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## Investment and Capital Flows: Implications of the ASEAN Economic Community

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Philippine Institute for Development Studies  
*Surian sa mga Pag-aaral Pangkaunlaran ng Pilipinas*

## Investment and Capital Flows: Implications of the ASEAN Economic Community

*Rafaelita M. Aldaba and Josef T. Yap*

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# Investment and Capital Flows: Implications of the ASEAN Economic Community

*Rafaelita M. Aldaba and Josef T. Yap\**

## **Abstract**

One of the objectives of the evolving ASEAN Economic Community (AEC) is to promote free investment flows and freer capital flows. By deepening economic integration among them, ASEAN Member Countries can establish a region-wide production base that will attract more foreign direct investment and strengthen the existing FDI-Trade nexus in East Asia. This will increase the opportunities for domestic firms to participate in regional and global production networks. The principal investment cooperation program of the AEC has been the ASEAN Investment Area which is being expanded to the ASEAN Comprehensive Investment Agreement (ACIA). The chapter delineates measures to make the ACIA more effective, examples of which are adoption of a collective approach and common time frame of trade and investment liberalization; and transferring mode 3 of services (commercial presence) from the ASEAN Framework Agreement on Services to the ACIA. Meanwhile, because of the risks that underlie movement of capital flows, it is recommended that regional financial integration give way to regional financial cooperation. The latter can be an important mechanism to accelerate the development of national financial systems, particularly through a more effective policy dialogue and surveillance process. Since greater global financial integration is a desirable long-term goal, regional financial cooperation can also be geared towards advocating for reform of the international financial architecture and crafting region-wide tools to manage capital flows. These will reduce the risks associated with financial integration. With regard to the issue of optimal sequencing in the process of capital account liberalization, the development of national financial systems remains to be an important component and prerequisite.

**Keywords:** Foreign direct investment, capital flows, ASEAN Economic Community

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## I. Introduction

### *Composition of Capital Flows*

The Association of Southeast Asian Nations (ASEAN) is committed to a “free flow of investment” and “freer flow of capital” as part of its effort toward building the ASEAN Economic Community (AEC). This was agreed upon as part of the AEC blueprint during the ASEAN Economic Ministers Meeting held in August, 2006 in Kuala Lumpur and affirmed by the ASEAN Leaders at the 12<sup>th</sup> ASEAN Summit in January 2007.

It will be useful to clarify some terms at the onset. Williamson and Mahar (1998) identified six dimensions along which the extent of financial liberalization can be assessed: (i) elimination of credit controls; (ii) deregulation of interest rates; (iii) free entry into financial services industry; (iv) bank autonomy; (v) private ownership of banks; and (vi) liberalization of international capital flows. Free entry into the financial services industry and liberalization of capital flows are the key elements of the process of global financial integration, implying that the latter is a subset of financial liberalization. The AEC is concerned mainly with regional financial integration which entails opening up of the financial services industry and liberalization of capital flows but only vis-à-vis countries that are members of a regional grouping. The AEC is therefore focused on a segment of the process of financial liberalization. Items (i), (ii), (iv) and (v) while important to regional financial integration, are largely national issues.

In theory investment flows are part of capital flows. However, the issues related to investment flows—what is referred to as foreign direct investment (FDI)—are different from those related to other capital flows. This is reflected in the objectives of the AEC wherein “free” is associated with investment while “freer” is associated with capital, implying something less ambitious. The structure of this chapter is based on this distinction.

The composition of capital flows to developing countries has changed over time, the implications of which will be discussed later. Table 4.1 shows that the share of FDI inflows to emerging markets and other developing countries increased from 15 percent in 1980-84 to a range of 44-49 percent in 2000-04. Meanwhile, the share of FDI to ASEAN member countries was following the same trend until the 1997 financial crisis. The average share of FDI inflows for the period 2000-06 was 25.7 percent, lower than the 35 percent average in 1995-99.

The share of debt has declined for developing countries. However, for ASEAN as a group, the trend also reversed after the 1997 crisis. This was largely due to the assistance from official creditors required to address the liquidity problems at that time. Equity and portfolio flows are the main focus of the analysis related to capital account liberalization and financial integration. The share of this category of capital flows has increased steadily for emerging markets, which includes majority of ASEAN member countries. However, for “other developing countries” portfolio and equity flows have stagnated reflecting the relatively poor investment climate in these countries.

**Table 4.1: Composition of Gross Inflows to ASEAN, Emerging Markets, and Other Developing Countries**

GROSS INFLOWS	1980-1984	1985-89	1990-94	1995-99	2000-04	2000-06
ASEAN (in billions of US \$)	23.1	35.1	51.3	75.6	89.9	113.2
Share of FDI	13.0	13.6	27.3	35.0	25.9	25.7
Share of Equity and Portfolio	4.5	3.4	6.9	8.2	5.7	9.3
Share of Debt	82.5	82.9	65.8	56.8	68.4	65.0
Emerging markets(in billions of US \$)	66	60	194	328	288	NA
Share of FDI	15.5	27.3	24.4	40.7	48.6	NA
Share of Equity and Portfolio	1.5	3.4	11.7	11.0	12.1	NA
Share of Debt	83.0	69.3	63.9	48.2	39.3	NA
Other developing countries(in billions of US \$)	6	4	7	13	16	NA
Share of FDI	15.1	17.2	27.7	40.9	44.2	NA
Share of Equity and Portfolio	1.1	0.6	0.5	0.5	0.4	NA
Share of Debt	83.8	82.2	71.8	58.6	55.4	NA

Source: ASEAN data, IMF Financial Statistics; IMF Balance of Payments Statistics and International Investment Position (IIP);  
Emerging Markets and Other developing countries, Table 1 of Prasad and Rajan (2008)

Note: Data for ASEAN exclude Brunei, Lao PDR and Viet Nam, since these countries do not submit IIP Statements to the IMF  
Gross Inflows are averages for the period; shares are in percent

### *AEC and Free Flow of Investment*

FDI has encouraged the growth of regional production networks and production sharing in ASEAN and East Asia. The regional production networks, which are at the heart of intraregional trade and investment flows, are the key drivers of economic growth in ASEAN together with its integration with the East Asian region. In this context, the AEC Blueprint aims to liberalize and facilitate investment in order to attract FDI and deepen the region's participation in vertical specialization and production networks.

Currently, investment cooperation in ASEAN is implemented through the 1998 Framework Agreement on the ASEAN Investment Area (AIA) while investment protection is provided by the 1987 ASEAN Agreement for the Promotion and Protection of Investment. The AIA aims to make ASEAN a competitive, conducive, and liberal investment area. Under the AIA all industries under manufacturing, agriculture, fishery, forestry and mining and quarrying sectors and services incidental to these five sectors will be liberalized. National treatment shall be granted to investors both at the pre-establishment and post-establishment stages, with some exceptions as identified by the member countries in their Temporary Exclusion Lists (TEL) and Sensitive Lists (SL). The TEL will be phased out based on agreed timelines and while the SL does not have a timeline for its phase out, it will be reviewed periodically (see Table 4.2). Recognizing the importance of investment in delivery of services, the AIA was amended in 2003 to expand it to include education services, health care, telecommunications, tourism, banking and finance, insurance, trading, e-commerce, distribution and logistics, transportation and warehousing, professional services such as accounting, engineering and advertising.

<b>Table 4.2 : Schedule of Temporary Exclusion List Phase Out for ASEAN Investment under the AIA</b>		
End Date	Manufacturing	Agriculture, Fishery, Forestry & Mining and Services incidental to the five sectors
1 Jan 2003	ASEAN6: Brunei, Indonesia, Malaysia, Philippines, Singapore, & Thailand Myanmar	
1 Jan 2010	Viet Nam, Lao PDR, & Cambodia	ASEAN6 Cambodia
1 Jan 2013		Viet Nam
1 Jan 2015		Lao PDR Myanmar
Source: ASEAN Secretariat (as cited in Kumar, 2008)		

One major initiative of the AEC Blueprint is the enhancement of the existing ASEAN Investment Area (AIA) into a more thorough and improved ASEAN Comprehensive Investment Agreement (ACIA) that will take into account international best practices and will be based on the following four approaches which will serve as the major pillars of the AIA: liberalization, protection, facilitation, and promotion.

Liberalization: There will be progressive liberalization of member countries' investment regimes to achieve free and open investment by 2015. ASEAN member countries are committed to (i) extend non-discriminatory treatment, including national treatment and most favored treatment, to investors in ASEAN with limited exceptions; minimize and where possible, remove such exceptions; (ii) reduce and where possible, remove restrictions to entry for investments in the Priority Integration Sectors covering goods; and (iii) reduce and where possible, remove restrictive investment measures and other impediments, including performance requirements.

Protection: Unlike the AIA, the ACIA will provide enhanced protection to all investors and their investments. The ACIA provisions will be strengthened to include provisions on investor-state dispute settlement mechanisms; transfer and repatriation of capital, profits, dividends, etc; transparent coverage on the expropriation and compensation; full protection and security; and treatment of compensation for losses resulting from strife.

Investment Facilitation: The ACIA will provide more transparent, consistent and predictable investment rules, regulations, policies and procedures. ASEAN member countries will commit to harmonize, where possible, investment policies to achieve industrial complementation and economic integration; streamline and simplify procedures for investment applications and approvals; promote dissemination of investment information: rules, regulations, policies and procedures, including a one-stop investment center or investment promotion board; strengthen databases on all forms of investments covering goods and services to facilitate policy formulation; strengthen coordination among government ministries and agencies concerned; consultation with ASEAN private sectors to facilitate investment; and identify and work towards areas of complementation ASEAN-wide as well as bilateral economic integration.

Promotion: The AEC also commits ASEAN member countries to promote ASEAN as an integrated investment area and production network through specific actions to create the necessary environment to promote all forms of investment and new growth areas into ASEAN; promote intra-ASEAN investments, particularly investments from ASEAN 6 to CLMV; promote the growth and development of SMEs and MNEs; promote industrial complementation and

production networks among MNCs in ASEAN; promote joint investment missions that focus on regional clusters and production networks; and work towards establishing an effective network of bilateral agreements on avoidance of double taxation among ASEAN countries.

Like most new age FTAs, the AEC Blueprint also includes other deeper integration provisions which are vital to investment. These cover services, standards, competition law, customs cooperation, IPR, and dispute settlement, all of which are crucial in reducing transactions costs and in attracting efficiency-oriented FDI.

Services: ASEAN member countries are committed to remove substantially all restrictions on trade in services for the following four priority sectors: air transport, e-ASEAN, health care, and tourism by 2010; logistics services by 2013; remove substantially all restrictions on trade in services for all other services sectors by 2015; and undertake liberalization through consecutive rounds of every two years until 2015. The services liberalization will result in no restrictions for Modes 1 (cross border delivery) and 2 (consumption abroad of services); allow for foreign (ASEAN) equity participation of not less than 51% by 2008, by 70% by 2010 for the four priority sectors; not less than 49% by 2008, 51% by 2010 and 70% by 2013 for logistics and not less than 49% by 2008, 51% by 2010, and 70% by 2015 for other services sectors; and progressively remove other Mode 3 (commercial presence) market access limitations by 2015. Mode 4 (movement of natural persons) will be liberalized through mutual recognition arrangements for professional qualifications.

Standards: Standards, technical regulations and conformity assessment procedures will be harmonized through the implementation of the ASEAN Policy Guideline on Standards and Conformance, with greater transparency, improved quality of conformity assessment and active participation of the private sector.

Competition Law: The AEC Blueprint commits ASEAN to introduce competition policy in all ASEAN Member Countries by 2015; establish a network of authorities responsible for competition policies; encourage capacity building programs for ASEAN Member Countries in developing national competition policy; and develop a regional guideline on competition policy by 2010.

Customs Cooperation: A comprehensive trade facilitation work program will be pursued to provide simple, harmonized and standardized trade and customs, processes, procedures and related information flows. The realization of ASEAN Customs Vision 2020 is accelerated to 2015. The creation of an ASEAN Single Window is the most important trade facilitation initiative to operate and integrate the 10 National Single Windows of the individual Member Countries.

Intellectual Property Rights (IPR): The AEC Blueprint called for the full implementation of the ASEAN IPR Action Plan 2004-2010 and the Work Plan for ASEAN Cooperation on Copyrights; establish an ASEAN filing system for design to facilitate filings by users; accession to the Madrid enforcement agencies on IPR protection; and promote regional cooperation on Traditional Knowledge, Genetic Resources, and Cultural Traditional Expressions.

Dispute Settlement: ASEAN has three interrelated dispute resolution mechanisms that address the implementation of obligations under ASEAN Agreements: ASEAN Consultation to Solve Trade and Investment Issues (ACT), ASEAN Compliance Body (ACB); and the Enhanced Dispute Settlement Mechanism (DSM). The ACB is advisory in nature while the DSM is binding.



## *AEC and Freer Flow of Capital*

“Freer flow of capital” is an integral part of the ASEAN Roadmap for Monetary and Financial Integration that was adopted in 2003. During the 12<sup>th</sup> ASEAN Finance Ministers Meeting in Danang, Viet Nam, in April, 2008 the key elements of the Roadmap were highlighted in the joint ministerial statement, thus:

### “Deepening Capital Markets

To support the AEC goals of freer capital flows and our vision for an interlinked ASEAN securities market, our officials have been engaging the private sector to distill the key issues that impede capital markets development in ASEAN. To this end, we agreed to establish a Medium Term Strategic Framework that systematically maps out action items to strengthen market linkages, market access and market liquidity.

In particular, on establishing market linkages, we agreed on the usefulness of working with bond information providers to facilitate the widest possible dissemination of ASEAN bond markets data to enhance international investors’ interests. We also supported the promotion of alliances among ASEAN Exchanges and welcomed the exploration of greater collaborative efforts towards enhancing market linkages and liquidity in the region. We will also look at how best to achieve a more conducive environment for regional cross border financial flows in ASEAN.

We noted the harmonization initiatives to develop ASEAN and Plus Standards to facilitate greater efficiency in cross border issuance of equity and debt securities to strengthen the attractiveness and competitiveness of ASEAN as a fund-raising centre.

We agreed to strengthen our dialogue mechanisms with key market participants operating in ASEAN capital markets. This will enable us to keep abreast of capital market developments, and ensure that our markets remain responsive to the needs of issuers, investors and financial intermediaries.

