,799	14,795	15,432	15,895	16,149
Agri., Fishery & Forestry	10,189	10,684	11,375	11,302	11,623	11,914	12,389	13,311	13,933	14,768	14,799	14,795	15,432	15,895	16,149
Industry Sector	16,125	16,688	17,630	19,490	21,662	20,934	21,926	23,362	26,298	29,551	33,461	37,206	40,493	44,373	49,205
Mining & Quarrying	4,487	4,289	4,617	5,337	6,073	5,985	6,433	6,442	6,803	7,383	7,760	7,952	8,088	7,991	8,167
Manufacturing	8,932	9,343	9,694	10,488	11,711	11,263	12,111	13,734	16,151	18,444	21,340	24,307	26,859	30,216	34,145
Construction	2,066	2,367	2,598	2,867	2,988	2,738	2,355	2,077	2,133	2,380	2,835	3,250	3,615	4,013	4,482
Electricity, Gas & Water	640	689	721	798	890	948	1,027	1,109	1,211	1,344	1,526	1,697	1,931	2,153	2,411
Service Sector	17,196	19,208	20,487	21,812	23,529	23,891	23,676	24,841	26,761	29,004	32,324	35,677	38,794	42,128	45,816
Transportation & Communication	2,542	2,847	2,984	3,138	3,464	3,630	3,851	4,055	4,412	4,839	5,483	6,058	6,579	7,132	7,745
Wholesale & Retail	5,383	5,694	6,104	6,583	7,107	6,911	6,147	6,423	6,988	7,687	8,825	10,091	11,165	12,315	13,608
Finance, Insurance & Real Estate	3,687	3,953	4,231	4,570	4,892	5,093	5,073	5,420	6,088	6,771	7,759	8,733	9,607	10,664	11,890
Government Services	4,563	5,649	6,027	6,328	6,817	6,957	7,253	7,543	7,819	8,185	8,579	8,964	9,466	9,892	10,288
Other Services	1,021	1,065	1,141	1,193	1,249	1,300	1,352	1,400	1,454	1,522	1,678	1,831	1,977	2,125	2,285

Source: Ministry of Finance, Economic Report 1985/86, 1989/90, 1993/94.

Table A-5: MALAYSIA - GDP GROWTH RATE
Unit: Per Cent

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
1. Gross Domestic Product	7.1	6.3	6.3	8.0	-0.1	2.2	6.1	8.9	9.5	9.9	8.8	8.0	8.1	8.6
2. By Industry														
Agriculture Sector	4.9	6.5	-0.6	2.8	2.5	4.0	7.4	4.7	6.0	0.2	-0.0	4.3	3.0	1.6
Agri., Fishery & Forestry	4.9	6.5	-0.6	2.8	2.5	4.0	7.4	4.7	6.0	0.2	-0.0	4.3	3.0	1.6
Industry Sector	3.5	5.6	10.6	11.1	-3.4	4.7	6.5	12.6	12.4	13.2	11.2	8.8	9.6	10.9
Mining & Quarrying	-4.4	7.6	15.6	13.8	-1.4	7.5	0.1	5.6	8.5	5.1	2.5	1.7	-1.2	2.2
Manufacturing	4.6	3.8	8.2	11.7	-3.8	7.5	13.4	17.6	14.2	15.7	13.9	10.5	12.5	13.0
Construction	14.6	9.8	10.4	4.2	-8.4	-14.0	-11.8	2.7	11.6	19.1	14.6	11.2	11.0	11.7
Electricity, Gas & Water	7.7	4.6	10.7	11.5	6.5	8.3	8.0	9.2	11.0	13.5	11.2	13.8	11.5	12.0
Service Sector	11.7	6.7	6.5	7.9	1.5	-0.9	4.9	7.7	8.4	11.4	10.4	8.7	8.6	8.8
Transportation & Communication	12.0	4.8	5.2	10.4	4.8	6.1	5.3	8.8	9.7	13.3	10.5	8.6	8.4	8.6
Wholesale & Retail	5.8	7.2	7.8	8.0	-2.8	-11.1	4.5	8.8	10.0	14.8	14.3	10.6	10.3	10.5
Finance, Insurance & Real Estate	7.2	7.0	8.0	7.0	4.1	-0.4	6.8	12.3	11.2	14.6	12.6	10.0	11.0	11.5
Government Services	23.8	6.7	5.0	7.7	2.1	4.3	4.0	3.7	4.7	4.8	4.5	5.6	4.5	4.0
Other Services	4.3	7.1	4.6	4.7	4.1	4.0	3.6	3.9	4.5	10.2	9.1	8.0	7.5	7.5

Source: Ministry of Finance, Economic Report 1985/86, 1989/90, 1993/94.

Table A-6: MALAYSIA - GDP AVERAGE GROWTH RATE
Unit: Per Cent

	1981-84	1985-89	1990-94
1. Gross Domestic Product	6.9	5.3	8.7
2. By Industry			
Agriculture Sector	3.4	4.9	1.8
Agri., Fishery & Forestry	3.4	4.9	1.8
Industry Sector	7.7	6.6	10.7
Mining & Quarrying	8.2	4.1	2.1
Manufacturing	7.1	9.8	13.1
Construction	9.7	-4.0	13.5
Electricity, Gas & Water	8.6	8.6	12.4
Service Sector	8.2	4.3	9.6
Transportation & Communication	8.1	6.9	9.9
Wholesale & Retail	7.2	1.9	12.1
Finance, Insurance & Real Estate	7.3	6.8	11.9
Government Services	10.8	3.7	4.7
Other Services	5.2	4.0	8.5

Source: Ministry of Finance, Economic Report 1985/86, 1989/90, 1993/94.

Table A-7: THAILAND - GDP BY INDUSTRIAL ORIGIN
Unit: Millions of Baht - at constant 1988 prices

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
1. Gross Domestic Product	936,351	991,097	1,030,032	1,088,601	1,166,242	1,202,803	1,257,177	1,376,847	1,559,764	1,745,952	1,953,382	2,110,978	2,270,527
2. By Industry													
Agriculture Sector	179,370	192,457	194,401	202,080	213,615	227,735	228,191	228,346	252,346	272,569	266,227	279,493	290,586
Industry Sector	311,919	322,436	331,642	354,799	382,980	379,195	406,060	463,432	539,340	633,672	737,193	825,234	901,735
Mining	21,672	20,263	19,736	20,822	23,154	21,950	21,511	24,107	26,559	28,227	31,051	36,063	37,966
Manufacturing	212,376	225,968	235,911	253,133	270,346	268,724	294,521	341,750	403,034	467,632	542,669	606,897	671,339
Construction	61,143	57,169	55,683	58,746	65,326	61,929	60,138	66,060	74,449	95,554	116,606	130,462	135,038
Electricity and Water	16,728	19,036	20,311	22,098	24,153	26,593	29,890	31,515	35,298	42,259	46,867	51,812	57,392
Service Sector	445,063	476,203	503,989	531,722	569,647	595,873	622,926	685,069	768,078	839,711	949,962	1,006,251	1,078,206
Transportation & Communication	60,363	64,830	69,692	74,780	82,482	85,864	92,046	100,585	116,611	128,754	146,753	157,035	171,277
Wholesale & Retail	155,908	165,263	170,717	178,058	191,768	198,288	207,211	229,859	266,257	296,919	341,137	364,211	382,671
Banking, Insurance & R. Estate	25,135	27,422	30,192	33,724	36,962	38,219	39,404	51,834	66,220	80,426	108,111	113,106	142,202
House Ownership	43,299	44,209	45,118	46,997	48,875	49,761	50,647	52,575	55,416	58,213	60,756	63,181	65,139
Administration & N. Defense	40,916	43,453	45,582	47,770	47,436	50,756	52,329	53,717	56,488	57,277	61,366	64,938	66,562
Other Services	119,441	131,027	142,688	150,393	162,124	172,986	181,289	196,499	207,086	218,122	231,839	243,780	250,355

Source: NESDB, National Income of Thailand, Rebased Series, 1980-1991.

Table A-8: THAILAND - GDP GROWTH RATE
Unit: Per Cent

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
1. Gross Domestic Product	5.8	3.9	5.7	7.1	3.1	4.5	9.5	13.3	11.9	11.9	8.1	7.6
2. By Industry												
Agriculture Sector	7.3	1.0	3.9	5.7	6.6	0.2	0.1	10.5	8.0	-2.3	5.0	4.0
Industry Sector	3.4	2.9	7.0	7.9	-1.0	7.1	14.1	16.4	17.5	16.3	11.9	9.3
Mining	-6.5	-2.6	5.5	11.2	-5.2	-2.0	12.1	10.2	6.3	10.0	16.1	5.3
Manufacturing	6.4	4.4	7.3	6.8	-0.6	9.6	16.0	17.9	16.0	16.0	11.8	10.6
Construction	-6.5	-2.6	5.5	11.2	-5.2	-2.9	9.8	12.7	28.3	22.0	11.9	3.5
Electricity and Water	13.8	6.7	8.8	9.3	10.1	12.4	5.4	12.0	19.7	10.9	10.6	10.8
Service Sector	7.0	5.8	5.5	7.1	4.6	4.5	10.0	12.1	9.3	13.1	5.9	7.2
Transportation & Communication	7.4	7.5	7.3	10.3	4.1	7.2	9.3	15.9	10.4	14.0	7.0	9.1
Wholesale & Retail	6.0	3.3	4.3	7.7	3.4	4.5	10.9	15.8	11.5	14.9	6.8	5.1
Banking, Insurance & Real Estate	9.1	10.1	11.7	9.6	3.4	3.1	31.5	27.8	21.5	34.4	4.6	25.7
House Ownership	2.1	2.1	4.2	4.0	1.8	1.8	3.8	5.4	5.0	4.4	4.0	3.1
Administration & National Defense	6.2	4.9	4.8	-0.7	7.0	3.1	2.7	5.2	1.4	7.1	5.8	2.5
Other Services	9.7	8.9	5.4	7.8	6.7	4.8	8.4	5.4	5.3	6.3	5.2	2.7

Source: NESDB, National Income of Thailand, Rebased Series, 1980-1991.

Table A-9: THAILAND - GDP AVERAGE GROWTH RATE
Unit: Per Cent

	1981-84	1985-89	1990-92
1. Gross Domestic Product	5.6	8.5	9.2
2. By Industry			
Agriculture Sector	4.5	5.1	2.2
Industry Sector	5.3	10.8	12.5
Mining	1.9	4.3	10.5
Manufacturing	6.2	11.8	12.8
Construction	1.9	8.6	12.5
Electricity and Water	9.6	11.9	10.7
Service Sector	6.4	8.1	8.7
Transportation & Communication	8.1	9.4	10.0
Wholesale & Retail	5.3	9.2	8.9
Banking, Insurance & Real Estate	10.1	17.5	21.6
House Ownership	3.1	3.6	3.8
Administration & National Defense	3.8	3.9	5.2
Other Services	7.9	6.1	4.7

Source: NESDB, National Income of Thailand, Rebased Series, 1980-1991.

