Liberalization of Cross-Border Capital Flows and Effectiveness of Institutional Arrangements against Crisis in East Asia

by
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Executive Summary

1. The paper titled "Liberalization of Cross-Border Capital Flows and Effectiveness of Institutional Arrangements in East Asia" is a contribution made by the Fiscal Policy Research Institute under the ASEAN+3 Research Group Initiative for 2005-2006. This paper uses selected East Asian countries comprising China, Korea, Indonesia, Malaysia, the Philippines, Singapore, and Thailand all of whom are member countries of the ASEAN+3 Finance Ministers Process.

2. In essence, this study has the following objectives:
   a. to carefully examine nature, contributions and drawbacks of capital movements in East Asia;
   b. to conduct a comparative study on experiences in capital account liberalization and institutional arrangements;
   c. to provide a doable set of policy recommendations on appropriate measures for efficient capital flows under the ASEAN+3 framework.

3. Capital account liberalization has been regarded as an important economic ingredient for growth having strong linkages to economic performances among East Asian economies. However, one must be careful in performing a careful assessment on capital account liberalization as it may impose potential adversary effects on domestic and regional macroeconomic instability.

4. Capital flows to East Asian economies were markedly noticeable since the 1960s and became more pronounced two decades later. Shares of other investments such as loans to the government sector as a portion of net private capital flows were dominant during the 1980s after which a shift towards foreign direct investment and portfolio investments took place in the early 1990s in tandem with the liberalization process of East Asian countries under study.

5. Net private capital inflows had increased dramatically during 1990-1996 before the emergence of the 1997 Asian Financial Crisis, which led to capital account reversals. Capital flows to East Asian countries plummeted during the crisis prior to pick up in the following years reflecting international confidence resuming after the crisis being tamed. In 2004, net private capital flows amounted to US$ 194.1 billion, recording over 21.6 fold increase, compared to its trough in 1998.

6. Determining factors of capital flows to East Asia are of two types—domestic and external ones. With respect to domestic factors, East Asian markets represent alternative investment with relatively high returns and portfolio diversification. In addition, East Asian governments have shown strong commitments in implementing economic reform measures implying sound and stable environments as perceived by international investors. There have also been investment incentives provided to attract investment from abroad. In terms of external factors, relatively stable exchange rates with more investment alternatives on financial products help create demand for East Asian financial assets.

7. A number of merits and demerits are attached with capital flows according to the past experience of East Asian countries. By and large, capital flows bring about more readily available funds to the region as well as improved efficiency in resource

allocation. Nonetheless, one must be careful as capitals flows are no "free lunch". Opening up the capital account without proper institutional arrangements put in place could seriously jeopardize macroeconomic stability in broad terms.

8. In order to effectively assess effective capital flow management applicable to East Asia, it is desirable to look into experiences of countries that had relatively successful implantation on the issue. To this connection, a comparative study of capital flow management between that of the European Union (EU) and the current practices adopted by East Asian countries is conducted.

9. Lessons learnt from the EU experience must be treated with care as the two regions are of significant differences—stages of economic development, geographical locations, comparative advantages of member countries, to name just a few.

10. Potential impediments applicable to East Asia in the form of capital controls are identified. As a matter of fact, the findings show that FDI is by and large most welcome within this region owing to its relatively less volatile nature whereas portfolio and other investments are subject to various impediments.

11. Within the East Asian context, the following policy recommendations are proposed:

a. Continuity of reforms on prudential regulations and supervisory procedures should be maintained in order to solve market failure problems such as moral hazard and asymmetric information;

b. Appropriate macroeconomic management targeting self-sustainability must be achieved prior to liberalizing the capital account;

c. Enhancement of surveillance functions at both domestic and regional levels must be carried out to provide safeguards and as well as proper monitoring to short-term capital flow activity;

d. Enhancement of safeguard tools for short-term flow fluctuations such as an expansion to the Chiang Mai Initiative could be used as one of the resolutions to assist member countries in time of crisis;

e. Establishment of institutional arrangements for future regional financial architecture including regional credit guarantee facilities, regional credit rating agencies, and regional investment funds should be seriously contemplated.

I. Introduction to Cross-Border Capital Flows in East Asia

1. "East Asian Miracle" has long been recognized among economists prior to the mid 1990s from the fact that most of East Asian countries achieved remarkable economic performances, which could be observed from splendid growth rates, moderate inflation, sufficiently large foreign exchange reserves, and fairly stable exchange rates. World Bank (1993) put together a very capable team of researchers performing an in-depth study on how East Asian economies could accomplish that marvelous outcome. In essence, the study even termed those East Asian economies in the sample as "High-Performing Asian Economies (HPAEs)[1].

2. The seemingly "Miracle" appeared to dissipate rapidly as several of those HPAEs went into a crisis a few years after. A prominent factor causing the deep recession known as the "1997 Financial Crisis" was abrupt and massive capital outflows or capital account reversal. Yet, the capital account reversal during the crisis did not lead those East Asian economies, at least not all, to perform to the extreme degrees of capital movement imperfection or self-fulfilled financial sufficiency by conducting capital controls. On the contrary, the crisis did have some positive consequences as it helped urge those crisis-affected East Asian economies to embark upon a full-scale economic reforms as well as to initiate economic and financial cooperation among themselves in order to heighten their economic harmony with a view to seeking appropriate measures that could collectively help the region to militate any crises from transpiring in a foreseeable future.

3. By and large, capital account liberalization is considered as one of the economic measures adopted so as to benefit from improved financial or capital resource allocation through a reduction of capital costs as more funds should be readily available for productive uses aside from relying upon domestic savings alone. Even though capital account liberalization instigates various types of economic returns to liberalized countries, it is still perceived that there might be downside risks associated with pre-mature liberalization. To a certain degree, there has been a generalized acceptance on the pre-requisites that an economy should have in place in terms of solid economic foundations as well as sufficiently strong institutional arrangements, prior to thinking of liberalizing its capital account. In essence, macroeconomic stability must be attained, especially on the fiscal front, before commencing the reform process.

4. Another issue dealing with cross-border capital movements involves with the suitable sequencing of liberalization that would not disrupt economic stability Moreover, the challenges in dealing with capital account liberalization involve with designing appropriate policy tools to combat potential hindsight such as fluctuations in asset prices and exchange rates as short-term capital flows in the form of "hot money" may freely flow into the economy. Thus, it is often argued that proper implementation of capital account liberalization should have efficient institutional arrangements in terms of prudent rules and regulations as its solid foundation. By and large, the aforesaid rationale indicates that liberalization of cross-border capital

[1] The report discusses the context of public policies fostering extraordinary economic growth among HPAEs consisting of eight East Asian countries—Japan, Hong Kong, Indonesia, Malaysia, South Korea, Singapore, Taiwan and Thailand.

flows must be done with care whereby the eruption of the Asian crisis in 1997-98 and its aftermath appear to confirm this notion.

5. In order to shed light on the issue of liberalization of capital flows and effectiveness of institutional arrangements in East Asia, the Fiscal Policy Research Institute (FPRI), an independent policy research-oriented agency of Thailand, has been selected to jointly undertake this research project alongside other selected ASEAN+3 research institutes/consultants under the ASEAN+3 Research Group Initiative. With a view to analyzing the stated issue, the paper is designed to examine merits and demerits of capital flows; to investigate the current regimes adopted among East Asian countries, to conduct a comparative study of East Asian capital flow management against relatively more successful experiences of developed countries, and to provide policy recommendations for appropriate capital flow management.

6. The structure of this paper is of the following format. Section 2 reviews recent literature whereas section 3 addresses merits, contributions, and drawbacks in issues relevant to cross-border capital flows including types and characteristics. Subsequently, section 4 performs a diagnostic analysis through a comparative study of the current regimes adopted in selected East Asian countries vis-à-vis those successful experiences of developed economies. Lastly, section 5 concludes the findings with policy recommendations on appropriate measures for efficient capital-flow management that could be adopted by East Asian countries with an emphasis placed upon selected ASEAN+3 member countries.

II. A Review of Recent Related Literature

7. Capital account liberalization, normally associated with a surge of capital inflows, has been regarded as one of the supplementary economic ingredients for growth, especially in recipient countries. Since capital account liberalization may inflict significant impacts to both domestic and regional economies, the issue has constantly drawn interests of economists and policymakers to gain better understanding in substantiating its true benefits and impending costs. United Nations (2005) categorizes types of capital flows and clarifies their patterns in both regional and global views with an emphasis placed upon emerging economies and possible vulnerabilities that may incur.

8. One of the fundamental concerns that most economists pay attention to is the linkages of capital account liberalization and ex post economic performance. Several studies such as Quinn, D. (1997), Klein, M. W. and Olivei, G. (2000), wards, S. (2001), Edison, H.J. and et al (2002) and Klein M. W. (2005) support the evidence that capital account liberalization have a strong linkage to growth. By and large, researchers resort to various methods of empirical investigation to derive their results in determining whether capital flows have contributed to growth.

9. Kaminsky, G. L. and Schmukler, S. L. (2003) suggests that the long-run gain from capital account liberalization would outweigh its potential costs as a result of relatively more stable financial markets in the longer term. In addition, further findings from Edwards, S. (1999), Hartwell, C. A. (2001) and Forbes, C. (2004) conclude that capital controls may pose impending risks to macroeconomic management in the long run owing to additional economic costs arising from distortions and misallocation of resources that may incur.

10. On the contrary, there are studies, among others, such as Kraay, A. (1998) and Rodrik, D. (1998) providing empirical findings countering the notion of capital flows promoting growth. In essence, they argue upon the possibility of capital flows provoking macroeconomic vulnerability and, ultimately, financial crises as an undesirable by-product of capital account and financial liberalization.

11. Apart from the contribution of capital account liberalization on economic development and growth, another interesting aspect evolves around proper sequencing for a successful process of capital account liberalization. To this end, nn, M. D., and Ito, H. (2005) and European Union (2006) suggest that the pre-conditions of capital liberalization is the trade account openness. Moreover, ber, S. M. and et al (1997) notices that domestic capital and financial reforms are regarded as a pre-requisite for the future prospects from capital account openness.

12. In terms of capital account liberalization sequencing, reforms in domestic banking and capital markets are essential since consequences of capital account liberalization immensely affected both sectors. nry, P. B. (2003) suggests that capital market liberalization also subsequently leads to the positive benefits to the

economy. Henry, P. B., and Lorentzen, P. L. (2003) believes that capital market liberalization may have mixed results since equity market liberalization could support future economic growth while liberalization of debt inflows may bring about macroeconomic instability as a result of sudden changes of investors' expectations.

13. In addition to banking, financial and capital market reforms, readiness of domestic financial systems is crucial to opening up the capital account. To reap full benefits from capital account liberalization, Tadesse, S. (2001) suggests that, for countries with developed financial markets, a more-balanced financial structure would outperform those with a bank-based system while, for those countries with relatively underdeveloped financial markets, a financial structure skewed towards the presence of commercial banks move prove superior to a more-balanced one. OECD (2002) emphasizes the importance of information disclosure whereas peer reviews should lead to more efficient policy implementation.

14. As capital account liberalization is not a simple task to implement, financial infrastructure must be effectively put in place in order to avoid economic instability influenced by freer capital movements. Concerns on prudential financial infrastructure are stressed by Eatwell, J. and Taylor, L. (2000) while Yago, G. (2000) reconfirms this finding using emerging economies in his investigation. In addition, in order to carry out a successful implementation of the liberalization process, efficient institutional and legal systems should be present alongside more efficient bureaucratic systems. Chinn, M. D., and Ito, H. (2005) explores these particular issues and concludes that these institution-related aspects also bring about more robust development to the equity market, which in turn lead to a more complete financial development process.

15. Various liberalization experiences of economic groupings and individual economies are worth reviewing. In case of developed economies, European Union (2005) reviews its past experiences on its capital account liberalization as well as its preparation for economic and monetary integration. In the case of emerging economies, Blöndal, S., and Christiansen, H. (1999) emphasizes the experiences in emerging economies. Edwards, S. (1998) addresses issues on capital flows, real exchange rates, and capital controls drawing on experiences of some Latin American countries while Ito, T. (1999), Rana, P. (1999) and UN ESCAP (2001) analyze capital account liberalization issues with an emphasis on Asian countries. Erskine, A. (2003) highlights specific issues in ASEAN economies. Some policy lessons from East Asian Crisis are further elaborated by Kochhar K. and et al (1998).

