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Foreign Direct Investment in ASEAN Economies

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The ASEAN region has become one of the attractive investment locations in the developing world and attracted a sizeable FDI during 1987-94. There was a spurt in the growth of global FDI flows during 1985-95. The FDI inflows in ASEAN economies have increased from an annual average of $ 8 billion in 1986-91 to 25.5 billion in 1997. They adopted relatively a free market, free trade, open capital account and liberalized policies to attract FDI. The success of ASEAN countries in attracting FDI may be attributed to a combination of factors that include political, social, economic stability, buoyant economies with capacity, growing domestic markets, favourable factor endowments, particularly natural resources and labour supply. The incentives given by ASEAN countries ranged from tax holidays, accelerated depreciation allowance, export incentives, import duty exemption and concession and low-cost credit facilities to subsidized infrastructure facilities such as industrial estate.

The main vehicle of FDI inflows in ASEAN countries is through mergers and acquisitions (M & As). FDI inflows through M & As was 72 per cent in 1994 and 66 per cent in 1995. During these periods, the economies of the region has shown higher level of development which has led to stronger M & As as market structure and technology based competition. The ratio of FDI in gross fixed capital formation ranged between 5 per cent to 35 per cent in the region. Intra-ASEAN investment accounts for only a small share of ASEAN's total inflow of FDI. The econometric analysis of FDI determinants showed that there was a positive influence of the size of the economy (GNP) on FDI inflows in the case of Indonesia and Singapore. The investment GNP ratio was significant for Malaysia. Exchange rate had no influence on FDI. The openness of the economy was significant in attracting FDI for Malaysia, Philippines and Thailand.

Foreign Direct Investment (FDI) involves the engagement of considerable assets and resources and satisfies the requirements of investment in the host country. It provides the much needed foreign exchange to help bridge the balance of trade deficits. It raises the technology standards, levels of efficiency and competitiveness of the host country. It helps to improve its export performance by providing the host country better access to foreign markets.

A country's FDI position is expected to evolve through a sequence of four or five stages according to Dunnings Investment Development Path (IDP) theory (1994).

The first stage is characterized by low levels of development and under development of infrastructure. At this stage little inward FDI that a country received is concentrated in extractive or primary resources because of insufficient locational advantage. Governments' intervention in this stage focuses on building up infrastructure and development of human resources. In the second stage, development of local markets and other locational advantage in the form of protection of local industry brings in import substituting manufacturing FDI. Domestic enterprises develop some ownership advantage as they accumulate certain technological capabilities in the process of production and adopting technologies available elsewhere. Government policies encourage accumulation of technological capabilities. This ownership advantage would lead to outward FDI at this stage. In the third stage both inward and outward FDI move towards a higher level of sophistication. The ownership advantage of domestic enterprises to produce standardized goods, will erode the competitiveness of ownership advantage of foreign investors in the standardized goods sector. This coupled with rising incomes and wages and enlarged market will direct inward FDI to more technology intensive manufacturing generation of higher value added locally and towards efficiency seeking or export production. It will also lead to expansion of outward FDI by domestic enterprises. In the final stage, the accumulation of acquired assets by domestic enterprises reaches a level that outward FDI flows are evenly balanced with the inward FDI flows.

The location-specific advantage is one of the crucial determinants of FDI inflows because the international investment frameworks are concerned for the location of FDI and transnational companies' activities. There are many host country factors involved in deciding where an FDI project should be located. The relative importance of different location-specific determinants depends on four aspects of investment (UNCTAD 1998). The motive for investment (eg. resource-seeking or market-seeking FDI), the type of investment (eg. new or sequential FDI), the sector of investment (eg. services or manufacturing) and the size of investors (small and medium-sized TNCs or large MNCs). Host countries that offer what TNCs are seeking and/or host countries whose policies are most conducive to TNC activities, stand a good chance of attracting FDI.

The key host country determinants of FDI classified by UNCTAD (1998) are : *(a)* The national FDI policy framework, *(b)* business facilitation, *(c)* Economic conditions, and *(d)* International policy frameworks.

Section I
The National FDI Policy Framework

One of the major determinants of FDI in the host country is the core FDI policies which consists of rules and regulations governing the entry and operations of foreign investors, the standard of treatment accorded to them and the functioning of the markets within which they operate (UNCTAD, 1996, 1997). FDI policies are accompanied by other policies like trade policies, privatization policies and policies on international investment agreements. The liberalization of FDI framework has become the dominant type of FDI policy change in ASEAN countries in the 1980s and 1990s that led to the forces of globalization.