Table A-10: INDONESIA - GDP BY INDUSTRIAL ORIGIN
Unit: Billions of Rupiah

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
1. Gross Domestic Product	77,676.3	82,910.7	84,959.1	89,473.6	94,302.3	99,156.9	107,369.9	115,217.3	123,164.8	130,908.8
2. By Industry										
Agriculture Sector	17,696.2	18,431.1	19,209.0	19,698.7	20,136.3	21,007.6	21,917.8	22,356.9	22,657.2	24,003.7
Agri., Forestry & Fishery	17,696.2	18,431.1	19,209.0	19,698.7	20,136.3	21,007.6	21,917.8	22,356.9	22,657.2	24,003.7
Industry Sector	30,914.9	33,916.7	33,779.8	35,485.5	37,898.3	39,400.5	42,946.4	47,267.2	52,140.8	55,019.8
Mining and Quarrying	16,107.4	17,120.1	15,480.4	16,308.6	16,365.5	15,394.0	16,663.8	17,531.7	19,341.4	19,064.5
Manufacturing	9,896.4	12,078.8	13,430.5	14,678.1	16,235.3	18,339.9	19,855.7	22,336.9	24,481.6	26,856.1
Construction	4,597.2	4,393.8	4,508.0	4,069.0	4,802.9	5,119.1	5,878.0	6,672.9	7,475.0	8,171.0
Electricity, Gas and Water	313.9	324.0	360.9	429.8	494.6	547.5	548.9	725.7	842.8	928.2
Service Sector	29,065.2	30,562.9	31,970.3	34,289.4	36,267.7	38,748.8	42,505.7	45,593.2	48,366.8	51,885.3
Commerce, Hotels and Restaurant Businesses	11,540.7	11,793.0	12,388.5	13,450.3	14,357.8	15,662.3	17,338.1	18,568.6	19,572.8	21,029.7
Transportation & Communication	4,098.1	4,443.1	4,487.0	4,668.4	4,937.3	5,225.2	5,811.5	6,367.9	6,869.4	7,595.0
Finance	2,358.6	2,801.8	2,998.5	3,464.9	3,530.5	3,597.2	4,290.7	4,893.8	5,561.0	6,257.8
Real Estate	2,355.5	2,411.5	2,461.0	2,545.1	2,653.9	2,762.2	2,877.7	2,998.8	3,119.7	3,249.3
National defense & Security	5,711.5	5,996.7	6,455.1	6,862.1	7,366.1	7,932.1	8,396.9	8,783.3	9,052.1	9,320.0
Other Services	3,000.8	3,116.8	3,180.2	3,298.6	3,422.1	3,569.8	3,790.8	3,980.8	4,191.8	4,433.5

Source: Pendapatan Nasional Indonesia

Table A-11: INDONESIA - GDP GROWTH RATE
Unit: Per Cent

	1984	1985	1986	1987	1988	1989	1990	1991	1992
1. Gross Domestic Product	6.7	2.5	5.3	5.4	5.1	8.3	7.3	6.9	6.3
2. By Industry									
Agriculture Sector	4.2	4.2	2.5	2.2	4.3	4.3	2.0	1.3	5.9
Agri., Forestry & Fishery	4.2	4.2	2.5	2.2	4.3	4.3	2.0	1.3	5.9
Industry Sector	9.7	-0.4	5.0	6.8	4.0	9.0	10.1	10.3	5.5
Mining and Quarrying	6.3	-9.6	5.3	0.3	-5.9	8.2	5.2	10.3	-1.4
Manufacturing	22.1	11.2	9.3	10.6	13.0	8.3	12.5	9.6	9.7
Construction	-4.4	2.6	-9.7	18.0	6.6	14.8	13.5	12.0	9.3
Electricity, Gas and Water	3.2	11.4	19.1	15.1	10.7	0.3	32.2	16.1	10.1
Service Sector	5.2	4.6	7.3	5.8	6.8	9.7	7.3	6.1	7.3
Commerce, Hotels and Restaurant Businesses	2.2	5.0	8.6	6.7	9.1	10.7	7.1	5.4	7.4
Transportation & Communication	8.4	1.0	4.0	5.8	5.8	11.2	9.6	7.9	10.6
Finance	18.8	7.0	15.6	1.9	1.9	19.3	14.1	13.6	12.5
Real Estate	2.4	2.1	3.4	4.3	4.1	4.2	4.2	4.0	4.2
National defense & Security	5.0	7.6	6.3	7.3	7.7	5.9	4.6	3.1	3.0
Other Services	3.9	2.0	3.7	3.7	4.3	6.2	5.0	5.3	5.8

Source: Pendapatan Nasional Indonesia

Table A-12: INDONESIA - GDP AVERAGE GROWTH RATE
Unit: Per Cent

	1984	1985-89	1990-92
1. Gross Domestic Product	6.7	5.3	6.8
2. By Industry			
Agriculture Sector	4.2	3.5	3.1
Agri., Forestry & Fishery	4.2	3.5	3.1
Industry Sector	9.7	4.9	8.6
Mining and Quarrying	6.3	-0.3	4.7
Manufacturing	22.1	10.5	10.6
Construction	-4.4	6.5	11.6
Electricity, Gas and Water	3.2	11.3	19.5
Service Sector	5.2	6.8	6.9
Commerce, Hotels and Restaurant Businesses	2.2	8.0	6.6
Transportation & Communication	8.4	5.6	9.3
Finance	18.8	9.1	13.4
Real Estate	2.4	3.6	4.1
National defense & Security	5.0	7.0	3.5
Other Services	3.9	4.0	5.4

Source: Pendapatan Nasional Indonesia

Table A-13: PHILIPPINES - GDP BY INDUSTRIAL ORIGIN
Unit: Millions of Pesos - at constant 1985 prices

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
1. Gross Domestic Product	630,642	653,642	665,467	616,962	571,883	591,423	616,923	658,581	699,448	720,690	716,522	718,941	733,097
2. By Industry													
Agriculture Sector	148,479	149,641	144,586	143,247	140,554	145,725	150,414	155,292	159,964	160,734	162,937	163,571	166,853
Agriculture	106,776	108,920	101,202	102,204	104,499	106,240	107,155	115,447	121,066	122,631	126,204	127,010	130,720
Fishery	25,251	26,987	29,968	29,383	27,058	29,246	30,920	28,581	29,628	30,783	32,001	32,375	32,636
Forestry	16,452	13,734	13,416	11,660	8,997	10,239	12,339	11,264	9,270	7,320	4,732	4,186	3,497
Industry Sector	258,545	264,957	268,987	238,038	200,548	205,164	213,389	232,052	249,175	255,548	248,718	247,384	251,788
Miing & Quarrying	9,350	9,165	9,244	8,959	11,893	12,313	11,232	11,704	11,389	11,091	10,770	11,495	11,571
Manufacturing	171,569	174,315	173,756	156,195	143,851	146,453	154,604	169,316	179,152	183,925	183,111	179,947	181,289
Construction	63,421	64,110	70,204	56,027	29,037	28,547	31,742	33,235	39,878	41,858	35,285	36,261	38,673
Electricity, Gas & Water	14,205	17,367	15,783	16,857	15,767	17,851	15,811	17,797	18,756	18,674	19,552	19,681	20,255
Service Sector	223,618	238,869	252,144	235,677	230,781	240,534	253,120	271,237	290,309	304,408	304,867	307,986	314,406
Transportation, Communication and Storage	30,629	31,415	32,622	32,060	31,666	33,075	35,086	37,898	40,243	41,108	41,291	41,870	43,095
Trade	79,511	86,338	89,739	83,637	82,835	86,917	90,038	95,180	102,729	107,428	108,002	109,780	112,479
Finance	20,770	21,914	24,957	20,110	17,123	18,517	21,465	23,845	27,261	29,968	29,114	29,217	29,909
Ownership of Dwellings and Real Estate	31,803	34,093	34,693	32,585	32,132	33,205	34,759	36,691	39,083	40,146	40,242	40,534	41,269
Private Services	33,783	36,918	42,289	39,506	39,121	40,120	42,060	45,301	47,534	49,353	49,273	49,551	50,934
Government Services	27,122	28,191	27,844	27,779	27,904	28,700	29,712	32,322	33,459	36,405	36,945	37,034	36,720

Source: National Statistical Coordination Board, Philippine Statistical Yearbook 1994.

Table A-14: PHILIPPINES - GDP GROWTH RATE
Unit: Per Cent

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
1. Gross Domestic Product	3.6	1.8	-7.3	-7.3	3.4	4.3	6.8	6.2	3.0	-0.6	0.3	2.0
2. By Industry												
Agriculture Sector	0.8	-3.4	-0.9	-1.9	3.7	3.2	3.2	3.0	0.5	1.4	0.4	2.0
Agriculture	2.0	-7.1	1.0	2.2	1.7	0.9	7.7	4.9	1.3	2.9	0.6	2.9
Fishery	6.9	11.0	-2.0	-7.9	8.1	5.7	-7.6	3.7	3.9	4.0	1.2	0.8
Forestry	-16.5	-2.3	-13.1	-22.8	13.8	20.5	-8.7	-17.7	-21.0	-35.4	-11.5	-16.5
Industry Sector	2.5	1.5	-11.5	-15.7	2.3	4.0	8.7	7.4	2.6	-2.7	-0.5	1.8
Miing & Quarrying	-2.0	0.9	-3.1	32.7	3.5	-8.8	4.2	-2.7	-2.6	-2.9	6.7	0.7
Manufacturing	1.6	-0.3	-10.1	-7.9	1.8	5.6	9.5	5.8	2.7	-0.4	-1.7	0.7
Construction	1.1	9.5	-20.2	-48.2	-1.7	11.2	4.7	20.0	5.0	-15.7	2.8	6.7
Electricity, Gas & Water	22.3	-9.1	6.8	-6.5	13.2	-11.4	12.6	5.4	-0.4	4.7	0.7	2.9
Service Sector	6.8	5.6	-6.5	-2.1	4.2	5.2	7.2	7.0	4.9	0.2	1.0	2.1
Transportation, Communication and Storage	2.6	3.8	-1.7	-1.2	4.4	6.1	8.0	[illegible]	2.1	0.4	1.4	2.9
Trade	8.6	3.9	-6.8	-1.0	4.9	3.6	5.7	7.9	4.6	0.5	1.6	2.5
Finance	5.5	13.9	-19.4	-14.9	8.1	15.9	11.1	14.3	9.9	-2.8	0.4	2.4
Ownership of Dwellings and Real Estate	7.2	1.8	-6.1	-1.4	3.3	4.7	5.6	6.5	2.7	0.2	0.7	1.8
Private Services	9.3	14.5	-6.6	-1.0	2.6	4.8	7.7	4.9	3.8	-0.2	0.6	2.8
Government Services	3.9	-1.2	-0.2	0.4	2.9	3.5	8.8	3.5	8.8	1.5	0.2	-0.8

Source: National Statistical Coordination Board, Philippine Statistical Yearbook 1994.

