A REPORT ON INSTITUTIONAL ARRANGEMENTS REGULATIONS SURROUNDING CROSS-BORDER CAPITAL FLOWS IN ASEAN+3 ECONOMIES

DAIWA INSTITUTE OF RESEARCH
Tokyo, Japan

July 2006

CONTENTS

Executive summary **1**

1. Introduction **11**

2. Analytical anchor and background of the study **13**

2.1 Some analytical perspectives: links between capital flows, exchange rates and vulnerable financial systems 13

2.2 In a capsule: an express AFC post mortem 19

2.3 What fanned the flames and other subplots 24

2.4 Recovery efforts and strategies 27

2.5 Post-AFC: policy lessons and new opportunities for regional economic cooperation 30

2.6 The role of institutions 32

3. Corporate governance, Prudential regulations and Institutional strengthening measures **35**

3.1 The case of Indonesia 37
- 3.1.1 Banking Sector
- 3.1.2 Corporate Sector
- 3.1.3 Prudential Regulatory and Supervisory Reforms
- 3.1.4 Corporate Governance

3.2 The case of Malaysia: Corporate governance 45

3.3 The case of Singapore 53
- 3.3.1 Prudent regulations, the MAS and the Banking sector
- 3.3.2 Reforms and initiatives

3.4 The case of Thailand 60
- 3.4.1 Financial sector
- 3.4.2 Bond market
- 3.4.3 Corporate sector
- 3.4.4 Other developments
- 3.4.5 Financial sector reforms
- 3.4.6 Corporate sector reforms
- 3.4.7 Corporate governance ROSC

3.5 The case of the Philippines 77
3.5.1 The Banking Sector
3.5.2 The Corporate Sector

4. Cross-border capital flows in East Asia: an economic analysis 83

4.1 Geographic distribution of portfolio and other financial investment 83

4.2 Weak financial linkage within East Asia 84

5. Summary remarks and policy recommendations 89

5.1 Recommendation-1
Further Strengthening of Domestic Financial Systems and
Prudential Regulatory Frameworks 91

5.2 Recommendation-2:
Building Monitoring Capacity to Assess Volatility of Capital Flows 91

5.3 Recommendation-3:
International Information Exchange and Information Disclosure to the Public 92

5.4 Recommendation-4:
More Efficient Mobilization of Domestic Financial Resources 93

5.5 Recommendation-5:
Establishing Emergency Facility to Prevent Capital Flow Crisis 93

6. Attachments 95

5.1 Attachment-A:
Patterns and determinants of Cross-border financial asset holdings in East Asia 95

5.2 Attachment-B:
Institutionalization of regional financial cooperation within Asia 134

7. List of tables 141

8. References 143

9. List of authors 153

EXECUTIVE SUMMARY

This paper reviews the major financial measures and economic adjustment strategies adopted by some Asian countries after the Asian Financial Crisis (AFC), analyzes the status of institutional and regional cooperative efforts of ASEAN+3 economies to better manage cross-border capital flows against the backdrop of globalized finance, and provides recommendations to enhance efforts with which capital market elements and regulatory bodies in ASEAN+3 could work, steadily and in tandem, to maximize country gains from capital flows in particular, and from regional integration arrangements in general.

The background and analytical perspectives (Part 2) used throughout this paper were gathered from existing literature and data. These perspectives were applied in the individual and integrated country analyses in subsequent sections. In Part 3, brief annotations of major liberalization measures undertaken during the period 1990 – 2004 are discussed and major institutions involved in capital flow movements are introduced, together with these institutions' regulatory and supervisory frameworks. It also presents the state of corporate governance and prudential regulations in selected economies of Asia. Part 4 contains an economic analysis of the regional characteristics of cross-border financial transactions in East Asia. Part 5 concludes the paper and enumerates policy recommendations. Finally, in Part 6, one may find the attachments containing the details of the empirical study on the patterns and determinants of cross-border capital flows in Asia, and measures of institutionalization of financial integration and cooperation within the region.

LINKS BETWEEN CAPITAL FLOWS AND EXCHANGE RATES

Financial liberalization was the flagship of the Asian region several years prior to the onset of the AFC. It promised many things: high growth, accelerated productivity gains, declining unemployment and removal of distortions caused by government intervention. Internationally mobile capital, according to its proponents, "facilitates the efficient global allocation of savings by channeling financial resources to its most productive uses, thereby increasing economic growth and welfare around the world." For the past two decades, liberalization paved the way to making financial capital extraordinarily mobile. The numbers were impressive indeed. From US$590 billion in 1989, approximately US$1.5 trillion moved across borders everyday by 1998. A favorite

destination in the mid-90's, Asia obtained huge inflows of capital. In 1996 alone, US$123 billion flowed into the territory. One year later, capital began flowing out in serious, contagious and alarming proportions. The AFC was born. Financial liberalization's promises were broken, leaving the countries worst affected by the crisis deeply marred by huge economic and social losses.