16. Specific countries' case studies have also been explored by many researchers. G-20 (2003) and Aramaki, K. (2006) evaluate experiences and issues of capital account liberalization in Japan. Bank for International Settlements (2003) and Aramaki, K. op. cit. identify the process of capital liberalization in China, as well as suggests possible Japanese implications for capital account liberalization in China. Noland, M. (2005) examines the issue of capital flows with the focus on the Republic of Korea while Edwards, S. (1998 and 1999) investigate case studies of Latin American countries through capital control measures. Kapur, B. K. (2005) examines experiences of capital account liberalization in Singapore. Darber, S. M. and et al

(1997) draws lessons from some specific emerging countries comprising Chile, Indonesia, Korea and Thailand.

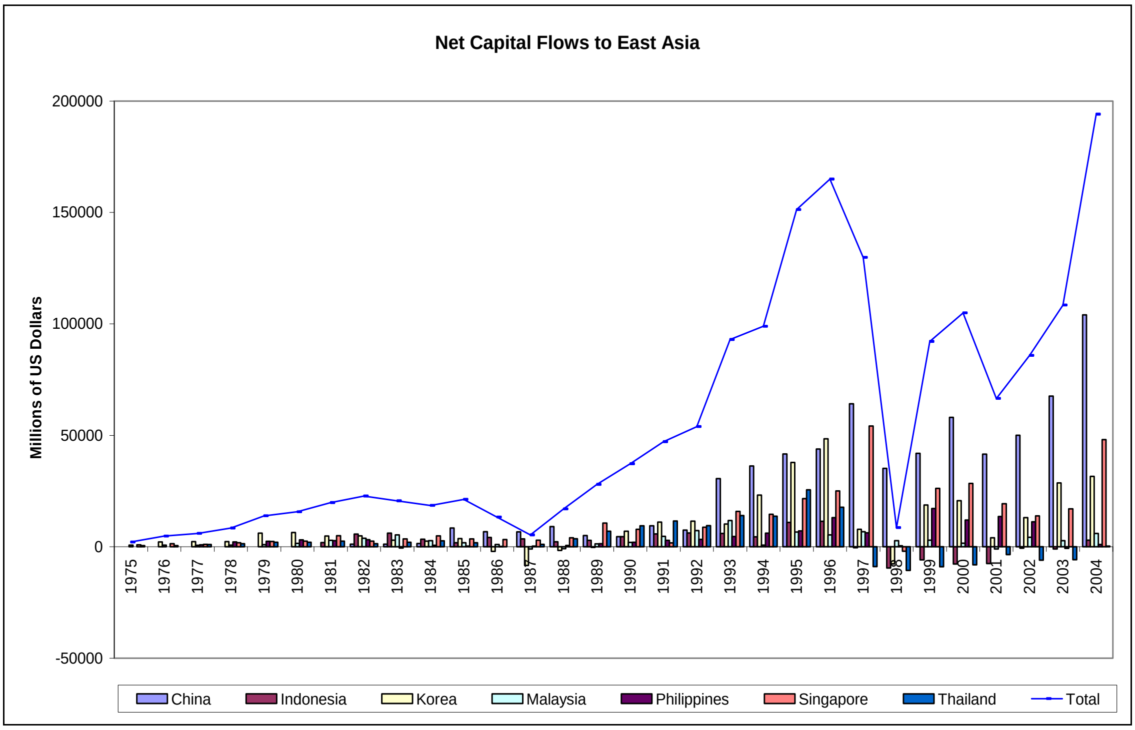
III. Cross-Border Capital Flows: Nature, Contributions and Potential Drawbacks

i) Nature of Capital Movements in East Asia

17. Capital flows have been an interesting issue in the field of international economics to which economists paid even more serious attention on the issue after the emergence of the financial crisis in 1997. Since capital flows to East Asia are considered an economic phenomenon amidst the present era of globalization, notable patterns of capital flows are worth examining.

18. Capital movements in East Asia were greatly discernable in the late 1980s, especially in terms of foreign direct investment. Consequent to the announcement of the Plaza Accord[2] resulting in an appreciation of the Japanese Yen vis-à-vis the US Dollar, it in turn caused the export sector of Japan to lose an edge over its counterparts. The loss of Japan's export competitiveness brought about the relocation of Japanese manufacturing facilities to other countries having a lower-cost environment, a means to retain its competitiveness. Subsequently, capital flows in the form of foreign direct investment from Japan began to flow into various countries in East Asia thereafter.

Figure 1: Net Private Capital Flows to East Asia



Source: International Financial Statistics, International Monetary Fund

19. The trends of net private capital flows in East Asia are illustrated in Figure 1. The increasing trends of net private capital flows had been noticeable from 1987 until 1996, increasing from US$ 5.3 billion to US$164.9 billion or approximately 30 times,

[2] Plaza Accord was announced on September 22, 1985 by Finance ministers of five economies consisting of the US, Japan, West Germany, France and the UK. The meeting was aimed to realign the value of the US Dollar against other major currencies so as to attain a more balanced adjustment of the global economy during that time. In case of Japan, by the end of 1987, the US dollar depreciated by over 50% against the Japanese yen from its peak in February 1985. [Source: http://www.economist.com]

whereby the trends in net private capital flows reversed after the crisis hit East Asian economies.

20. After the 1997 crisis, East Asia experienced a slump of net private capital flows, especially in 1998, before the overall flows became positive in the following years reflecting international confidence resuming after the crisis being tamed. In 2004, net private capital flows amounted to US$ 194.1 billion, recording over 21.6 fold increase, compared to its trough in 1998.

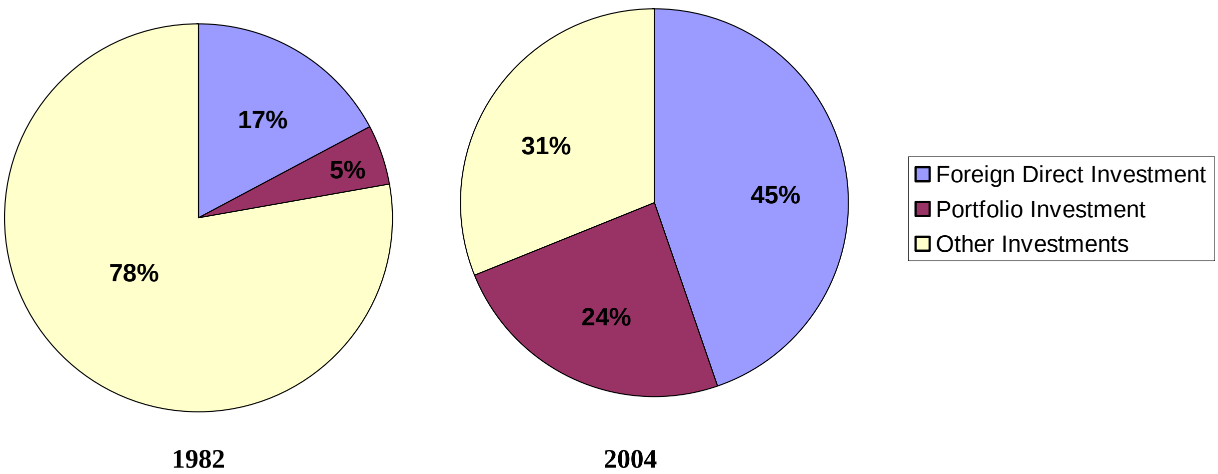
Table 1: Capital Flows in ASEAN-5, China and Korea

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
China															
Direct Investment	3,487.0	4,366.0	11,156.0	27,515.0	33,787.0	35,849.2	40,180.0	44,237.0	43,751.0	38,753.0	38,399.3	44,241.0	49,308.0	47,076.7	54,936.5
Portfolio Investment	0.0	565.0	393.0	3,646.0	3,923.0	710.4	2,372.0	7,842.0	98.0	-699.0	7,316.7	1,249.0	1,752.0	8,443.6	13,203.4
Others	1,070.0	4,500.0	-4,082.0	-576.0	-1,496.0	5,116.2	1,282.0	12,028.0	-8,619.0	3,854.0	12,328.9	-3,933.0	-1,029.3	12,039.8	35,928.1
Total	4,557.0	9,431.0	7,467.0	30,585.0	36,214.0	41,675.8	43,834.0	64,107.0	35,230.0	41,908.0	58,044.9	41,557.0	50,030.7	67,560.1	104,068.0
Indonesia															
Direct Investment	1,093.0	1,482.0	1,777.0	2,004.0	2,109.0	4,346.0	6,194.0	4,677.0	-240.8	-1,865.6	-4,550.4	-2,977.4	145.1	-596.9	1,022.7
Portfolio Investment	-93.0	-12.0	-88.0	1,805.0	3,877.0	4,100.0	5,005.0	-2,632.0	-1,878.0	-1,792.4	-1,910.7	-243.8	1,221.9	2,251.3	3,222.3
Others	3,495.0	4,227.0	4,440.0	2,179.0	-1,538.0	2,416.0	248.0	-2,470.0	-7,470.3	-2,214.3	-1,284.7	-4,270.7	-1,970.0	-2,598.8	-1,248.3
Total	4,495.0	5,697.0	6,129.0	5,988.0	4,448.0	10,862.0	11,447.0	-425.0	-9,589.1	-5,872.3	-7,745.8	-7,491.9	-603.1	-944.4	2,996.7
Korea															
Direct Investment	788.5	1,179.8	728.3	588.1	809.0	1,775.8	2,325.4	2,844.2	5,412.3	9,333.4	9,283.4	3,527.7	2,392.3	3,525.5	8,188.6
Portfolio Investment	661.5	2,905.8	5,874.5	11,087.8	8,713.1	14,619.3	21,514.4	13,308.1	774.8	7,907.9	12,697.0	12,227.3	5,378.0	22,690.2	19,007.2
Others	5,500.0	7,001.3	4,924.1	-1,455.1	13,632.2	21,449.9	24,571.3	-8,317.2	-13,868.4	1,502.4	-1,267.5	-11,751.4	5,262.6	2,433.7	4,427.0
Total	6,950.0	11,086.9	11,526.9	10,220.8	23,154.3	37,845.0	48,411.1	7,835.1	-7,681.3	18,743.7	20,712.9	4,003.6	13,032.9	28,649.4	31,622.8
Malaysia															
Direct Investment	2,332.5	3,998.5	5,183.4	5,005.6	4,341.8	4,178.2	5,078.4	5,136.5	2,163.4	3,895.3	3,787.6	554.0	3,203.4	2,473.2	4,624.2
Portfolio Investment	-254.7	170.2	-1,122.3	-708.6	-1,649.2	-435.6	-268.3	-247.8	283.1	-891.6	-2,145.0	-665.8	-836.1	1,174.5	8,902.4
Others	-88.7	495.6	3,183.3	7,441.1	-1,908.7	2,885.3	533.0	1,912.4	272.4	0.0	0.0	-829.0	1,867.6	-895.0	-7,496.1
Total	1,989.0	4,664.3	7,244.3	11,738.1	783.8	6,627.9	5,343.1	6,801.2	2,718.9	3,003.7	1,642.6	-940.8	4,235.0	2,752.6	6,030.5
Philippines															
Direct Investment	530.0	544.0	228.0	1,238.0	1,591.0	1,478.0	1,517.0	1,222.0	2,287.0	1,725.0	1,345.0	989.0	1,792.0	347.0	469.0
Portfolio Investment	-50.0	125.0	155.0	897.0	901.0	2,619.0	5,126.0	600.0	-325.0	7,681.0	1,019.0	997.0	1,571.0	153.0	324.0
Others	1,577.0	2,273.0	2,940.0	2,455.0	3,562.0	3,040.0	6,370.0	4,396.0	-1,525.0	7,761.0	9,611.0	11,600.0	7,911.0	-1,234.0	201.0
Total	2,057.0	2,942.0	3,323.0	4,590.0	6,054.0	7,137.0	13,013.0	6,218.0	437.0	17,167.0	11,975.0	13,586.0	11,274.0	-734.0	994.0
Singapore															
Direct Investment	5,574.7	4,887.1	2,204.3	4,686.3	8,550.2	11,619.1	9,499.0	13,496.9	7,407.6	16,601.6	16,479.2	14,087.8	5,724.5	9,348.1	16,032.1
Portfolio Investment	572.7	-241.9	1,398.3	2,867.3	113.6	-239.3	830.3	-225.6	1,254.8	3,398.5	-1,389.1	275.6	-345.6	3,003.8	2,337.7
Others	1,664.1	-2,939.6	5,100.8	8,323.5	5,911.1	10,204.5	14,765.0	40,887.0	-10,613.5	6,190.4	13,294.4	4,981.1	8,530.0	4,594.4	29,667.2
Total	7,811.6	1,705.6	8,703.4	15,877.1	14,574.9	21,584.3	25,094.3	54,158.4	-1,951.0	26,190.5	28,384.5	19,344.5	13,908.9	16,946.2	48,037.0
Thailand															
Direct Investment	2,443.6	2,014.0	2,113.0	1,804.1	1,366.4	2,068.0	2,335.9	3,894.7	7,314.8	6,102.7	3,366.0	3,892.3	953.4	1,949.3	1,411.5
Portfolio Investment	-38.1	-81.1	924.4	5,455.3	2,486.2	4,082.9	3,585.1	4,597.6	337.6	-109.1	-546.0	-525.3	-694.4	851.0	61.3
Others	6,996.3	9,641.6	6,479.5	6,739.0	9,838.8	19,382.7	11,875.9	-17,343.5	-18,243.3	-14,964.0	-10,914.3	-6,897.2	-6,262.5	-8,589.7	-1,139.3
Total	9,401.8	11,574.6	9,516.8	13,998.5	13,691.5	25,533.6	17,796.9	-8,851.1	-10,591.0	-8,970.4	-8,094.3	-3,530.2	-6,003.5	-5,789.5	333.5

Source: International Financial Statistics, International Monetary Fund

21. Continuous increases in net private capital flows could be observed in a number of East Asian countries such as China, Korea and selected ASEAN countries during 1990-1996. Comparing the levels of net private capital flows in 1996 to that in 1990, the increases of net private capital flows were approximately 3.4 folds. As most ASEAN-5 countries comprising Indonesia, Malaysia, the Philippines, Singapore and Thailand, began their liberalization in capital and financial sectors during the early 1990s, their net private capital flows substantially increased. Please see table 1 for a breakdown of net private capital flows data from 1990-2004.