Table A-15: PHILIPPINES - GDP AVERAGE GROWTH RATE
Unit: Per Cent

	1982-84	1985-89	1990-93
1. Gross Domestic Product	-0.6	2.7	1.2
2. By Industry			
Agriculture Sector	-1.2	2.3	1.1
Agriculture	-1.4	3.5	1.9
Fishery	5.3	0.4	2.5
Forestry	-10.6	-3.0	-21.1
Industry Sector	-2.5	1.3	0.3
Miing & Quarrying	-1.4	5.8	0.5
Manufacturing	-2.9	3.0	0.3
Construction	-3.2	-2.8	0.3
Electricity, Gas & Water	6.6	2.7	2.0
Service Sector	1.9	4.3	2.0
Transportation, Communication and Storage	1.6	4.7	1.7
Trade	1.9	4.2	2.3
Finance	-0.0	6.9	2.5
Ownership of Dwellings and Real Estate	1.0	3.7	1.4
Private Services	5.7	3.8	1.8
Government Services	0.8	3.8	2.4

Source: National Statistical Coordination Board, Philippine Statistical Yearbook 1994

APPENDIX B

-FDI AND FDI GROWTH FOR EACH ASEAN COUNTRY CLASSIFIED BY COUNTRY ORIGIN-

Table B-1: SINGAPORE - FDI BY COUNTRY
Unit: Millions of S$

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
United States	2,091	2,597	3,109	3,549	4,147	4,650	5,135	5,678.5	6,265.1	6,785.3	7,840.1	8,809.3	10,010.7	11,462.9	13,911.6
Japan	1,187	1,396	1,612	1,843	2,855	2,934	3,357	3,958.1	4,649.5	5,190.7	5,898.9	6,612.1	7,470.1	8,249.5	9,163.3
European Countries	2,886	3,421	3,806	4,130	4,307	4,508	4,600	4,897	5,263	5,812	6,253	6,947	7,486	8,391	9,298
United Kingdom	1,172	1,402	1,640	1,802	1,809	1,815	1,822	1,864.4	1,921.0	2,095.6	2,185.5	2,372.0	2,677.5	3,035.3	3,560.4
Netherlands	1,292	1,421	1,477	1,533	1,589	1,661	1,661	1,731.9	1,814.8	1,988.8	2,061.4	2,277.6	2,320.7	2,328.4	2,504.0
Germany	138.4	189	212	235	244	245	273	363.3	410.0	436.4	602.1	662.3	768.7	973.3	1,065.1
France	57	82	93	112	134	190	209	227.5	313.5	419.5	479.9	555.1	589.2	714.1	768.1
Italy	0.01	0.01	0.03	0.1	0.1	0.2	0.4	0.9	1.8	3.5	7.1	14.4	41.1	84.4	123.3
Switzerland	111	115	119	125	126.8	129.0	144.2	151.5	159.1	161.6	164.1	166.6	169.1	235.4	235.4
Sweden	41	111	121	125	127	137	139	139.0	139.0	139.0	139.0	139.0	139.0	139.0	139.0
Other EC	40	73	109	152	224	277	296	318.2	391.1	435.5	442.4	520.2	540.8	555.1	562.7
Other European Countries	26	28	35	46	53	53	55	99.8	112.8	131.7	171.5	239.8	239.8	326.0	310.1
Others	822	970	977	984	999	1,080	1,087	1,093.1	1,126.3	1,160.5	1,180.1	1,274.6	1,329.6	1,405.8	1,460.7
Total Amount	**7,091**	**8,384**	**9,618**	**10,779**	**12,639**	**13,147**	**14,012**	**15,803.0**	**17,460.8**	**19,086.2**	**21,304.1**	**23,765.2**	**26,436.0**	**29,588.3**	**33,915.7**

Source: Economic Development Board (EDB)
Notes: 1) Figures are cumulative amount.
2) Only manufacturing projects granted approval.
3) Germany: Figures before 1989 are those of W. Germany.
4) Other EC: 1993 and 1994 figures are those of EU (European Union).

Table B-2: SINGAPORE - FDI GROWTH RATE BY COUNTRY
Unit: Per Cent

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
United States	24.2	19.7	14.2	16.8	12.1	10.4	10.6	10.3	8.3	15.5	12.4	13.6	14.5	21.4
Japan	17.6	15.5	14.3	54.9	2.8	14.4	17.9	17.5	11.6	13.6	12.1	13.0	10.4	11.1
European Countries	18.5	11.2	8.5	4.3	4.7	2.0	6.5	7.5	10.4	7.6	11.1	7.8	12.1	10.8
United Kingdom	19.6	17.0	9.9	0.4	0.4	0.4	2.3	3.0	9.1	4.3	8.5	12.9	13.4	17.3
Netherlands	10.0	3.9	3.8	3.7	4.5	0.0	4.3	4.8	9.6	3.7	10.5	1.9	0.3	7.5
Germany	36.6	12.2	10.8	3.8	0.4	11.4	33.1	12.9	6.4	38.0	10.0	16.1	26.6	9.4
France	43.9	13.4	20.9	19.3	41.7	10.1	8.8	37.8	33.8	14.4	15.7	6.1	21.2	7.6
Italy	0.0	200.0	233.3	0.0	100.0	100.0	125.0	100.0	94.4	102.9	102.8	185.4	105.4	46.1
Switzerland	3.6	3.1	5.0	1.8	1.7	11.8	5.1	5.0	1.6	1.5	1.5	1.5	39.2	0.0
Sweden	170.7	9.0	3.3	1.6	7.9	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other EC	49.0	49.3	39.4	47.4	23.7	6.9	7.5	22.9	11.4	1.6	17.6	4.0	2.6	1.4
Other European Countries	7.7	25.0	31.4	15.2	0.0	3.8	81.5	13.0	16.8	30.2	39.8	0.0	35.9	4.3
Others	18.0	0.7	0.7	1.6	8.1	0.6	0.6	3.0	3.0	1.7	8.0	4.3	5.7	3.9
Total	**18.2**	**14.7**	**12.1**	**17.3**	**4.0**	**6.6**	**12.8**	**10.5**	**9.3**	**11.6**	**11.6**	**11.2**	**11.9**	**14.6**

Source: Economic Development Board (EDB)
Notes: 1) Based on the cumulative amount.
2) Only manufacturing projects granted approval.
3) Germany: Figures before 1989 are those of W. Germany.
4) Other EC: 1993 and 1994 figures are those of EU (European Union).

Table B-3: SINGAPORE - FDI AVERAGE GROWTH RATE BY COUNTRY
Unit: Per Cent

	1987-1989	1990-1994
United States	9.7	15.5
Japan	15.7	12.0
European Countries	8.1	9.9
United Kingdom	4.8	11.3
Netherlands	6.2	4.8
Germany	17.5	20.0
France	26.8	13.0
Italy	106.5	108.5
Switzerland	3.9	8.8
Sweden	0.0	0.0
Other EC	13.9	5.4
Other European Countries	37.1	22.1
Others	2.2	4.7
Total	**10.9**	**12.2**

Source: Economic Development Board (EDB)
Notes: 1) Based on the cumulative amount.
2) Only manufacturing projects granted approval.
3) Germany: Figures before 1989 are those of W. Germany.
4) Other EC: 1993 and 1994 figures are those of EU (European Union

Table B-4: MALAYSIA - FDI BY COUNTRY
Unit: Millions of Ringgit

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
United States	533.2	805.1	1,199.2	1,678.4	2,211.5	2,714.9	3,250.1	3,570.9	4,138.2	5,862.5	9,161.2	10,918.9	12,172.1
Japan	1,408.2	2,380.0	3,447.5	5,553.8	10,210.8	14,546.0	15,768.0	18,450.2	22,662.8	26,020.5	28,701.8	30,366.0	32,131.2
Australia	199.9	302.8	400.7	514.8	663.7	809.5	809.5	809.5	863.8	1,274.3	3,399.9	3,452.0	3,627.6
India	109.7	171.9	244.5	298.1	445.0	622.2	1,216.3	1,700.5	2,377.6	3,324.1	3,393.4	3,462.7	3,532.0
China									9.7	409.2			
Panama								183.9					
Bahamas	32.7	41.8	83.6	85.3	110.7	130.7	150.7	170.6	190.6	210.6	230.5	250.5	270.4
NIES	2,953.2	4,505.0	6,279.6	8,136.1	10,206.0	12,428.0	13,980.9	17,552.2	25,812.0	32,454.8	34,496.6	36,117.5	41,337.7
S. Korea	2.2	4.2	8.2	16.0	31.2	36.5	41.8	230.7	881.1	2,350.0	2,449.4	2,560.5	2,969.3
Taiwan	0.1	0.6	2.6	11.0	54.8	139.2	968.8	3,088.2	9,427.3	12,975.7	14,475.7	15,369.9	18,243.9
Hong Kong	730.3	1,089.9	1,474.0	1,852.5	2,363.5	3,016.0	3,314.4	3,666.5	4,041.5	4,642.1	4,642.1	4,735.8	5,609.7
Singapore	2,220.6	3,410.3	4,794.8	6,256.6	7,756.5	9,236.3	9,655.9	10,566.8	11,462.1	12,487.0	12,929.4	13,451.3	14,514.8
Other ASEAN Countries													
Indonesia	26.8	43.0	69.1	111.1	178.6	287.0	461.3	741.5	1,824.8	3,059.7	3,539.9	4,948.0	7,952.6
European Countries	1,679.5	2,500.4	3,453.4	6,088.7	8,638.7	11,163.7	11,558.0	12,887.6	13,878.6	14,677.6	21,131.2	21,963.9	23,459.2
United Kingdom	1,324.9	1,971.8	2,732.1	4,928.0	7,114.7	9,302.3	9,498.8	10,262.9	11,130.1	11,664.5	12,968.5	13,012.6	13,012.6
W. Germany	218.9	334.6	461.5	600.8	773.0	942.5	1,059.3	1,368.9	1,368.9	1,368.9	1,368.9	1,433.8	2,089.2
Netherlands	126.5	176.2	224.9	490.5	611.6	636.2	660.8	685.5	746.3	764.5	905.5	1,274.9	1,524.1
France										27.0	4,093.0	4,093.0	4,093.0
Italy												10.6	63.5
Denmark	3.4	5.5	9.0	14.8	24.3	39.9	65.4	119.4	142.2	321.3	473.7	777.1	1,274.7
Switzerland	5.6	11.8	24.7	51.5	107.6	224.5	240.5	252.1	292.3	332.6	372.8	413.1	453.3
Finland	0.2	0.5	1.2	3.1	7.5	18.3	33.2	198.8	198.8	198.8	198.8	198.8	198.8
Ireland											750.0	750.0	750.0
Others	148.3	220.2	326.9	485.4	720.6	1,070.0	2,254.9	2,825.9	6,332.0	9,329.3	10,195.0	11,270.7	13,278.1
Total Amount	**7,880.5**	**12,138.4**	**16,959.3**	**24,625.7**	**35,251.5**	**45,708.8**	**50,586.8**	**59,154.9**	**76,784.0**	**92,740.3**	**110,512.4**	**116,799.6**	**128,023.6**

Source: Malaysian Industrial Development Authority (MIDA)
Notes: 1)Only manufacturing projects granted approval.
2)Germany - Figures before 1990 are those of West Germany.
3)Cumulative amount since 1982.