Business Facilitation

The liberalization of core FDI policies should be complemented by proactive measures aimed at facilitating the business that foreign investors undertake in a host country. They include promotion efforts, the provision of incentives to foreign investors, the reduction of the "hassle costs" of doing business in a host country, the provision of amenities that contribute to the quality of life of expatriate personnel and after-investment services. However, business facilitation measures are neither necessary nor sufficient for FDI to take place. There have been considerable investment inflows into the countries that used neither promotional techniques nor incentives (for instance Brazil in the 1970s and 1990s and Indonesia in the 1980s).

Economic Determinants

The economic determinants of inward FDI can be grouped into : resource-seeking, market-seeking and efficiency-seeking. Resource-seeking FDI determinants includes availability of raw materials, low-cost unskilled labour and skilled labour, technological, innovatory and other created assets and physical infrastructure such as ports, roads, power and telecommunication. The market-seeking FDI inflow is related to market size, income of its population, market growth, access to regional global markets, country-specific consumer preferences and structure of market. The globalization process have led to a reconfiguration of the ways in which TNCs pursue their resource-seeking, market-seeking and efficiency-seeking objectives.

International Policy Frameworks

International agreements with an expanding set of issues will influence FDI in the host countries. Bilateral investment treaties exert some sort of influence on the policy framework for FDI, by contributing to the improvement of an investment climate. The regional integration frameworks (RIF) influence FDI flows depending upon the scope and depth of the integration envisaged by a RIF. RIFs such as NAFTA, MERCOSUR and EU have exerted significant influence on FDI determinants. The multilateral framework on investment will influence investment decisions and lead to higher FDI flows around the world.

The objectives of this paper are to analyze the trends and patterns of FDI inflows in ASEAN countries as also to understand its determinants.

The paper is organized into the following sections : Section II reviews FDI policies in ASEAN countries. Section III analyzes the trends and patterns of FDI in ASEAN countries and Section IV is devoted to understand the determinants of FDI. Section V concludes the discussion.

...region has become one of the attractive investment locations in the developing world and attracted a large amount of FDI, particularly during the 1987-94 period.

FDI is not only a source of capital funds and foreign exchange, but also a dynamic and efficient vehicle to secure the much needed industrial technology, managerial expertise and marketing knowledge and networks to improve on growth, employment, productivity and export performance.

Investors are primarily concerned with minimizing risks and maximizing after-tax profits. Investor participation often takes the form of production-sharing arrangements, service contracts and technical assistance agreements. In the ASEAN countries, the production-sharing arrangement was the prevalent form of FDI participation in the oil and gas industry. The investing firm usually has strong ownership advantage over local firms in the form of production know-how, finance, management resources and marketing techniques. With the exception of Singapore and Brunei, the other ASEAN countries have attracted sizeable FDI during their import substitution phases from the early 1960s to the mid-1980s. However, market distortion, reduced the benefits from FDI.

For investments oriented to the export market, important considerations for investors are international competitiveness as determined by production and transaction costs, accessibility to markets and supplies and stable exchange rates. The ownership advantage of investing firms derives from their production and marketing know-how. The locational advantage of the ASEAN host countries derives from the availability of industrial estates and the export processing zone with well-developed infrastructure, abundant low-wage labour and minimal rules and regulations. FDI in export manufacturing is in search of the most attractive conditions and host countries have to compete aggressively to provide the physical infrastructure, institutional support, human resources and labour and generous tax incentives and to minimize ownership restrictions and other performance requirements. With changing production technologies and management and organization methods, abundant low wage labour may not be sufficient nor necessary to attract export-oriented FDI. As the Singapore experience shows, the availability of efficient physical infrastructure, information technology and facility for basic research, testing and quality control increasingly attract FDI.

The success of ASEAN countries in attracting FDI may be attributed to a combination of factors that include political, social, economic stability, buoyant economies with capacity, growing domestic markets, favourable factor endowments, particularly natural resources and labour supply.

Investments targetted at the host market characterized the first wave of manufacturing FDI in ASEAN in the 1960s and were in response to the widespread adoption of import substituting industries. Investments to produce manufactures for export became increasingly important in the 1980s, particularly liberalization policies after 1985. Compared with other developing regions, the ASEAN countries have always maintained a favourable stance towards FDI. However, until recent years, there were wide diversities in policies and attitudes among them. Singapore welcomed FDI without any reservation at a time when the FDI role was hotly debated in developing countries. In the post-1985 period, the ASEAN has revamped and modified their investment policies. As a result there has been a convergence of FDI policies with respect to both the level and range of investment incentives offered and relaxation of performance requirements and other restrictive regulations.