Figure 2: Type of Capital Flows Shift (1982 and 2004)



Source: International Financial Statistics, International Monetary Fund

22. With respect to shares of capital inflows into East Asia, the share of other investments out of total capital flows, with the government sector being the most prominent recipient, played a dominant role in the early 1980s. This, in essence, signified the period of sovereigns' borrowings from external sources. However, in the subsequent years, types of capital flows into East Asia shifted from loans and credits to governments to foreign direct investment made directly to productive private sectors within these countries.

23. Figure 2 and table 2 depict this changed pattern showing the compositions of net private capital flows in 1982 (the period that most East Asian countries still adopted import substitution policies and financial sectors were not fully liberalized) compared to the compositions in 2004. It should be noted that foreign direct investment grew from 17% in 1982 to 45% in 2004 whereby other investments became less important as its share accounted for 31% in 2004, nearly half reduction from its contribution in the early 1980s. In the mean time, portfolio investment had grown substantially, expanding five times from merely 5% in 1982 to 24% in 2004.

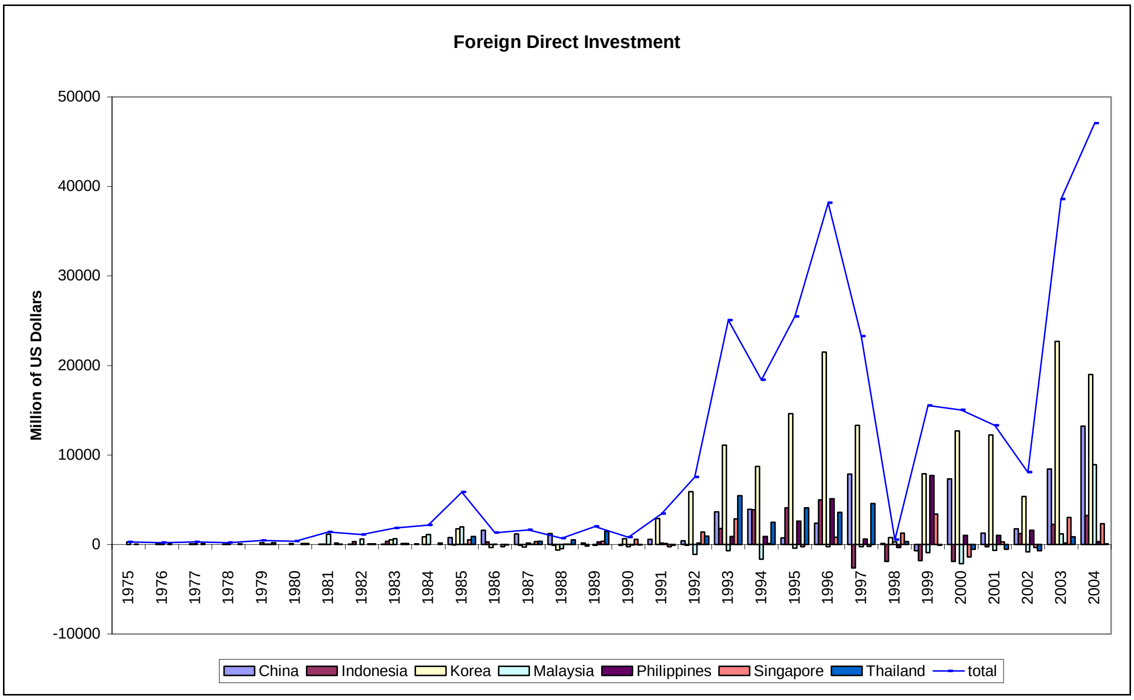
Table 2: Share of Capital Flows

Unit: Percentage

	1984	1986	1992	1996
FDI	22.1	39.0	43.4	40.7
Portfolio Investment	11.8	9.7	14.0	23.1
Other Investment	66.1	51.3	42.6	36.2
	1997	**1998**	**1999**	**2000**
FDI	58.2	794.3	80.9	64.9
Portfolio Investment	17.9	6.4	16.8	14.3
Other Investment	23.9	-700.6	2.3	20.7
	2001	**2002**	**2003**	**2004**
FDI	96.7	74.0	59.1	44.7
Portfolio Investment	20.0	9.4	35.6	24.2
Other Investment	-16.7	16.7	5.3	31.1

Source: Calculated from various issues of International Financial Statistics, International Monetary Fund

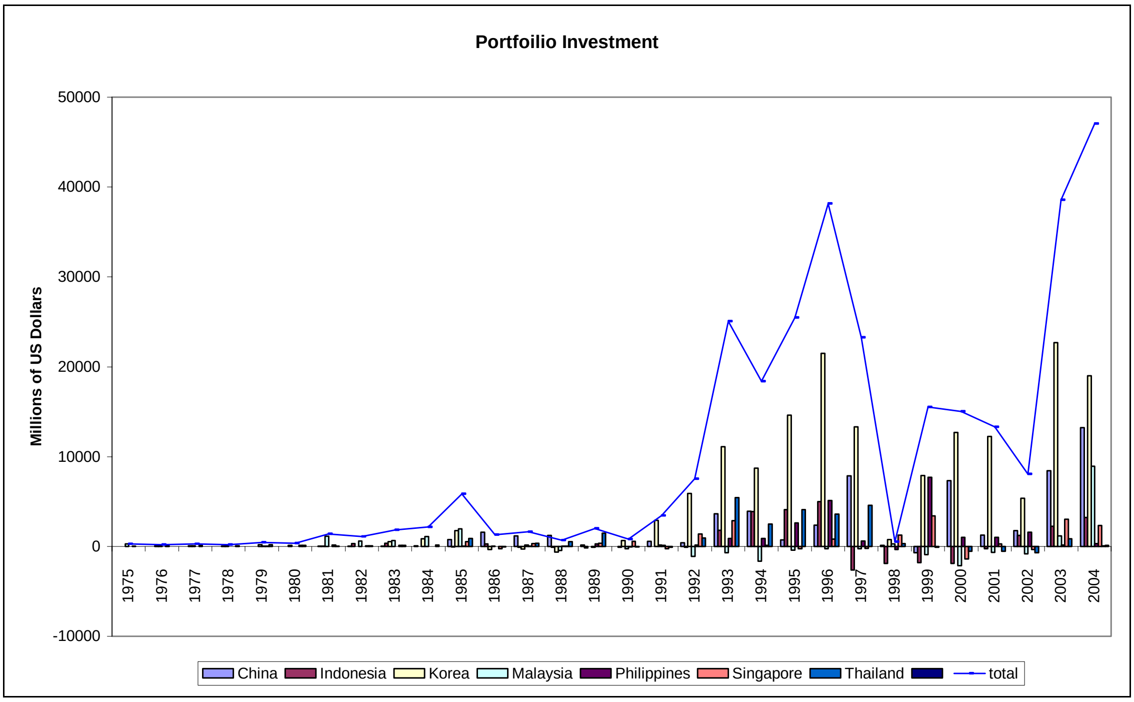
Figure 3: Foreign Direct Investment



Source: International Financial Statistics, International Monetary Fund

24. In terms of foreign direct investment (FDI), it has consistently rendered the most stable contribution since the early 1990s. Except for the 1997 crisis spell, the value of FDI kept expanding to record approximately US$ 86.7 billion, compared to US$ 11.2 billion in 1988, roughly a 6.7 fold surge. Figure 3 exhibits the stated fact of FDI movements in ASEAN-5 plus China and Korea.

Figure 4: Portfolio Investment

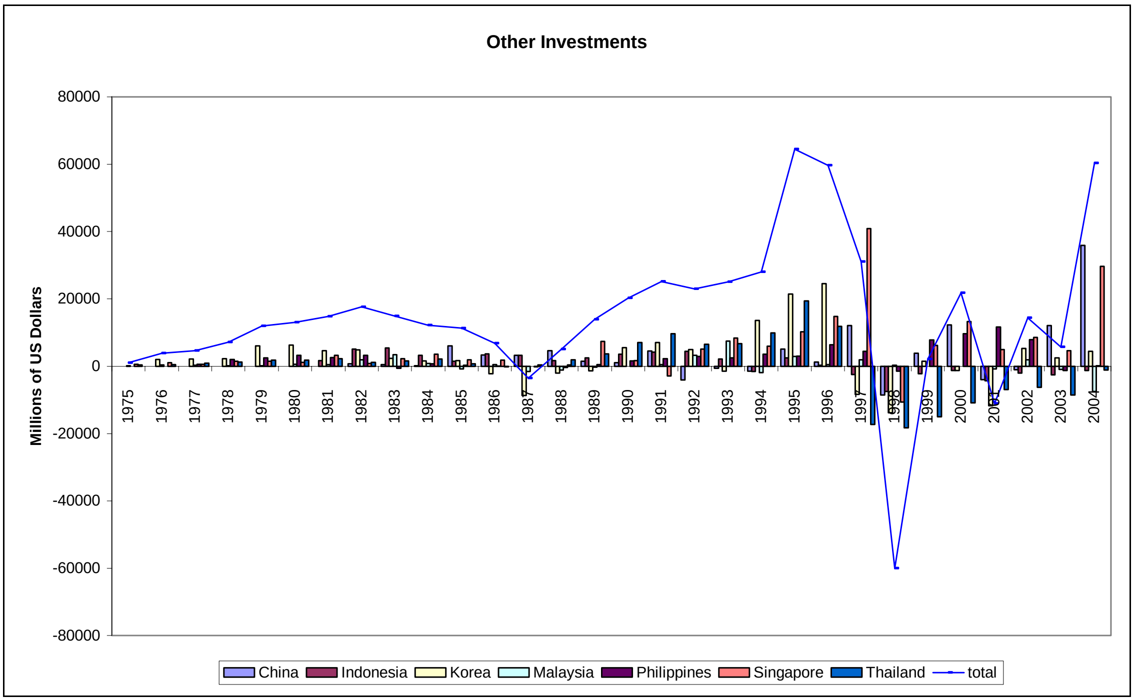


Source: International Financial Statistics, International Monetary Fund

25. Another type of net private capital flows, portfolio investment, including investments in securities, bonds, and other types of financial assets, caught an interest of foreign investors as domestic capital and East Asian financial markets became more liberalized. As a matter of fact, the process of liberalization prompted international fund managers opportunities of portfolio diversification as well as improved returns on their investments and, thus, escalated the level of portfolio investment into the region.

26. It could be noticed that the upward trends of portfolio investment started from the early 1990s have been in tandem with the capital and financial sector liberalization in East Asian countries. In 1990, portfolio investment amounted to a negligible amount of approximately US$ 0.8 billion and leapfrogged to reach a markedly higher level of approximately US$ 38.2 billion in 1996, before encountering a declining trend during the 1997 crisis. Afterwards, portfolio investment resumed in 2003 and recorded an even larger amount of US$ 47.1 billion in 2004. In figure 4, it was lucid that portfolio investment growth in Korea, Singapore and Thailand was more pronounced among East Asian countries, especially after 1992. After 2000, the upward trends of portfolio investment in China became more notable as the Chinese government started to further liberalize its capital markets.

Figure 5: Other Investments



Source: International Financial Statistics, International Monetary Fund
Remark: Other Investments consists of short-term and long-term credit, loans and deposits

27. In the case of other investments, the effect of banking liberalization, specifically on the foreign currency-denominated loans, stimulated the flows of foreign credits performing as a supplementary source of funds for real sector operations domestically. Alongside FDI and portfolio investment, other investments grew sharply, after banking and financial liberalization in the early 1990s, amounting to approximately US$ 20.2 billion in 1990 and kept rising to reach its peak of approximately US$ 64.5 billion in 1995, before tremendously plummeting during the crisis. Even so, other investments revived in 2003 and exhibited an increasing trend in 2004 with an amount of US$ 60.3 billion.