Table B-5: MALAYSIA - FDI GROWTH RATE BY COUNTRY

Unit: Per Cent

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
United States	51.0	49.0	40.0	31.8	22.8	19.7	9.9	15.9	41.7	56.3	19.2	11.5
Japan	69.0	44.9	61.1	83.9	42.5	8.4	17.0	22.8	14.8	10.3	5.8	5.8
Australia	51.5	32.3	28.5	28.9	22.0	0.0	0.0	6.7	47.5	166.8	1.5	5.1
India	56.7	42.2	21.9	49.3	39.8	95.5	39.8	39.8	39.8	2.1	2.0	2.0
China									4118.6			
Panama												
Bahamas	27.8	100.0	2.0	29.8	18.1	15.3	13.2	11.7	10.5	9.4	8.7	7.9
NIES	52.5	39.4	29.6	25.4	21.8	12.5	25.5	47.1	25.7	6.3	4.7	14.5
S. Korea	90.9	95.2	95.1	95.0	17.0	14.5	451.9	281.9	166.7	4.2	4.5	16.0
Taiwan	500.0	333.3	323.1	398.2	154.0	596.0	218.8	205.3	37.6	11.6	6.2	18.7
Hong Kong	49.2	35.2	25.7	27.6	27.6	9.9	10.6	10.2	14.9		2.0	18.5
Singapore	53.6	40.6	30.5	24.0	19.1	4.5	9.4	8.5	8.9	3.5	4.0	7.9
Other ASEAN Countries												
Indonesia	60.4	60.7	60.8	60.8	60.7	60.7	60.7	146.1	67.7	15.7	39.8	60.7
European Countries	48.9	38.1	76.3	41.9	29.2	3.5	11.5	7.7	5.8	41.0	3.9	6.8
United Kingdom	48.8	38.6	80.4	44.4	30.7	2.1	8.0	8.4	4.8	11.2	0.3	0.0
W. Germany	52.9	37.9	30.2	28.7	21.9	12.4	29.2				4.7	45.7
Netherlands	39.3	27.6	118.1	24.7	4.0	3.9	3.7	8.9	2.4	18.4	40.8	19.5
France										15059.3	0.0	0.0
Italy												499.1
Denmark	61.8	63.6	64.4	64.2	64.2	63.9	82.6	19.1	125.9	47.4	64.0	64.0
Switzerland	110.7	109.3	108.5	108.9	108.6	7.1	4.8	15.9	13.8	12.1	10.8	9.7
Finland	150.0	140.0	158.3	141.9	144.0	81.4	498.8	0.0	0.0	0.0	0.0	0.0
Ireland											0.0	0.0
Others	48.5	48.5	48.5	48.5	48.5	110.7	25.3	124.1	47.3	9.3	10.6	17.8
Total	54.0	39.7	45.2	43.1	29.7	10.7	16.9	29.8	20.8	19.2	5.7	9.6

Source: Malaysian Industrial Development Authority (MIDA)

Notes: 1)Only manufacturing projects granted approval.

2)Germany - Figures before 1990 are those of West Germany.

Table B-6: MALAYSIA - FDI AVERAGE GROWTH RATE BY COUNTRY
Unit: Per Cent

	1987-1989	1990-94
United States	17.4	28.9
Japan	22.6	11.9
Australia	7.3	45.5
India	58.4	17.2
China		823.7
Panama		
Bahamas	15.5	9.7
NIES	19.9	19.6
S. Korea	161.1	94.7
Taiwan	322.9	55.9
Hong Kong	16.0	9.1
Singapore	11.0	6.6
Other ASEAN Countries		
Indonesia	60.7	66.0
European Countries	14.8	13.6
United Kingdom	13.6	5.0
W. Germany	21.2	10.1
Netherlands	3.9	18.0
France		3011.9
Italy		99.8
Denmark	70.2	64.1
Switzerland	40.2	12.5
Finland	241.4	0.0
Ireland		
Others	61.5	41.8
Total	19.1	17.0

Source: Malaysian Industrial Development Authority (MIDA)
Notes: 1)Only manufacturing projects granted approval.
2)Germany - Figures before 1990 are those of West Germany.

Table B-7: THAILAND - FDI BY COUNTRY
Unit: Millions of Baht

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Japan	35,765	36,260	36,754	37,289	44,512	47,065	48,884	69,523	93,694	185,145	232,474	277,382	309,446	329,522
United States	11,460	12,255	13,305	14,340	16,982	19,750	45,542	47,883	55,473	63,726	76,371	105,221	187,147	193,505
Australia	1,172	1,234	1,695	2,082	2,163	2,253	15,164	15,842	16,653	17,197	17,591	18,702	20,503	22,096
India	6,722	7,162	7,379	8,716	8,826	9,169	9,911	10,729	11,435	12,202	13,042	13,936	14,891	15,911
Panama	1,521	1,537	8,331	8,670	8,670	8,838	9,257	10,219	10,521	10,822	11,112	11,547	12,000	12,470
Israel	327	327	327	526	590	590	590	601	612	791	872	961	1,059	1,167
European Countries	22,894	29,497	34,813	37,089	38,308	39,610	41,308	44,702	50,687	62,466	94,000	132,255	166,764	256,078
United Kingdom	6,851	9,908	13,354	14,030	14,737	15,059	15,690	16,321	20,545	23,159	42,482	65,129	80,244	139,599
Germany	2,567	2,658	3,324	3,476	3,566	3,821	3,942	4,179	4,415	4,980	5,913	6,093	6,579	7,103
Swwitzerland	3,695	4,269	4,401	4,549	4,601	4,719	5,021	5,700	6,314	11,617	13,343	15,069	16,795	18,519
Netherlands	5,612	8,141	9,056	9,970	9,970	10,000	10,284	10,568	10,702	12,454	16,397	22,926	25,774	29,835
Portugal	1,846	2,134	2,198	2,369	2,552	2,870	2,870	2,879	3,444	3,985	3,995	4,304	4,638	4,997
France	2,148	2,175	2,251	2,261	2,271	2,281	2,290	2,315	2,447	3,435	8,378	11,557	23,311	42,758
Italy	175	212	229	434	611	860	1,211	2,740	2,820	2,836	3,462	7,177	9,424	13,267
NIES	12,469	15,120	22,028	22,925	24,255	28,430	31,247	38,080	52,083	70,982	113,073	153,485	337,578	352,102
S.Korea	150	202	345	368	496	668	901	1,215	1,570	1,924	4,077	5,318	6,025	6,829
Taiwan	4,922	6,087	10,739	10,873	11,007	13,549	14,742	16,917	22,636	30,977	45,874	60,466	74,344	76,102
Hong Kong	4,413	4,538	5,342	5,575	6,136	7,100	7,653	11,159	14,254	18,571	38,605	47,282	208,463	210,534
Singapore	2,984	4,293	5,602	6,109	6,616	7,113	7,951	8,789	13,623	19,510	24,517	40,419	48,746	58,637
Other ASEAN Countries	1,693	2,008	2,464	2,932	3,993	5,220	5,829	6,438	7,225	9,423	10,575	15,275	25,977	28,725
Indonesia	382	417	501	585	665	755	859	944	946	1,446	1,538	1,629	1,852	2,105
Philippines	497	563	664	707	707	1,263	1,356	1,856	2,446	2,446	3,107	3,778	4,595	5,589
Malaysia	814	1,028	1,299	1,640	2,621	3,202	3,422	3,638	3,833	5,531	5,930	9,868	19,530	21,031
Total Amount	**133,002**	**144,919**	**156,836**	**161,727**	**180,314**	**193,892**	**238,694**	**289,208**	**352,122**	**498,687**	**657,212**	**848,431**	**1,208,058**	**1,384,869**

Source: Board of Investment (BOI)
Notes: 1)Cumulative amount since 1960.
2)Germany: Figures before 1990 are those of West Germany.

Table B-8: THAILAND - FDI GROWTH RATE BY COUNTRY

Unit: Per Cent

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Japan	1.4	1.4	1.5	19.4	5.7	3.9	42.2	34.8	97.6	25.6	19.3	11.6	6.5
United States	6.9	8.6	7.8	18.4	16.3	130.6	5.1	15.9	14.9	19.8	37.8	77.9	3.4
Australia	5.3	37.4	22.8	3.9	4.2	573.1	4.5	5.1	3.3	2.3	6.3	9.6	7.8
India	6.5	3.0	18.1	1.3	3.9	8.1	8.3	6.6	6.7	6.9	6.9	6.9	6.8
Panama	0.9	442.0	4.1	0.0	1.9	4.7	10.4	3.0	2.9	2.7	3.9	3.9	3.9
Israel	0.0	0.0	60.9	12.2	0.0	0.0	1.9	1.8	29.2	10.2	10.2	10.2	10.2
European Countries	28.8	18.0	6.5	3.3	3.4	4.3	8.2	13.4	23.2	50.5	40.7	26.1	53.6
United Kingdom	41.6	34.8	5.1	5.0	2.2	4.2	4.0	25.9	12.7	83.4	53.3	23.2	71.0
Germany	3.5	25.1	4.6	2.6	7.2	3.2	6.0	5.7	12.8	19.3	2.5	8.0	8.0
Swwitzerland	15.5	3.1	3.4	1.1	2.6	6.4	13.5	10.8	84.0	14.9	12.9	11.5	10.3
Netherlands	45.1	11.2	10.1	0.0	0.3	2.8	2.8	1.3	16.4	31.7	39.8	12.4	15.8
Portugal	15.6	3.0	7.8	7.7	12.5	0.0	0.3	19.6	15.7	0.3	7.7	7.8	7.7
France	1.3	3.5	0.4	0.4	0.4	0.4	1.1	5.7	40.1	143.9	37.9	101.7	83.1
Italy	21.1	8.0	89.5	40.8	40.8	40.8	126.3	2.9	0.6	22.1	107.3	31.3	40.8
NIES	21.3	45.7	4.1	5.8	17.2	9.9	21.9	36.8	36.3	59.3	35.7	119.9	4.3
S.Korea	34.7	70.8	6.7	34.8	34.7	34.9	34.9	29.2	22.6	111.9	30.4	13.3	13.3
Taiwan	23.7	76.4	1.2	1.2	23.1	8.8	14.8	33.8	36.8	48.1	31.8	23.0	2.4
Hong Kong	2.8	17.7	4.4	10.1	15.7	7.8	45.8	27.7	30.3	107.9	22.5	340.9	1.0
Singapore	43.9	30.5	9.1	8.3	7.5	11.8	10.5	55.0	43.2	25.7	64.9	20.6	20.3
Other ASEAN Countries	18.6	22.7	19.0	36.2	30.7	11.7	10.4	12.2	30.4	12.2	41.4	70.1	10.6
Indonesia	9.2	20.1	16.8	13.7	13.5	13.8	9.9	0.2	52.9	6.4	5.9	13.7	13.7
Philippines	13.3	17.9	6.5	0.0	78.6	7.4	36.9	31.8	0.0	27.0	21.6	21.6	21.6
Malaysia	26.3	26.4	26.3	59.8	22.2	6.9	6.3	5.4	44.3	7.2	66.4	97.9	7.7
Total	**9.0**	**8.2**	**3.1**	**11.5**	**7.5**	**23.1**	**21.2**	**21.8**	**41.6**	**31.8**	**29.1**	**42.4**	**14.6**

Source: Board of Investment (BOI)

Notes: 1)Based on the cumulative amount since 1960.