Amidst a plethora of crisis-causing factors, the growing body of AFC literature always point to the role played by the link between exchange rate and capital flows from at least three angles. First is the role that exchange rate policies played in the pre-crisis period in encouraging enormous capital inflows. Second is the trigger (presumably *overvalued* exchange rates due to the so-called *de facto* dollar peg of the countries involved), which set off the crisis in already-vulnerable economies. The *de- facto* dollar peg with high interest rates invited short-term portfolio investments. A subset of this factor is the weak financial sector, which complicated the currency crisis. Large capital inflows were channeled through undercapitalized, poorly regulated and badly supervised domestic financial institutions. A weak banking system becomes an indicator for foreign speculators to attack the local currency. Third is the role exchange rates played once the crisis unfolded. The erosion in the values of the Asian currencies made it difficult for banks and businesses to pay back debts. For a number of these entities, defaulting on their loans was the only way out.

ASIAN FINANCIAL CRISIS AND STRUCTURAL WEAKNESSES

Why did so much capital flow into Asia? The huge flows of financial resources to East Asia were the product of several factors. These include the pursuit of perceived large profit opportunities in a low interest rate environment, the diversion of Japanese investment offshore, the expansion of institutional investors and country funds, the development of regional ratings, and the easing of local capital controls. Liberalization offered anxious foreign investors the opportunity to profit from the so-called "miracle" economies of Asia.

With this increasing depth of liberalization, domestic macroeconomic environments allowed large inflows of short-term, unhedged capital, which fueled a credit boom. Private corporations became highly leveraged entities with large domestic and external debts. In a newly liberalized but insufficiently regulated financial markets, the domestic banking sector began to develop systemic vulnerabilities.

The nature of capital flowing into Asia was also a key factor, which fed into the vulnerability of the countries' financial sectors. Since most of the capital inflow was neither foreign direct investment (FDI) nor portfolio investment, but rather short-term capital bank loans, a speculative investment boom surfaced. Domestic corporations were prompted to borrow funds directly from international lenders or indirectly from domestic financial institutions that had access to external financing and to over-invest in industries prone to asset bubbles, particularly the real estate sector, and in inefficient manufacturing sectors.

The potential of some types of capital flows for being notoriously and highly volatile was fully played out during the crisis. Bank loans were the most volatile and underwent the most violent reversal. But aside from capital flow's potentially reversible nature, institutional quality and macroeconomic policy may also influence the risk of capital flow volatility occurring.

Lack of prudential risk management on the part of commercial banks; ineffective banking regulation and supervision; poor accounting, auditing and disclosure practices; and weak corporate governance --- all these weaknesses reinforced each other and made credit analysis and risk management largely redundant. This in part explains why large amounts of external corporate funding were made through debt rather than through equity, which requires closer monitoring of firms. Pre-existing prudential safeguards were weak and were undermined by the close relationship between corporations and banks, coupled with their influence on governments. Also, high corporate leverage was exacerbated by controlling owners' refusal to disclose relevant information and by the inadequate legal/court protection afforded to minority shareholders. Given this environment, capital resources were allocated and utilized below the desirable optimal level.

In the context of financial liberalization and capital flows, this sub-optimal allocation of resources took the form of imprudent lending behavior by banks and investors alike, on the assumption that deposits were implicitly guaranteed and that the government would bail out banks. Banks, fearless due to the inherent expectation that the government will scoop them out of the mud, went on a lending frenzy to investors who bet their borrowed chips on bubble-prone assets such as real estate or finance companies owned by individuals close to (or had) relatives sitting on the throne of power.

Reliance on implicit government approval of large loans (to sectors, if not to firms) was rampant and bailing out major banks from facing their liabilities was justified because they were

"too big to fail." Moreover, the cross-ownership structure of banks (where banks and other financial institutions are part of the conglomerate and subservient to it) did not afford them any motivation to impose effective corporate governance.

The AFC delivered a strong message home: the regional economies of Asia are 'institutionally ill prepared' to ride the waves of global financial liberalization without the risk of drowning. The calls for reforms at the national and regional levels were made imperative. A common denominator among Asian economies, post-AFC, is the conviction that the benefits of economic integration and its institutionalization outweigh the costs. In view of this, it has become essential for institutions (e.g., central banks, finance ministries, banks, stock exchanges, credit rating firms, etc.) and regulatory frameworks to be reviewed, renewed and strengthened. Only through these would the financial and capital markets in Asia develop and stand its ground despite the onslaught of globalized finance, and harness the resource potentials of capital flows despite its unpredictable and testy nature.

Ultimately, the quality of macroeconomic outcomes Asian economies seek to achieve depends on the quality and capability of institutions to manage the challenges of internationally mobile capital and regional financial integration.