28. It is worth mentioning that, prior to the 1997 crisis, other investments especially short-term foreign loans, were known as the primary substituted sources for domestic credits because of their relatively cheaper costs, compared to those of the domestic ones. Owing to them being cheaper and easy to access during that time, short-term borrowings from external sources became a crucial factor causing the 1997 crisis to erupt as they were normally attached with currency and maturity risks, so called "double mismatches".

ii) Determining Factors of Capital Inflows of East Asia

29. Ito (1999) and UN ESCAP (1999) addressed several causes of skyrocketing amounts and incremental varieties of capital flows that were explained by several domestic and external factors applicable to East Asia. The breakdown of such determining factors inducing capital investments in East Asia can be categorized as follows:

Table 3: Determining Factors of Capital Flows

	Foreign Direct Investment	Portfolio and Other Investments
Domestic	▪ Incentives offered to foreign investors (both tax and non-tax incentives) ▪ Improved returns of investment prompting foreign investors' interests ▪ Government commitments to economic restructuring	▪ Liberalization of financial sectors ▪ Economic prosperity that burgeons foreign investors' confidence ▪ Government commitments to economic restructuring
External	▪ Long-term appreciation trends in Yen/US Dollar due to the Plaza Accord Agreement in the 1980s ▪ East Asian currency stability as a result of de facto exchange rate peg regimes prior to 1997 and relatively stable exchange rates at present	▪ Lower interest rate trends in developed countries ▪ East Asian currency stability as a result of de facto exchange rate peg regimes prior to 1997 and relatively stable exchange rates at present

a) Domestic Factors:

30. Incentives to attract investment: In the early 1990s when the financial sector and capital account liberalization process initially commenced, there were substantial incentives offered by East Asian governments to attract capital flows from abroad. In terms of FDI, *export processing zones, where foreign producers could receive tax privileges in various forms*, were established within these countries including Korea, Indonesia, Malaysia, the Philippines, as well as Thailand. To this end, it should be highlighted that Singapore, with a view to becoming a regional export hub, whose tax rates have been set remarkably lower than those of other East Asian counterparts. And, thus, in practice, Singapore did not have any compelling needs to emulate other East Asian fellows in setting up these export processing zones.

31. Higher returns on investment: The liberalization process also spurred both portfolio and other investments as regional assets with relatively higher returns, compared to those in more advanced markets, became more easily accessible while local borrows realized an alternative source of funds with relatively lower costs of borrowing.

32. Full government commitments: Although, at present, economic landscapes including economic policies have changed tremendously as a result of the 1997 crisis, those determining factors used to describe capital inflows to East Asia are, to certain extent, still in the frame. After the 1997 crisis, full-scaled economic reforms across crisis-affected East Asian economies have been launched whereby the governments explicitly expressed total commitments to fulfill these assignments. Sheer determination expressed by East Asian governments has been perceived by foreign investors as a guarantee for smooth business operation and thus accordingly encourages the level of investments from abroad into the region.

b) External Factors:

33. Favorable exchange rate management: With regard to external factors, a long-term appreciation trend of the Yen vis-à-vis the US dollar caused a relocation of production facilities to East Asian countries as previously stated which in turn led to a colossal surge in FDI. Another relevant external factor that help accentuate this incident was the then fixed exchange rate regimes mostly adopted by these East Asian countries. The Yen appreciation cum stable exchange rates constituted conducive environments for FDI.

34. Improved returns and diversification: Likewise, portfolio and other investments were encouraged through portfolio diversification of foreign investors so as to seek better returns for their investments. In essence, the relatively lower trends of interest rates of developed countries during the 1990s or even at present encouraged foreign investors to invest into the East Asian markets in terms of both stocks and bonds. Nonetheless, it should be mentioned that despite other investments in the form of bank lending sharing the same determining factors as those of portfolio investment, their activity became markedly less pronounced after the 1997 crisis.

iii) Contributions and Potential Drawbacks of Cross-Border Capital Movement

35. Capital flows may bring about both positive and negative effects to recipient economies. In this section, contributions and potential drawbacks of cross-border capital movements will be addressed as follows.

Table 4: Contributions and Potential Drawbacks of Cross-Border Capital Movements

Contributions	Drawbacks
I. Proliferation Sources of Investments - Japanese direct investments supplemented sources of investments in several emerging East Asian countries beginning in the late 1980s - Foreign credits and loans facilitated domestic borrowers to have an access to the international sources of investment funding. The example could be observed in China, Korea and Thailand.	**I. Issues of Volatility and Difficulties of Macroeconomic Implementation** - The East Asia's boom-and-bust cycle created by loss of investors' confidence led to economic chaos during 1997 as a result of massive capital flights and interrupted economic growth, which would deteriorate their domestic economy as a whole, in those recipient countries. - Massive capital inflows to East Asia during 1997 also generated problems on macroeconomic stability, especially the implementation of monetary policies.
II. Improvement of Economic Efficiency of Capital Resources - Portfolio diversification by foreign investors was facilitated as an alternative apart from investments in low rate of return of western financial assets. - Development of bond markets during 2000s in several emerging East Asian economies such as China, Korea and Thailand help preventing future double mismatches	**II. Issues on Flows in the Imperfect Market Environment** - Moral hazard as a result of loan facilitation to unproductive sectors subsequently brought about pressures to the crisis in 1997. - Herd behavior and bank run in East Asian countries, which created a substantial adverse effect to other banks and financial institutions, could be observed in Korea and Thailand

Contributions:

a) Proliferation sources of investments:

36. While domestic savings as a source of funds being scarce, foreign sources from capital inflows can perform as an additional pool for productive investments in the East Asian region. To this end, foreign borrowings would play a role as an alternative funding source whereby domestic consumption could carry on without any interruptions. Hence, foreign funding sources can help smooth out consumption and investment patterns which could, as a result, generate more output and further eventually perpetuate the cycle of growth.

37. In the case of East Asian countries, capital inflows provided funding for domestic investment in manufacturing or industrial sectors. Starting from the late 1980s, foreign direct investment, especially from Japan, ha been considered as one of the dominant sources for additional investment funds in most of East Asian countries. During the 1990s, foreign sources of funds were relatively abundant. Following the seemingly pre-mature liberalization process of financial and capital markets, inflows of foreign loans, especially into Indonesia, Korea, Singapore and Thailand, had played a vital role in financing domestic operation of private sector producers.

38. In Thailand, capital inflows led to an investment boom period, especially in the export-manufacturing sector. In this regard, new financing facilities such as the Bangkok International Banking Facility (BIBF) and Provincial International Banking Facility (PIBF) helped elevate the degrees of financial openness by providing domestic borrowers easy access to foreign sources of investment funding. In a similar fashion, capital inflows into Korea were also partly used in supporting investment of Chaebols. Other East Asian countries also went through similar episodes.

b) Improvement of economic efficiency in resource allocation:

39. The liberalization of capital and financial markets, to a certain degree, could perform as a means of risk diversification for fixed-income investors as risks could be shared not only among domestic agents but also foreign investors as well. Therefore, this would minimize investment and saving risks and enhance the resource allocation process.

40. A clear example was the case when real interest rates in most East Asian economies during the 1990s were relatively higher than those of developed economies. As a result of capital and financial sector liberalization, foreign investors were attracted towing to higher profitability and portfolio diversification. The stable exchange rate environment was also supportive in promoting even higher demand on East Asian assets.

41. Promoting intra-regional cross border investment after the 1997 crisis in an effort trying to develop Asian bond markets would help increase the efficiency of resource allocation through risk reduction in both maturity and currency, known as “double mismatches”, widely blamed as a factor causing the crisis to erupt. Since the overlapping spell of 2001-2002, the Asian Bond Markets Initiative has been central to regional financial cooperation among crucial forums, e.g., ASEAN+3, ACD, and EMEAP. In doing so, the initiative will lead to higher degrees of rule and regulation harmonization, more liquidity of both domestic and regional markets, and more volume of cross border trading, to name just a few.

Drawbacks:

a) Issues of Volatility and Difficulties of Macroeconomic Implementation:

42. One aspect of the concerns that puts the capital flow issue as a highly debatable one is the correlation between capital flow volatility and macroeconomic instability[3]. It is often argued that the fluctuating nature of capital flows may, more often than not, bring about economic fragility to the domestic economy which was evident during the Asian Financial Crisis in 1997.

43. In a similar notion, massive capital inflows may also generate problems on macroeconomic stability, especially in monetary policy implementation. An example on this was the case of financial sector liberalization experiences in some East Asian countries during the 1990s that brought along huge influx of inflows which, subsequently, exerted upward pressure on East Asian exchange rates, and thereby inflicted a loss of trade competitiveness.

b) Issues on the Flows in the Imperfect Market Environment

44. As indicated in Ito (1999) and United Nations (2005), results from capital or financial market imperfection led to the substantial positive or negative expectations that might put impending pressures on the markets themselves and in turn create threats on massive capital inflows or outflows.

45. Since emerging capital or financial markets might not be mature enough, information asymmetries in the markets could still exist. Available capital sources, especially, capital inflows in forms of loans, on the financial view, might lead to moral hazard behavior as a result of banking or financial sector originated a risk on loan channeling to unproductive investment such as real estate and equity sectors. The classic example could be observed in the case of Thailand. Bank credits were put into long-term unproductive activities such as infrastructure and real estate projects. When the crisis emerged, the foreign lenders were reluctant to rollover those loans and, in turn, brought investors into liquidity problems.

46. Another moral hazard problem came from the fact that ex post outcomes were guaranteed leading to adverse effects on ex ante behavior. The case could be observed in East Asia's government bailout guarantee in banking and financial sectors. The case in Thailand showed that the government blanket guarantee led to both borrowers and lenders to perform riskier economic activities. In lenders' point of view, those risky projects might not be carefully reviewed since government bailout would support lenders (banks and financial institutions) in such a way that they would not face liquidity or bankruptcy problems. In borrowers' point of view, they tended to invest in risky projects as they were aware that banks would be rescued if they faced aforementioned problems.

47. In addition, herd behavior, as explained in Ito (1999) and United Nations (2005), was also one of the common features that might occur when negative expectations were placed in the market. Massive capital movements as a result of herd behavior might be considered to be optimal for economic agents in the markets because other people are reacted on the current market situation in the same way, however, ex post outcomes from this kind of behavior may be drastically affected overall economies. Herd

[3] See United Nations (2005) for further details

behavior may be more pronounced if economic agents are so responsive to minor negative changes or adequate confidence of investors in the markets was lost.

48. One of the herd behaviors could be noticed during 1997 when economic agents were able to detect the sign of economic weaknesses. In Thailand, massive currency depreciation cast some doubts to depositors on the soundness of banking and financial institutions. This led to the massive withdrawals of deposits, which created liquidity problems in the banking and financial systems.

49. A prevalent case was also observed in the bank run that occurred during the economic crisis in 1997 in some East Asian countries such as Korea and Thailand. Since financial institutions relied on short-term external financing abroad, when the crisis hit, there were no enough foreign currencies for them to repay their debt and in turn creditors refused their debt rollover. Massive refuse of debt rollover by foreign creditors created bank run during the crisis in 1997-1998.

50. In addition to the generic view of advantages and disadvantages of capital flows, it is worth noting that specific features in major three types of capital flows, namely direct investment, portfolio investment and bank credits and loans (which is classified as “other investments”), could also explain some particular benefits and downside aspects of those flows. The following table pinpoints some key positive contributions as well as potential drawbacks from capital flows.

IV. Diagnosis of Liberalization of Cross-Border Capital Movement and Its Institutional Arrangements

51. Capital flows are, by and large, perceived as one of prospective economic growth propellers as seen in potential contributions illustrated in the previous section. However, liberalization of capital movements may instigate impending pressures to macroeconomic policy implementation since freer movements could create difficulties for policymakers to effectively manage the economy to stay sound and robust.

52. There are benefits and costs that may arise from the process of capital account liberalization. In order to prescribe proper policy recommendations, it is vital to carefully analyze the past experiences of those who, to a certain extent, succeeded in implementing the policy. In what follows, this section will assess the process of liberalization of cross-border capital movements taking into consideration the steps taken by the European Union whereby a comparison with the directives chosen by selected East Asian countries will be demonstrated.