Malaysia and Thailand introduced amendments to their legislative framework to attract foreign investment dates back to the 1950s whereas Indonesia was cautious towards FDI till the 1990s. While Malaysia adopted foreign equity participation in their new economic policy announced in 1970, Thailand adopted foreign equity participation only in 1984. Indonesia allowed foreign equity participation in the 1990s and allowed 100 per cent foreign ownership of non-bank financial firms including insurance companies. Malaysia guaranteed upto 51 per cent foreign equity participation in existing insurance companies by current holders. Philippines introduced Foreign Investment Act in 1991 that liberalized the rules and regulations on foreign equity. Malaysia allowed 100 per cent foreign equity in all the new projects in manufacturing including for expansion and diversification and will not need to meet any export requirements. Thailand relaxed the regulations of the Board of Investment in 1997 for companies with financial difficulties so that they could have foreign ownership of more than 51 per cent on the condition that Thai shareholders of that company agree and conform their acceptance in writing of the change in ownership to the Board of Investment.

The incentives given by ASEAN countries ranged from tax holidays, accelerated depreciation allowance, export incentives, import duty exemption, and concession and low-cost credit facilities to subsidized infrastructure facilities such as industrial estate. 100 per cent foreign equity is currently permitted in all ASEAN countries, although in some cases, these are conditional upon fulfilling certain performance requirements. Performance requirements are widely adopted by ASEAN countries and generally pertain to the minimum level of investment, employment of local personnel, local sourcing of inputs, level of exports and technology transfers. Among ASEAN countries, Singapore has the most efficient bureaucracy and the least restrictive rules and performance requirements. All ASEAN countries have established investment boards or one stop investment centres to promote, coordinate, and monitor FDI, *viz.* the Indonesian Capital Investment Coordinating Boards (BKPM), the Malaysian Industrial Development Authority (MIDA), the Board of Investment (BOI) in Philippines and Thailand and Singapore's Economic Development Board (EDB). ASEAN countries established industrial estates and EPZs to create a favourable atmosphere for FDI.

The benefits of FDI largely depend on the institutional and policy environment of host countries. Countries where trade, industrial and competition policy regimes result in a distorted incentives structure, as is usually the case with import substitution and where government bureaucracies are incompetent and corrupt, foreign MNCs are more prone to inefficiency and rent-seeking activities. In general, countries that pursue market-oriented and export-oriented policies have better experience with FDI. Countries which impose highly restrictive performance requirements on equity ownership, localization of personnel, local sourcing of inputs and transfer of technology without parallel measures to improve domestic supplies and human resource development will be unable to maximize the benefits from FDI. A strong, incorrupt and efficient open trade policy that emphasizes efficiency and competitiveness contribute to inducing good corporate behaviour among foreign firms.

Singapore's pursuit of export-oriented industrialization and its small domestic market ensures that FDI is both export-oriented and efficient. Singapore has no performance requirements on recruitment of local personnel. Instead, it actively encourages foreign MNCs to provide manpower training at all levels to supplement and complement government efforts in providing education and training for industry through the rapid expansion of science, technology, computer and business-based education in universities and polytechnics and technical and vocational education and training under the vocational and Industrial Training Board and the Economic Development Board. The incentives for employers to provide training, both in-house training and external programmes includes subsidies from the Skills Development Fund established through an employment levy introduced in 1979.

Foreign investors contribute to the transfer of technology in three possible ways, *viz.* the introduction of new technology, the transfer of know-how to their local employees and the diffusion of know-how to local enterprises *via* backward and forward linkages.

Singapore imposes no rules and regulations on technology transfer by FDI. Foreign investors are free to choose, with few exemptions, the type of industries and products they wish to produce, although only those considered crucial to Singapore's development are eligible for fiscal incentives.

ASEAN Free Trade Area entails the removal of barriers to intra-ASEAN trade in manufactures, including capital goods and process of agricultural products, but excluding agricultural products and services. The mechanism to achieve this is the Common Effective Preferential Tariff (CEPT) which took effect on January 1, 1993 and would lead to tariff liberalization over the next 15 years.