### Reinforcing Financial Services Liberalization

We have committed to liberalize key financial services sectors by 2015, towards our Leaders’ objective of achieving the AEC. Our officials will assess the feasibility of further expanding the scope and pace of liberalization. We reiterated our commitment to facilitate intra-regional trade and investment by progressively opening up our financial services sector to one another. In this regard, we are pleased with the conclusion of the Fourth Round of financial services liberalization negotiations under the ASEAN Framework Agreement on Services (AFAS) and have signed the Protocol to Implement the Fourth Package of Financial Services Commitments this afternoon. We agreed to launch the Fifth Round of negotiations which will conclude by 2010. Our officials will continue to facilitate financial services negotiations with our Dialogue Partners.

## Capital Account Liberalization

Capital Account liberalization is important to promote growth and to support regional economic integration. We therefore reaffirmed our commitments to further liberalize capital account at a pace that will ensure the maximization of the benefits while providing adequate safeguards against macroeconomic instability.”

### *Structure of the Chapter*

The elements of the AEC and the Financial Sector Roadmap clearly indicate the commitment to regional economic integration. The status of financial integration in ASEAN is described in Section II along with a review of the potential benefits and risks of financial liberalization. The section also contains a description of the trade-investment nexus in ASEAN and East Asia. Combining the status of financial integration in ASEAN with the relevant framework for analysis will help identify relevant policy issues to be addressed. This is the topic of Section III. Relevant policy measures should be guided by the potential impact of greater FDI and other capital flows and the potential impact of greater regional financial integration on these flows. Section IV provides a modest literature review on the empirical effects of regional economic integration on FDI flows and the impact of greater financial liberalization. The policy issues are addressed in Section V, which highlights some adjustment measures that must be undertaken by ASEAN member countries, individually and as a group. Section VI concludes.

## **II. Implications of Free Investment Flows and Freer Capital Flows for ASEAN**

### *Benefits of Financial Integration*

Financial integration centers on greater capital mobility. This is generally viewed to be advantageous to the process of economic development. Capital flows to emerging market economies have eased the domestic savings constraint, which in turn has increased investment, thereby boosting economic growth. To the extent that real returns to marginal investment are lower in capital-rich countries than those in capital-scarce countries, then the movement of capital from developed economies to emerging market economies improves the efficiency of world resource allocation.

The availability of international capital also provides an economy the ability to smooth expenditures especially in the advent of adverse exogenous shocks. Meanwhile, an open capital account for both developed and emerging market economies allows for greater portfolio diversification and better management of risk on the part of investors. This is one of the more common arguments at the microeconomic level for capital account liberalization.

These arguments reflect the potential benefits of global financial integration. The case for regional financial integration, however, requires careful nuance (Asian Development Bank, 2008). For one thing, regional financial integration is less likely than global integration to foster risk-sharing, insofar as business cycles tend to be more closely correlated among neighboring countries than among distant ones. Evidence shows that financial integration facilitates better diversification of risk when countries are more specialized (Imbs, 2004 as quoted by Garcia-Herrero and Wooldridge, 2007).

The argument for promoting regional integration usually highlights the institutional dimension. The European experience and more recently that of Asia show that peer pressure has promoted

the upgrading of and harmonization of local practices in the functioning of the financial system, including accounting, tax treatment and even regulation and supervision (Garcia-Herrero and Wooldridge, 2007). Regional institutions can apply the peer pressure and can also foster dialogue and information sharing that promote financial development and integration, as well as best practices in financial regulation and supervision (ADB, 2008).

The importance of local information and common time zones for financial markets can add to the benefits of regional integration. In particular, information asymmetries or differences in investment styles could cause investors in neighboring countries to act differently from those in distant countries, and so regional integration might help to diversify the global investor base (Garcia-Herrero and Wooldridge, 2007).

### *Benefits of FDI*

Instead of raising the investment rate indirectly by providing more resources, capital flows may do so directly in the form of FDI. This type of capital flow is crucial to the success of the economic integration in ASEAN. Apart from bringing in new capital flows, foreign exchange, easy access to foreign markets, and technology transfer, FDI can be instrumental in strengthening institutions and creating a more stable business environment (Plummer, 2007). The UNCTAD (2006 as cited in Kumar, 2008) also noted that investment liberalization plays a vital role in facilitating the process of efficiency-seeking industrial restructuring. This facilitates the creation of supply capabilities in relatively less developed countries. FDI is also the least volatile form of capital flows, making countries less susceptible to sudden stops or reversals of flows (Kose and others as cited in Campos and Kinoshita, 2008).

While the theoretical discussions on the impact of regional integration on trade has been extensive, the theoretical literature on regional integration and FDI has not generated much academic interest (Medvedev, 2006) and has not provided any general prediction on the impact of regional integration on FDI (Blomström and Kokko, 1997). Theoretical models identify both investment creating and investment diverting effects of regional integration but leaves the question on which ones dominate to empirical studies. As Medvedev (2006) noted, to the extent that multiple transmission channels are present, theory does not establish their relative magnitudes and provides no ready answer for the direction of the net effect.

### *Risks Related to Financial Integration*

The Asian financial crisis was a painful reminder of the risks associated with more open capital accounts. Foreign capital flows may cause imbalances that threaten macroeconomic stability. This situation becomes likely if the absorptive capacity of the economy falls below the level of the capital inflows. Such a disparity arises because of policy arbitrage, where capital flows are attracted by the sound fundamentals of an economy causing financial markets to allocate too much or too little capital to some recipients at a given moment.

If an economy has a flexible exchange rate regime, capital inflows will lead to an appreciation of the nominal and real exchange rates. This will have an adverse impact on the competitiveness of exports and import-substituting industries and result in a deterioration of the current account balance. The resource allocation effects of a real exchange rate appreciation may also spawn asset price bubbles and rapid credit expansion that could jeopardize the stability of the financial system.

In a fixed-exchange rate regime, capital inflows lead to a real exchange rate appreciation via inflationary pressure brought about by the increase in money supply and domestic credit. However, a fixed-exchange rate regime is more vulnerable when there is a net capital outflow. Unless it has adequate foreign exchange reserves, the monetary authority would have to raise interest rates to protect the peg. The likely outcome would be an economic recession.

Many factors could also undermine the efficacy of the capital inflows. The host economy may experience a mere substitution of domestic savings by foreign savings, which would only facilitate a consumption boom. In order to avoid this situation, a relatively high saving rate must be attained in order to generate a trade surplus that will be used to service the foreign debt incurred. But even if this saving rate is attained, an insufficient amount of investment may be channeled to the tradable goods sector (most likely because of the appreciation of the real exchange rate), which would reduce the convertibility of the surplus to foreign currency needed to service the foreign debt. Some analysts have argued that even if capital inflows are channeled completely to investment, the resulting improvement in the growth rate is only short-term in nature unless it is accompanied by a significant improvement in the economy's technology (Reisen, 1998).

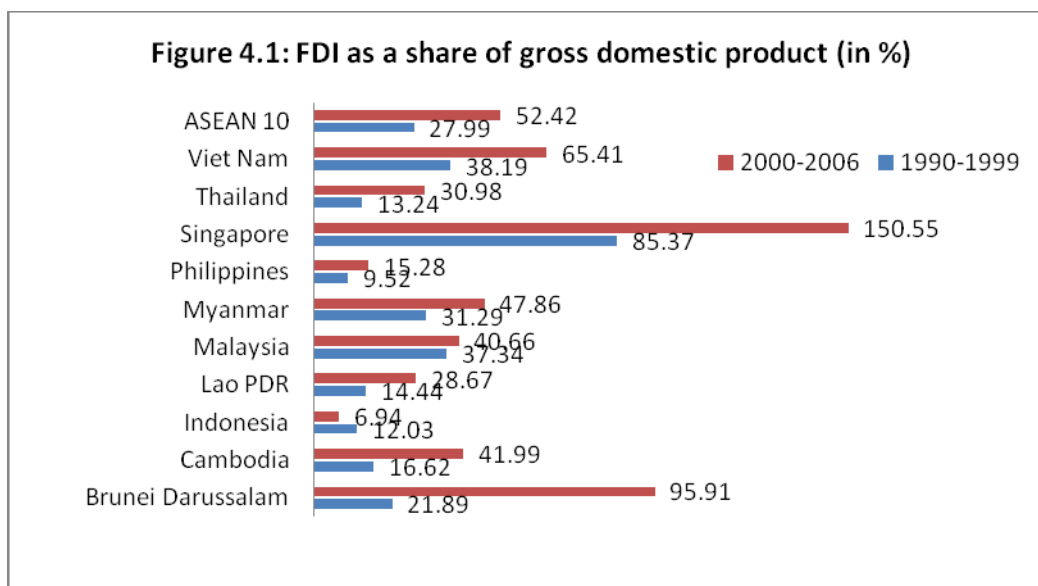
Since capital account inflows inherently entail financial transactions, they are also susceptible to market imperfections associated with asymmetric information and moral hazard. These microeconomic distortions normally result in an inappropriate assessment of risk exposure and cause over-borrowing, making the financial system vulnerable to exogenous shocks. The problem becomes particularly acute when banks are the main intermediaries of capital flows. The situation is even more precarious in emerging markets where the risk-management practices of the private sector are underdeveloped, the capacity of regulators to supervise the financial sector are limited, and the financial markets are thin.

In this context, capital account liberalization can also exacerbate the balance sheet problems caused by currency and maturity mismatches. Most countries are unable to borrow abroad in their own currency and cannot borrow in local currency at long maturities and fixed rates even at home, a fact that was dubbed as "Original Sin" by the economists Barry Eichengreen and Ricardo Hausmann. Capital account liberalization creates potential currency mismatch problems by giving economic agents more opportunity to borrow in foreign currency.

The discussion indicates that FDI is generally the more beneficial form of capital flow. The increasing share of FDI inflows, as shown in Table 4.1, is therefore encouraging. One objective of the AEC is to sustain this trend and at the same time make FDI more beneficial in terms of technology transfer, economic growth, and employment.

#### *FDI and Trade Nexus*

FDI and trade have played a major role in the successful economic development of ASEAN countries and their increasing integration with other East Asian economies. Through FDI and trade, the ASEAN economies have obtained technology and know-how from foreign countries which has contributed to economic growth by improving production and technological capability (Haddad, 2007). On the average, FDI as a percentage of GDP increased from 28% during the period 1990-1999 to 52% in 2000-2006 (see Figure 4.1). Except for Indonesia, all countries experienced rising average shares. At the same time, exports as a percentage of GDP rose from 46% in 1990-1999 to 62% in 2000-2006. All ASEAN member countries witnessed increases in their average shares, except for Brunei.



Sources: IMF-World Economic Outlook, 2007; UNCTAD FDI Statistics

Table 4.3 compares the FDI inflows to ASEAN with other regions and selected countries. The European Union accounted for the bulk of the total inflows from 1995 to 2006 with the EU30 registering a share of 43% while the EU25 had a share of 39%. The US had a share of 18% while China accounted for 6.4%. East Asia registered a share of 14%, while ASEAN had a share of only 3.8%. Note that prior to the 1997 Asian crisis, ASEAN share was around 8%. This dropped to almost 2% in 2000 and although there are some improvements observed since 2003, the mid-1990s peak FDI shares are yet to be reached.

**Table 4.3: Share of FDI Inflows, Selected countries and Regions (in %)**

Country/ Region	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	1995- 2006
US	17.16	21.5	21.13	24.6	25.79	22.25	19.2	12	9.42	18.3	10.7	13.4	18.16
EU30	38.34	31.78	29.11	39.6	45.74	49.26	45.8	49.4	45.51	27.5	51.4	40.7	42.77
EU25	35.22	28.2	26.65	36.4	34.85	42.98	35.2	49.4	45.51	27.5	51.4	40.7	39.01
JAP	0.01	0.06	0.66	0.45	1.16	0.59	0.75	1.49	1.12	1.05	0.29	-0.5	0.57
PRC	10.95	10.62	9.25	6.41	3.67	2.88	5.63	8.48	9.49	8.17	7.66	5.32	6.41
ROK	0.36	0.51	0.54	0.72	0.9	0.64	0.5	0.55	0.78	1.21	0.75	0.38	0.66
E. Asia	21.6	21.84	19.42	12.3	9.62	9.89	11.9	13.5	16.5	18.9	16.4	13.5	14.12
ASEAN	8.22	7.76	7.01	3.14	2.62	1.67	2.48	2.9	4.34	4.75	4.34	3.94	3.79
World	343	393	489	709	1099	1411	833	622	564	742	946	1306	9457

Note: World FDI Inflows are in US\$ billion. Source: UNCTAD

Figure 4.2 presents the FDI stock for the years 1999 and 2006 which amounted to US\$250.5 billion and US\$420.2 billion, respectively. In 1999, Singapore accounted for 41% of the total ASEAN FDI stock. Malaysia followed with a share of 20%; Thailand had 12%; Indonesia, 11.7%; Viet Nam, 7% and the Philippines, 5%. In 2006, Singapore's share rose to 50%, Thailand, 16%; Malaysia, 13%; Viet Nam, 8%; Indonesia, 5%; and the Philippines, 4%. The combined shares of Cambodia, Laos, and Myanmar slightly declined from 2.2% to 2.1% between 1999 and 2006. Brunei's share went up from 1.3% to 2.4% during the same years under review.