53. In terms of foreign direct investment or FDI, it is generally considered as the most welcome type of capital flows as it normally leads to numerous positive consequences. FDI ensures recipient countries a sufficiently long spell of the funds whereby this could help lessen the funding withdrawal that could lead to capital account reversals. In addition, FDI mostly is equipped with technology transfers, human capital improvement, etc. while downside risks of FDI may take the form of transfer pricing or resource extortions. Nonetheless, on balance, FDI has been a relatively more productive and beneficial to the host countries.

54. Portfolio investment and other investments including foreign bank loans or credits are also indispensable types of capital inflows that can provide significant mutual benefactors to both home and host countries. However, these types of capital flows are more volatile in nature to which their volatility could pose relatively greater pressure on prudential regulations and institutional set-up to effectively handle them. In terms of benefits, portfolio and other investments are deemed to have vast contribution to domestic financial sector development but, on the contrary, their highly fluctuating idiosyncrasy in the form of “hot money” could leave the fund receiving countries to be vulnerable.

i) Capital Account Liberalization: A Comparative Analysis between Developed and Selected East Asian Economies

55. In order to best prescribe a doable set of policy recommendations on capital account liberalization with an emphasis on institutional arrangements for East Asian economies, it is worthwhile taking into consideration successful experiences of existing forerunners. To this end, the path of capital account liberalization of selected East Asian economies will be analyzed against benchmarks set forth by the European Union. In addition, this section will also address Japan’s experience on the issue.

56. While performing a diagnosis on the liberalization process of these countries, it is unavoidable to also look at related liberalization components, namely trade and banking sectors. Table 5 summarizes the liberalization processes in a chronological order whereas a detailed demonstration appears as appendices 1 and 2.

Table 5: Liberalization Sequencing: A Chronological Summary

	Trade Liberalization	Capital Account Liberalization		
		Direct Investment	Portfolio Investment	Other Investments
Developed Economies				
EU	Start: 1951 Finish: 1968	Start: 1960 Finish: 1979	Start: 1979 Finish: 1996	Start: 1977 Finish: 1993
Japan	Start: 1945 Finish: ongoing	Start: 1967 Finish: ongoing	Start: 1970 Finish: ongoing	Start: 1976 Finish: ongoing
Selected East Asian Economies				
China	Start: 1984 Finish: ongoing	Start: 1945 Finish: ongoing	Start: 1945 Finish: ongoing	Start: 1945 Finish: ongoing
Indonesia	Start: 1985 Finish: ongoing	Start: 1985 Finish: ongoing	Start: 1987 Finish: ongoing	Start: 1991 Finish: ongoing
Korea	Start: 1985 Finish: ongoing	Start: 1983 Finish: ongoing	Start: 1984 Finish: ongoing	Start: 1981 Finish: ongoing
Singapore	Start: 1967 Finish: ongoing	Start: 1967 Finish: ongoing	Start: 1984 Finish: ongoing	Start: 1968 Finish: ongoing
Thailand	Start: 1980 Finish: ongoing	Start: 1977 Finish: ongoing	Start: 1986 Finish: ongoing	Start: 1990 Finish: ongoing

Remark:
European Union: The detailed process of capital account liberalization in European Union is acquired from the European Union website [http://europa.eu.int].
Japan: The liberalization process of Japanese's capital account are further discussed in Aramaki (2006), Bank of International Settlements (2003) and G-20 (2003)

The detailed process of capital account liberalization in East Asian countries are as follows:
China: See Aramaki (2006), Bank of International Settlements (2003), G-20 (2003) and Prasad and Wei (2005)
Indonesia: See Darber, Echeverria and Johnston (1997), Kaminsky and Schmukler (2005) and Annual Report of Bank Indonesia [http://www.bi.go.id]
Korea: See Darber, Echeverria and Johnston (1997), G-20 (2003) and Noland (2005)
Singapore: See Kapur (2005)
Thailand: See Darber, Echeverria and Johnston (1997), Kaminsky and Schmukler (2005) and Annual Report of the Bank of Thailand [http://www.bot.or.th]

57. From a historical perspective, the EU began its liberalization in the early 1950s, much earlier than the initiation made by East Asian economies in the sample. Among these selected East Asian economies, Singapore, despite commencing at a much later stage than others, appeared to spearhead on this front. Nonetheless, the liberalization process among these countries is underway and far beyond being considered as a finished product. For the time being, liberalization of East Asian economies at both domestic and regional levels is ongoing and has been central to discussions in regional forums such as ASEAN and ASEAN+3.

58. In terms of sequencing, it should be emphasized that the EU elected to embark upon trade liberalization prior to initiating the capital account openness. This has, in essence, put forward a specific model of liberalization sequencing which is still an issue subject to debates by researchers (please see European (2006)). Customs Union was introduced in the European Community (the early stage of the European Union) with the objectives of fundamental economic integration and regional security, while trade liberalization in East Asian countries was aimed to modernize their domestic economies rather than serve capital flow stabilizing objective.

ii) Capital Account Liberalization: A Diagnosis on Potential Impediments

59. East Asian economies under consideration, at present, still possess various degrees of capital controls among which can be seen as a form of impediments. By and large, impediments to allowing free capital movements are of either regulatory barriers or non-regulatory ones. Conceptually, these impediments have been put in place, in most cases, to protect important institutions, provide balance and continuity, and support difficult transitions (ADB, 2005). Nevertheless, as time passes by, it may be more optimal to reconsider all these impediments to assess whether they, to some extent, impede efficient transactions across the capital account. Common impediments classified by types of capital account compositions are as follows:

60. Foreign direct Investment: Compared to the other two types of investments—portfolio and others—FDI appear to be the investment type with fewest impediments. In general, inward FDI is welcome except for some strategic sectors such as banking, real estate, etc. whereby ceilings on foreign holdings concerning issues such as majority of foreign ownership, acquisitions of fixed assets, and merger are widely practiced among these East Asian countries. On the contrary, outward FDI is, to a large extent, more regulated as all outward FDI must obtain some form of approval from relevant domestic authorities. It should be noted that Singapore is the only country imposing no regulations on both inward and outward FDI.

61. Portfolio investment: Regulations on portfolio investment among these countries are relatively more prevalent than those of FDI's. This fact reflects the heavier volatile aspect as well as the aggravating past experience during the recent crisis of these countries. By and large, non-residents must abide by various rules when portfolio investment is concerned. Among others, there exists, in some cases, a limit on non-residents investing in domestic financial products as well as a ceiling on residents investing in financial products abroad. In addition, income such as capital gains and interest income arising from this type of investment may be subject to withholding taxes. Mostly, these regulations are designed to counter the volatile nature of "hot money".

62. Other investments: Common regulations of other investments are of similar types to those of portfolio investments.

63. Table 6 provides a succinct note of these impediments among selected East Asian countries whereby a more detailed tabulation is shown in appendix 4:

Table 6: A Summary of Capital Controls

	Impediments		
	Foreign Direct Investment	**Portfolio Investment**	**Other Investments**
China	- Both inward and outward FDIs are subjected to the approval of Ministry of Foreign Trade and Economic Cooperation (MOFTEC) and State Administration of Foreign Exchange (SAFE)	- Non-residents are prohibited to issuance of stocks and bonds - Issuance of stock by residents abroad are subjected to approval of China Securities Regulatory Commission (CSRC) - Issuance of bonds by	- Lending are allowed for financial institutions or other institutions approved by MOFTEC - Borrowing by local institutions are subjected to state approval - Financial institutions are allowed to carry

	Impediments		
	Foreign Direct Investment	Portfolio Investment	Other Investments
		residents abroad are subjected to approval of SAFE - Investment in B-stock is liberalized for non-resident investors. A-share investment is still limited to minimum requirement. - Other sales and purchases of stocks and bonds are still prohibited or subjected to state approval	out the short-term loan transactions, which are subjected to approval of SAFE - Borrowing by foreign companies are allowed after the registration with SAFE
Indonesia	- Inward FDI is subject to control in some sectors - Proportion of domestic stakeholders are required within 11-15 years	- Resident investors are prohibited to buy Rupiah-denominated securities issuing abroad - Ceiling on purchase of forwards and futures are imposed to non-residents except for investment-related transaction Foreign exchange and interest derivatives are allowed	- Borrowing abroad are allowed for banks and have to report to central bank - Lending to non-residents are prohibited
Korea	- Outward investments have to notify Ministry of Finance and Economy (MOFE) - Purchases of real estates abroad by residents and purchases of domestic real estate by non-residents have to report to Bank of Korea and foreign exchange banks	- Purchases of stocks in 23 domestic companies by non-residents are still limited	- Short-term external borrowing by weak financial domestic companies were permitted in restricted manner - Notification is required for foreign currency loans for non-bank companies, especially with the amount exceeding US$ 30 million
Singapore	None	- S$ is subject to non-internationalization: purchase or issuance of securities is allowed, however, funds are needed to convert to foreign currencies	- Limit credit facilities not exceeding S$ 5 million to foreign financial institutions - Loans to non-residents for overseas activities have to be converted to foreign currencies
Thailand	- Approval from Bank of Thailand is required for outward investment exceeding US$ 10 million	- Limits on equity holdings to 50% for non-resident investors	- Lending to non-residents are permitted in foreign currencies

	Impediments		
	Foreign Direct Investment	**Portfolio Investment**	**Other Investments**
		- Sales and Issuances of securities by non-residents are subjected to approval of Ministry of Finance, Bank of Thailand and Securities and Exchange Commission - Forwards and futures needed to be related with trade and financial transactions	

Remark:
European Union: The detailed process of capital account liberalization in European Union is acquired from the European Union website [http://europa.eu.int].
Japan: The liberalization process of Japanese's capital account are further discussed in Aramaki (2006), Bank of International Settlements (2003) and G-20 (2003)

The detailed process of capital account liberalization in East Asian countries are as follows:
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Korea: See Darber, Echeverria and Johnston (1997), G-20 (2003) and Noland (2005)
Singapore: See Kapur (2005)
Thailand: See Darber, Echeverria and Johnston (1997), Kaminsky and Schmukler (2005) and Annual Report of the Bank of Thailand [http://www.bot.or.th]

V. Policy Recommendations on Efficient Capital Flows Liberalization

64. In order to effectively address efficient capital account liberalization, it is within the best interest of East Asian economies to prudently put in place necessary and sufficient frameworks so as to ensure that full benefits rather than impending risks would be realized. In this section, policy recommendations that can help constitute the process of allowing freer capital movements are elaborated as follows:

a) Continuity of reforms on prudential regulations and supervisory procedures

65. The aftermath of the 1997 crisis led to a full-scaled launch of economic reforms across crisis-affected economies. In essence, the economic reforms have targeted a number of aspects that are suspected of being the source of crisis including sectors involving capitals movements across borders. In this regard, it is thus compulsory to carry on with the reform process to effectively establish prudential regulations and supervisory procedures, comparable to international best practices within the context suitable to each and individual economy.

66. Rules and regulations evolving around capital account liberalization must address the problems of asymmetric information as well as moral hazard. Information disclosure, transparency, accountability, as well as governance on short-term capital flows will be required so as to ascertain that the data availability on those short-term capital flows, known as "hot money", becomes more readily available to concerned parties which would allow a more efficient process to assess the risk exposure between lenders and borrowers.

b) Appropriate macroeconomic management targeting self-sustainability

67. For an economy to allow freer capital inflows, it is imperative that the economy is ready in terms of having maintained its robust macroeconomic management with a view to achieving self-sustainability. In essence, the ease of bringing funds in and out of the country will eventually challenge the authorities to identify suitable macroeconomic policies concerning, for instance, fiscal and monetary policies, exchange rates, and the level of international reserves etc. In addition, there exists a need for the authorities to be more vigilant in supervising capital movement activities especially, short-term ones. Therefore, the economy with plans to open up its capital account must put in place appropriate regimes of macroeconomic management that would militate against vulnerability that may result from capital account liberalization.

68. It is also desirable to be equipped with safeguard measures that can minimize the impending risks associated with capital account liberalization. Among others, currency speculation is regarded as an immediate issue that must be taken into consideration. To this connection, it is beneficial to carefully design preventive measures that could help combat against currency attacks by prudently supervising short-term flows with potential safeguard mechanisms such as:

- **To allow only *qualified entities* executing the capital movement deals:** currency speculation risks should be sufficient lessened provided that capital movements reflect sound investment objectives without pure speculation motives. With respect to this, at the initial stage of opening the capital account, it may be sensible to limit the entities to those who are deemed to be "qualified" whereby merely productive investments would be made. To this end, an initial set of "qualified institutional investors" with appropriate guidance should be identified.