Section III
Foreign Direct Investment : Trends and Pattern

There was a spurt in growth of global FDI flows during 1985-97. The FDI inflows have increased from $142 billion on an average during 1985-90 to $400 billion in 1997 (*see Table 1*). The average annual growth of FDI inflows was about 26 per cent during the same period. The main reasons for the sharp rise in FDI flows can be attributed to : the huge two-way investment between the US and the EU, renewed merger and acquisition activities among industrialized nations: global industrial restructuring of power, telecommunications, pharmaceuticals and other chemicals; strong economic performance enabling massive investment which in turn led to recovery in corporate earnings (JETRO 1997). The cross border M & As contributed 59 per cent of the total FDI inflows in 1997. The cross border M & As have grown at a growth rate of 21 per cent on an average during 1986-90 to 45 per cent in 1997. Another significant development of the 1990s is the rising importance of developing countries as recipients of FDI. especially South, East and South-East Asia. South, East and South-East Asia attracted 24 per cent of the total global FDI inflows in 1994 but has fallen to 21 per cent in 1997 mainly due to financial crisis (*Table 2*).

The developed countries attracted 58 per cent of the total global FDI inflows whereas the developing countries attracted only 37 per cent in 1997. Among the developing countries, the Asian region attracted FDI inflows around 60 per cent during 1994-97 (*Table 2*). With regard to FDI outflows, developed countries contributed nearly 85 per cent during 1994-97 whereas developing countries' share was only less than 15 per cent during the same period. Among the developing countries, Asia's share of FDI outflows was more than 80 per cent during 1994-97.

Within South, South-East and East Asia, it is the ASEAN countries and China in which FDI inflows have grown rapidly. The FDI inflows in ASEAN have increased from an annual average of $ 8 billion in 1986-91 to $ 25.5 billion in 1997 (*Table 3*). Singapore attracted a large share of FDI during 1986-97 followed by Malaysia, Indonesia, Thailand and the Philippines (*Table 3*). There were moderate decreases in FDI inflows into Indonesia, Malaysia and the Philippines and a sharp increase in Thailand during 1996-97. FDI has become one of the most important sources of private development financing for the region.

FDI inflows have increased in Thailand and Singapore between 1996 and 1997 inspite of the symptoms of financial crisis in the region. In other countries of the region, there was only a marginal fall in FDI inflows compared to foreign bank lending and portfolio investments that were negative during this period. This is because FDI involves not only financial capital but also technological, managerial and intellectual capital. FDI involves long-term relationship at the level of production between investors and their foreign affiliates. Since FDI is mainly a real investment in firm, its mobility is limited by such factors as physical assets, networks of suppliers, the local infrastructure, human capital and the institutional environment. FDI outflows by ASEAN countries are given in Table 4. The main share of FDI outflows was from Singapore followed by Malaysia, Thailand and Indonesia. Indonesia's increased outflows were largely the result of a few large M & As, the largest being an investment project in oil and gas in Kazakhstan (UNCTAD, 1998).

The main vehicle of FDI inflows in ASEAN countries is through mergers and acquisitions (M & As) (*Table 6*). FDI inflows by mergers and acquisition constituted 72 per cent in 1994 and 66 per cent in 1995. During the late 1980s and early 1990s the economies of the ASEAN region has shown higher level of development which has led to stronger M & As as a market structure and technology based competition. M & A sale by ASEAN countries had increased from $ 5 billion in 1990 to $15 billion in 1996 and $14 billion in 1997 (*see Table 6*). Liberalization and deregulation provided opportunities for foreign multinational companies to undertake direct investment in the region through M & As involving host country firms.

M & As took place in large numbers in the five most affected countries since the financial crisis began, because of lower stock prices and liberal policy towards M & As. The object of M & As has been less of 'investments' and more of strengthening the relation for securing of supply of products. The United States and Singapore were the main M & As purchasers from these countries. The M & As sales by Indonesia were the highest ($ 6.5 billion) in 1994 whereas M & As sales were highest by Malaysia ($ 4.5 billion) in 1996 followed by the Philippines and Indonesia ($ 2.7 billion). The sales of M & A by Indonesia were highest ($ 4.3 billion) in 1997 followed by the Philippines ($ 2.8 billion) and by Malaysia ($ 2.4 billion). The sale of M & As by Thailand was $ 2.6 billion in 1992, $ 3 billion in 1995 and $ 1.4 billion in 1997.

Cross border M & As purchases by ASEAN countries were lower than their sales (*Table 7*). The ASEAN countries prefer the greenfield mode or acquisition of minority shareholding in entering markets through FDI. Malaysian MNCs purchased M & As worth of $ 7 billion in 1994 which was the highest among all countries in ASEAN during 1990-97. Malaysia, Singapore and Thailand were the main countries of the region who involved M & As purchases. Indonesia has purchased M & As worth of $ 2.4 billion in 1997. The M & As purchase had been significant for ASEAN countries since 1994 (*Table 7*).