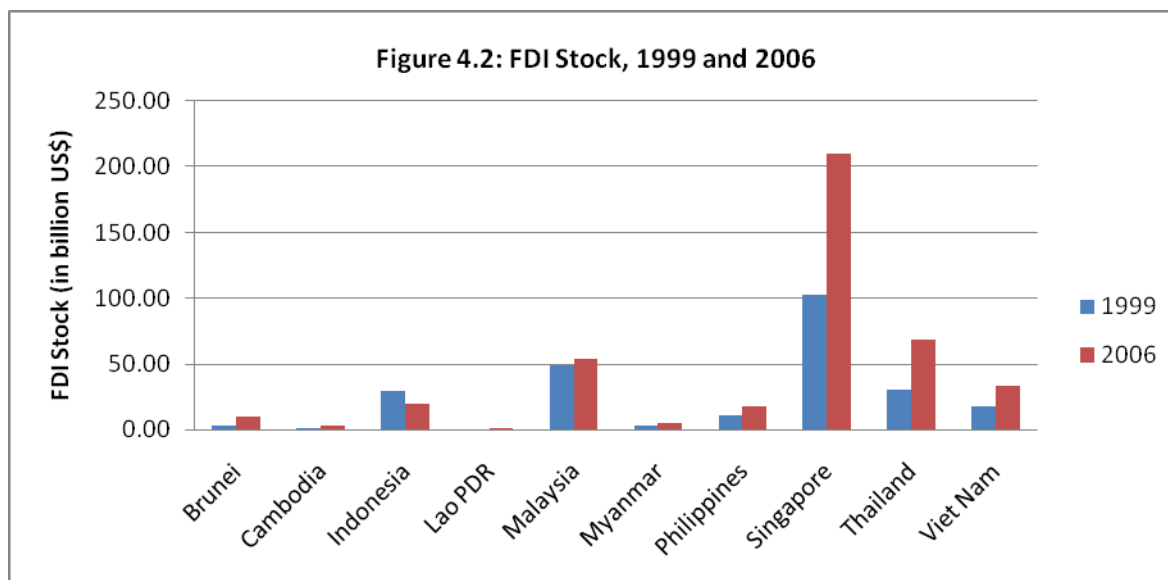


Table 4.4 presents FDI flows to the region by source country and by sector during the period 1999-2006. The total cumulative flows to the ASEAN Member countries amounted to US\$194 billion. The largest source of FDI is the European Union with a share of 36% of the total followed by Japan with 17% and the US with a share of 13%. Intra-ASEAN investment which reached a cumulative total of around US\$23 billion accounted for a modest share of about 12%. The Emerging Economies of East Asia contributed around 8% with Taiwan accounting for 3%; Korea, 2%; China, 1% and Hong Kong, 2%.

The table also indicates that the manufacturing sector received the bulk of the flows with a share of 38% of the total cumulative flows from 1999 to 2006. This is followed by financial services with a share of 22% and trade/commerce sector with a share of 13%. Other services accounted for a share of 8% while real estate and mining and quarrying registered equal shares of about 6% each. Except for the US, FDI from the other source countries was concentrated in the manufacturing sector. During this period, US FDI was highest in financial services.

**Table 4.4: FDI Flows to ASEAN, by country source and economic sector  
1999-2006 (in million US\$)**

	Japan	USA	EU	ROK	HK	Taiwan	PRC	ASEAN	Others	Total
Agriculture, fishery & forestry	-40	166	336	220	-50	104	26	503	24	1290
Mining & quarrying	124	-197	6119	201	245	87	807	2421	1003	10810
Manufacturing	19369	939	33625	1229	987	2189	259	8119	7869	74584
Construction	195	-339	248	-213	27	79	8	277	109	391
Trade/commerce	5701	5646	6403	614	812	80	419	2914	3127	25717
Financial intermediation	6173	11896	13639	152	732	2249	-48	2864	4672	42329
Real estate	-82	1310	3150	640	431	193	419	4257	751	11069
Services	2183	2337	4158	423	226	465	122	2818	4306	17039
Others	1	2732	1931	203	927	161	-5	-1657	4384	8677
<b>Total</b>	<b>33624</b>	<b>24489</b>	<b>69609</b>	<b>3470</b>	<b>4337</b>	<b>5606</b>	<b>2008</b>	<b>22515</b>	<b>26246</b>	<b>193987*</b>

\*Note: The total includes adjustments on Cambodian and Philippine data. Source: ASEAN Secretariat

With respect to intra-ASEAN investment for the period 1999 to 2006, Table 4.5 shows that the biggest source was Singapore which accounted for 64% of the total cumulative flows from 1999 to 2006. Malaysia followed with a share of 21% and Indonesia with a share of 11%. Manufacturing accounted for 36% of the total intraregional FDI flows. Trade and commerce, financial services, and other services had a combined share of 39% while real estate accounted for 18%.

	Bru	Cam	Indo	Lao	Mal	Myan	Phils	Sin	Thai	Viet	Total
Agriculture, fishery & forestry	-	1	-3	-	201	3	22	192	89	0	503
Mining & quarrying	0	-	22	-	198	0	18	2,178	3	1	2,421
Manufacturing	16	1	37	8	401	2	148	7,343	156	7	8,119
Construction	3	-	-20	0	112	0	3	137	41	0	277
Trade/commerce	85	6	115	0	-176	27	10	2,807	31	10	2,914
Financial intermediation	-7	0	431	1	1,048	-1	124	1,782	-514	0	2,864
Real estate	4	4	1,776	1	1,995	45	81	337	-2	18	4,257
Services	10	0	81	0	845	11	3	1,463	397	8	2,818
Others	5	7	92	0	91	1	13	-1,890	21	4	-1,657
<b>Total</b>	<b>116</b>	<b>18</b>	<b>2,530</b>	<b>11</b>	<b>4,714</b>	<b>87</b>	<b>421</b>	<b>14,349</b>	<b>220</b>	<b>48</b>	<b>22,515</b>

Source: ASEAN Secretariat

For the period 2002 to 2006, it is evident from Table 4.6 that the largest recipients of intraregional FDI flows were Thailand, which cornered 35% of the total flows; Singapore and Indonesia with equal shares of 22% each; and Viet Nam with 5%. Cambodia received 2% of the total cumulative intraregional FDI flows while Lao had 0.16% and Myanmar, 0.6%.

Total ASEAN exports and imports are heavily concentrated in the machinery sector consisting of the following commodity groups: nonelectrical machinery including plant & capital equipment, office machinery & computers, electrical machinery including television receivers, sound recorders & reproducers, & telecommunications equipment, and transportation machinery vehicles & parts. These commodity groups comprised 46.5% of total ASEAN trade in 2006 (see Table 4.7). Within the ASEAN region, these commodity groups accounted for about 46% of the total and outside the region they made up almost 47% of the total.

Haddad (2007) characterized a large part of the intra-industry trade in East Asia as vertical and this was attributed to two factors: one, the vertical intra-industry trade in the intraregional trade in East Asia reflects substantial diversity in the level of economic development among the East Asian economies; and two, the vertical intra-industry trade in the intraregional trade in East Asia also reflects the emerging regional production networks through which parts and components of different quality and characteristics are being actively traded for the production of finished goods.

Host Country	2002	2003	2004	2005	2006	Total
Brunei Darussalam	21.23	36.79	19.66	19.43	9.71	106.82
Cambodia	8.52	19.88	31.92	129.18	155.54	345.04
Indonesia	1,296.62	383.46	204.25	883.32	1,524.53	4,292.18
Lao PDR	2.92	2.98	7.75	6.68	10.56	30.9
Malaysia	0.02	251.12	980.17	572.91	467.82	2,272.05
Myanmar	25.11	24.28	9.31	38.35	27.79	124.84
Philippines	87.44	175.37	71.11	12.69	-95.56	251.06
Singapore	762.3	699.2	548	1,175.60	1,137.70	4,322.80
Thailand	1,408.29	1,060.42	688.71	762.22	2,822.12	6,741.76
Viet Nam	200.43	100.4	242.87	164.72	181.89	890.31
<b>TOTAL ASEAN</b>	<b>3,812.89</b>	<b>2,753.90</b>	<b>2,803.75</b>	<b>3,765.11</b>	<b>6,242.09</b>	<b>19,377.75</b>

Source: ASEAN Secretariat

Description	Intra-ASEAN	Extra-ASEAN	Total ASEAN
HS 84 Nonelectrical machinery (inc plant & capital equipment, office machinery & computers)	14.40	15.30	15.07
HS 85 Electrical machinery (inc television receivers, sound recorders & reproducers, & telecommunications equipment)	27.86	27.49	27.58
HS 86-89 Transportation machinery (vehicles & parts)	3.72	3.91	3.86
<b>Total</b>	<b>45.98</b>	<b>46.70</b>	<b>46.51</b>
Exports (in US\$ million)	189176.5	561530.8	750707.3
Imports (in US\$ million)	163594.9	490503.5	654098.4
<b>Total Trade (in US\$ million)</b>	<b>352771.4</b>	<b>1052034.3</b>	<b>1404805.7</b>

Source: ASEAN Trade Database

Ando and Kimura (2008) characterized the production and distribution networks in East Asia as complex cross-border production sharing or fragmentation of production which involves both intra-firm and inter-firm back-and-forth trade transactions across a number of countries in a particular region. This has enabled developing countries in the region to take advantage of differences in comparative advantage at a more complex level of specialization. Haddad (2007) indicated that a substantial portion of the exports of Malaysia, Philippines, Thailand, and Viet Nam are accounted for by vertical specialization. She noted that between 1998 and 2004, the first three countries performed exceptionally well in exports of finished or assembled machinery. Japan accounts for more than half of East Asia's machinery exports. Haddad wrote that the production networks that initially linked Japan vertically with Korea and Taiwan in low-skill assembly activities have gradually been moved to lower-wage countries such as Malaysia, Philippines, and Thailand. These networks are now being transferred to China and Viet Nam.



Table 4.8 illustrates the trade taking place in the ASEAN and East Asian region which is generally characterized by the exports of parts, components, capital equipment and other industrial inputs to be assembled into finished goods in China for export to the outside world. This phenomenon is common in the automotive and electronics sectors. Intra-ASEAN and intra-East Asian trade is presented by the table in more detailed products which are based on three SITC 4-digit classification product groups: (i) 7649 (parts, not elsewhere specified, of and accessories for apparatus falling in heading 76 telecommunications, sound recording and reproducing equipment); (ii) 7849 (other parts and accessories, for vehicles of headings 722, 781-783; and (iii) 7810 (passenger motor vehicles excluding buses).

For telecommunications/sound recording/reproducing equipment parts and components under SITC 7649, intra-ASEAN trade fell from 49% in 1996 to 30% in 2006. But note the entry of Viet Nam (a non-exporter in 1996) in the exporting of these products. For intra-East Asian trade in these products, the share declined from 50% in 1996 to 34% in 2006.

For vehicle parts and components under SITC 7849, intra-ASEAN trade dropped from 38% of total ASEAN exports in 1996 to 29% in 2006. Intra-East Asian trade went up from 23% to 30% during the same years. All ASEAN 6 countries experienced increases in the share of their exports to China. Viet Nam, which was a non-exporter in 1996, was able to gain market access and participate in the exporting of SITC 7849.

For motor vehicles under SITC 7810, intra-ASEAN trade is quite strong and increased from 23% in 1996 to 31% in 2006. Intra-East Asian trade fell from 6% to 5% with exports to China and Japan declining during the years under review. Among the ASEAN countries, Thailand leads in terms of exports which increased from US\$11 million in 1996 to US\$2.9 billion in 2006.

The intra-industry trade described above is closely associated with FDI flows and the establishment of regional production networks. With production sharing between developed and developing economies, foreign investment flows usually precede the onset of joint production. The networks have promoted the specialization of production in East Asia by fragmenting the multinationals' production processes into different sub-processes, which are located in different economies based on comparative advantage (Kawai, 2005). Box 4.1 describes Toyota's global production network and the emergence of Thailand as the regional hub not only of Toyota but also of the world's other large automakers such as Mitsubishi, Honda, Auto Alliance (Ford and Mazda), GM, and Isuzu. As of 2002, Thailand had 1,800 locally based suppliers providing engines, engine components, body parts, brake systems, steering systems, suspensions, transmissions and electronics. With a strong supplier base, Thai-based auto makers source almost 90 percent of their parts domestically. In 2005, the assembly and parts sectors contributed 42.4 percent of Thailand's total manufacturing value added.

To sum up, the preceding analysis has shown that first, the cumulative FDI inflows to ASEAN during the period 1999-2006 reached US\$194 billion. The largest source of FDI is the European Union with a share of 36%, followed by Japan with 17% and the US with a share of 13%. The manufacturing sector received the bulk of the flows with a share of 38%. Intra-regional investment flows in ASEAN remained modest with a share of 12% of cumulative FDI inflows from 1999 to 2006 with Singapore as the top investor.

**Table 4.8: Intra-ASEAN and -East Asian Trade in Selected Machinery Products  
SITC 7649, 7810, and 7849**

<b>7649</b>	Export value million US\$		Importer									
			World		ASEAN6		East Asia		China		Japan	
Exporter	1996	2006	1996	2006	1996	2006	1996	2006	1996	2006	1996	2006
Indonesia	366	668	0.7	0.5	51.6	53.1	68.6	70.1	0.2	5.6	12.4	10.1
Malaysia	2355	2706	3	1.5	50.1	31.3	61.1	46.4	0.7	6.7	9.9	7.4
Philippines	296	582	1.4	1.2	11.2	9.5	59.1	42.1	0.4	4.9	46.8	24.1
Singapore	3751	5149	3	1.9	52	36	60.5	47.3	2.1	8.4	5.1	1.8
Thailand	846	1543	1.5	1.2	40.2	7.6	60.9	45.3	1.6	4.9	15.8	28.9
Viet Nam	0	80	0	0.2		7.9		66.4		5		50.7
Japan	6267	14613	1.5	2.3	26.5	11.3	39.6	34.2	7.7	20.3		0
China	2199	31474	1.5	3.2	11.4	9.7	56.5	26		0	36.2	8
Korea	2252	14648	1.6	4.9	18.1	5.4	37.2	42.7	8.8	35.6	10.2	1.7
ASEAN6	7615	10728	2.3	1.4	48.5	30.2	61.1	48.1	1.5	7.1	9.8	9.2
EA	18333	71462	1.8	2.6	32.8	12.2	50.2	34.4	4.3	12.5	9.6	5.2

<b>7810</b>	Export value million US\$		Importer									
			World		ASEAN6		East Asia		China		Japan	
Exporter	1996	2006	1996	2006	1996	2006	1996	2006	1996	2006	1996	2006
Indonesia	28	839	0.1	0.7	93.5	29.3	94.8	29.9	0	0.1	1.2	0.5
Malaysia	190	174	0.2	0.1	11.6	21.9	11.7	24.9	0	0.4	0	1.1
Philippines	6	90	0	0.2	2.2	96.2	90.3	97.1	0	0.3	88.1	0.6
Singapore	183	443	0.1	0.2	22.5	12.8	38	13.6	15.3	0.2	0.2	0.3
Thailand	11	2922	0	2.2	76.8	33	85.7	35.4	0.1	0.4	8.6	2
Viet Nam	0	1	0	0		0		5.2		5.2		0
Japan	40488	94485	9.8	14.6	5.1	1.6	5.8	3.5	0.7	1.4		0
China	26	1536	0	0.2	42.5	3.2	44.3	4.4		0	1.1	1
Korea	9089	30597	6.6	10.3	4.8	2.1	5.3	4	0.4	1.9	0.1	0
ASEAN6	418	4469	0.1	0.6	23.4	31.2	31.7	33	6.7	0.3	1.6	1.5
EA	50020	131087	4.8	4.8	5.2	2.7	5.9	4.6	0.7	1.5	0	0.1