2)Germany: Figures before 1990 are those of West Germany.

Table B-9: THAILAND - FDI AVERAGE GROWTH RATE BY COUNTRY

Unit: Per Cent

	1987-1989	1990-1993
Japan	58.2	15.7
United States	12.0	34.7
Australia	4.3	6.5
India	7.2	6.9
Panama	5.4	3.6
Israel	11.0	10.2
European Countries	14.9	42.7
United Kingdom	14.2	58.5
Germany	8.2	9.5
Swwitzerland	36.1	12.4
Netherlands	6.8	24.9
Portugal	11.9	5.9
France	15.7	91.7
Italy	43.2	50.4
NIES	31.6	54.8
S.Korea	28.9	42.2
Taiwan	28.5	26.3
Hong Kong	34.6	118.1
Singapore	36.3	32.9
Other ASEAN Countries	17.7	34.3
Indonesia	21.0	9.9
Philippines	22.9	23.0
Malaysia	18.7	44.8
Total	**28.2**	**29.5**

Source: Board of Investment (BOI)

Notes: 1)Based on the cumulative amount since 1960.

2)Germany: Figures before 1990 are those of West Germany.

Table B-10: INDONESIA - FDI BY COUNTRY

Unit: Millions of US$

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
United States	575.2	663.7	1,172.8	1,231.8	1,235.7	1,239.6	1,243.6	1,754.6	2,019.4	2,196.8	2,496.1	2,716.4	3,700.5
Japan	3,372.4	4,343.7	4,999.5	5,036.6	5,144.0	5,251.4	5,927.6	6,183.9	7,224.4	9,645.1	11,405.0	13,068.4	13,937.0
Canada	863.3	863.3	863.3	863.3									
Australia	208.4	211.4	214.3	214.3	226.9	243.7	254.2	264.6	625.7	863.6	962.0	1,275.0	1,500.7
India	61.6	154.4	182.5	193.0	318.9	347.8	376.6	385.2	486.7	588.1	695.0	821.5	970.9
Panama					112.6	132.3	166.6	235.4	312.9	420.5	473.5		
NIES	1,405.5	1,590.4	1,953.7	2,291.8	2,386.5	2,472.2	2,540.2	4,151.1	5,745.4	8,890.5	11,396.1	14,197.7	17,233.5
S.Korea	84.8	117.8	150.7	150.7	201.4	215.4	221.9	428.0	938.6	1,863.8	2,228.9	2,964.6	3,621.6
Taiwan	113.3	117.8	122.5	128.5	133.8	143.9	143.9	1,048.5	1,279.0	2,302.1	3,375.2	3,936.0	4,034.5
Hong Kong	1,062.3	1,193.0	1,509.8	1,826.6	1,843.0	1,859.5	1,875.9	2,118.4	2,730.5	3,731.2	4,213.2	5,237.8	5,682.5
Singapore	145.1	161.8	170.7	186.0	208.3	253.4	298.5	556.3	796.4	993.4	1,578.8	2,059.3	3,894.9
Other ASEAN Countries	25.6	28.3	32.2	37.1	42.5	47.9	53.5	70.0	113.8	133.9	176.6	235.8	318.3
Thailand	20.4	21.4	22.5	23.5	24.7	26.0	26.0	27.2	28.4	31.2	32.7	34.3	36.0
Malaysia	5.2	6.9	9.7	13.6	17.8	21.9	27.5	42.8	85.3	102.7	143.9	201.5	282.3
European Countries	1,060.3	1,567.2	1,838.8	1,880.8	2,326.9	2,361.4	2,894.8	4,163.7	4,573.0	5,211.6	6,368.9	7,633.1	9,901.7
United Kingdom	110.8	286.7	360.0	373.9	663.9	665.5	667.1	674.9	682.6	733.3	1,414.7	2,453.5	2,759.1
Germany	213.9	295.0	394.7	395.7	486.3	501.0	867.2	1,818.8	1,848.8	1,853.9	1,859.6	1,865.3	1,957.4
Netherlands	320.0	551.1	630.3	646.4	685.3	685.3	850.9	1,112.7	1,422.1	1,962.9	2,131.5	2,255.7	4,071.1
Switzerland	143.6	151.0	158.4	158.4	165.8	173.2	173.2	192.6	199.1	211.9	492.0	553.7	572.6
France	121.6	130.0	139.0	148.7	164.2	170.4	170.4	171.2	199.1	222.3	237.7	254.2	271.8
Belgium	81.7	83.5	85.3	85.3	88.9	89.5	89.5	115.9	142.2	147.0	151.7	167.6	185.2
Denmark	68.7	69.9	71.1	72.4	72.5	76.5	76.5	77.8	79.0	80.3	81.7	83.1	84.5
Multinationals	1,526.9	1,636.8	1,746.7	1,856.6	1,966.3	2,535.6	2,818.2	3,102.6	6,371.2	8,947.5	13,452.3	15,436.3	17,833.9
Total Amount	**10,464.9**	**11,777.3**	**14,416.3**	**14,841.1**	**15,265.8**	**15,808.8**	**17,283.5**	**21,397.5**	**28,442.7**	**38,677.9**	**48,351.4**	**63,015.8**	**67,624.6**

Source: Badan Koordinasi Penanaman Modal (BKPM)

Notes: 1)Cumulative amount since 1967.

2)Germany: Figures before 1990 are those of West Germany.

3)Australia: 1981 figure includes New Zealand.

Table B-11: INDONESIA - FDI GROWTH RATE BY COUNTRY

Unit: Per Cent

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
United States	15.4	76.7	5.0	0.3	0.3	0.3	41.1	15.1	8.8	13.6	8.8	36.2
Japan	28.8	15.1	0.7	2.1	2.1	12.9	4.3	16.8	33.5	18.2	14.6	6.6
Canada	0.0	0.0	0.0									
Australia	1.4	1.4	0.0	5.9	7.4	4.3	4.1	136.5	38.0	11.4	32.5	17.7
India	150.6	18.2	5.8	65.2	9.1	8.3	2.3	26.4	20.8	18.2	18.2	18.2
Panama					17.5	25.9	41.3	32.9	34.4	12.6		
NIES	13.2	22.8	17.3	4.1	3.6	2.8	63.4	38.4	54.7	28.2	24.6	21.4
S. Korea	38.9	28.0	0.0	33.6	7.0	3.0	92.9	119.3	98.6	19.6	33.0	22.2
Taiwan	4.0	4.0	4.9	4.1	7.5	0.0	628.6	22.1	79.9	46.6	16.6	2.5
Hong Kong	12.3	26.6	21.0	0.9	0.9	0.9	12.9	28.9	36.6	12.9	24.3	8.5
Singapore	11.5	5.5	9.0	12.0	21.7	17.8	86.4	43.2	24.7	58.9	30.4	89.1
Other ASEAN Countries	10.4	13.8	15.2	14.4	12.8	11.7	30.8	62.5	17.7	31.9	33.5	35.0
Thailand	4.9	5.1	4.4	5.1	5.3	0.0	4.6	4.6	9.7	4.8	4.9	5.0
Malaysia	32.1	40.6	40.2	30.5	23.4	25.6	55.6	99.4	20.4	40.1	40.0	40.1
European Countries	47.8	17.3	2.3	23.7	1.5	22.6	43.8	9.8	14.0	22.2	19.8	29.7
United Kingdom	158.8	25.6	3.9	77.6	0.2	0.2	1.2	1.2	7.4	92.9	73.4	12.5
Germany	37.9	33.8	0.3	22.9	3.0	73.1	109.7	1.6	0.3	0.3	0.3	4.9
Netherlands	72.2	14.4	2.6	6.0	0.0	24.2	30.8	27.8	38.0	8.6	5.8	80.5
Switzerland	5.2	4.9	0.0	4.7	4.5	0.0	11.2	3.4	6.4	132.2	12.5	3.4
France	6.9	6.9	7.0	10.4	3.8	0.0	0.5	16.3	11.7	6.9	6.9	6.9
Belgium	2.2	2.2	0.0	4.2	0.7	0.0	29.4	22.8	3.3	3.2	10.5	10.5
Denmark	1.7	1.7	1.8	0.1	5.5	0.0	1.7	1.6	1.6	1.7	1.7	1.7
Multinationals	7.2	6.7	6.3	5.9	29.0	11.1	10.1	105.4	40.4	50.3	14.7	15.5
Total	**12.5**	**22.4**	**2.9**	**2.9**	**3.6**	**9.3**	**23.8**	**32.**	**36.0**	**25.0**	**30.3**	**7.3**

Source: Badan Koordinasi Penanaman Modal (BKPM)

Notes: 1)Based on the cumulative amount since 1967.

2)Germany: Figures before 1990 are those of West Germany.

3)Australia: 1981 figure includes New Zealand.

Table B-12: INDONESIA - FDI AVERAGE GROWTH RATE BY COUNTRY
Unit: Per Cent

	1987-1989	1990-1993
United States	18.8	16.9
Japan	11.3	18.2
Canada		
Australia	48.3	24.9
India	12.3	18.9
Panama	33.4	11.8
NIES	34.9	32.2
S. Korea	71.7	43.3
Taiwan	216.9	36.4
Hong Kong	14.2	20.6
Singapore	49.1	50.8
Other ASEAN Countries	35.0	29.5
Thailand	3.1	6.1
Malaysia	60.2	35.2
European Countries	25.4	21.4
United Kingdom	0.9	46.6
Germany	61.5	1.5
Netherlands	27.6	33.2
Switzerland	4.9	38.6
France	5.6	8.1
Belgium	17.4	6.9
Denmark	1.1	1.7
Multinationals	42.2	30.3
Total	**22.0**	**24.7**

Source: Badan Koordinasi Penanaman Modal (BKPM)
Notes: 1)Based on the cumulative amount since 1967.
2)Germany: Figures before 1990 are those of West Germany.
3)Australia: 1981 figure includes New Zealand.

Table B-13: PHILIPPINES - FDI BY COUNTRY
Unit: Millions of US$

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
United States	647	791	926	1,127	1,306	1,461	1,552	1,620	1,649	1,718	1,771	1,829	1,887
Japan	257	282	346	362	362	362	372	377	396	448	502	603	764
Australia	3	34	38	44	44	44	45	45	45	57	65	65	67
Canada	41	41	43	43	46	46	47	48	48	49	52	52	53
Hong Kong	72	106	116	128	131	160	163	176	190	206	224	246	267
European Countries	126	178	244	263	294	309	332	337	339	364	385	401	423
United Kingdom	41	63	71	73	83	88	101	102	103	106	115	123	131
Netherlands	19	30	80	91	109	119	126	130	131	148	152	155	158
Switzerland	46	51	57	59	60	60	63	63	63	68	75	81	86
France	19	34	36	40	42	42	42	42	42	42	43	46	48
Total Amount	**1,306**	**1,614**	**1,916**	**2,188**	**2,344**	**2,591**	**2,722**	**2,830**	**2,902**	**3,106**	**3,275**	**3,690**	**3,857**

Source: Central Bank of the Philippines
Note: Cumulative amount since 1970.