The ASEAN countries have enjoyed a robust economic growth since 1975. High Foreign Direct Investment (FDI) has contributed to high levels of investment and employment generation, rising productivity and skill development and sharply improved export performance. The ASEAN economies have acted as a magnet to attract further inward investment flows. FDI acts as both cause and effect in the economic growth and facilitates economic upgrading. From 1987-1996, the ASEAN region has become one of the most attractive investment regions in the developing world and attracted large amounts of FDI.

The FDI flows in the world have increased by leaps and bounds. FDI flows in the developing countries touched an unprecedented $ 120 billion in 1997. The ten largest recipients have received more than two-third of total inflows, while the smallest 100 received only 1 per cent. The FDI share of the ten largest developing countries has increased from 69 per cent of annual average FDI flows to these countries in 1990-91 to 76 per cent in 1995-96. As a percentage of GDP, FDI inflows ranged from 25 per cent in the case of Singapore to 2 per cent in the case of Thailand.

In ASEAN countries, the role of foreign direct investment (FDI) has been increasing over the years. The ratio of FDI in gross fixed capital formation ranged between 5 per cent in the case of Thailand and 35 per cent in the case of Singapore (*Table* 5). In the case of Singapore and Malaysia the FDI ratios were found to be more than 20 per cent. The share of gross fixed capital formation to gross domestic product showed an encouraging trend over the years in the case of Indonesia, Malaysia, and Thailand. International trade has been more and more investment driven. The foreign direct investment promoted exports of manufactured goods and there was larger inflow of foreign direct investment in trade and commerce.

In Indonesia, the largest FDI concentration was in the manufacturing sector with a share of 72 per cent followed by the services sector (15.1 per cent), mining (8.5 per cent) and agriculture, forestry and fishery (4.5 per cent) in 1996. Within the manufacturing sector, the largest concentration of FDI was in chemicals, followed by basic metals, metal goods, pulp and paper and textiles, during the same period. In the Philippines, the manufacturing sector accounts for 49 per cent followed by mining (25.9 per cent), banking and finance (12.1 per cent), commerce (5.3 per cent) and services (4.2 per cent) in 1996. Within the manufacturing sector the investments were mainly in chemicals, foods, basic metal products, transport equipment and textiles. In Thailand, more than one-third of FDI was in manufacturing, which was concentrated in textiles, electronics and electrical products, chemicals, machinery and transport equipment (UNCTAD, 1998). In Malaysia, FDI concentration was in basic metal products and components, non-metallic mineral products, chemicals, and fabricated metal products.

In Singapore, the manufacturing accounted for 42.2 per cent followed by the financial and business services (40.8 per cent) and commerce (11.6 per cent) in 1996. Within manufacturing, the major investments were in electronic products and components, machinery and transport equipment. Most of the inflow of FDI into the ASEAN countries was traditionally from North America, Western Europe, more specifically USA, UK, Germany, Netherlands, France. Japan has emerged as a major investor since the 1970s and the Asian NIEs as a major investor in the post-1989 period. The US, the European community and Japan were the three top leading investors in the ASEAN. Intra-ASEAN investment accounts for only a small share (5 per cent) of ASEAN's total inflow of FDI. However, Intra-ASEAN trade represents more than 50 per cent of their total trade.

Section IV
Determinants of FDI

Empirical studies focusing on the determinants of FDI suggest that the basic determinants of the inflows of FDI in a particular country or a set of countries depends on three key variables, *viz.* size of the market, growth of the market and exchange rate of the country.

In the light of the existing empirical studies, an econometric exercise has been undertaken to study the determinants of FDI in the countries of the ASEAN region. The specification of the model as used by UNCTAD (1993) is given as :

FDI_t	=	$\beta 0 + \beta 1\ GNP_{t-1} + \beta_2\ \Delta GNP_t$ $+ \beta 3\ (I/GNP)_{t-1} + \beta_4\ x\ R_t + \beta_5\ OP_t + \beta_6\ DUM + u$
FDI_t	=	inflow of FDI in year t
GNP_{t-1}	=	the level of GNP in year t-1
ΔGNP_t	=	Change in GNP between t and t-1
$(I/GNP)_{t-1}$	=	the ratio of domestic investment to GNP in year t-1
XR_t	=	the exchange rate in years t, defined as the ratio of domestic currency to US dollar
OP_t	=	degree of openness of the economy in year t, measured as the ratio of exports plus imports to GNP
DUM	=	Dummy variable : 0, before the financial crisis 1, after the financial crisis
u	=	random error