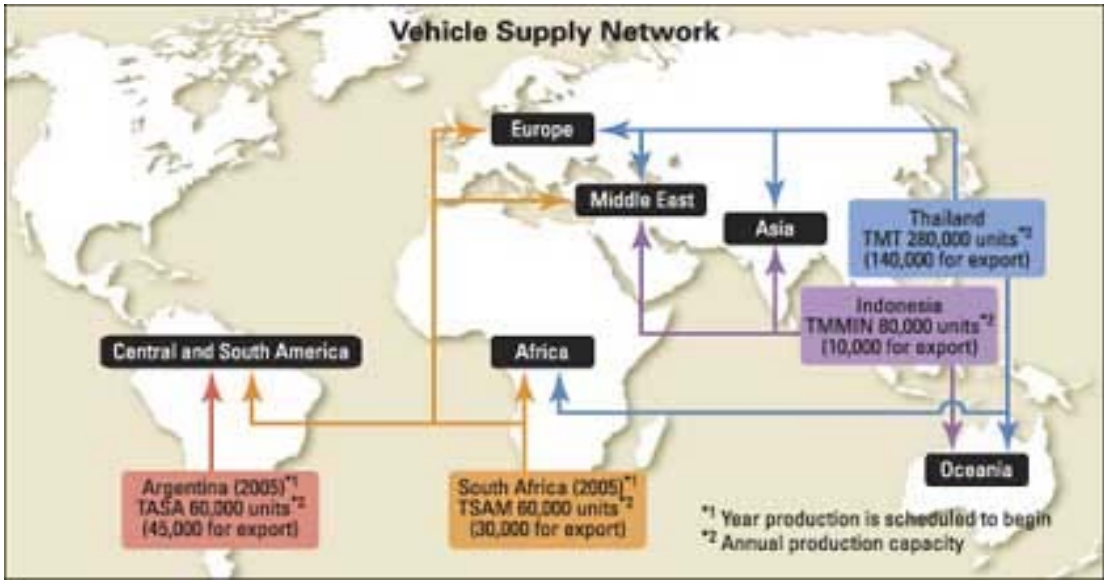
  

<b>7849</b>	Export value million US\$		Importer									
			World		ASEAN6		East Asia		China		Japan	
Exporter	1996	2006	1996	2006	1996	2006	1996	2006	1996	2006	1996	2006
Indonesia	59	923	0.1	0.7	17.5	33.9	33.1	65.9	0.1	6.9	14.5	25
Malaysia	73	543	0.1	0.3	53.4	43.1	60.8	53.8	0.1	3.3	7	7
Philippines	281	1400	1.4	3	29.2	26.7	45.8	54.7	0	2.6	16.6	24.9
Singapore	484	1501	0.4	0.6	46.5	34.7	52.8	53.1	2	8.3	2.6	1.7
Thailand	123	2500	0.2	1.9	28.1	25.1	42.6	42.2	0.2	2	14.2	14.7
Viet Nam	0	262	0	0.7		7.3		72.2		0		64.7
Japan	16630	25867	4	4	16.7	11.1	21.8	27.5	1.8	12.8		0
China	380	8849	0.3	0.9	12.5	4.7	33.5	22.5			20.1	14.2
Korea	1009	1009	0.7	0.3	8.3	8.3	16.5	16.5	2.1	2.1	6.2	6.2
ASEAN6	1021	7130	0.3	0.9	38.3	29.3	49.1	52	1	4.1	8.8	16.6
EA	19039	42854	1.8	1.6	17.3	12.8	23.2	30.3	1.8	8.4	1.2	5.8

Source: UNCOMTRADE

### Box 4.1: Toyota's IMV Project

The automotive industry is highly global and high-tech. It is capital intensive and requires economies of scale in order to make its operations profitable. To maintain their competitiveness, foreign automakers are fragmenting their production process by separating the capital intensive segments from the labor-intensive ones with the latter being transferred to developing countries that are characterized by large domestic markets. This is illustrated by Toyota's Innovative Multi-Purpose Vehicle (IMV) Project. Under the IMV Project, Toyota upgraded and expanded plants in Thailand (Toyota Motor Thailand or TMT), Indonesia (PT Toyota Motor Manufacturing Indonesia or TMMIN), Argentina and South Africa and turned them into assembly and export bases for a line of innovative IMVs. The Project also aims to increase imported components sourced from Toyota plants and suppliers in Asian and Latin America countries outside Japan.



Source: Toyota Motor Corporation

Thailand is regarded as the key base; TMT has a production capacity of 280,000 units and is expected to export 140,000 units of pick-up trucks and SUVs. Indonesia has a capacity of 80,000 units with 10,000 units for export; South Africa has 60,000 units with 30,000 units for export while Argentina has 60,000 units with 45,000 units for export. Historically, Toyota established its R&D centers only in Japan and developed countries in the US and Western Europe. In 2005, Japan's first R&D center (Toyota Technical Center Asia Pacific Thailand Co. Ltd) in an emerging market was opened in Thailand. This operates like those in developed countries, taking platforms and models developed in Japan to suit the needs of different emerging markets. In March 2005, Toyota established an R&D center in Australia to gain better understanding of local needs in Asia and Oceania.

Aside from its stable macroeconomic environment, good infrastructure, relatively large domestic market and the presence of an extensive network of components manufacturers; Thailand's success in integrating with the global production networks of foreign auto companies is the product of its long years of policy reform. Like many developing countries, Thailand followed an import-substitution policy from 1970 up to the mid-1980s. Since then, it has managed its trade and industrial policy quite well; as such, it was able to shift successfully from a highly protected industry towards an export-oriented one in the early 1990s.

Source: Aldaba, R. (2008), "Globalization and the Need for Strategic Government-Industry Cooperation in the Philippine Automotive Industry", forthcoming PIDS Discussion Paper.

Second, after the Asian crisis, FDI inflows to ASEAN have remained low with China being the largest recipient of FDI among emerging market economies. China is ASEAN's biggest competitor for FDI flows given the huge size of its domestic market as well as its rising per capita income (Lay Hong and Anil, 2002).

Third, the FDI flows to ASEAN are closely associated with the intra-industry trade taking place in ASEAN and East Asia and the establishment of vertically integrated production networks. As Kawai (2005) noted, the FDI-trade nexus is a natural consequence of multinational corporations' efforts to form regional supply chains and production networks. This phenomenon which is common in the automotive and electronics sectors is generally characterized by the exports of parts, components, capital equipment and other industrial inputs to be assembled into finished goods in China for export to the outside world.

Fourth, to address the challenge posed by China, the ASEAN economies need to pursue further liberalization and deeper reforms to improve their competitiveness and enable them to attract more investment and make ASEAN a single investment area. The ASEAN Economic Community Blueprint emphasizes the importance of regional cooperation to facilitate efficiency seeking FDI and intensifying the region's participation in regional and global production networks.

#### *Degree of Financial Integration in ASEAN and East Asia*

The potential benefits of capital inflows underpin some of the measures of capital mobility and the degree of financial integration. For example, the standard Feldstein-Horioka approach analyzed the relationship between savings rates and investment rates using regression of domestic investment rates on national savings rates:

$$\left(\frac{I}{Y}\right)_{i,t} = \alpha + \beta \left(\frac{S}{Y}\right)_{i,t} + \varepsilon_{i,t}$$

where I – investment, S – savings, Y – Gross Domestic Product, i represents the country, and t the time period. This equation can be run for a single economy and the result compared with other economies. Or else the equation can be tested for a group of countries or economies to determine the degree of financial integration in aggregate.

The hypothesis underlying the model is that in the world of perfectly mobile capital, domestic savings would seek the highest returns on the world capital market independently upon domestic demand for investment. This would imply a lower value of  $\beta$ . The initial econometric results showed a high and significant correlation of investment and savings for OECD countries giving rise to the "Feldstein and Horioka puzzle". Apart from providing theory-based explanations, the econometric methodology was also criticized (Coakley, et al. 1998 gives a historical account). Since then more reasonable results have been obtained (Bilas, 2007).

Bilas (2007) estimated the equation for four regional groupings: EU-15, ASEAN, MERCOSUR and NAFTA. His results are replicated in Table 4.9. The average  $\beta$  coefficient for EU-15 countries is 0.51, for MERCOSUR countries, 0.27, for NAFTA countries, 0.50 and for ASEAN member countries, 0.27. The results indicate that EU-15 economies are the most financially integrated, while ASEAN economies<sup>1</sup> are the least financially integrated. Note that this is a

<sup>1</sup> Brunei is not included due to lack of data.

measure of financial integration with the global economy and not financial integration among the member countries.

The estimated  $\beta$  coefficient for ASEAN member countries for the period 1960-2003 is shown in Table 4.10. The results indicate that Viet Nam had the lowest level of capital mobility during this period while the Philippines had the highest. This study will not attempt to explain this ranking. Of more interest would be the degree of financial integration among the members of a regional grouping. The law of one price implies that integration will be accompanied by price convergence. Fully integrated financial markets imply that traders can perform transactions freely anywhere within an area. In a financially integrated region, therefore, prices for similar financial assets—i.e. those with similar expected adjusted-returns—should converge. Arbitrage will tend to erode price differentials that may have arisen due to market power, different regulations, and imperfect flows of information. Financial integration therefore implies greater co-movement of prices in the region and is typically accompanied by an increase in financial assets traded within the regional and that held by regional participants.<sup>2</sup>

An alternative framework would be to examine the relationship of consumption growth and income growth. Economic theory suggests that if a region was financially integrated, consumption growth in a member economy would be more closely related to regional consumption growth than to its own income growth. The ability to borrow from other member economies facilitates consumption risk sharing.

Several studies have evaluated the degree of financial integration among the countries and economies of East Asia. Kim, Lee and Shin (2007) applied a gravity model of cross-border portfolio asset and bank claim holdings and found that there is some evidence of regional financial integration in East Asia. However, their results show that East Asia tends to be relatively more integrated with global markets rather than with one another in the region, particularly when compared with Europe. The consumption risk sharing model also indicated that East Asia tend to have relatively weaker regional risk sharing arrangements, but stronger global risk sharing arrangements compared to Europe.

By calculating the standard deviation of various interest rates, the ADB (2008) observed declining interbank rate differentials and converging bond yields among 10 East Asian economies. However, the interbank rate differentials still remained higher than comparable figure for the EU prior to the introduction of the euro. Meanwhile, Garcia-Herrero and Wooldridge (2007) assessed the progress of global and regional economic integration in emerging markets in three regions: Europe, Asia and Latin America. Their results, which are largely based on the above-described methodologies, are summarized in the concluding section of the study:

“The multifaceted nature of financial integration makes it hard to compare the progress of different emerging regions. That being said, available data point to significant integration over the past decade. The new EU members have reached a very high level of financial integration...At the same time, the geographical reach of integration in the new EU members is relatively limited; their integration almost entirely reflects the deepening of links with their neighboring financial bloc.

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<sup>2</sup> Quoted from ADB (2008), page 122.

**Table 4.9: Standardized  $\beta$  coefficients for EU-15, ASEAN, MERCOSUR, and NAFTA 1960-2003 through periods**

Integration		Total	1960-1964	1965-1969	1970-1974	1975-1979	1980-1984	1985-1989	1990-1994	1995-1999	2000-2004
EU - 15	Mean	0.51	0.89	0.4	0.34	0.13	0.19	0.5	0.54	0.44	0.32
	N	15	3	7	15	15	15	15	15	15	15
	Std.Deviation	0.33	0.08	0.49	0.56	0.65	0.61	0.46	0.44	0.49	0.78
ASEAN	Mean	0.65	0.1	0.01	0.22	0.29	0.05	0.22	0.06	0.13	0.58
	N	9	4	5	5	5	6	8	7	9	7
	Std.Deviation	0.16	0.94	0.65	0.45	0.49	0.74	0.64	0.54	0.75	0.4
MERCOSUR	Mean	0.27	0.81	-0.04	-0.17	0.39	-0.02	0.27	0.28	-0.1	-0.43
	N	4	3	3	4	4	3	3	4	4	4
	Std.Deviation	0.08	0.15	0.34	0.77	0.7	0.06	0.47	0.82	0.4	0.78
NAFTA	Mean	0.5	0.79	0.43	0.91	0.41	0.27	0.4	0.28	0.31	0.41
	N	3	2	3	3	3	3	3	3	3	3
	Std.Deviation	0.1	0.22	0.88	0.06	0.6	0.98	0.2	0.85	0.49	0.98
Total	Mean	0.52	0.59	0.22	0.31	0.23	0.14	0.39	0.36	0.27	0.29
	N	31	12	18	27	27	27	29	29	31	29
	Std.Deviation	0.27	0.62	0.58	0.59	0.6	0.62	0.49	0.57	0.58	0.75

Source: Table 4 of Bilas (2007)

**Table 4.10:  $\beta$  coefficients in ASEAN Countries 1960-2003**

Country	$\beta$ coefficients
Myanmar	0.67
Vietnam	0.91
Thailand	0.77
Singapore	0.50
Malaysia	0.54
Indonesia	0.55
Laos	0.80
Philippines	0.43
Cambodia	0.64

Source: Table 7 of Bilas (2007)

“By contrast, in Latin America the geographical reach of integration is broader than in the new EU members, involving neighboring countries as well as those farther afield. Yet the progress of integration has been much less rapid. Overall, financial integration in Latin America lags behind that in the new EU members.

“The situation in Asia is somewhere between those of Europe and Latin America. geographical links are broader than among the new EU members. One respect in which Asia stands out from other emerging regions is that it has the largest share of foreign investment financed within the region. Indeed, intraregional links are more important than those with the largest neighboring financial centre, Japan, although still secondary to links to global markets. Nevertheless, the progress of integration is closer to that of Latin America: for example, capital mobility continues to be restricted in several countries.”

The last three studies cover a mixture of ASEAN member countries and other Asian countries. Only the study of Bilas (2007) considered ASEAN separately. He also evaluated financial integration in the aforementioned four regional groupings based on movements of real interest rates. He concluded that NAFTA and the EU-25 show similar values of real interest rates among their member countries while the situation with MERCOSUR and ASEAN member countries is quite the opposite. This implies that capital is more mobile in NAFTA and EU-25 than in MERCOSUR and ASEAN.