Table B-14: PHILIPPINES - FDI GROWTH RATE BY COUNTRY
Unit: Per Cent

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
United States	22.3	17.1	21.7	15.8	11.9	6.2	4.4	1.8	4.2	3.1	3.3	3.2
Japan	9.7	22.6	4.7	0.0	0.0	2.8	1.3	5.0	13.1	12.1	20.1	26.7
Australia	1233.3	10.0	15.9	0.3	0.0	2.3	0.0	0.0	26.7	14.0	0.0	3.1
Canada	0.0	4.2	0.0	7.0	0.0	2.2	2.1	0.0	2.1	6.1	0.0	1.9
Hong Kong	46.4	9.3	10.8	2.2	22.1	1.9	8.0	8.0	8.4	8.7	9.6	8.8
European Countries	41.8	37.2	7.7	11.7	5.1	7.4	1.5	0.6	7.4	5.8	4.9	4.7
United Kingdom	52.1	13.7	2.4	13.5	6.0	14.8	1.0	1.0	2.9	8.5	7.0	6.5
Netherlands	59.1	165.7	14.0	19.6	9.2	5.9	3.2	0.8	13.0	2.7	2.0	1.9
Switzerland	9.3	11.9	4.5	1.1	0.0	5.0	0.0	0.0	7.9	10.3	7.3	6.8
France	81.8	5.0	9.5	6.2	0.0	0.0	0.0	0.0	0.0	2.4	7.0	4.3
Total	**23.6**	**18.7**	**14.2**	**7.1**	**10.5**	**5.1**	**4.0**	**2.5**	**7.0**	**5.4**	**12.7**	**4.5**

Source: Central Bank of the Philippines
Note: Based on the cumulative amount since 1970.

Table B-15: PHILIPPINES - FDI AVERAGE GROWTH RATE BY COUNTRY
Unit: Per Cent

	1987-1989	1990-1992
United States	3.5	3.2
Japan	6.5	19.6
Australia	8.9	5.7
Canada	1.4	2.7
Hong Kong	8.1	9.0
European Countries	3.2	5.1
United Kingdom	1.6	7.3
Netherlands	5.6	2.2
Switzerland	2.6	8.2
France	0.0	4.6
Total	**4.5**	**7.5**

Source: Central Bank of the Philippines
Note: Based on the cumulative amount since 1970.

Table B-16: VIETNAM - FDI BY COUNTRY
Unit: Millions of US$

	1988	1989	1990	1991	1992	1993
United States						0.2
Japan		83.0	84.9	97.8	318.5	394.7
Australia	1.6	2.6	90.5	169.1	285.0	443.4
Malaysia				70.9	91.8	139.1
European Countries	10.4	177.6	228.1	315.2	612.3	790.5
United Kingdom		118.6	118.6	123.5	290.0	291.1
Netherlands	7.1	7.1	54.1	122.9	128.6	137.9
France	3.3	51.9	55.4	68.8	193.7	361.5
NIEs	10.0	55.0	237.1	957.7	1,691.7	3,118.1
S.Korea			0.4	41.1	148.5	519.6
Taiwan		1.0	109.5	593.5	923.0	1,326.6
Hong Kong	10.0	54.0	107.3	288.7	507.9	910.0
Singapore			19.9	34.4	112.3	361.9
Others	125.1	192.5	381.8	558.4	1,095.2	1,524.1
Total Amount	**147.3**	**510.9**	**1,023.2**	**2,169.9**	**4,096.0**	**6,711.4**

Source: JETRO
Notes: 1)Projects granted approval.
2)Cumulative Amount since 1988.

Table B-17: VIETNAM - FDI GROWTH RATE BY COUNTRY
Unit: Per Cent

	1989	1990	1991	1992	1993
United States					
Japan		2.3	15.2	225.7	23.9
Australia	62.5	3380.8	86.9	68.5	55.6
Malaysia				29.5	378.3
European Countries	1607.7	28.4	38.2	94.3	29.1
United Kingdom		0.0	4.1	134.8	0.4
Netherlands	0.0	662.0	127.2	4.6	7.2
France	1472.7	6.7	24.2	181.5	86.6
NIEs	450.0	331.1	303.9	76.6	84.3
S.Korea			10175.0	261.3	219.9
Taiwan		10850.0	442.0	55.5	43.7
Hong Kong	440.0	98.7	169.1	75.9	79.2
Singapore			72.9	226.5	222.3
Others	53.9	98.3	46.3	96.1	39.2
Total	**246.8**	**100.3**	**112.1**	**88.8**	**63.9**

Source: JETRO
Notes: 1)Projects granted approval.
2)Based on the cumulative amount since 1988.

Table B-18: VIETNAM - FDI AVERAGE GROWTH RATE BY COUNTRY
Unit: Per Cent

	1990-1993
United States	
Japan	66.8
Australia	897.9
Malaysia	102.0
European Countries	47.5
United Kingdom	34.8
Netherlands	200.3
France	74.8
NIEs	199.0
S. Korea	2671.6
Taiwan	2847.8
Hong Kong	105.7
Singapore	130.4
Others	70.0
Total	**91.2**

Source: JETRO
Notes: 1)Projects granted approval.
2)Based on the cumulative amount since 1988.

APPENDIX C

-FDI AND FDI GROWTH FOR EACH ASEAN COUNTRY CLASSIFIED BY INDUSTRY-

Table C-1: SINGAPORE - FDI BY INDUSTRY
Unit: Millions of S$

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Food & Beverages	241	301	363	372	383	394	404.3	560.9	729.3	763.4	807.2	847.0	925.3	1,016.4	1,187.2
Textiles	45	48	52	55	60	63	68.6	72.6	83.2	85.2	88.0	99.2	105.7	109.2	135.7
Wood Products	111	116	120	125	130	135	138.4	153.1	153.1	155.2	163.8	166.6	158.6	195.9	203.5
Electrical Machinery & Appliances	1,212	1,452	1,822	2,122	2,666	3,117	3,247.9	4,086.3	5,021.9	5,798.8	6,995.9	8,256.3	9,014.7	9,616.1	11,361.8
Petroleum	3,160	3,490	3,903	4,178	4,178	4,182	4,298.0	4,420.4	4,420.4	4,420.4	4,801.4	4,900.9	5,366.5	5,451.1	6,138.7
Industrial Chemicals	122	176	187	701	1,139	1,213	1,291.0	1,323.9	1,448.6	1,738.6	2,004.5	2,326.5	2,590.7	3,374.2	3,934.2
Machinery except Electrical	562	702	784	866	867	905	1,110.6	1,204.1	1,328.8	1,542.3	1,728.5	2,105.0	2,458.5	2,789.3	3,052.4
Fabricated Metal Products	261	310	355	426	792	822	851.8	956.1	1,136.6	1,267.6	1,370.7	1,497.8	1,639.0	1,786.9	2,136.7
Paper Products & Printing	102	131	132	162	265	271	276.2	301.3	411.2	512.2	588.4	697.8	793.1	885.3	1,153.1
Precision Equipment	156	178	203	231	263	288	299.7	404.4	476.4	570.2	591.3	625.3	766.6	877.3	877.3
Non-Metallic Mineral Products	125	131	161	191	285	324	333.3	339.5	383.5	476.5	485.5	533.4	608.0	734.1	734.1
Basic Metals	60	74	77	79	82	85	87.3	92.5	226.3	226.3	226.3	229.1	264.4	333.8	333.8
Transport Equipment	339	421	492	502	506	509	512.0	573.7	589.0	675.6	789.7	914.0	1,083.9	1,425.1	1,967.1
Plastic Products.	98	128	157	170	198	226	254.8	283.5	393.9	444.7	453.6	540.8	660.9	709.2	712.2
Total Amount	**7,091**	**8,384**	**9,618**	**10,779**	**12,639**	**13,147**	**14,012.0**	**15,803.0**	**17,460.8**	**19,086.2**	**21,304.1**	**23,765.2**	**26,436.0**	**29,588.3**	**33,915.7**

Source: Economic Development Board (EDB)
Notes: 1)Figures are cumulative amount.
2)Only manufacturing projects granted approval.

Table C-2: SINGAPORE - FDI GROWTH RATE BY INDUSTRY

Unit: Per Cent

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Food & Beverages	24.9	20.6	2.5	2.9	2.9	2.7	38.7	30.0	4.7	5.7	4.9	9.2	9.9	16.8
Textiles	7.4	7.3	7.4	7.4	5.9	8.9	5.8	14.6	2.4	3.3	12.7	6.6	3.3	21.2
Wood Products	4.0	4.0	4.1	4.0	4.0	2.3	10.6	0.0	1.4	5.5	1.7	4.8	23.5	3.9
Electrical Machinery & Appliances	19.8	25.5	16.5	25.6	16.9	4.2	25.8	22.9	15.5	20.6	18.0	9.2	6.7	18.2
Petroleum & Petroleum Products	10.4	11.8	7.0	0.0	0.1	2.8	2.8	0.0	0.0	8.6	2.1	9.5	1.6	12.6
Industrial Chemicals	44.3	6.3	274.9	62.5	6.5	6.4	2.5	9.4	20.0	15.3	16.1	11.4	30.2	16.6
Machinery except Electrical	24.9	11.6	10.5	0.1	4.4	22.7	8.4	10.4	16.1	12.1	21.8	16.8	13.5	9.4
Fabricated Metal Products	18.8	14.5	20.0	85.9	3.8	3.7	12.2	18.9	11.5	8.1	9.3	9.4	9.0	19.6
Paper Products & Printing	28.4	0.8	22.7	63.6	2.1	2.1	9.1	36.5	24.6	14.9	18.6	13.7	11.6	30.3
Precision Equipment	14.0	13.9	13.9	13.9	9.4	4.1	34.9	17.8	19.7	3.7	5.8	22.6	14.4	0.0
Non Metallic Mineral Products	4.8	22.9	18.6	49.2	13.7	2.9	1.9	13.0	21.3	1.9	9.9	14.0	20.7	0.0
Basic Metals	23.3	3.6	3.5	3.4	3.2	3.1	6.0	144.6	0.0	0.0	1.2	15.4	26.3	0.0
Transport Equipment	21.2	16.9	2.0	0.8	0.6	0.6	12.1	2.7	14.7	16.9	15.7	18.6	31.5	38.0
Plastic Products	30.1	23.1	8.3	16.7	14.1	12.5	11.3	38.9	12.9	2.0	19.2	22.2	7.3	0.4
Total	**18.2**	**14.7**	**12.1**	**17.3**	**4.0**	**6.6**	**12.8**	**10.5**	**9.3**	**11.6**	**11.6**	**11.2**	**11.9**	**14.6**

Source: Economic Development Board (EDB)

Notes: 1)Based on the cumulative amount.

2)Only manufacturing projects granted approval.