The higher the size of the market (as represented by GNP), larger will be the inflow of FDI. China, for instance, has attracted large FDI inflows. However, the small market is not necessarily a constraint in attracting FDI. For instance, Vietnam despite being a small economy is comparable to China in terms of its FDI potential. It is hypothesized that a change in GNP attracts larger flow of FDI. The change in GNP level may be the result of *inter alia*, the policy changes such as economic liberalization and as such it attracts FDI. Higher domestic investment is likely to proved attractive to foreign investors. Higher the domestic investment may also be an indication of the existence of good infrastructure such as roads, ports, railways, telecommunications and auxiliary institution. It is generally perceived that open trade and foreign exchange regimes attract FDI. The economic liberalization process initiated by India and China attracted considerable FDI which clearly indicates that open economy attracts FDI. The liberal foreign exchange and investment regimes in these countries pave the way for FDI inflows. Hence, it is hypothesized that larger the ratio of trade to GNP, the larger attraction for FDI. Exchange rate plays an important role in attracting FDI in the host country. The more stable the exchange rate the more FDI inflows in the host country.

The model was estimated by OLS method over the period 1985-97. The model results were presented in Table 8. The result showed a positive influence of the size of the economy (GNP_{t-1}) on FDI inflows in Indonesia and Singapore. Change in GNP (ΔGNP_t) was not a significant variable in any country. The investment – GNP ratio $(I/GNP)_{t-1}$ was also not a significant variable in any of the country. Exchange rate had not influenced FDI inflows in all countries. Openness Variable (OP_t) was significant in attracting FDI inflow for Indonesia and Thailand.

The model was improved by dropping some of the insignificant variables and significant variables having the wrong sign. The variable, change in GNP (ΔGNP_t)

was dropped in all equations. The results are presented in Table 9. The level of GNP (GNP_{t-1}) was a significant variable for Indonesia and Singapore. Domestic investment as a ratio of GNP ($(I/GNP)_{t-1}$) was significant only for Malaysia. Exchange rate was not a significant variable in all countries and did not play any significant role in attracting FDI in ASEAN countries. Openness variable (OP_t) was a significant variable for Malaysia, the Philippines and Thailand. It was not a significant variable in the case of Indonesia and Singapore. Dummy variable was not a significant variable in any of the equation indicating that FDI was not affected significantly by the financial crisis of East Asia.

All regression equations are significant and there was no problem of serial correlation.

Section V
Conclusions

The ASEAN region has become one of the attractive investment locations in the developing world and attracted a large amount of FDI during 1987-94. There was a spurt in growth of global FDI flows during 1985-95. The FDI inflows in ASEAN countries have increased from an annual average of $ 8 billion in 1986-91 to $ 25.5 billion in 1997. The main vehicle of FDI inflows in ASEAN countries was through mergers and acquisitions. The ratio of FDI in gross fixed capital formation ranged between 5 per cent to 35 per cent in the region. Intra-ASEAN investment accounted for only a small share of ASEAN's total inflow of FDI. However, Intra-ASEAN trade represented more than 50 per cent of their total trade. The econometric analysis of FDI determinants showed that there was a positive influence of the size of the economy (GNP) on FDI inflows in the case of Indonesia and Singapore. The investment GNP ratio (I/GNP) was significant for Malaysia. Exchange rate had no influence on FDI. The openness of the economy was significant in attracting FDI for Malaysia, the Philippines and Thailand.

Table 1
World FDI Inflows and Outflows

	Value at Current Prices ($ billion)				*Annual Growth Rate*			
	1985-90 (Annual Average)	*1995*	*1996*	*1997*	*1986-90*	*1991-95*	*1996*	*1997*
FDI Inflows	142	317	338	400	23.6	20.1	1.9	18.6
FDI Outflows	156	339	333	424	27.1	15.1	–0.5	27.1
Cross Border M & A	120	141	163	236	21.0	30.2	15.5	45.2

Table 2
Regional Distribution of FDI Inflows and Outflows, 1994-97

(Percentage)

	Inflows				Outflows			
	1994	1995	1996	1997	1994	1995	1996	1997
Developed Countries	58.2	63.9	57.9	58.2	85.0	86.9	85.1	84.8
Western Europe	32.3	37.1	29.6	28.7	47.0	49.4	50.6	46.2
US	18.6	17.7	22.6	22.7	25.8	26.1	22.5	27.0
Japan	0.4	—	0.1	0.8	6.4	6.4	7.0	6.1
Developing Countries	39.3	31.9	38.5	37.2	15.0	12.9	14.8	14.4
Asia	25.0	20.3	23.7	21.7	12.9	12.1	14.0	12.0
South, East and South-East Asia	24.0	20.1	23.0	20.6	12.5	11.9	14.0	11.8

Source : UNCTAD, World Investment Report, 1998.