- **To consider implementing measures to induce long-term rather than short-term flows:** if necessary, appropriate mechanisms that may help encourage long-term flows while discouraging short-term ones could be applied such as imposing a tax rule on short-term flows with a spell of a certain period, say, one year. Otherwise, comparable mechanisms, e.g., implementing a reserve rule on short-term flows should also bring about a similar outcome.
- **To explicitly identify a "bail-in" clause as a pre-condition of capital outflows:** this measure is to tie down the level of capital outflows with macroeconomic stability whereby temporary limitations on the amount of funds to leak out of the economy may be placed if it is deemed to adversely affect macroeconomic stability as a whole.

c) Identifying appropriate liberalization sequencing

69. Notwithstanding the sequencing model of capital account liberalization illustrated by the EU, it is worthwhile to explore a proper process tailor made to suit unique characteristics of East Asian economies. To this connection, one must bear in mind certain factors that differentiate East Asian countries from their European counterparts. Among others, stages of economic development, comparative advantages of export sectors, geographical differences, etc. place East Asian countries in a position that emulating the EU work path may not lead to a similar outcome reached by the EU.

70. In essence, it does not exist a "one size fits all" type of policy recommendations, i.e., for East Asian countries, completing trade liberalization does not have to precede liberalization of capital flows. Taking into consideration the stage of both trade and capital account liberalization, it may be sensible for East Asian countries to carry on with whatever they have been achieved and move on implementing both liberalization processes simultaneously.

d) Enhancement of surveillance functions of both domestic and regional levels

71. Relevant to sustainable macroeconomic management, there exists a serious need to upgrade and enhance economic surveillance at both domestic and regional levels. At the domestic front, economic surveillance functions, by and large, are a joint effort among responsible agencies such as the Ministry of Finance, the Central Bank, and the Securities Commission, to name just few. To deliver best possible surveillance, synchronized cooperation among these agencies must be accomplished.

72. In practice, each and every agency will have its own specialization of individual areas, e.g., the Ministry of Finance would be armed with fiscal data and, thus, can contribute to an efficient surveillance process in this area while its central bank counterpart would be adept to have profound information on the financial sector. Therefore, it is encouraged for relevant domestic agencies to conduct joint surveillance on a regular basis.

73. On the regional or international front, it is very useful to have policy dialogues on economic surveillance among countries within the region. Within this context, there are several forums that have embedded this functions as a main agenda of their

meetings such as the ASEAN Surveillance Process under the ASEAN Finance Ministers Process and the Informal ASEAN+3 Finance and Central Bank Deputies Meeting of the ASEAN+3 Finance Ministers Process. Aside from those, there are other individual initiatives such as Short-term Capital Flows Monitoring, Chiang Mai Initiative, Early Warning Systems under ASEAN+3 which, in one way or another, serve as a tool to strengthen regional surveillance functions.

74. Ultimately, these regional or international initiatives are of marked importance as they can help contribute to effective management of capital flow liberalization. Nonetheless, the current cooperation on the issue among East Asian countries is still at its initial stage. Further development, in a longer term, in institutionalizing an “independent body” should be considered. This could then serve as the “Secretariat” of some prominent regional forums such as ASEAN+3 Secretariat prior to being developed into a central organization of financial integration in the future.

e) Enhancement of safeguard tools for short-term flow fluctuations

75. The first and foremost salient feature of the Chiang Mai Initiative (CMI) under the ASEAN+3 framework in terms of being a self-help mechanism is to assist participating countries facing difficulties arising from balance of payments problems. To this end, the CMI would effectively serve as an efficient tool to counter speculative attacks against as well as short-term flow fluctuations of regional economies through:

- Enlarging the size of commitments made under both the ASEAN Swap Arrangements and the ASEAN+3 Bilateral Swap Arrangements;
- Improving and expediting the disbursement procedures to make sure financial assistance could be made swiftly when there exists a serious need from contracted parties;
- Multilateralizing the CMI, in the long term, from its bilateral operations at present;
- Considering using regional or local currencies as swapped currencies to help address the currency mismatch as well as to internationalize regional currencies;
- Abandoning, when ready, the IMF linkage conditions in disbursing higher than 20% of the requested portion of financial assistance.

f) Establishment of institutional arrangements for future regional financial architecture

76. In order to drive forward the efficient capital flow liberalization process, the following institutionalization should se contemplated:

- **Regional Credit Guarantee Facilities:** in order to promote cross-border capital flows in terms of stable investments into regional debt securities**,** an appropriate form of entities that can provide credit guarantee functions of potential debt issuers should be established. This should help address the “credit quality” gap of borrowers who may not be well-known to the regional markets. Putting this credit guarantee agency in place should help promote cross-border capital flows into productive uses among debt markets in the region. At the initial stage, the regional credit guarantee could be set up as part of the existing facility such as a new unit under the Asian Development Bank. It subsequently could be expanded into an independent agency as its demand grows.
- **Regional Credit Rating Facilities:** In light of capital market development, regional risk-rating facilities should be developed in order to ensure the ability to accurately assess necessary risks and to promote transparency in both debt and capital markets. Risk-rating institutions for both corporate and sovereign securities would

provide more information to investors which could help elevate the demand for securities issued by regional entities. It is often argued that there exists such a need to found a "regional credit rating agency" as information of regional issuers could be more easily accessed by regional institutions rather than an international one. Furthermore, the relatively higher costs in risk assessment on regional issuers may deter the interest of international rating agencies causing a potential shortage of supply of credit rating services. Thus, in medium to long terms, an establishment of a regional credit rating agency may be needed while, in the short run, measures like "mutual recognition agreements" or some forms of standardization (harmonization) of necessary rules and regulations can serve as a transit measure prior to moving towards setting up the aforesaid "independent" regional credit rating agency.

- **Regional Investment Funds:** With a view to promoting stable and productive demand for regional assets, the implementation of setting up regional investment funds such as the Asian Bond Funds (ABFs) under the EMEAP forum should be repeated as well as augmented in terms of both size and participating countries. Both ABF 1 and 2 have shown by example that a systematic approach to promote the demand for regional debt instruments is a useful method in advancing regional debt markets. To this end, similar types as well as variations of the ABFs should be established with enlargement in size of the funds. In addition, the regional investment funds to be established should also draw upon available resources Asia-wide without constraining themselves within a certain geographical boundary.

APPENDIX 1
Capital Account Liberalization of Selected Developed Economies

European Union (EU)

1. The process of capital account liberalization of European countries had been implemented as part of the economic integration plan known as the "European Union (EU)". The ultimate goals of the EU are to execute the liberalization plan on trade and capital accounts with a view to pursuing the path towards a single currency in its monetary union. The establishment of economic and monetary union (EMU) began during the 1960s when the sequencing of openness started from trade liberalization after which capital account liberalization follow suit. Following the footstep of customs union, trade liberalization among member states that was completed in 1968, capital liberalization was introduced in 1960 as its first initiation attempting to move European Union towards freer capital movements.

2. The recent experiences of the EU can be summarized as follows:

July 1990 – December 1993: This period was designed with an aim to move towards full economic convergence. This stage suggested all member states to progressively converge their economic-related policies in order to achieve targeted economic performance. The plan also included the objective on achieving capital account liberalization in all aspects i.e. direct investment, portfolio investment, as well as, other investments.

3. January 1994 – December 1998: the plan of this stage was to further build upon initial economic convergence achieved during the last stage towards the establishment of the EMU. In this stage, several economic goals were pre-defined in a non-committed manner in order to accomplish higher degrees of regional economic convergence. This deepening unification included targeted fiscal deficits, prohibition of privileged access of public undertakings to financial institutions, and inhibition of credit facilitation from central banks to public sectors. During this stage, some institutions were founded in order to ensure the economic and monetary convergence. European Union Institute (EMI) was founded in order to be responsible for ensuring the cooperation of central banks among member states as well as preparing the introduction to single currency market.

4. January 1999 up to present: this stage was to establish a single currency (Euro). It should be noted that the highest degree of economic and monetary cooperation has been accomplished at this stage. The single monetary policy has been applied to all member countries. To ensure the adoption of policy implementation, institutionalization commenced. The establishment of European System of Central Banks (ESCB) was developed in this stage in order to substitute the role of EMI. In the last stage, Euro exchange rate was launched at the fixed rate against member countries' local currencies.

5. It is worth noting that the rationale behind the development of EMU was from the fact that economic tri-lemma from impossible trinity, the paradox of independent monetary policy, stability of exchange rate and free capital movement, are simultaneously unattainable policy choices. Since the past experience from national bloc as a result of "Beggar-thy-Neighbor" policy implementation, which created a massive competitive devaluation, did not eventually generate any desirable outcomes

for any countries, single monetary policy might be the best choice for EU members to acquire long-run stability of exchange rate.

6. By solely observing in the process of capital liberalization, full capital flows liberalization in EU was introduced with the exception, during the early stage of liberalization, that capital controls may be reinforced if flows created difficulties to monetary union or attained some contents of monetary or security reasons. However, the main purpose of liberalization was still intact. The ultimate objectives of capital account liberalization among EU members were to integrate financial markets among member countries and to facilitate effective implementation of single monetary policy.

7. Capital flow liberalization among EU members led to the adjustment in several regulatory and supervisory measures, standards and process of monitoring and transparency. Several amendments on tax reform, collateral agreements, credit transfer as well as related codes and conducts were introduced to banking and financial sectors. Encouragement of market participants and application of international accounting standards ensured market competition and strengthened companies' operation. Conducts on fund settlements were modified in such a way that transaction cost would be minimized.

8. Apart from banking and financial sectors, capital markets in EU member countries also encountered its new challenges during its transition to single currency market. Bond markets were subjected to the change of Euro currency denomination in order to commit with the EMU process and ensure overall liquidity in bond markets. As well as bond markets, stock market trade was subjected to the change to Euro denomination in 1999. In regarding of structural changes, streamlined codes and conducts in capital markets were introduced in order to ensure transparency and evade from impending disagreement during transition period.

<u>Japan</u>

9. The liberalization process of the Japanese economy started from trade, which could be traced back to the 1940s with a particular intensity of trade liberalization during the 1960s. The period was driven by the intention to achieve higher economic growth after the post-war period. Investment priority during that period was ranged from heavy industries, e.g., automobiles, electrical related goods, and energy-related products to light industries such as textiles. One of the tools to accomplish its economic goal was by regulating the banking sector to extend loans in order to support the country's strategic industrial sectors. In addition, deregulations also covered interest rate controls in the form of interest rate ceilings and floors given to preferred sectors and savers in order not to interrupt country's investment plan as well as to stabilize the rate of domestic savings.

10. Economic policy shifted from trade-oriented liberalization to capital account liberalization in the 1970s. One of the reasons that led to the transition was that Japan came to the situation that stable growth was obtained due to the end of labor migration from the agricultural sector to industrial or manufacturing sectors. Moreover, there was a higher demand for new financial instruments that could obtain higher rates of returns. However, the process of capital account liberalization proceeded very gradually.

In the 1970s, even though the degrees of capital controls, especially in short-term capital flows were rather substantial, some efforts to liberalize domestic capital markets were pursued. With respect to portfolio investment, several reforms were initiated such as liberalization on the purchase of foreign securities by trust banks and commercial banks; deregulations on long-term bank loans; elimination of voluntary restraints of bank investments on foreign securities; permission to purchase foreign securities by banking sector; and deregulations on long-term bonds.

11. Between the 1980s and the 1990s, the gradual approach on capital account liberalization remained with new introductions of deregulated rules to facilitate inward investment. Regulations on the conversion of foreign currency-denominated funds into yen were eased while interest rates on time and demand deposits were liberalized. By 1996, massive reforms of capital markets that had direct impacts on capital account liberalization were implemented such as cross-border capital and introduction of derivatives instruments. It should be noted that these reforms not only hinged upon the liberalization process but also covered, to a large degree, the institutionalization process that played an important role to the overall development of financial sectors including transparency, disclosure practices, and laws on financial products.

APPENDIX 2
Capital Account Liberalization of Selected East Asian Countries

China

1. The difference of the Chinese economy compared to other countries in the region is that the Chinese economy has been subject to a relatively high level of state management rather than market-driven mechanism. Unlike most of East Asian economies, China preserved its full level of capital controls prior to 1980s. Foreign borrowings and credit facilitation for investment projects were subject to state approvals. Transfers of capital as well as profit remittances were also subject to high tax rates or slightly improved tax incentives on remittances on long-term investment projects.

2. The beginning of liberalization was in 1982 when China decided to allow foreign participation in energy-related and export industries. Most of liberalization in this period was toward the path of real sector development, which mostly related to the attraction of more foreign direct investment to the country in order to develop the export sector. During the 1980s, income taxes were reduced while rules and regulations on joint ventures in China were deregulated, especially for foreign direct investment of joint-ventured projects in Shanghai.