A stylized fact that emerges is that ASEAN is among the least financially integrated with the rest of the world. Financial integration among member countries is also relatively weak, particularly when compared to Europe. This phenomenon, which is generally true across East Asia, has been analyzed extensively (Eichengreen and Park, 2004; Park, Lee, and Shin, 2007; ADB, 2008). The reasons will be presented in Section III as a transition to policy issues related to capital flows.

### **III. Policy Issues Related to FDI and Capital Flows**

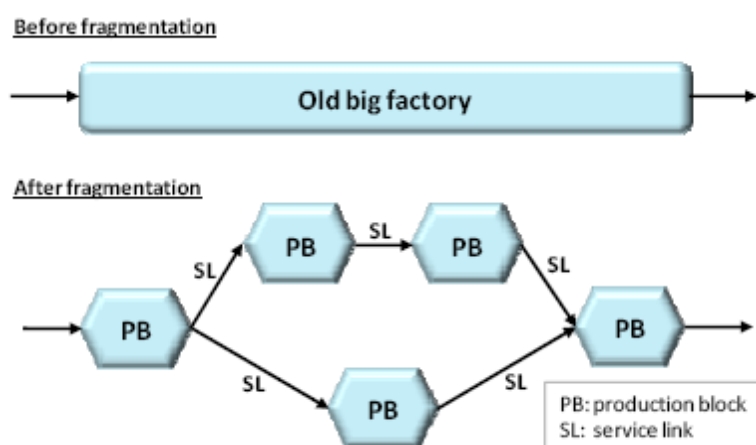
#### *Promoting FDI in ASEAN*

There are two major motives for foreign direct investment (FDI), one is to serve the domestic market and the other is to obtain cheaper inputs (see Shatz and Venables, 2000). The former, which is often referred to as “horizontal FDI”, occurs when a firm decides to duplicate production facilities and sell in two or more markets in different locations, due to the presence of tariffs and other barriers. As such, horizontal FDI and trade are substitutes, since parent firms replace exports with local production. The firm aims primarily to reduce the costs in supplying the market and improve the firm’s competitive position.

The second reason which involves the search for low cost inputs is known as “vertical FDI”. This entails slicing the vertical chain of production into many stages and relocating these different parts of the chain in different countries where costs are lower. Vertical FDI usually leads to trade creation since products at different stages of production are transported between different locations. This phenomenon is known as cross-border production sharing or fragmentation of production. The literature indicates that with vertical specialization, a slight reduction in trade costs can lead to large trade in intermediate goods due to the multiple border-crossings of sequentially finished goods.

Using insights from the fragmentation theory, a number of authors have developed models to explain the phenomenon of cross-border production sharing or fragmentation of production which has emerged not only in East Asia but also in the United States and Mexico/Costa Rica, and between Germany and the Czech Republic/Slovakia/Hungary/Poland (Kimura, 2008). As Figure 4.3 shows, before fragmentation, a firm handles the whole production processes from upstream to downstream. Fragmentation allows a firm to separate production processes into two or more components or segments and locate these in different areas. Jones and Kierzkowski (1990) characterized the fragmentation of production by a series of production blocks (PB) which are connected by various service links (SL).

**Figure 4.3: Fragmentation of Production**



Source: Ando and Kimura (2008)

Many authors recognize the crucial role of the advances in technology and declining costs of services in fostering the growth and development of the fragmentation process (see Jones and Kierzkowski, 2001; Arndt, 2003). The significant declines in transportation, communication and coordination costs have enabled multinational companies (MNCs) to fragment production internationally within the firm and take advantage of differences in technologies and factor prices among countries. These have created new opportunities for profitable production sharing which have been successfully exploited by the countries of East Asia. Jones and Kierzkowski (2004) emphasized the following:

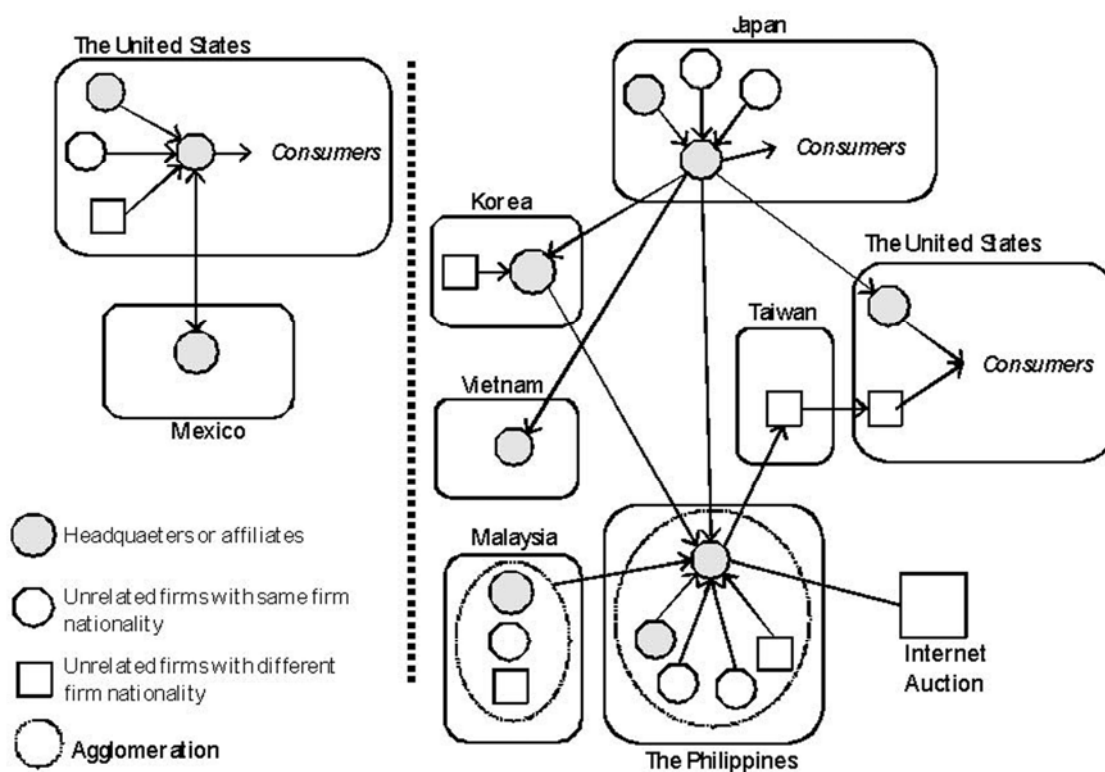
- The optimal degree of fragmentation depends on the size of the market. Economic growth encourages fragmentation and trade in parts and components; and
- The lowering of service links costs promotes fragmentation and outsourcing of output.

Recent research also indicates a trade magnification impact arising from a deeper fragmented production which leads not only to increased intermediate goods trade per se, but to multiple border-crossings of sequentially finished goods with incremental value added at each production stage (Yi, 2003). In turn, the share of final goods trade in overall trade gets smaller as the international fragmentation of production rises (Egger and Pfaffermayr, 2005).



More recently, new economic geography has also been included in the fragmentation analysis particularly in addressing issues on agglomeration and spatial location of economic activity. Jones (2006) noted that increases in the outsourcing of economic activity, whether nationally or globally, may lead to new forms of agglomeration. Combining the fragmentation theory with new economic geography, Ando and Kimura (2005) provided a useful tool in understanding the mechanics of international production and distribution networks that have emerged in East Asia. Their framework is characterized by both intra-firm and inter-firm transactions across a number of countries in a particular region which reflects the more complex operations of production networks in East Asia. As Figure 4.4 shows, the production networks that evolved in East Asia go beyond the simple intra-firm fragmentation accompanied by back-and-forth intra-firm transactions as observed in the US and Mexico.

**Figure 4.4: Production Networks in NAFTA and East Asia**



Source: Ando and Kimura (2008)

The aforementioned framework and the empirical description of trade and investment flows in Section II drive at the main policy issue that must be addressed: How can the AEC enable ASEAN member countries to participate more effectively in the fragmentation and agglomeration process that is ongoing in the global economy? The trade structure shows that there is a solid base ASEAN can work with, given the dominance of machinery exports. However, FDI flows to ASEAN have been declining relative to GDP and the allocation has not been even.

Ando and Kimura identified three major elements that make the fragmentation process possible:

- Production cost saving in fragmented production blocks must be present;
- Cost of service links that connect remotely located production blocks must not be too high; and
- The cost of network set-up is small.

The fragmentation theory suggests that the presence of differences or diversity in development stages may hasten fragmentation and FDI at the production process level if the proper policy environment is created to allow the lowering of service link costs and network set-up costs which are crucial to the operations of production networks (Kimura, 2008). This entails continuing efforts to liberalize and facilitate trade and investment; pursue reforms to lower transactions costs; strengthen institutions and develop economic infrastructures to improve the investment climate and create better business environment. Kimura suggested the creation of industrial estates, development of one-stop services for foreign investors, logistics infrastructure and stable legal system as useful measures that can quickly improve the investment climate in developing countries, and reduce service link costs to enable their participation in production networks. Regional cooperation through the AEC aims to improve economic development by deepening the participation of Member Countries in regional production networks.

Even if FDI were to rise again in the region, policies must be implemented for it to be an effective channel of technology transfer and economic development. For example, a study found that the exogenous components of FDI flows to developing countries did not exert a positive influence on economic growth (Levine and Carkovic, 2002). This conclusion is supported by microeconomic analysis that generally suggests that FDI does not boost economic growth primarily because of the absence of evidence of positive spillovers running from foreign-owned to domestic-owned firms. Another study found limited technology transfer of FDI in ASEAN and therefore an insignificant impact on poverty reduction (Mirza and Giroud, 2004a and 2004b). In this context, the growth effects of FDI are likely to be short-term in nature.

#### *Why is Financial Integration Weak in East Asia?*

Section II reviewed studies that have characterized the level of East Asia's global and regional financial integration as relatively weak. ASEAN contributes a great deal to this state of affairs. As mentioned earlier, many studies have analyzed this phenomenon and many possible reasons have been cited. Below are the major points of convergence.

A significant part of East Asia's weak financial integration has to do with its level and disparity of economic development, particularly when compared with Europe. This is reflected in the financial system of many economies, which has led to the observation that "Asia's legacy of underdeveloped national financial markets and institutions is perhaps the biggest impediment to greater financial integration and intermediation. While some economies have more developed financial sectors than others, and all have huge progress over the past decade, the traditional dependence on bank financing and the legacy of financial repression have stunted the growth of equity and bond markets in many economies" (ADB 2008).

Controls on capital account transactions have been found to have a persistent effect on the volume of cross-border claims, and their impact is longest where those controls were maintained for the greatest number of years (Eichengreen and Park, 2004). Similarly, inadequate deregulation and the limited openness of national financial markets impede their development. Capital controls, inadequate deregulation, and restricted national financial

markets hinder the issuance of local currency bonds, limit investment in foreign bonds by domestic investors, and prevent foreign borrowers from issuing bonds denominated in different currencies in Asian markets (ADB, 2008).

Statistical evidence suggests that East Asian economies have no incentive to diversify their portfolio holdings within the region because of the homogeneity of the economies in terms of the correlations of their output growth with output growth of the global economy (Park, Lee and Shin, 2007). Countries with different structures, subject to different economic shocks, and low business cycle correlation, will find it more advantageous to develop closer financial links with one another. The opposite case is generally true in East Asia. Other related reasons for the absence of a 'regional bias' have been offered: investing in East Asia may involve larger costs since most East Asian countries are developing economies with under-developed financial markets; and information sharing may be more difficult among East Asian countries and economic agents in these countries may have better information about financial markets of developed countries like the US.

The divergence of macroeconomic policies in East Asia may also hamper regional financial integration. Different exchange rate regimes leads to higher exchange rate volatility between various currencies. This can be contrasted to the experience of European countries that adopted the euro. Weak fiscal positions in some countries also prevent their involvement in efforts toward stronger regional financial cooperation.

Another important aspect that can be considered is the absence of a free trade area encompassing East Asia. Park and Eichengreen (2004) argue that since finance follows trade, the lower level of intra- regional exports in Asia (relative to GDP) could partly explain the weaker financial integration.

The reasons for weak financial integration highlight the relevant policy issues that must be addressed. First and foremost is whether ASEAN should pursue greater financial liberalization, including greater financial integration. The appropriate policy measure would depend largely on the empirical evidence, i.e. the impact of greater financial integration on the real economy. The empirical evidence is reviewed in Section IV.

If indeed, greater financial liberalization and financial integration is the appropriate course of action, there is the matter of "optimal sequencing". Some analysts have proposed the standard process as suggested by McKinnon (1993): start with fiscal balance; proceed with domestic financial liberalization and development of prudential bank regulation; accompanied by current account liberalization; end with capital account liberalization, with long-term capital flows such as FDI preceding short term flows.

Others have cited the indirect or "collateral" benefits that accrue to a country's governance and institutions when it opens up to cross-border capital flows (Prasad and Rajan, 2008) implying that some aspects of financial liberalization feed on each other. This is related to the proposal for "optimal cascading". Chow, et al. (2006) argue that it is not necessarily the case that all three dimensions of liberalization—domestic financial sector development, exchange rate flexibility and capital openness—follow sequentially. Instead, it may be more effective if all three are perhaps determined together as a single holistic set of interrelated policy decisions. If so, then it is important to recognize that policymakers desirous of maintaining financial stability while embarking on a liberalization program should not aim for an optimal sequencing problem, but an optimal cascading problem.

Once financial integration is pursued, the balance between global integration and regional integration and their relationship must be determined. A case in point is the utilization of the foreign exchange reserves of East Asian economies. The limited development of regional financial markets and their small fragmented nature have led to a large part of Asian savings being intermediated outside the region. In particular, Asia recycles its capital inflows by purchasing US dollar denominated investment products such as US Treasuries, and the funds return to Asia through US direct and portfolio investment. Fostering domestic financial markets and regional financial integration is important because it facilitates the intermediation of Asian savings within the region, as well as attracts foreign investment in instruments denominated in the domestic currency (Chow, et al. 2006). Such alternative sources of funding would reduce Asia's reliance on foreign currency borrowing and concomitantly, the risk exposure of the region to maturity and currency mismatches.

The question is whether it would be beneficial to encourage intra-regional financial intermediation which would certainly reduce global financial integration. East Asia—particularly through the ASEAN+3 process—has been actively promoting regional financial integration. However, some analysts believe that any trade-off is short-term in nature and that regional and global integration are complementary in the medium- to long-term (Garcia-Herrero and Wooldridge, 2007).