Table 3
FDI Inflows by Host Country – 1986-97

($ in million)

Countries	*1986-91 (Annual average)*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*
Brunei	—	4 (–)	14 (–)	6 (–)	7 (–)	9 (–)	5 (0.02)
Cambodia	—	33 (0.3)	54 (0.3)	69 (0.4)	151 (0.7)	294 (1.1)	200 (0.8)
Indonesia	74.6 (9.4)	1777 (14.7)	2004 (12.9)	2109 (11.3)	4348 (19.3)	6194 (23.1)	5350 (21.0)
Laos	3 (–)	8 (–)	30 (0.2)	59 (0.3)	95 (0.4)	160 (0.5)	90 (0.3)
Malaysia	1605 (20.3)	5183 (42.8)	5006 (32.3)	4342 (23.2)	4132 (18.3)	4672 (17.4)	3754 (14.7)
Myanmar	68 (0.9)	171 (1.4)	149 (1.0)	91 (0.5)	115 (0.5)	100 (0.4)	80 (0.3)
Philippines	501 (6.3)	228 (1.9)	1238 (8.0)	1591 (8.5)	1459 (6.5)	1520 (5.7)	1253 (4.9)
Singapore	3592 (45.4)	2204 (18.2)	4686 (30.2)	8368 (44.8)	8210 (36.5)	9440 (35.2)	10000 (39.2)
Thailand	1325 (16.8)	2114 (17.5)	1804 (11.6)	1322 (7.1)	2002 (8.9)	2268 (8.5)	3600 (14.1)
Vietnam	68 (0.9)	385 (3.2)	523 (3.4)	742 (4.0)	2000 (8.9)	2156 (8.0)	1200 (4.7)
ASEAN	7908 (100.0)	12107 (100.0)	15508 (100.0)	18699 (100.0)	22519 (100.0)	26813 (100.0)	25532 (100.0)

Note : Figures in parenthesis indicate percentages.
Source : UNCTAD, World Investment Report, 1998.

Table 4
FDI Outflows by Home Country – 1986-97

($ in million)

Countries	*1986-91 (Annual average)*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*
Brunei	—	—	—	—	—	—	—
Cambodia	—	—	—	—	—	—	—
Indonesia	7	52	356	609	603	512	2400
Laos	—	—	—	—	—	—	—
Malaysia	311	514	1325	1918	2575	3700	3100
Myanmar	—	—	—	—	—	—	—
Philippines	1	5	374	302	98	182	136
Singapore	658	1317	2021	3746	3988	4805	5900
Thailand	92	147	233	493	886	931	500
Vietnam	—	—	—	—	—	—	—
ASEAN	1069	2035	4309	6967	8150	10130	12036

Source : UNCTAD, World Investment Report, 1998.

Table 5
Inward FDI Flows as a Percentage of Gross Fixed Capital Formation by Country – 1986-96

(Percentage)

Countries	*1986-91 (Annual average)*	*1992*	*1993*	*1994*	*1995*	*1996*
Brunei	—	—	—	—	—	—
Cambodia	—	—	—	—	—	—
Indonesia	2.3	3.9	4.3	3.8	6.7	8.5
Laos	—	—	—	—	—	—
Malaysia	14.7	26.0	20.3	14.9	11.0	11.1
Myanmar	3.0	3.3	2.4	1.0	0.8	0.5
Philippines	6.6	2.1	9.6	10.5	8.9	7.8
Singapore	37.6	12.4	23.0	35.0	28.9	27.5
Thailand	5.5	4.8	3.6	2.3	2.9	3.0
Vietnam	—	—	—	—	—	—

Source : UNCTAD, World Investment Report, 1998.