3. The coastal investment zone, consisting of fourteen coastal cities, was established in order to induce advanced technology through foreign direct investment. Several preferential taxes within coastal zones were introduced whereas trade-facilitated regulations such as custom duties, import duties for export commodities as well as export duties for exportables were exempt. Several financial-related activities during this period have been expanded to cover a wider range of financial products such as settling payments of foreign currency transactions, performing foreign exchange transaction within special economic zones, and setting up foreign exchange lending facilities. Subsequently, the concept of export processing zones was expanded to establish another four special economic zones and fourteen cities.

4. The pace of liberalization of the Chinese economy was considered gradual. During 1990-1996, the government was eager to attract more foreign direct investment into underdeveloped areas by extending further preferential treatments and incentives to joint ventures similar to those in preferential economic zones. Meanwhile, the pressure of the Chinese government to nationalize joint ventures was eased due to amendments to the law on Chinese equity joint ventures. More rules and regulations were reformed, for example, income taxes were reformed to be a unified rate for profit remittance of joint ventures. Most of liberalization was mainly in direct investment towards export goods or development of domestic infrastructures. The progress of liberalization was only in the area of inward direct investment rather than outward investment, which were subjected to state approval. Gradual processes of liberalization in foreign direct investment were continued until 2002 that direct investment were re-classified in the way that allows some particular service sectors eligible for direct investment liberalization.

5. The capital and money market instruments were still prohibited or permitted under the condition of the state approvals for both resident and non-resident investors during 1990s. Furthermore, the control on liquidity funding was subjected to the review of state agencies. The development of financial and capital markets was in steady

ongoing process. Regulations on local currency loans from non-resident lenders to resident borrowers were allowed for only authorized enterprises and only permitted financial institutions could facilitate credits to those investors in 1996.

6. Several rules and regulations in capital markets were relaxed during 1998-2005. Regulations related to foreign-currency denominated bonds by domestic institutions and external guarantee were implemented. External borrowing regulations were relieved. Ongoing process was gradually and closely deregulated throughout the period. Several regulations for capital and financial market development were gradually introduced such as permission for share purchasing with existing foreign currency deposits. Regulations on foreign exchange purchasing for the future payment of foreign-currency loans and advance payments were somewhat relaxed. In the same rationale, regulations of borrowings in foreign currency were eased and reserve requirements on domestic- and foreign-currency denominated accounts were unified. In addition, regulated exchange rate was partially eased. Exchange rate of Renminbi was adjusted to be more flexible.

Indonesia

7. During the 1980s, the liberalization was not proceeded in any specific area. Indonesia started its massive reform beginning from its money market reform to trade and capital liberalization. The reforms of trade account, capital account and exchange rate and monetary system have been done simultaneously. However, it was still noticeable that the liberalization of direct investment flows and trade account were set as a priority. Partial trade openness was occurred in 1985 when a partial liberalization on import tariff in some products has been introduced. Followed by direct investment, deregulations of direct investment inflows were implemented in order to persuade more investors to invest in the country. Those schemes were aimed to diversify export proportion towards non-oil exporting products, especially manufacturing goods. It is worth mentioning that opportunities for portfolio investments and international bank lending by domestic entities are still limited. Over the period of time, gradual liberalization in investments in real sectors, for example, permission for foreign investors in some certain businesses, permission for domestic purchases for inputs and relaxation of equity ownerships as well as trade liberalization, especially reforms of tariff systems, are introduced.

8. On the contrary, portfolio investments are not substantially liberalized over the period of time. The beginning of the reform was in 1987 when government allowed foreign investors to purchase stocks, allowed private companies to organize stock exchanges in 1988 and allowed to purchase up to 49% of stock in the market, except for the stock of domestic private bank stock. Several years later, this rule was deregulated to enable investors to purchase commercial bank's stock as minority shareholders in 1992 and mutual fund companies were enabled to be 100% foreign owned in 1996. Even though there were some steps towards more liberalized portfolio investments, overall degree of liberalization in Indonesia is considerably low. As well as portfolio investment, capital market reform in the past is not in the continuous manner. Its first important step in capital market development was in 1987 where rules and operation associating with capital markets were introduced. During the 1990s, the introduction of Surabaya Stock Exchange, the provision for commercial banks to issue securities through stock market and establishment of stock clearing, guaranteeing, and settling agencies were another step of strengthening institutions of stock markets. Even though the steps in improving capital market during the 1980s to the early 1990s were

considered awkward, due to the Asian Financial Crisis in 1997, the realization of stronger capital market was acknowledged. By 2000, prudential regulations on government bond management and trading was issued, which covered the function of registration, clearing and settlement, reporting, trading mechanism and monitoring process.

9. Banking- and financial-related systems began its process of liberalization uninterruptedly since 1980s. The main objective of banking and financial liberalization was initially created markets and related institutions towards market-based system. Interest rates were not in the government administration in 1983 and money market instrument was launched in 1985. During late 1980s, several institutional reforms in order to create market liquidity as well as prudential supervision and regulatory frameworks though banking and capital markets. Moreover, bank licensing was permitted to new foreign and domestic entrants, which created more competitions within banking system. In addition, the attempt to increase maturity has been done through extension of money market securities up to 6 months. The liberalization was claimed to be sources of market functioning and liquidity generators. However, considering the reduction in reserve requirements on domestic liabilities and foreign currencies, this might be impending risks for the future vulnerabilities on capital flows.

10. This led to the adjustment towards stricter regulatory and supervisory measures in 1990s as stringent rules and regulations were imposed. Bank licensing was limited as well as bank's net open position, compliance of capital adequacy requirements and non-performing assets were imposed. Stricter rules and regulations on information disclosure standards, accounting standards and financial supervision were introduced concomitantly with other banking and financial reforms in order to strengthen domestic banking and financial sectors. Even though there were stricter rules and regulations on domestic borrowings from domestic banking sectors, the portfolio investment liberalization, which mostly in forms of securities held by non-resident investors took part in generating more capital inflows in Indonesia during 1990s.

11. For the exchange rate arrangements, Indonesia adopted a basket of weighed currency (de facto fixed exchange rate) since 1987 with a certain percentage movement, which provided more flexibility of trading foreign exchange rate, and facilitation of hedging instruments such as exchange rate swap to banking institutions. During 1990s, exchange rate band was moving towards more flexibility. However, in 1997, exchange rate band were unable to cope with speculative pressure during the emergence of financial crisis and led to managed floated system afterward. This brought about the stricter regulations and control on capital markets and exchange rate management such as stricter swap facility and net open position.

Korea

12. Capital account liberalization in Korean economy was limited during 1980s and early 1990s. Foreign investments were limited due to the nationalization of domestic industries. Financial sectors were aimed for facilitating domestic industrial regime (Chaebols) and domestic capital markets were limited for domestic resident investors. Trade liberalization was implemented since 1982, the liberalizations on some import contents and tariff deregulations. As well as trade, in the late 1980s, capital account liberalization was introduced in response with the overall macroeconomic environment. Several deregulations were launched. Capital account was liberalized in order to tackle

with the macro foundation deterioration. Foreign direct investments were subsequently liberalized. Foreign investments were granted in some sectors previously restricted by the government. Some types of investment were promoted by government such as investment on high technology. Tax privileges were facilitated to direct investments in Korea. Inward direct investments began to liberalize, however, liberalization on outward investments were still limited. However, during the 1990s, several incentives for direct investment liberalization covered most of manufacturing industries in line with the reform of tax incentive system. Until late 1990s and early 2000s, liberalization on some restricted sectors such as real estate rental, waterworks, investment companies were further liberalized.

13. Capital account liberalization and banking and financial liberalization began during the late 1980s and more intense during 1990s. Portfolio liberalization in Korea began during the late 1980s. Domestic institutions are permitted to invest in foreign stock markets. Off-shore accounts were liberalized, for example, foreign exchange banks were allowed to issue foreign currency bonds offshore, foreign investors were allowed to engage to each other in the direct transaction of Korean stocks. Interest rate and yields were partially liberalized. During the 1990s, the intense degree of liberalization was conducted. Liberalization on investments in securities was further extended. Vast areas of liberalization were covered. Domestic stock markets allowed foreign investors to join with some certain limitation. Liberalization was extended to the foreign holdings of capital in Korean companies. In the same rationale, the investments in domestic bonds by foreign investors were allowed in London market. The investments in bond market were relaxed in the non-guaranteed segment. In addition, more capital instruments such as commercial papers and certificates of deposits were allowed to issue abroad by Korean institutions. Interest rate for both loans and deposits were liberalized. Technology such as wiring networks was introduced.

14. As well as portfolio investments, banking institutions were intensively liberalized. During 1980s, several deregulations were aimed to strengthen and globalize banks and financial institutions. During the late 1980s and the early 1990s, New commercial banks were established, which would increase domestic competition on banking products and services and new law enforcement covered many aspects in banks and financial institutions aiming for increasing prudential monitoring, supervision and transparency. Moreover, the process covered the promotion of restructuring process. Liberalization also led to the relaxation of foreign credits rules and regulations to increase domestic liquidity. For example, maximum amount of foreign loans were increased as well as the permission to issue certificates of deposits and commercial papers abroad. However, the stricter rules and regulations in banks and financial institutions that engaged with foreign transaction applied due to the emergence of crisis, especially on the foreign credits with short maturities. Prudential safeguard measures on capital market liberalization were further introduced in 1999 in order to tackle with unstable international capital flows. The engagement in foreign exchange related businesses have to notify Ministry of Finance and Economy.

15. For exchange rate arrangements, the basket of currencies with minor adjustments was adopted during the 1980s. The regime is aimed to incorporate with the stability of exchange rate. Restrictions of on derivatives were also liberalized in order to tackle with hedging impending risks and allow further degree of stability. However, the exchange rate regime that applied to independent monetary policies and capital account

liberalization may not be attainable in the long run. Even though the band of exchange rate was gradually widened during 1990s, the adjustment was too low to consider as exchange rate liberalization. The currency was floated at the end of 1997. After the floatation of Korean Won, the new institution, Korea Futures Exchange, was established in order to commit the development of foreign exchange market.

<u>Singapore</u>

16. Singapore was the country whose objective was to be the banking and financial center since 1970s. Therefore, the country started its own process of liberalization, including foreign currency involving activities such as borrowing, lending and investing for both resident and non-resident investors. Rules and regulations were established in order to support the liberalization. Institutional establishment in order to support capital account liberalization was established such as Domestic Banking Units and Asian Currency Units for banking and financial sectors and the Stock Exchange of Singapore (SES) and Singapore International Monetary Exchange (SIMEX) for capital market. Policy implementation regarding to its aim of being financial center was further elaborated into various aspects.

17. Throughout the period, capital markets were refurbished. Several tax regulations were reformed. The beginning operation was the removal on stamp duties for off-shore loan agreements of international financial sectors, followed by tax holiday for incomes derived from offshore transactions. Tax incentives were also given to fund managers whose tradings in foreign securities and ACU transactions. Computerized system was assigned to enhance its trade transactions. The development of securities and futures market became prevalent when merging of both markets (SES and SIMEX) was successful.

18. In the same rationale, bank and financial sectors were also strengthened corresponding to the support of this sector to capital markets. While capital markets principally adopted tax-based regime and establishments of new institutions in order to liberalize capital markets, bank and financial sectors used the mixture of rules and standards and tax reforms to modernize as well as ensure the future stability of these sectors. Prudential regulations were also adopted such as loan limit on off-shore banks, the stricter reserves on swap transactions, risk management framework for banking sectors. It is noticeable that the intensity of reforms in financial sectors is largely emphasized after the crisis in 1997. Fundamental review of financial sectors was introduced in 1997. Liberalization on commercial bank sector was formulated in 1999 by abolishing the capital holding limits by foreign investors. Measures on financial and non-financial activities were streamlined. In addition, the involvement in Financial Sector Assessment Program by IMF and World Bank also ensured the aspects on macroeconomic factors and health of financial sectors from adaptation of financial rules and standards. In 2001, the central bank of Singapore also announced new risk-based liquidity supervision for banking sectors. The strong monitoring of loan facilitation to foreigners in Singapore Dollar was still intact in order to ensure that risks from speculative activities from those loan facilitations were minimized.

19. On the aspect of exchange rate arrangements, Singapore dollar was subjected to non-internationalization for a long period. However, the country started its exchange rate liberalization in 1978 and adopted the managed-floated regime by 1981. Even though the exchange rate was partially liberalized, non-internationalization of Singapore

dollar was still intact until 1998 when the wider use of Singapore Dollar by non-resident investors for business purposes were permitted. Encouragement of the use of Singapore Dollar was aimed to instigate capital market liquidity from more participants joining investments in its domestic capital markets. Non-internationalization policies were further eased by extending the use of Singapore Dollar by non-residents in various purposes such as derivatives, securities borrowings and lendings, credit facilitation and investments in financial assets and real estates.