#### **IV. Impact of Freer Capital Flows and Free Investment Flows: Empirical Evidence**

##### *Regional Integration and Investment Flows*

Table 4.11 summarizes the main findings of studies that examined the impact of the European Union, NAFTA, and MERCUSOR on FDI inflows. Studies on ASEAN are also presented.

##### The European Union (EU)

Studies on European economic integration generally provide empirical support for the proposition that integration is a positive determinant of FDI. This suggests that the integration process was a significant influence in the rise of investments in Europe, along with its changed pattern and flow over the years. While some studies suggest otherwise, i.e., regional integration was not a catalyst for increased foreign investment, these were more related to the differing impact of the two stages of integration in Europe and the nature of flows (i.e. inward and outward investment) within Europe.

Blomstrom and Kokko (1997) observed that the common market had attracted investments from the US which might otherwise have been located in other European countries. However, studies of later stages in European integration have been more mixed in their findings about the effects on inter-regional foreign direct investment. Lipsey (1990) [in Blomstrom and Kokko,1997] concluded that the impact on US multinational firms was relatively small after the 1992 program while Dunning (1992), Thomsen and Nicolaidis (1991), Balasubramanyam and Greenaway (1992 as cited in Blomstrom and Kokko, 1997) claimed otherwise. Barrell and Choy (2003) and Barrell and Pain (1997 as cited in Barrell and Choy, 2003) also argue that European integration had an important effect on the pattern and level of FDI within Europe.

## North American Free Trade Agreement (NAFTA)

On the whole, the literature suggests that the impact of NAFTA on FDI is tilted more towards the positive effects of regional integration. However, the same literature reveals that the main beneficiaries of the integration process are the US and Canada, and that benefits which accrue to Mexico are deemed limited compared to what theory predicts.

Blomstrom and Kokko (1997) observed that when regional trade and investment barriers were reduced as a result of the NAFTA, the US share of Mexican exports increased from 70 percent in the late 1980s to over 86 percent in 1995, while the value of Mexican exports more than quadrupled over the same period as a result of the increasing sales to US. Similarly, Monge-Naranjo (2002) postulated that NAFTA gave a significant advantage to Mexico.

<b>Table 4.11: Summary of Studies on Regional Integration and its Impact on FDI</b>	
<b>Author (Date)</b>	<b>Impact of Regional Integration on FDI</b>
<b><i>The European Union (EU)</i></b>	
Franko (1976) Pelkmans (1984)	provided evidence of investment diversion caused by integration
Lipsey (1990)	locational changes of fixed investment by US multinational firms were relatively small after the 1992 program
Molle and Morsink (1991)	intra-EC trade and intra-EC investment are complementary to each other, but only above a certain level of trade intensity
Thomsen and Nicolaides (1991), Dunning (1992) Balasubramanyam and Greenaway (1992)	positive impact as evidenced by the surge in American and Japanese investments in Europe in response to both opportunities and threat created by the integration process
Blomstrom and Kokko (1997)	positive impact; the common market had attracted investments from the US which might otherwise have been located in other European countries.
Barrell and Pain (1997)	significantly affected the pattern and level of FDI within Europe and considered to be a major vehicle for competition and productivity
Sekkat and Galgau (2001)	creation of the European Single Market did not significantly affect FDI inflows from non-EU member states
Barrell and Choy (2003)	increased integration involved increased internal trade as the customs union was perfected, but that increased trade integration has not been as important since 1980
De Sousa and Lochard (2004)	First EU enlargement in 1986 was not beneficial but positive in the second enlargement in 1995
Kyrkilis and Pantelidis (2004)	enlargement after 1980 had no significant effect on intra regional FDI
<b><i>North American Free Trade Agreement (NAFTA)</i></b>	
Blomstrom and Kokko (1997)	bulk of the inflows of FDI to Mexico were directed to the local market in response to the country's improving economic and institutional environment and not mainly attributed to the decline in trade barriers
Monge-Naranjo (2002)	NAFTA gave a significant advantage compared to other Central American countries with respect to attracting FDI
Robertson (2006)	provided indirect evidence that post-NAFTA FDI tends to be vertical in nature

Waldkirch (2008)	confirmed commonly held perceptions that the US is the most important source of FDI in Mexico and provided evidence of positive effect of FDI on productivity, in particular, total factor productivity (TFP)
Feils and Rahman (2008)	positive but selective effect on FDI inflows into the region
<b><i>Mercado Common del Sur (MERCOSUR)</i></b>	
Blomström and Kokko (1997)	significant changes in trade and investment rules in the region resulted in relatively strong FDI effects
UNCTAD (2000)	above-average growth in FDI inflows was attributed to a few exceptionally large acquisitions, rather than a permanent change towards Mercosur in the composition of FDI flows
Yeyati et al (2003)	market size has a significant effect in attracting FDI as evidenced by the booming of FDI inflows
Ciravegna (2003)	provides empirical evidence, to a limited degree, that regional integration can create the appropriate conditions for multinationals to upgrade their operations in developing countries, given that the region is also gradually being inserted into global networks
Kubney et al (2008)	developments at the level of individual Mercosur-member countries suggest that regional integration has been just one, and possibly even a minor, factor driving FDI inflows
<b><i>Association of South East Asian Nation (ASEAN)</i></b>	
Barrell and Choy (2003)	likely limited impact, if any, since many of the trade barriers within East have already been removed, thus gains of scale that can come from specialization would have probably been reaped already
Kawai (2004)	increased competition among multinational firms, which resulted partly from liberalization and deregulation in various sectors in many countries, promoted their global activities, thereby expanding trade and FDI
Park and Park (2007)	integration does not guarantee increased investment flows but selective integration bloc can optimize the benefits of integration

Waldkirch (2008) observed that FDI into Mexico increased dramatically since the inception of NAFTA and provided evidence of a positive effect of FDI on productivity including total factor productivity (TFP). Feils and Rahman (2008) showed that NAFTA has had a positive effect on FDI inflows into the region but not all partner countries benefited to the same degree. The major beneficiaries were the US and Canada, while Mexico does not appear to have attracted additional FDI due to NAFTA. These findings, along with earlier findings on the EU, are consistent with some of the theoretical arguments that posit unequal gains in terms of inward FDI among the members following regional integration.

#### Mercado Common del Sur (MERCOSUR)

Studies analyzing the impact of MERCOSUR on FDI are ambiguous in terms of both overall attractiveness to FDI and the distribution of FDI among member countries. Kubney et al (2008)'s analysis showed mixed results. In particular, significant changes in trade and investment rules in the region resulted in relatively strong FDI effects for Mercosur as a whole but smaller members like Paraguay were lagging behind in attracting new FDI (Blomström and Kokko, 1997). Market size has had a significant effect in attracting FDI as evidenced by the increase in FDI inflows in the second half of the 1990s yet some regard Mercosur as unsuccessful in attracting FDI (Yeyati et al., 2003). The increase in FDI inflows up to 1997 closely resembles the general trend

observed for the rest of Latin America and the above-average growth in FDI inflows was attributed to a few exceptionally large acquisitions, rather than a permanent change towards Mercosur in the composition of FDI flows to the whole of Latin America (UNCTAD, 2000 in Kubney et al, 2008).

Kubney et al (2008) observed that developments at the level of individual MERCOSUR member countries indicate that regional integration has been just one, and possibly even a minor factor in driving FDI inflows. In a survey conducted by UNCTAD (2000), it revealed that in Brazil, transnational corporations' decisions on investing and any sustained effects of MERCOSUR integration were clearly dominated by country-specific boom and bust phenomena. The study of Ciravegna (2003) which focused on the automotive value chain provided partial support to the view that regional emphasis was an influential determinant which allowed the Brazilian automotive plants to acquire certain links of the chain, such as product development, and some decisional autonomy.

#### Association of South East Asian Nation (ASEAN)

ASEAN is the loosest among the regional arrangements considered in this section. Barrell and Choy (2003) discussed the evolving pattern of trade in East Asia and its determinants, surveying the recent literature on gravity models and trade. They observed that East Asia is more externally orientated than Europe and suggested that that any gain from trade following an East Asian integration would be substantially smaller. Furthermore, many of the trade barriers within East Asia, especially in terms of tariffs, have already been removed through the multilateral platforms such as WTO, APEC and ASEAN as well as through FTAs between individual countries. Hence the gains that can come from specialization probably have already been reaped. Kawai (2004) similarly observed the rapid expansion of both foreign direct investment (FDI) and FDI-induced manufactured trade in East Asia since the 1980s. This is reflected in the emergence of a so-called "FDI-trade nexus" which is comprised of regional production chains and networks formed by multinational corporations.

#### *Impact of Capital Account Liberalization: Empirical Evidence*

Despite the theoretical and intuitive arguments in favor of greater capital mobility, the benefits have to be determined empirically. Two general issues must be addressed: the impact of global financial integration and whether regional financial integration should be pursued ahead of greater global financial integration.

In one study, an indicator of capital account liberalization was included as an explanatory variable for economic growth (Rodrik, 1998). The conclusion reached was that the data provided no evidence that countries without capital controls have grown faster, invested more, or experienced lower inflation. The study of Rodrik was criticized by Eichengreen (1998) as being biased. Variables that are negatively associated with growth but positively associated with the decision to open the capital account were inadvertently omitted.

These are two studies that provide a flavor of the debate. A recent and comprehensive review was conducted by Obstfeld (2007) who covered the major empirical studies done over the past decade. He finds that at the macro level in particular, it is difficult to find unambiguous evidence that financial opening yields a net improvement in economic performance for emerging countries. The major problems in empirical evaluation are the bundling of financial opening with a potential host of other growth-friendly reforms, and the endogeneity of the liberalization

decision itself. Microeconomic evidence may provide less ambiguous evidence, but even in the micro context identification problems can remain.

This does not imply, however, that financial liberalization, or specifically capital account liberalization must be abandoned. Plausible explanations exist why empirical work does not unambiguously show that capital account liberalization is beneficial on a net basis. One explanation could be that there are threshold levels of institutional development only above which the costs exceed the benefits. This could also explain why the correlation between growth and the use of foreign capital is strongly positive for industrial countries but not for low-income countries. Related to this is that collateral benefits of openness to foreign capital are greater at higher levels of development while the associated costs and risks are greater at lower levels of development. A third possible reason is that crude quantity-based measures of the use of foreign finance, such as the current account deficit or gross inflows, may not capture the influence of foreign capital.

Following this logic, Obstfeld (2007) argues that despite the skimpy direct evidence that developing countries gain from financial globalization, they should nonetheless proceed—albeit cautiously, in an incremental manner. There is strong evidence that domestic financial development spurs growth under the right conditions, and these conditions—plus domestic financial development itself—are likely to make capital inflows from abroad more productive. Moreover, in the long-term, an internationally open financial system is likely to be more competitive, transparent, and efficient than a closed one.

The above analysis highlights the issue of appropriate sequencing or cascading of policies related to financial liberalization. This will be discussed in further detail in Section V.

Several studies have been conducted to support the case for regional financial integration. The original 1988 Cecchini Report cautioned that fully liberalizing capital movements will increase the risk of exchange rate instability. In order to reap the benefits of economic integration, the report proposed increased monetary policy cooperation through a strengthened European Monetary System (EMS). This eventually led to the establishment of the euro area.

A study by London Economics (2002) examined the quantitative impact of European financial integration focusing on the EU-15. The empirical work suggests that trading costs could fall sharply as a result of full European financial market integration. Based on a model linking a firm's cost of equity capital to the trading costs of the firm's equity on secondary markets, a strong, positive relationship between trading costs and the cost of equity capital was established. Meanwhile, it was shown that the cost of equity capital would fall across Europe by about 40 basis points on average. This estimate was very similar to the reduction in the cost of capital expected by the vast majority of financial market participants responding to an accompanying survey.

In a recent paper, Schiavo (2005) investigated the relation between financial integration and output correlation in the context of the Optimum Currency Area theory. He finds robust and consistent evidence that monetary integration enhances capital market integration, which in turn feeds back into the system and results in closer business cycles synchronization. This mechanism adds to the trade channel that would support financial integration and lends credit to the hypothesis that countries are better candidates to join a monetary union *ex post* rather than *ex ante*. This is consistent with earlier finding of Garcia-Herrero and Wooldridge (2007) that emerging markets in Europe are integrated mostly with the EU-15. By doing so, it would create



a virtuous cycle and enable the emerging markets of Europe to integrate seamlessly into the EU.

However, it is not clear whether this experience is applicable to ASEAN, primarily because of the absence of the institutional mechanisms to support the dynamics that are involved. What may be relevant is the experience of Spain as documented by Royo (2007). He argues that while the overall benefits of EMU membership are undeniable, contrary to expectations, it has not led to a process of deep economic structural reforms that would have fostered the development of an economic growth model based on value added and productivity. While the arguments are counter-intuitive and are inconsistent with other evidence, the examination of the Spanish case will show that the process of economic reforms has also to be a domestic process led by domestic actors willing to carry them out.

A study by the UFJ Institute (2003) estimated the impact of regional trade integration in East Asia on the volume of cross-border capital flows. Simulations using a simple model showed the following: (i) a stable and continuous inflow of export-oriented FDI is needed to sustain the targeted growth of the regional economy; (ii) cross-border loans will result from stable economic growth; and (iii) inflows of portfolio investment are found to be affected by the size of the domestic capital market and the presence of foreign investors but the volatility of such flows and limited data preclude robust estimates. The findings are consistent with the empirical result of Park and Eichengreen (2004) which showed that lack of formal trade integration has limited regional financial integration in East Asia.

## **V. The AEC and Capital Flows: Evaluation and Adjustment Issues**

### *Potential Impact of the AEC on Investment Flows*

The AEC Blueprint investment provisions and major elements focus on the more advanced areas of investment in order to integrate the region more fully into the global economy; attract more investments and technology; and promote ASEAN as a single investment area. A distinct feature of the AEC Blueprint is its recognition of the importance of regional cooperation in facilitating efficiency seeking FDI and deepening the region's participation in dynamic production networks. Another important feature of the AEC is its adoption of open regionalism.