Table 6
Cross-Border M & A Sales by Country of Seller – 1990-97

($ in million)

Countries	1990	1991	1992	1993	1994	1995	1996	1997
Brunei	1	—	—	—	—	—	—	667
Cambodia	—	—	—	—	30	667	63	—
Indonesia	792	275	2287	1421	6507	4125	2654	4312
Laos	—	—	—	10	—	—	—	—
Malaysia	842	1004	1197	541	393	821	4497	2361
Myanmar	64	5	—	15	104	632	134	6
Philippines	2576	123	576	679	1824	2966	2708	2835
Singapore	633	127	450	2071	1145	597	1692	1208
Thailand	116	152	2556	330	605	2963	2063	1405
Vietnam	10	49	227	2329	2894	1975	1300	901
ASEAN	5034	1735	7293.	7396	13502	14746	15111	13695
		(13.0)	(60.2)	(47.7)	(72.20)	(65.5)	(56.4)	(53.6)

Note : Figures in brackets indicate cross-border M & A sale as a percentage of total FDI.
Source : UNCTAD, World Investment Report, 1988.

Table 7
Cross-border M & A Purchases by Country of Purchase – 1990-97

($ in million)

Countries	1990	1991	1992	1993	1994	1995	1996	1997
Brunei	—	4	—	202	1	82	182	—
Cambodia	—	—	—	—	8	—	—	—
Indonesia	187	58	106	247	519	615	614	2416
Laos	40	—	—	—	—	—	—	—
Malaysia	160	235	143	1220	7021	1253	5413	2490
Myanmar	—	—	—	—	—	—	1	—
Philippines	—	18	51	—	433	11	2	66
Singapore	243	417	554	2117	1811	2765	4006	4841
Thailand	—	15	1638	553	181	3577	1346	15
Vietnam	—	—	20	—	4	2	—	—
ASEAN	630	747	2513	4319	9978	8305	11564	9828

Source : UNCTAD, World Investment Report, 1998.

Table 8
Model Results – I

Variables	*Indonesia*	*Malaysia*	*Philippines*	*Singapore*	*Thailand*
Constant	–9898	–10503	–2553	–32746	–22102
	(3.2)	(0.6)	(0.8)	(1.1)	(1.2)
GNP_{t-1}	*58.7	–50.5	–13.3	*130.1	*–16.3
	(4.1)	(1.4)	(0.6)	(3.0)	(2.5)
ΔGNP_t	38.6	–19.7	19.6	229.3	*–69.5
	(1.3)	(0.2)	(0.3)	(1.5)	(3.8)
$(I/GNP)_{t-1}$	159.6	228.6	10.8	48.9	15.9
	(1.7)	(1.0)	(0.1)	(0.2)	(0.4)
XR_t	–4.5	1240.3	37.3	9458.7	647.1
	(1.5)	(0.2)	(0.2)	(1.2)	(1.0)
OPt	*20709.2	3823.8	6714.7	3708.3	*13791.4
	(1.9)	(1.2)	(1.1)	(1.0)	(3.8)
Dummy	–1129	678.5	–545.8	2743.7	–634.5
	(1.8)	(0.4)	(0.8)	(1.1)	(1.1)
$\overline{R}^2$	0.939	0.781	0.572	0.787	0.857
DW	2.4	2.1	2.4	2.0	3.1

Note : Figures in brackets indicate t-ratios.
* indicates significant at 5 per cent level.

Table 9
Model Results – II**

Variables	*Indonesia*	*Malaysia*	*Philippines*	*Singapore*	*Thailand*
Constant	*–6258.8	–872.6	–479.4	–3556.7	–39071.6
	(2.4)	(1.7)	(0.5)	(0.3)	(1.5)
GNP_{t-1}	*43.7	*–56.7	—	*108.2	—
	(4.0)	(2.2)		(3.3)	
ΔGNP_t	—	—	—	—	—
$(I/GNP)_{t-1}$	91.1	*305.9	—	—	1.9
	(1.0)	(2.4)			(0.1)
XR_t	–1.6	3053.3	–51.2	–163.4	1319.9
	(0.8)	(0.9)	(0.9)	(0.1)	(1.4)
OPt	7448.2	*3693.7	*5380.7	1557.2	*11305.3
	(0.9)	(2.1)	(3.9)	(0.6)	(2.5)
Dummy	—	—	—	—	—
$\overline{R}^2$	0.926	0.837	0.691	0.80	0.64
DW	2.1	1.9	2.0	2.0	1.5

Notes : ** The model is re-estimated by dropping some of the insignificant variables and variables significant but having wrong sign.
* indicates significant at 5 per cent level.
Figures in brackets indicate t-ratios.

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