Table C-3: SINGAPORE - FDI AVERAGE GROWTH RATE BY INDUSTRY
Unit: Per Cent

	1987-1989	1990-1994
Food & Beverages	24.5	9.3
Textiles	7.6	10.0
Wood Products	4.0	6.0
Electrical Machinery & Appliances	21.4	14.5
Petroleum & Petroleum Products	0.9	6.9
Industrial Chemicals	10.7	17.9
Machinery except Electrical	11.6	14.7
Fabricated Metal Products	14.2	11.1
Paper Products & Printing	23.4	17.8
Precision Equipment	24.1	9.3
Non-Metallic Mineral Products	13.0	9.3
Basic Metals	50.2	8.6
Transport Equipment	9.8	24.1
Plastic Products	21.0	10.2
Total	10.9	12.2

Source: Economic Development Board (EDB)
Notes: 1)Based on the cumulative amount.
2)Only manufacturing projects granted approval.

Table C-4: MALAYSIA - FDI BY INDUSTRY
Unit: Millions of Ringgit

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Food	1,345.8	1,943.7	2,512.2	3,289.9	4,284.1	5,077.8	5,561.1	7,773.3	8,216.0	8,541.8	8,759.9	8,945.0	9,002.4
Textiles	859.5	1,281.4	1,724.0	2,291.5	3,013.5	3,596.3	3,782.6	4,082.4	5,031.3	5,506.5	6,664.9	7,140.3	8,359.0
Wood & Wood Products	316.8	495.1	703.5	915.3	1,242.0	1,471.3	1,594.2	2,408.4	2,961.5	3,497.7	3,774.3	4,043.9	4,960.8
Chemical Products	569.8	885.3	1,249.6	1,813.6	2,660.8	3,548.4	4,229.1	4,942.8	6,642.4	8,431.4	9,752.6	11,515.1	12,639.1
Non-Metallic Mineral Products	791.9	1,163.7	1,537.8	2,366.7	3,480.6	4,547.7	4,568.4	4,677.3	4,946.8	6,723.0	7,057.3	7,172.2	7,977.6
Basic Metal Products	352.5	553.8	791.4	1,070.0	2,020.2	3,522.2	4,060.8	4,284.0	8,554.2	11,768.2	12,543.6	13,330.5	13,789.0
Fabricated Metal Products	270.0	425.1	608.7	825.0	1,105.3	1,342.3	1,466.4	1,854.9	2,176.7	3,754.4	3,856.1	3,952.0	4,113.4
Machinery	125.2	194.0	273.1	363.1	477.0	568.0	702.2	859.5	1,123.3	1,458.1	1,821.8	1,880.1	2,137.2
Electric & Electronics Products	1,151.8	1,602.7	1,968.5	2,522.4	3,224.7	3,760.5	4,803.4	7,047.9	10,675.7	12,688.0	13,645.5	15,476.0	20,152.9
Transportation Equipment	316.6	506.4	737.7	1,018.3	1,711.7	2,691.9	3,390.6	3,718.8	4,058.1	4,292.0	4,370.2	4,687.7	4,956.1
Others	1,780.1	3,081.7	4,846.7	8,119.0	12,031.6	15,458.6	16,349.4	17,269.2	22,329.3	25,881.0	38,051.2	38,441.8	39,570.2
Total Amount	**7,880.5**	**12,138.4**	**16,959.3**	**24,625.7**	**35,251.5**	**45,708.8**	**50,586.8**	**59,154.9**	**76,784.0**	**92,740.3**	**110,512.4**	**116,799.6**	**128,023.6**

Source: Malaysia Industrial Development Authority (MIDA)
Notes: 1)Only Manufacturing projects granted approval
2)Germany : Figures before 1990 are those of West Germany.
3)Figures are cumulative Amount since 1982.

Table C-5: MALAYSIA - FDI GROWTH RATE BY INDUSTRY
Unit: Per Cent

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Food	44.4	29.2	31.0	30.2	18.5	9.5	39.8	6.1	3.6	2.5	2.1	0.6
Textiles	49.1	34.5	32.9	31.5	19.3	5.2	7.9	23.2	9.4	21.0	7.1	17.1
Wood & Wood Products	56.3	42.1	34.4	31.4	18.5	8.4	51.1	23.0	18.1	7.9	7.1	22.7
Chemical Products	55.4	41.2	45.1	46.7	33.4	19.2	16.9	34.4	26.9	15.7	18.1	9.8
Non-Metallic Mineral Products	47.0	32.1	53.9	47.1	30.7	0.5	2.4	5.8	35.9	5.0	1.6	11.2
Basic Metal Products	57.1	42.9	35.2	88.8	71.3	15.3	5.5	99.7	37.6	6.6	6.3	3.4
Fabricated Metal Products	57.4	43.2	35.5	34.0	21.4	9.2	26.5	17.3	72.5	2.7	2.5	4.1
Machinery	55.0	40.8	33.0	31.3	19.1	23.6	22.4	30.7	28.0	26.7	3.2	13.7
Electric & Electronics Products	39.1	22.8	28.1	27.8	16.6	27.7	46.7	51.5	18.8	7.5	13.4	30.2
Transportation Equipment	59.9	45.7	38.0	68.1	57.4	25.8	9.7	[illegible]	5.8	1.8	7.3	5.3
Others	73.1	57.3	67.5	48.2	28.5	5.8	5.6	29.3	15.9	47.0	1.0	2.4
Total	**54.0**	**39.7**	**45.2**	**43.1**	**29.7**	**10.7**	**16.9**	**29.8**	**20.8**	**19.2**	**5.7**	9.6

Source: Malaysia Industrial Development Authority (MIDA)
Notes: 1)Only Manufacturing projects granted approval
2)Germany - Figures before 1990 are those of West Germany.
3)Based on the cumulative amount since 1982.

Table C-6: MALAYSIA - FDI AVERAGE GROWTH RATE BY INDUSTRY
Unit: Per Cent

	1987-1989	1990-1994
Food	22.6	3.0
Textiles	10.8	15.6
Wood & Wood Products	26.0	15.8
Chemical Products	23.1	21.0
Non-Metallic Mineral Products	11.2	11.9
Basic Metal Products	31.7	30.7
Fabricated Metal Products	19.1	19.8
Machinery	21.7	20.5
Electric & Electronics Products	30.4	24.3
Transportation Equipment	31.0	5.9
Others	13.3	19.1
Total	**19.1**	**17.0**

Source: Malaysia Industrial Development Authority (MIDA)
Notes: 1)Only Manufacturing projects granted approval
2)Germany - Figures before 1990 are those of West Germany.
3)Based on the cumulative amount since 1982.

Table C-7: THAILAND - FDI BY INDUSTRY
Unit: Millions of Baht

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
1. Agricultural Products	13,018	14,140	15,225	16,141	17,222	18,226	19,154	21,827	28,241	36,277	44,927	53,843	58,277	68,508
2. Mining & Manufacturing	42,384	45,151	45,184	45,217	45,249	45,653	58,270	59,306	59,730	79,610	109,130	129,879	140,024	162,672
3. Chemical Products	26,701	29,536	39,973	44,713	46,378	48,558	74,598	84,418	99,936	116,427	139,765	174,300	276,092	318,713
4. Electric & Electronics Products	14,677	17,221	18,197	18,903	25,435	29,086	33,208	48,735	65,572	92,463	123,478	157,883	180,718	204,711
5. Services	7,836	8,077	14,723	15,361	15,998	16,493	16,979	21,940	24,807	70,857	104,684	177,514	380,953	441,264
Total Amount	**133,002**	**144,919**	**156,836**	**161,727**	**180,314**	**193,892**	**238,694**	**289,208**	**352,122**	**498,687**	**657,212**	**848,431**	**1,208,058**	**1,384,869**

Source: Board of Investment (BOI)
Note: Cumulative amount since 1960.

Table C-8: THAILAND - FDI GROWTH RATE BY INDUSTRY
Unit: Per Cent

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
1. Agricultural Products	8.6	7.7	6.0	6.7	5.8	5.1	14.0	29.4	28.5	23.8	19.8	8.2	17.6
2. Mining & Manufacturing	6.5	0.1	0.1	0.1	0.9	27.6	1.8	0.7	33.3	37.1	19.0	7.8	16.2
3. Chemical Products	10.6	35.3	11.9	3.7	4.7	53.6	13.2	18.4	16.5	20.0	24.7	58.4	15.4
4. Electric & Electronics Products	17.3	5.7	3.9	34.6	14.4	14.2	46.8	34.5	41.0	33.5	27.9	14.5	13.3
5. Services	3.1	82.3	4.3	4.2	3.1	2.9	29.2	13.1	185.6	47.7	69.6	114.6	15.8
Total	**9.0**	**8.2**	**3.1**	**11.5**	**7.5**	**23.1**	**21.2**	**21.8**	**41.6**	**31.8**	**29.1**	**42.4**	**14.6**

Source: Board of Investment (BOI)
Note: Based on the cumulative amount since 1960.

Table C-9: THAILAND - FDI AVERAGE GROWTH RATE BY INDUSTRY
Unit: Per Cent

	1987-1989	1990-1993
1. Agricultural Products	23.9	17.4
2. Mining & Manufacturing	11.9	20.0
3. Chemical Products	16.0	29.6
4. Electric & Electronics Products	40.8	22.3
5. Services	76.0	61.9
Total	28.2	29.5

Source: Board of Investment (BOI)
Note: Based on the cumulative amount since 1960.

Table C-10: INDONESIA - FDI BY INDUSTRY
Unit: Millions of US$

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Agri., Fishery & Forestry	586.5	616.5	682.9	762.2	796.2	873.7	943.0	985.3	1,164.4	1,750.4	1,796.2	2,004.5	2,325.8
a. Agriculture	235.0	242.6	281.9	327.6	330.3	372.2	415.2	446.1	540.4	1,093.3	1,115.3	1,173.1	1,365.2
b. Fishery	155.4	161.1	170.0	183.9	193.9	206.3	219.5	221.5	227.5	258.3	278.0	308.9	330.4
c. Forestry	196.1	212.8	231.0	250.7	272.0	295.2	308.3	317.7	396.4	398.8	102.9	522.5	630.2
Mining	1,331.0	1,339.4	1,497.3	1,497.3	1,539.1	1,580.9	1,725.0	1,725.0	2,925.7	3,269.8	3,385.8	5,975.0	6,551.6
Manufacturing	7,036.9	8,233.5	10,757.4	11,175.3	11,315.9	11,557.3	12,417.7	16,155.7	21,332.3	27,831.0	32,182.1	37,674.2	40,897.3
a. Textiles	1,329.6	1,350.4	1,385.0	1,544.1	1,721.4	1,919.3	2,139.5	2,492.5	2,845.5	3,198.5	3,803.4	4,334.3	4,783.4
b. Chemicals	1,741.6	2,212.4	2,214.2	2,216.0	2,355.3	2,601.3	2,632.1	4,189.3	6,866.6	8,983.5	10,202.2	12,858.2	13,822.4
c. Metal Products	695.8	1,456.8	2,154.7	2,264.9	2,393.5	2,476.3	2,760.6	2,842.5	3,032.1	3,476.8	4,649.3	5,524.8	6,835.8
d. Basic Metals	1,865.4	1,865.4	2,806.4	3,400.9	3,620.8	3,672.1	3,723.4	3,774.8	3,964.2	4,173.7	4,383.2	4,395.9	4,554.7
e. Non Metallic Minerals	668.4	710.8	753.2	753.2	762.6	763.4	883.2	1,092.5	1,301.7	1,696.4	2,222.2	3,076.9	3,310.4
Construction	153.1	165.3	177.4	193.2	319.3	347.8	411.4	414.3	433.2	544.3	584.2	622.4	722.5
Real Estate	131.5	171.3	223.1	290.5	559.5	569.1	591.1	600.3	676.1	1,661.2	2,089.6	2,405.7	3,799.0
Hotels	272.1	298.9	333.0	356.8	380.6	388.1	583.7	902.3	1,087.3	2,067.8	6,119.6	6,987.7	7,461.0
Transportation	120.5	151.1	189.4	237.5	240.8	255.1	395.8	398.3	412.1	1,154.8	1,499.8	1,535.5	1,602.4
Services	44.7	58.3	102.9	102.9	105.3	138.6	193.5	197.6	356.0	398.6	691.1	821.8	1,175.7
Total Amount	**10,464.9**	**11,777.3**	**14,416.3**	**14,841.1**	**15,265.8**	**15,808.8**	**17,283.5**	**21,397.5**	**28,442.7**	**38,677.9**	**48,351.4**	**63,015.8**	**67,624.6**

Source: Badan Koordinasi Penanaman Modal (BKPM)
Note: Cumulative amount since 1967.