The key investment provisions of the AEC are summarized in Table 4.12 and are classified based on the following transmission channels through which the AEC can affect FDI flows:

#### Investment provisions

Under the ASEAN AIA, all industries shall be liberalized and national treatment and most favored nation treatment granted to investors, with some exceptions. Member countries are committed to increase transparency of investment rules and policies and simplify procedures for applications and approval of investment projects at all levels. The removal of regulatory and legal barriers to international capital flows and the participation of foreign investors in domestic firms and financial markets will generally lead to more FDI as new sectors are opened up, as foreign ownership restrictions are relaxed, and performance requirements are abolished. Note, however, that these provisions alone are not a guarantee of increased FDI. Significant increases in FDI can be realized only if the most important sectors are opened up and member countries address their core business environment issues. This requires that member countries implement complementary policies that help improve the overall investment climate.

### Third wave investment provisions affecting the investment climate

The AEC also includes deeper integration features such as trade in services, setting and harmonization of standards, competition law, customs cooperation, IPR, and dispute settlement. These will improve the host economy's investment environment and are likely to attract FDI inflows.

Transmission Channel	Expected Change in FDI & Capital Flows	Notes
PTA investment provisions	Positive	Investment liberalization; most favored nation treatment and national treatment; investment protection, promotion and facilitation
Other "deep integration" provisions that improve host country's investment climate	Positive	Services, Standards, Competition, Customs Cooperation, IPR, Dispute Settlement
Trade and FDI <ul style="list-style-type: none"> <li>• Horizontal FDI</li> <li>• Vertical FDI</li> </ul>	Positive due to the expected shift from horizontal to vertical FDI and increase in horizontal FDI for services	With productions networks, FDI and trade are complements; Singapore, Malaysia, Thailand, Philippines and Indonesia are already active & important participants of complex regional production networks Services liberalization is expected to increase horizontal FDI
Market size (extended common market hypothesis)	Positive	In the literature, market size is the most robust determinant of FDI, suggests a positive relationship between market size and FDI
Dynamic/growth effects	Positive	FDI is positively associated with economic growth, though direction of causation is unclear.
Source: The transmission channels are based on Medvedev (2006).		

### Trade flows and FDI effects

The theoretical and empirical literature on trade and investment provides an ambiguous answer to the direction of the relationship between trade and FDI. The magnitude of the impact of preferential trade liberalization on FDI flows could be either positive or negative depending on the type of FDI along with industry characteristics and MNC's capacity to undertake new investment projects. For horizontal FDI, which is based on the tariff jumping perspective with trade and FDI as substitutes, intra-regional FDI flows are expected to decline because trade liberalization makes exporting from the home country relatively more attractive than FDI as a way to serve the regional market. For vertically integrated FDI, where the operations of MNCs different affiliates are specialized, regional integration is expected to increase regional flows.

The earlier analysis of trade and investment in ASEAN and East Asia has shown the growing importance of the international trade in parts and components along with the fragmentation of production processes and the development of complex networks. Singapore, Malaysia, Thailand, Philippines and Indonesia are key participants in international production sharing and production networks. Viet Nam is also involved while Cambodia, Lao and Myanmar are about to take part.

With regional cooperation in the liberalization and facilitation of investment, ASEAN aims to deepen its integration into the global economy and become a more dynamic participant in regional/global production networks. This is expected to lead to net increases in FDI inflows arising from vertical FDI inflows. As Arndt (2003) indicated, a free trade area that is clearly trade-diverting under traditional circumstances becomes trade-creating when the free trade area is carried out within the context of deeper integration, where preferential liberalization is accompanied by production sharing.

It is important to note that average tariffs in ASEAN are already at a relatively low level, even with peak tariffs (see Table 4.13). For the ASEAN6 countries, effective average tariff is 5.46% and average most favored nation tariff is 5.8%. For ASEAN, effective average tariff is 6.5% while average MFN is 8%. This implies that tariff-hopping FDI might no longer be significant.

Plummer (2007) pointed out that the trade and investment reforms under the AEC are expected to lead to a shift from horizontal to vertical FDI flows to the region as multinational enterprises take advantage of the opportunities associated with vertically integrated, specialized plants across a diverse region like the ASEAN. There will be less horizontal FDI as horizontal production activities are consolidated. The AICO Scheme has illustrated a successful integration initiative of the ASEAN as it encouraged multinational enterprises particularly those in the electronics and automotive industry to adopt efficient production networks throughout the region.

Box 4.2 looks at the EU experience which highlights the importance of trade integration for the deepening of international production networks in the automotive industry. A prominent example is the case of Audi, which utilizes its Hungarian plant to manufacture engines, a relatively labor-intensive part of motor vehicles. The plant has been Hungary's biggest exporter and one of the country's highest revenue-companies for a number of years (Dieter, 2007). In ASEAN, the creation of AFTA in 1992, which reduced tariffs to a range from 0 to 5% by 2003, made the integration of production in the region attractive. In the automotive industry, this led to the systematic creation of regional production networks by Japanese automakers through FDI.

In a study of the possible determinants of intraregional flows to Asia using a gravity model, Rajan (2008) found that exports and FDI appear to be complementary to one another, higher exports stimulate future FDI flows. This is suggestive of vertical specialization and production integration between Asian economies as characterized by Ando and Kimura (2005).

For services, the liberalization and removal of barriers to trade in services is expected to result in increases in horizontal FDI.

#### **Box 4.2: Role of Regional Integration in Deepening Production Networks Experience of the Automotive Industry in Europe and East Asia**

Both the European and East Asian experience has shown the importance of the integration process in facilitating regional production networks. This is best illustrated by the dramatic transformation that took place in the automotive industry in the past decade.

The auto industry has been a leading driver of change in the industrial development of Eastern Europe. The development of the car and component industry was led by Western European companies like Volkswagen, General Motors/Opel, Fiat and Renault. In recent years, manufacturers from East Asia like Toyota, Kia, and Hyundai have started to manufacture vehicles in Eastern Europe. Specialization and outsourcing in Europe has been supported by the presence of a pool of specialized small and medium enterprises.

After the creation of a free trade agreement between the European Union and Hungary (which became operational in March 1992), Audi, a German auto manufacturer, decided to relocate its entire engine manufacturing to Hungary. Today, the Audi Hungarian Motor Kft. in Győr is one of the most important suppliers of engines for Audi and the rest of the Volkswagen Group. The company was founded in Hungary in February 1993 after production locations had been compared all over Europe. Note that Hungary was in a good position to engage in component manufacturing because the country was supplying components to USSR car manufacturers for decades.

The plant site covers an area of about 1.7 million square meters and has a workforce of 5,000 employees. The plant has been Hungary's largest exporter and one of the highest-revenue companies in the country. Almost everything in the Audi plant is subcontracted out to local suppliers. In 2005, the plant produced a total of 1.69 million engines. A tool-making shop with total investment of 40 million euros was added in 2005.

In East Asia, trade liberalization through the ASEAN Free Trade Area (AFTA) has made the integration of production in the region attractive. This enabled auto makers unrestricted access to South East Asian market which is essential for achieving economies of scale and for the development of full production instead of assembly of completely-knocked –down kits. Prior to these, ASEAN had the Brand-to-Brand Complementation Scheme which was signed in 1988 allowing intra-regional tariff preferences and local content accreditation. This was replaced by the ASEAN Industrial Cooperation Scheme effective 1 November 1996. On January 28, 1992, the ASEAN member states agreed to extensively remove barriers to intra-ASEAN trade by creating the AFTA. Its main mechanism was the Common Effective Preferential Tariffs which would reduce tariffs to a range from 3 to 5 percent by the year 2003 for the automotive industry.

With the creation of AFTA, Japanese auto makers systematically created production networks through accelerated FDI. These changes did not only improve the competitiveness of Japanese firms, but also contributed to the de facto integration processes in Asia and to the regionalization of production.

Sources: Dieter (2007), Toyota Motor Corporation

Country Group	Tariff	Simple Average	Weighted Average	Standard deviation	Minimum rate	Maximum rate
ASEAN6	Effective average tariff	5.46	2.43	10.6	0	170
ASEAN6	Bound tariff	23.04	11.19	14.82	0	226
ASEAN6	Most favored nation	5.81	2.96	11.48	0	170
CLMV	Effective average tariff	11.28	12.22	16.31	0	150
CLMV	Bound tariff	28.27	32.23	41.29	0	550
CLMV	Most favored nation	11.6	13.67	14.64	0	150
ASEAN	Effective average tariff	6.47	3.01	12.32	0	170
ASEAN	Bound tariff	24.09	11.33	22.77	0	550
ASEAN	Most favored nation	8.13	3.6	13.17	0	170

Source: Atje (2008); WITS

### Market size

The literature states that to the extent that a preferential trading arrangement (PTA) creates an expanded market through closer integration of PTA partners; a positive relationship between PTAs and FDI is implied. Thus, a large regional market is expected to be a more attractive investment site for foreign MNCs than the fragmented national markets separately. After the formation of the Single Market in the European Union, its share in global FDI inflows increased from about 30% in the 1980s to around 50% in the 1990s and has remained there (UNCTAD, 2006). Mexico also experienced a sharp increase in its FDI inflows after joining the NAFTA which rose from an average of US\$12 billion during the 1991-1993 period to US\$54 billion in the period 200-2002 (Kose, et al, 2004 as cited in Kumar, 2008). Note, however, that the PTA extended common market effect is not automatic; its size depends on the economic and geographic proximity of the partners (Medvedev, 2006). Kumar (2008) also indicated that the market extending or enlargement effect is only one and a relatively minor effect of regional trading arrangements.

### Long-term growth effects

FDI and growth/dynamic effects studies indicate that regional integration may affect FDI through more dynamic means by generating additional economic growth. Studies have shown that controlling for other factors, FDI flows are positively related to economic growth. The literature attributes this positive relationship to the growth-enhancing knowledge and spillovers from FDI. However, the direction of the causation is not clear, for instance, Rodrik (1999) suggested that FDI tends to be located in more productive and faster-growing economies. Medvedev (2006) further indicated that while the positive FDI-growth link is well established, the connection between regional integration agreements and growth is much more ambiguous which makes the regional integration-growth-FDI hypothesis uncertain.

### *Adjustment Issues and Recommended Measures for Investment*

The AIA constitutes the investment pillar of the AEC upon which the framework for the implementation of the AEC investment liberalization and facilitation will be built. Deeper

investment liberalization and facilitation are necessary in order to integrate the region more fully into regional and global production networks; attract more investments (particularly efficiency-seeking FDI) and technology; and promote ASEAN as a single investment area. At its current form, however, Soesastro (2008) noted that the AIA is based on an outdated concept and there is a need to develop a new scheme that can promote the region's dynamic involvement in regional and international production networks. Lim (2008) also called for an urgent re-examination of the AIA given the importance of intra-Asian investment more than intra-ASEAN investment, particularly after the 1997 Asian Financial Crisis. Pupphavesa (2008) raised some detailed weaknesses of the AIA and suggested ways to make investment liberalization more effective:

- The current mechanism of accession to other ASEAN countries' investment liberalization is conditional on ASEAN-X basis, while this encourages voluntary reciprocal liberalization and discourages free riding, it allows X countries to fall behind in the liberalization process. This weakens the regional force of attracting investment and reduces the potential benefits of the induced investment. Hence, ASEAN member countries should make stronger commitment to collective approach and common time frame of trade and investment liberalization.
- The time frame of 2015 for investment liberalization is long considering the rapid globalization pace and strong FDI competition. To shorten this, ASEAN member countries should review impediments to inward FDI classifying them into administrative, market access and national treatment standards, incentives, and operational restrictions and consider the causes or rationale of those impediments with the aim to remove as many as and as soon as possible. Despite the absence of clear evidence in the literature on the effectiveness of tax incentives in attracting FDI, East Asian countries offer generous packages of tax incentives. ASEAN countries would be better off with harmonized tax incentive and better, tax incentives should be removed.
- Preferential treatment is granted only to ASEAN investors for a certain period of time and extended to all investors in later years. To achieve competitiveness in attracting FDI and competitive production base, ASEAN investment liberalization should be unconditional MFN.
- Trade and investment liberalization should go in tandem with one another, hence the TEL and SL in trade in goods and services should be minimized and eliminated as soon as possible.
- Trade and investment liberalization should be accompanied by structural adjustment measures in order to facilitate the restructuring process. ASEAN Member countries need to come up with, unilaterally and collectively, with a structural adjustment and reform assistance and capacity building measures to help those that would be adversely affected by the reforms.

Sudsawasad (2008) noted the absence of a comprehensive network of tax treaty agreements within the ASEAN which may increase business costs and impede the regional integration process. While there seems to be insufficient evidence that corporate income tax rates have a significant impact on FDI flows to East Asia, the author found that bilateral income tax treaties have a positive relationship with FDI inflows to the ASEAN5. This finding implies support for the FDI promotion rationale for tax treaty formation. Sudsawasad indicated that while Singapore and Indonesia have extensive bilateral tax treaty networks, others like Brunei, Lao, and Myanmar have very limited networks with other East Asian countries. Except with Thailand, Cambodia has hardly any tax treaty agreements with the East Asian countries. Several ASEAN member countries also offer more favorable treaty agreements to non-ASEAN member countries than

they do to ASEAN member countries (Farrow and Jogarajan, 2006 as cited in Sudsawasd, 2008). Many treaties were also concluded many years ago and could be out of date. Hence, it is important that the new AEC develop a regional tax regime and a standard tax treaty framework for the region.

In a very comprehensive study assessing the impact of the AIA on FDI inflows to ASEAN, Plummer (2007) found that in general, the AIA had a positive effect and has contributed to opening up sectors and reducing barriers to investment. In terms of its impact on ASEAN FDI inflows, the author clarified that no definitive answer can be given because of the short time the AIA has been implemented and the setbacks that it suffered due to the Asian financial crisis. To strengthen and enhance the AIA, the author proposed the following priorities:

- Introduction of collective measures to be taken by all ASEAN Member Countries and encourage individual Member countries to lower transaction costs and strengthen market factors to facilitate investment and promote regional production networks;
- Widening the scope of industries by transferring mode 3 of services (commercial presence) from the ASEAN Framework Agreement on Services (AFAS) to the AIA;
- Combine the AIA, the 1987 Agreement for the Promotion and Protection of Investments, and appropriate provisions of bilateral investment treaties into a comprehensive “AIA-Plus” agreement;
- Harmonize national provisions on equity ownership, land tenure, nondiscriminatory taxation, movement of skilled labor, and financial flows at the ASEAN regional level to ensure national treatment;
- Formulate measures to promote public-private partnerships and disseminate information on ASEAN’s investment environment, opportunities, and products such as outreach programs and through the internet or one stop investment shops;
- Regular engagement of the private sector in ASEAN to provide inputs, ideas, and information on investment;
- Rationalize timeframes for actions, current timeframes are too many and should be consolidated;
- Identify and remove investment impediments within a clear timeline and specific procedures for implementation;
- Reduce the number of industries and sectors under the sensitive list and review those covered with a view towards a phase out;
- Make the AIA-plus an integral part of the AEC as its provisions would cover investments, services, capital flows, and skilled labor associated with investment;
- Establish a mechanism for monitoring progress; and
- Expand the mandate of the ASEAN Secretariat and strengthen its technical and analytical capabilities.