Thailand

20. The process of liberalization in Thailand started in 1970s when government promoted industrialization process in export-competing industries. In this matter, the country needed to have substantial amount of funds in order to catch up the development in international environment. Export promotion regime led to transformation of domestic macroeconomic structure. Attraction of capital was necessary for supplementing domestic sources of capital for further economic development.

21. For the case of Thailand, the beginning of the capital account liberalization came from the openness of foreign direct investment in export sectors. The Board of Investment of Thailand was established to be responsible for country's investment planning. Varieties of investment incentives were applied, especially in export promoting products, such as tax exemption and reduction, including corporate income tax holidays ranging from 3 to 8 years, exemptions or reductions of duties and other taxes on machinery and raw material imports. In addition to tax incentives, investment promotion includes basic infrastructure for industrial operation, transportation system, public utilities, environmental protection and technological development. Intensive government assistance was more prevalent during 1990s. Government deregulated the foreign ownership of domestic firms to be 100% for companies with 100%-exported outputs and ownership ceiling for joint ventures at 49%. Starting from 1997, the pattern of direct investment was more diverse not only in the export-oriented sectors but also in banking and financial sectors as well. During the financial crisis, foreign direct investments were more widespread. This kind of investments in financial sectors was re-regulated in case-by-case basis. Foreign ownership ceiling were lifted under specific circumstances in order to avoid banking and financial insolvency.

22. For financial and banking markets, the liberalization process during 1980s was still restricted. Commercial bank lending to foreigners in foreign currency was still limited. However, during 1990s, the liberalization of banking and financial sectors was immensely taken place. Several measures are implemented in order to strengthen domestic financial structure towards the international arena. Interest rate ceiling was partially liberalized during 1980s and then fully liberalized in 1992. Establishment of Bangkok International Banking Facility (BIBF) was the first huge step for scope expansion of international service. Facility of cross-border transactions was provided and international borrowing/lending was allowed. Non-resident participants were allowed to join these benefits. Several law amendments were undertaken in order to support the liberalization such as Financial Institutions' lending Rate Act and the Commercial Banking Act. Furthermore, the Bank of Thailand has deregulated regulations placed on foreign bank branches such as asset requirements within the country, capital maintenance, and liquidity reserve requirement. Further, Provincial International Banking Facility was established to take care of credit extension in local

currency. Rules and regulations on banking and financial standards were also intact. Several regulations on capital adequacy ratio, capital-to-risk assets were raised. Net foreign position was also imposed on net foreign position was applied to both banks and financial institutions.

23. However, the high degree of financial openness led to the massive capital outflows during the crisis. The emergence of crisis led the country to several establishment of new asset clearing in financial systems as banks and financial institutions as well as BIBFs were severely damaged. Those establishment or re-organization were, for example, Financial Institutions Development Fund (FIDF), Corporate Debt Restructuring Advisory Committee (CDRAC), Thai Asset Management Corporation and other private asset management corporations. In addition to new institutional arrangements, the country also applied stricter rules and regulations in order to tackle with weakening financial environments such as financial restructuring, recapitalization, and foreclosure law. For example, regulations on definition of NPLs and loan loss provision were streamlined; legal framework restructuring on financial sector-related areas were amended.

24. Capital markets are also developed in accordance with the development of financial and banking sectors. During 1980s, the encouragement of capital market participation was done through tax incentives such as income tax reduction for both residents and non-residents. During 1990s, intense liberalization was commenced such as investment by finance companies in a greater proportion of their funds was permitted; regulations on securities trading office in provincial areas were enacted; Securities and Exchange Bill were drafted; repatriation of investment funds, loan repayment and interest payments by foreign investors were enabled to perform; Security and Exchange Act were introduced. Moreover, bond market development was undertaken. Liberalization in the early 1990s was the permission to raise funds through debt instruments, which reduced the cost of raising funds by domestic companies; Thai Credit Rating Agency was established; Thai Bond Dealer's Club (which is now known as Thai Bond Market Association) were founded in order to strengthen secondary bond market information, standards and codes, and regulatory and monitoring process.

25. The development of exchange rate arrangement was gradually liberalized for a whole period. During the 1980s, the exchange rate regime was switched from exchange rate peg to basket of currencies. However, high degree of exchange rate control was still prevailed due to the high proportion of US dollar in the basket. Thus, it was widely known that Thailand eventually adopted de facto pegged exchange rate in order to maintain exchange rate stability for the sake of stability for external trade and attraction of capital flows. However, speculative attack in 1997 led to the adoption of managed floated regime with unpublished currency band.

Appendix 3
Liberalization Sequencing

	Trade Liberalization	Capital Account Liberalization		
		Direct Investments	**Portfolio Investments**	**Other Investments**
Developed Economies				
European Union	**1951:** The first trade cooperation was initiated through European Coal and Steel Community. **1968:** Customs Union was successfully established.	**1960:** Freedom of capital movements was initially initiated. **1986:** "Program for the Liberalization of Capital Movements" was adopted. **1988:** "The Single European Act" was adopted. **1990 onward:** Full liberalization of capital transactions was adopted.	**1979:** Co-ordinations on stock exchange listing were introduced. **1990:** Full liberalization of capital transactions was adopted. **1996 onward:** Liberalization in securities market was enacted.	**1977:** The first framework on banking prudential regulation and supervision was laid. **1990:** Full liberalization of capital transactions was adopted. **1993 onward:** Single market in Banking sector was introduced and series of measures were adopted from 1994 onwards.
Japan	**1945:** Agency for managing Japanese trade was established. **1949:** Comprehensive law on foreign exchange and trade were enacted. **1960:** Intensive liberalization of trade, especially on the import, was adopted.	**1967:** "50-percent rules" were applied to 50 industries. **1969:** 155 more industries were liberalized.	**1970:** Samurai bonds were initiated. **1971:** Limits on purchases of foreign securities by investment trusts and insurance companies were eased. **1972:** Limits on purchases of foreign securities were applied for trust banks and commercial banks. **1977:** Rules on foreign bond holdings by residents were eased. **1996:** Big-bang reforms in capital markets were introduced.	**1976:** Outward long-term loans were eased. **1984:** Regulations on conversion of foreign currency-denominated loans to yen were abolished and yen-denominated loans for Japanese oversea investors were liberalized. **1998 onward:** Big-bang reforms in financial markets were launched.
Selected East Asian Economies				
China	**1984 onward:** Trade were liberalized	**1984:** 14-coastal	**1990:** Stock exchange	**1978:** The people's Bank

	Trade Liberalization	Capital Account Liberalization		
		Direct Investments	Portfolio Investments	Other Investments
	in corresponding with foreign direct investments.	economic zone was established and several incentives on long-term investments were prioritized. **1990:** Law for establishing joint ventures in was eased. **1990-1997** Several incentives on foreign trade and investments were facilitated. **2001:** Outward investments were liberalized through the permission to purchase foreign exchange rate. **2002:** Some direct investments, especially in service sector, were allowed.	markets in Shanghai and Shenzhen were established. **1996:** Non-resident investors were allowed to purchase B-share only. **2001:** Domestic investors were allowed to purchase B-share with foreign currency deposits. **2004:** Qualified foreign institutional investors were allowed to invest in B Shares.	of China was independent from Ministry of Finance. **1984:** Loans facilitation related to the domestic investments in advanced technology imports were facilitated by Bank of China and Industrial and Commercial Bank of China. **1999:** Some controls on Renminbi loans were eased. **2001:** Rules on advanced purchases of foreign exchange to repay foreign currency loans were liberalized. **2004:** Several rules and regulations on banking and credit institutions were streamlined in China and Hong Kong.
Indonesia	**1985:** Import tariffs were realigned. **1986:** Import licensing was liberalized. **1990 onwards:** Tariffs were further reduced in corresponding with liberalization of licensing requirements.	**1985:** Direct investments in some industries were allowed if they were 100% export production. **1988:** Joint ventures on financial institution establishment were allowed. **1991:** Negative list of foreign direct investment was revised. **1994:** 100% foreign ownership was allowed in some	**1987:** Permission to purchase stocks was given. **1989:** Foreign investors were allowed to purchase 49% of stocks in primary market. **1995:** Utilization of swap facilities was allowed. **2002:** Permission to mutual funds to broaden their investments overseas was	**1991:** Offshore loans were introduced. **1998:** Establishment of new bank and branches were eased. **2000:** Overseas loans were subject to central bank monitoring.

	Trade Liberalization	Capital Account Liberalization		
		Direct Investments	**Portfolio Investments**	**Other Investments**
		industries for an initial 15-year period.	granted.	
Korea	**1985:** Import tariffs were revised. **1987:** New Foreign Trade Act was in effective. **1988:** Some imports were removed from restricted items. **1989 onward:** Tariff reduction program was established.	**1983:** Foreign capital Inducement Law was revised and negative list industries were more opened. **1991:** Tax exemption on corporate profits was facilitated for 3 years. **1998:** Foreign Investment Act was further liberalized. Negative list industries were minimal, tax incentives was extensively granted and foreign investment zone was established.	**1984:** Korean Fund was listed in NYSE. **1987:** The "Korean Europe Fund" were established to induce more foreign portfolio investments. **1993:** Issuance of foreign currency-denominated securities was allowed. **1996:** Won-denominated securities by non-residents could be sold abroad up to 50%. **1997:** Limits of several types of bonds purchases were eased. **1999:** Issuance of won-denominated securities and foreign currency-denominated securities issued by non-residents were allowed.	**1981:** Issuance of foreign beneficiary certificates by Korean trust companies was allowed. **1991:** Limits on foreign loans for investments were lifted. **1992:** Maximum foreign loans for overseas investments were raised. **1994:** Short-term borrowing was allowed for foreign-financed manufacturing companies. **1997:** Regulations on long-term loans were abolished. **1999:** Short-term loans were allowed for companies with strong financial stance. **2001:** Restrictions of foreign currency loans by domestic banks to domestic borrowers were abolished.
Singapore	**1967:** Export Expansion Incentive Act was in effective.	**1967:** In corresponding with the Export Incentive Act, foreign direct investment was attracted. **1979:** Industrial restructuring, especially in high-technology products, was	**1984:** Trading of international gold futures was facilitated. **1991:** Low tax rate on foreign securities trading was granted. **1996:** Foreign companies could	**1968:** Bank of America was established in Asian Currency Unit (ACU) operation. **1975:** ACU deposits were not subject to tax. **1980:** Stamps on ACU offshore loans

	Trade Liberalization	Capital Account Liberalization		
		Direct Investments	Portfolio Investments	Other Investments
		intensified. **1987:** Local Industry Upgrading Program was implemented to improve production efficiency.	list Singapore-dollar denominated stock. **1999:** Stock Exchange of Singapore and the Singapore International Monetary Exchange were integrated. **2001:** Swap restriction were lifted for offshore banks.	were abolished. **1998:** Intensive financial liberalization was initiated. **2000:** Non-internationalization of Singapore dollar was liberalized. **2003:** Non-internationalization of Singapore dollar was further liberalized in all individuals and non-financial sectors.
Thailand	**1980:** Export promotion industrialization was initiated.	**1977:** Investment Promotion Act was implemented. **1991:** Investment Promotion Act was amended to attract more investments. **1993:** Investment zone was established for export-oriented industries and tax incentives were granted. **1994:** Outward investment was partially liberalized. **1999:** Alien Business Law was amended.	**1986:** Tax income from mutual funds was lowered **1991:** Tax on dividends was reduced. **1993:** Thailand's credit rating agency was established. **1993:** Rules on issuing debentures in foreign countries were specified in order to increase sources of fund mobilization. **1994:** Thai Bond Dealers' Club was established to be secondary bond market.	**1990:** Commercial banks were allowed to do foreign loan transactions and remittance. **1992:** Some financial services were allowed to banks and financial institutions to operate. **1993:** Bangkok International Banking Facility was established. **1994:** Provincial International Banking Facility was established. **1997:** (crisis hit) Restructuring legal and financial frameworks were implemented. **2001:** Thailand Asset Management Corporation were established.

Remark:
European Union: The detailed process of capital account liberalization in European Union is acquired from the European Union website [http://europa.eu.int].

Japan: The liberalization process of Japanese's capital account are further discussed in Aramaki (2006), Bank of International Settlements (2003) and G-20 (2003)

The detailed process of capital account liberalization in East Asian countries are as follows:
China: See Aramaki (2006), Bank of International Settlements (2003), G-20 (2003) and Prasad and Wei (2005)
Indonesia: See Darber, Echeverria and Johnston (1997), Kaminsky and Schmukler (2005) and Annual Report of Bank Indonesia [http://www.bi.go.id]
Korea: See Darber, Echeverria and Johnston (1997), G-20 (2003) and Noland (2005)
Singapore: See Kapur (2005)
Thailand: See Darber, Echeverria and Johnston (1997), Kaminsky and Schmukler (2005) and Annual Report of the Bank of Thailand [http://www.bot.or.th]

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