Table C-11: INDONESIA - FDI GROWTH RATE BY INDUSTRY
Unit: Per Cent

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Agri., Fishery & Forestry	5.1	10.8	11.6	4.5	9.7	7.9	4.5	18.2	50.3	2.6	11.6	16.0
a. Agriculture	3.2	16.2	16.2	0.8	12.7	11.5	7.5	21.1	102.3	2.0	5.2	16.4
b. Fishery	3.7	5.5	8.2	5.4	6.4	6.4	0.9	2.7	13.5	7.6	11.1	7.0
c. Forestry	8.5	8.6	8.5	8.5	8.5	4.4	3.0	24.8	0.6	1.0	29.7	20.6
Mining	0.6	11.8	0.0	2.8	2.7	9.1	0.0	69.6	11.8	3.5	76.5	9.7
Manufacturing	17.0	30.7	3.9	1.3	2.1	7.4	30.1	32.0	30.5	15.6	17.1	8.6
a. Textiles	1.6	2.6	11.5	11.5	11.5	11.5	16.5	14.2	12.4	13.9	14.0	10.4
b. Chemicals	27.0	0.1	0.1	6.3	10.4	1.2	59.2	63.9	30.8	13.6	26.0	7.5
c. Metal Products	109.4	47.9	5.1	5.7	3.5	11.5	3.0	6.7	14.7	33.7	18.8	23.7
d. Basic Metals	0.0	50.4	21.2	6.5	1.4	1.4	1.4	5.0	5.3	5.0	0.3	3.6
e. Non-Metallic Minerals	6.3	6.0	0.0	1.2	0.1	15.7	23.7	19.2	30.3	31.0	38.5	7.6
Construction	8.0	7.3	8.9	65.3	8.9	18.3	0.7	4.6	25.6	7.3	6.5	16.1
Real Estate	30.3	30.2	30.2	92.6	1.7	3.9	1.6	12.6	145.7	25.8	15.1	57.9
Hotels	9.8	11.4	7.1	6.7	2.0	50.4	54.6	20.5	90.2	195.9	14.2	6.8
Transportation	25.4	25.3	25.4	1.4	5.9	55.2	0.6	3.5	180.2	29.9	2.4	4.4
Services	30.4	76.5	0.0	2.3	31.6	39.6	2.1	80.2	12.0	74.1	18.4	43.1
Total	**12.5**	**22.4**	**2.9**	**2.9**	**3.6**	**9.3**	**23.8**	**32.9**	**36.0**	**25.0**	**30.3**	**7.3**

Source: Badan Koordinasi Penanaman Modal (BKPM)
Note: Based on the cumulative amount since 1967.

Table C-12: INDONESIA - FDI AVERAGE GROWTH BY INDUSTRY
Unit: Per Cent

	1987-1989	1990-1993
Agri., Fishery & Forestry	10.2	20.1
a. Agriculture	13.4	31.5
b. Fishery	3.3	9.8
c. Forestry	10.8	13.0
Mining	26.2	25.4
Manufacturing	23.2	17.9
a. Textiles	14.0	13.9
b. Chemicals	41.4	19.5
c. Metal Products	7.0	22.7
d. Basic Metals	2.6	3.6
e. Non-Metallic Minerals	19.5	26.8
Construction	7.9	13.9
Real Estate	6.0	61.1
Hotels	41.8	76.8
Transportation	19.8	54.2
Services	40.6	36.9
Total	**22.0**	**24.7**

Source: Badan Koordinasi Penanaman Modal (BKPM)
Note: Based on the cumulative amount since 1967.

Table C-13: PHILIPPINES - FDI BY INDUSTRY
Unit: Millions of US$

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Agriculture Sector	31	36	38	39	40	44	46	46	47	47	53	54	54
Industry Sector	888	1,125	1,386	1,519	1,702	1,980	2,074	2,166	2,220	2,355	2,468	2,799	2,926
Mining	196	281	410	497	572	687	732	770	797	824	853	884	896
Manufacturing	675	826	958	1,004	1,111	1,272	1,320	1,374	1,401	1,509	1,593	1,892	2,004
Construction	17	18	18	18	19	21	22	22	22	22	22	23	26
Service Sector	346	404	427	442	473	534	566	580	611	662	711	792	832
Commerce	82	94	94	94	101	111	112	116	125	154	173	195	209
Services	42	71	77	79	84	104	106	109	129	135	140	170	177
Finance	222	239	257	269	288	319	348	355	357	373	398	427	446
Public Utilities	22	24	25	26	28	34	35	38	39	41	41	43	45
Total Amount	**1,306**	**1,614**	**1,916**	**2,188**	**2,344**	**2,591**	**2,722**	**2,830**	**2,902**	**3,106**	**3,275**	**3,690**	**3,857**

Source: Central Bank of the Philippines
Notes: 1)Projects granted approval.
2)Cumulative amount since 1970.
3)Agriculture sector consists of agriculture, fisheries and forestry.

Table C-14: PHILIPPINES - FDI GROWTH RATE BY INDUSTRY

Unit: Per Cent

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Agriculture Sector	13.3	7.9	2.8	1.2	10.5	4.4	0.0	2.2	0.0	12.8	1.9	0.0
Industry Sector	26.7	23.2	9.6	12.0	16.3	4.8	4.4	2.5	6.1	4.8	13.4	4.5
Mining	43.4	46.0	21.1	15.2	20.1	6.6	5.2	3.5	3.4	3.5	3.6	1.4
Manufacturing	22.4	15.9	4.8	10.6	14.5	3.8	4.1	2.0	7.7	5.6	18.8	5.9
Construction	4.6	1.4	0.0	4.2	10.5	5.1	1.0	0.0	0.0	0.0	4.5	13.0
Service Sector	16.6	5.9	3.4	7.1	12.7	6.1	2.4	5.3	8.3	7.4	11.4	5.1
Commerce	13.8	0.3	0.2	7.1	10.5	0.2	3.9	7.8	23.2	12.3	12.7	7.2
Services	69.9	7.9	2.8	7.1	22.8	2.4	2.7	18.3	4.7	3.7	21.4	4.1
Finance	7.6	7.5	4.8	7.1	10.5	9.3	1.9	0.6	4.5	6.7	7.3	4.4
Public Utilities	9.0	2.9	5.4	7.1	19.7	5.1	7.4	2.6	5.1	0.0	4.9	4.7
Total	**23.6**	**18.7**	**14.2**	**7.1**	**10.5**	**5.1**	**4.0**	**2.5**	**7.0**	**5.4**	**12.7**	**4.5**

Source: Central Bank of the Philippines

Notes: 1)Projects granted approval.

2)Based on the cumulative amount since 1970.

3)Agriculture sector consists of agriculture, fisheries and forestry.

Table C-15: PHILIPPINES - FDI AVERAGE GROWTH RATE BY INDUSTRY

Unit: Per Cent

	1987-1989	1990-1992
Agriculture Sector	0.7	4.9
Industry Sector	4.3	7.6
Mining	4.0	2.8
Manufacturing	4.6	10.1
Construction	0.3	5.9
Service Sector	5.4	7.9
Commerce	11.6	10.7
Services	8.6	9.7
Finance	2.3	6.1
Public Utilities	5.0	3.2
Total	**4.5**	**7.5**

Source: Central Bank of the Philippines

Notes: 1)Projects granted approval.

2)Based on the cumulative amount since 1970.

3)Agriculture sector consists of agriculture, fisheries and forest

Table C-16: VIETNAM - FDI BY INDUSTRY
Unit: Millions of US$

	1988	1989	1990	1991	1992	1993
Heavy Industry	6.1	49.0	67.2	308.7	926.3	1,695.8
Light Industry	6.1	10.1	73.5	422.4	673.4	1,120.2
Petroleum & Gas	112.0	228.0	410.1	527.3	1,029.7	1,124.3
Agriculture & Forestry		3.2	65.9	111.6	185.2	258.7
Fishery	16.0	16.0	38.6	65.4	82.0	95.6
Transportation, Communication & Postal Services	0.5	43.1	134.8	162.2	192.1	486.8
Hotels & Tourism	4.1	156.9	218.2	493.6	795.0	1,380.8
Finance			10.0	10.0	111.0	151.6
Construction				4.9	12.0	109.0
Culture, Health Services & Education				4.1	4.2	15.9
Total Amount	147.3	510.9	1,023.2	2,169.9	4,096.0	6,711.4

Source: JETRO
Notes: 1)Projects granted approval.
2)Cumulative amount since 1988.

Table C-17: VIETNAM - FDI GROWTH RATE BY INDUSTRY
Unit: Per Cent

	1989	1990	1991	1992	1993
Heavy Industry	703.3	37.1	359.4	200.1	83.1
Light Industry	65.6	627.7	474.7	59.4	66.3
Petroleum & Gas	103.6	79.9	28.6	95.3	9.2
Agriculture & Forestry		1959.4	69.3	65.9	39.7
Fishery	0.0	141.3	69.4	25.4	16.6
Transportation, Communication & Postal Services	8520.0	212.8	20.3	18.4	153.4
Hotels & Tourism	3726.8	39.1	126.2	61.1	73.7
Finance			0.0	1010.0	36.6
Construction				144.9	808.3
Culture, Health Services & Education				2.4	278.6
Total	246.8	100.3	112.1	88.8	63.9

Source: JETRO
Notes: 1)Projects granted approval.
2)Based on cumulative amount since 1988.

Table C-18: VIETNAM - FDI AVERAGE GROWTH RATE BY INDUSTRY
Unit: Per Cent

	1990-1993
Heavy Industry	169.9
Light Industry	307.0
Petroleum & Gas	53.2
Agriculture & Forestry	533.6
Fishery	63.2
Transportation, Communication & Postal Services	101.2
Hotels & Tourism	75.0
Finance	261.6
Construction	238.3
Culture, Health Services & Education	70.3
Total	91.2

Source: JETRO
Notes: 1)Projects granted approval.
2)Based on cumulative amount since 1988.

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