All these are considered important and should be taken into consideration by the committee currently reviewing the AEC. Finally, ASEAN should learn from the experience of its North Asian neighbors and also those of some of its member countries in harnessing the benefits of FDI. It should be noted that firm-level competitiveness is primarily a function of technology and technological capability, the development of which can help overcome the constraints to regional economic integration. Box 4.3 explains the issues that are involved and gives a practical measure in the form of the Local Industries Upgrading Program. This program can be implemented at the ASEAN level, with Thai firms, for example, being the source of technology and CLMV firms being the recipients.

### **Box 4.3. Capability-building Spill-overs from FDI\***

The large variety of possible direct interfaces between the domestic and foreign knowledge subsystems may take the form of FDI, joint ventures, licensing, OEM, original design manufacturing, original brand manufacturing, subcontracting, franchising, management, marketing, technical service and turnkey contracts, overseas training, overseas acquisition of overseas investments, strategic partnership or alliances, for technology, R&D contracts, bilateral cooperative technology agreements and material sub-assembly. FDI is generally expected to bring in advanced skills, know-how, and technology. Direct effects from FDI inflows occur through its contribution to higher productivity, upgrading of technological and managerial practices, R&D, employment and training. Indirect spill-overs may occur through collaboration with local R&D institutions, technology transfer to local downstream and upstream operations and turnover of trained personnel.

The literature on FDI often assumes that FDI leads to substantial potential capability-building spill-overs through horizontal and vertical linkages. It is also recognized that local firms' degree of success actually benefiting from them largely depends on their absorptive capacity. The empirical evidence on productivity, wages and export spill-overs in developing, developed and transitional economies reveals, however, that it is far easier to identify potential spill-overs in theory than to actually verify them empirically.

Efforts have been made to identify differences in technological capability between foreign and local firms in various developing regions, seeking to estimate how public policy could best help to harness the latent diffusion potential. Not surprisingly, it was found that such potential indeed exists, although its realization is hindered by foreign firms limited reliance on whatever domestic IS there is. Since local product R&D activities pose stringent demands on the services of the R&D support infrastructure, foreign firms typically rely on their home base for those services. However, foreign firms do tend to utilize local personnel in their process R&D activities and, to a much lower extent, in product design and development activities.

Singapore provides an interesting case of leveraging FDI potential capability-building spillovers by turning domestic SMEs into attractive input and service suppliers. Through the Local Industries Upgrading Program (LIUP), originally launched in 1986, the government encouraged transnational corporations to adopt a group of SMEs and transfer technology and skills to them. LIUP covered the salary of full-time procurement expert to work for specific periods with the 'adopted' firms and help them upgrade their production and management capabilities to international standards and precision norms. LIUP encompassed three phases: (i) improvement of overall operational efficiency such as production planning and inventory control; (ii) launching of new products or processes; and (iii) joint product, process R&D activities with TNC partners. The sequencing of policy instruments in Singapore shows that first a critical mass technical trained workforce was developed and then incentives primarily in the form of research grants to encourage both local and foreign enterprises to increase their R&D investments were given. This stimulated a strong demand for innovation, particularly in activities serving foreign markets.

\*Lifted from Box 6.6 of UNIDO 2005 Industrial Development Report, page 75.



### *Adjustment Issues and Recommended Measures for Capital Flows*

The policy agenda for financial liberalization focuses on maximizing the gains and minimizing the risks associated with this process. There are policy measures at all three levels: domestic, regional and international. A major issue for this chapter is how regional monetary and financial cooperation can facilitate the transition towards greater financial openness, including greater capital account liberalization.

Many analysts agree that strengthening national financial systems should be prioritized. The ADB (2008) identifies the major weaknesses to be: insufficient market opening and capital account liberalization; the limited and varying degrees of improvements in transparency, financial regulation, financial supervision, and governance; inadequacies in risk management in financial firms and markets; and the heterogeneity of supervisory, accounting, and auditing rules and regulatory frameworks across countries.

Chow, et al. (2006) identified the major policy achievements of ASEAN+3 countries in each of the six areas associated with financial liberalization. Erskine (2004) recommended a program for each of the ASEAN member countries in the area of capital account liberalization. Meanwhile, ADB (2008) summarized the progress of selected Asian countries in terms of financial reforms in response to the 1997 financial crisis and outlined the challenges to further reforms. The combination of the analyses could be a basis for a more updated national agenda for financial liberalization. Such an agenda would necessarily include: i) strengthening the banking sector primarily by improving its regulation and supervision; ii) adoption of international norms and standards; and iii) promoting capital markets, especially local currency bond markets, to create the liquidity and innovative financial products required to attract a broader and more diversified investors' base.

Detailed national programs are not part of this chapter. What would be of interest is how regional financial cooperation can advance the development of national financial systems. The most important mechanism would be the Policy Dialogue and Surveillance Process (PDSP). At present, the PDSP is carried out through the ASEAN+3 Economic Review and Policy Dialogue (ERPD) and the ASEAN Surveillance Process (ASP). A common component is a peer pressure mechanism that is intended to induce appropriate policy responses and reforms in the financial sector. The ERPD and ASP also have common weaknesses, particularly the inability to ensure forthright and effective policy discussions. The primary source of these weaknesses is the absence of an independent, professional organization that can prepare relevant analyses, and the "ASEAN way" that respects "consensus and non-interference in others' domestic affairs".

Whether it be under the purview of ASEAN or ASEAN+3, the PDSP must be transparent, comprehensive, and open in order to ensure its effectiveness. One way for the PDSP to attain these qualities is to restructure its objectives. Thus instead of focusing only on the ability to anticipate a crisis and minimize its adverse impacts, the PDSP should also aim at the following: (i) coalescing of common interests in the region and projecting these in a global rules setting; (ii) supporting domestic policy making, and hence domestic stability and growth, by providing mechanisms for frank and useful discussion of economic issues and problems in a constructive and supportive environment, and by creating peer pressure for policymakers in less well performing countries to pursue corrective stabilizing policies; and (iii) providing necessary inputs for regional economic cooperation.

Apart from supporting domestic reforms, regional financial cooperation can enable ASEAN member countries to advocate for reform of the international financial architecture in order to

reduce the volatility and risks associated with capital flows. This essentially recognizes that capital account liberalization is inevitable but it would be useful to ensure that the international economic environment is conducive to such action. This is part of the recognition of common interests and projecting them in a global rules setting which of course would be more effective at the ASEAN+3 level. A case in point is the insertion of collective action clauses in loan contracts or even the proposal for a Sovereign Debt Restructuring Mechanism. While these are only modest proposals, the use of CACs and the SDRM were not supported by the US Treasury. Through regional cooperation ASEAN member countries can lobby more effectively for their consideration.

Regional cooperation would also be useful in increasing the relevance of capital controls that are designed to manage surges in capital inflows, e.g. reserve requirement. Such an instrument can be more effective if it is broadly and specifically endorsed at the international level (Grenville, 2007). The endorsement (e.g. by the IMF) can be made in the context of offering operational guidelines on how to make it more effective in achieving its objectives, weighing up the pros and cons and identifying the specific circumstances when it might be most effectively used. ASEAN can support this effort and even if it falls short of “international endorsement” applying the instrument at a regional level will make it more effective than each country acting alone (as was the case in Thailand in December 2006).

Other relevant regional efforts include fostering the growth of regional bond markets, strengthening the Chiang-Mai Initiative, exchange rate coordination, and building market infrastructure such as regional clearing houses, payment and settlement systems, credit rating agencies, research and training facilities and data bases. The usefulness and progress of these efforts, particularly for regional financial integration, have been discussed extensively in other studies. This would include the role of ASEAN. Part of the recommendations deal with using the savings of East Asia—reflected partly in the accumulation of foreign exchange reserves—for infrastructure projects in the region.

The last major issue to be considered is optimal sequencing or optimal cascading as may be the case. There is downside in accepting the notion that there is a minimum threshold of institutional development before financial liberalization or even capital openness will be effective. This may lead to policy recommendations that are equivalent to “in order to develop the country must be developed”. At present, it would be best for ASEAN to focus more on developing the financial systems of the member countries. Regional financial integration can then adopt a multi-track and multi-speed approach. In the meantime, more emphasis can be placed on regional monetary and financial cooperation.

## **VI. Concluding Remarks**

In general, the experiences of the EU and NAFTA show the importance of regional integration in attracting FDI. In the EU, the implementation of the Single Market Programme led to significant increases in investment in both manufacturing and services sectors. Internal EU trade seems to be complementary to intra-regional FDI as economic liberalization facilitates the relocation of economic activities and the formation of production and distribution networks. NAFTA's experience indicates large increases in FDI inflows since the creation of NAFTA, with post NAFTA FDI from the US being characterized as vertical FDI. There are also some studies that show limited benefits for Mexico. In MERCOSUR, the empirical results are quite mixed likely because many of the member economies have not reached a threshold of development that allows the benefits of economic integration to be maximized.

As ASEAN Member Countries deepen their economic integration through the creation of the ASEAN Economic Community, it is important that the principles of open regionalism, national treatment and most favored nation treatment to investors are pursued. Given that average tariffs in ASEAN are already low, tariff-hopping FDI might no longer be significant. In the light of ASEAN's participation in regional and global production and distribution networks, integration through the AEC is expected to give rise to increases in vertical FDI. Horizontal FDI in differentiated products as well as in services-related FDI is also expected to go up significantly.

The AEC Blueprint recognizes the importance of creating an integrated production base to capture investment into the region as well as increasing the region's competitive edge as a manufacturing base that is globally-oriented. Though the net potential impact of the investment features and provisions based on the various transmission channels examined is positive, the AIA needs to be strengthened to be more effective. Currently, the ASEAN AIA is still being reviewed to make it more comprehensive in terms of scope and coverage and more effective in meeting the objectives of the AEC. The revised AIA, to be known as ASEAN Comprehensive Investment Agreement (ACIA) is expected to be completed by the 40<sup>th</sup> AEM meeting in August 2008. With the AEC Blueprint, the ASEAN Comprehensive Investment Agreement is intended to provide investors with a framework that is highly conducive for regional production and distribution activities. Drawing from the work of Pupphavesa (2008); Sudsawasad (2008); and Plummer (2007), the following measures are recommended for inclusion in the ACIA:

- Adoption of a collective approach and common time frame of trade and investment liberalization;
- Transferring mode 3 of services (commercial presence) from the ASEAN Framework Agreement on Services (AFAS) to the ACIA;
- Consolidate the ACIA, the 1987 Agreement for the Promotion and Protection of Investments, and appropriate provisions of bilateral investment treaties;
- Harmonize national provisions on equity ownership, land tenure, nondiscriminatory taxation, movement of skilled labor, and financial flows at the ASEAN regional level to ensure national treatment;
- Minimize the Temporary Exclusion List and Sensitive List in trade in goods and services with a view towards a phase-out;
- Identify and remove investment impediments within a clear timeline and specific procedures for implementation;
- Make the ACIA an integral part of the AEC as its provisions would cover investments, services, capital flows, and skilled labor associated with investment;
- Formulate structural adjustment measures in order to facilitate the restructuring process;
- Establish a mechanism for monitoring progress; and
- Expand the mandate of the ASEAN Secretariat and strengthen its technical and analytical capabilities.

The ACIA by itself does not guarantee that FDI would flow automatically to the region. Individual ASEAN countries are facing the huge challenge of improving their competitiveness. As the UNCTAD (1999) noted, though a large domestic market remains a powerful market for investors, multinational companies serving global markets increasingly look for world-class infrastructure, skilled and productive workers, innovative capabilities, and an agglomeration of efficient suppliers, competitors, support institutions and services. For the AEC implementation to be successful, it has to be accompanied by complementary policies and programs especially at the national level. Member Countries should continue to implement their investment and trade

reforms in line with the ACIA and improve their domestic business environment, including economic regulations, corporate governance, and labor laws. Member Countries should also develop their logistics infrastructure and stable legal and economic systems to increase FDI inflows. ASEAN Member Countries need to come up with, unilaterally and collectively, with a structural adjustment and reform assistance and capacity building measures to help those that would be adversely affected by the reforms.

Kimura (2008) noted that in designing policies and recommendations to deepen the ASEAN Member Countries involvement in global and regional production networks, approaches should differ depending on the countries' level of development and corresponding level of participation in regional production networks. This implies that approaches for less developed countries like Cambodia, Myanmar, and Lao that are about to participate should differ from the approaches for Indonesia, Philippines, Malaysia, Thailand, and Singapore which are already part of complex production networks. Viet Nam has already started participating in production networks. For the CML countries, the policy focus should be on how to attract the first wave of production fragmentation from industrial agglomeration that has formed nearby. For these countries, the removal of tariffs, trade and investment facilitation as well as institution building for investment climate and industrial zones would be required. For Thailand, Philippines, Malaysia, and Indonesia which are facing competition from both lower and higher-income countries, policies to upgrade the industrial structure will be vital as well as policies to form industrial agglomeration. For Philippines and Indonesia, human resource development and overall improvement in business environment are important. For Singapore, which is a major source of FDI, the policy focus should be on how to avoid "hollowing out".

The case for "freer" capital flows is not as straightforward for ASEAN Member Countries as is the case for FDI. Because of the risks involved and the limited scope of Singapore as an international financial center, regional financial integration should be less of a priority than regional financial cooperation. The latter can facilitate the development of national financial systems primarily through a more effective Policy Dialogue and Surveillance Process (PDSP).

Greater global financial integration in the medium- to long-term would still be beneficial for ASEAN Member Countries. In this context, regional financial cooperation will be useful in reducing the risks involved. ASEAN Member Countries can be the focal point in East Asia in advocating for reform of the international financial architecture. Joint action in crafting measures to manage capital inflows will also be worthwhile.

In terms of sequencing, it would be prudent to address the disparity in the level of development of the national financial systems. As stated earlier in this chapter, many recommendations along this line have already been laid out in various studies and it is a matter of consolidating the proposed measures.

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