WEAK FINANCIAL LINKAGE WITHIN EAST ASIA AND ITS BACKGROUND

Empirical evidence, based on gravity model study, suggests that financial integration is closely associated with trade integration. This may imply that East Asia can be further financially integrated as it continues to promote the growth of intra-regional trade. However, the intra-region trade-to-GDP ratio for East Asia is already very high, even comparable to the intra-region ratio for Europe. Hence, it is not clear that further regional trade integration can create substantial cross-border finance. Furthermore, the finding that regional financial integration in East Asia is much weaker than in other regions, after controlling for the degree of intra-region trade integration, suggests that there are other structural and institutional impediments to financial integration in this region and they need be addressed by policies, particularly designed to promote the growth of Asian financial markets.

There are several institutional and structural characteristics in East Asian financial systems that constrain regional financial integration. Generally, the underdevelopment of financial markets

hinder trade in regional securities between different East Asian countries. In East Asia, where financial systems have been traditionally bank-oriented, securities markets have been relatively less developed. The inadequate financial and legal structure, low auditing and accounting standards, low transparency, and weak corporate governance have curtailed the development of capital markets in East Asia. This underdevelopment of financial markets and institutions in East Asian economies must be the primary cause of the lower degree of financial integration in the region. Therefore, among others, East Asian economies must make efforts to improve their own financial infrastructures while working together for a harmonization of financial markets within the region in the areas of rules, regulations, taxes and so on.

In particular, bond markets are underdeveloped in East Asia. In terms of the composition of domestic financing, East Asia relies less on bond markets than equity or bank loans, and many Asian domestic bond markets are small relative to those of developed economies such as the US and Japan. The bond markets in East Asia still lack liquidity and remain largely fragmented.

After the financial crisis of 1997~98, there has been considerable progress in the development of the regional bond markets. The basic motive is to mobilize the region's vast pool of savings for direct use in the region's long-term investment, thereby reducing the double mismatch problem and diversifying the means of financing. Most prominent among these developments is the launch of the Asian Bond Fund (ABF) in June 2003, which attempts to pool the international reserves of Asian central banks and invest in Asian bonds. The Executives Meeting of East Asia-Pacific Central Banks (EMEAP) contributed US$1 billion to invest in dollar-denominated, sovereign and quasi-sovereign bonds issued by Asian entities. The central banks established another fund, the so-called ABF II, which is intended to invest in local currency-denominated Asian bonds.

However, regardless of the efforts to develop regional bond markets, there are preliminary tasks that must be fulfilled. The most important pre-requisite is the deregulation and opening of the domestic financial systems so that more local currency bonds are issued, domestic investors are allowed to invest in foreign bonds, and foreign borrowers can issue bonds denominated in different currencies in East Asia's domestic markets.

It is still true that a number of countries in East Asia remain behind the capital market liberalization process by relying frequently on capital controls. Restrictions on capital account transactions and on entering foreign financial institutions are impediments to the process of integrating financial markets across economies in the region.

East Asia also needs further financial and monetary cooperation for exchange rate stabilization among regional currencies. Higher degrees of exchange rate volatility contribute to a lower degree of financial integration in East Asia. A number of studies show that higher exchange rate volatility will lead to fewer transactions in trade in assets, as well as trade in goods.

Another special feature after the financial crisis is that East Asia had accumulated a substantial amount of dollar reserve assets. East Asia, with a 'fear of floating' against the US dollar, have intervened in the foreign exchange market so as to moderate excessive volatility of exchange rates and moreover to maintain competitiveness of export sectors. They were also inclined to build up a capacity to draw on reserves in contingency so that it reduces the vulnerabilities to any future possible external disturbance. East Asian economies tended to hoard their reserves in low-yielding US Treasury instruments and other dollar denominated financial assets. This strong tendency to invest in dollar-denominated safe-assets must have had a negative impact on regional integration. This post-crisis experience has provoked questions on what is the optimal exchange rate regime for East Asia. Whether East Asia can emulate the European experience of monetary integration by taking necessary steps to build requisite institutions and policies that eventually lead to the formation of a monetary union is an important issue.

CONCLUDING REMARKS AND POLICY RECOMMENDATIONS

The AFC of 1997-1998 has its roots from the extensive volume of foreign capital, which flowed into the region in such a short period of time. The sudden inflow of money flown into both the business and banking sectors caused a sudden increase of bank loans and capital flows into the corporate sector. Because access to the funding market was relatively easy, companies expanded their investment and business activities without making careful plans.

The virtual fixed exchange rate with the US dollar also accelerated the inflow of capital from abroad. All the currency exchanges from US dollar to its domestic currency, such as Thai bath, Malaysian ringgit, Indonesian rupiah, etc., go through the banks' exchange facility. Therefore, if the monitoring of banks' foreign exchange transactions volume can be well established, the policy authorities can identify sudden changes in the currency exchange market.

There are financial crises caused by sudden inflow of capital and the sudden outflow of capital. In such cases, the volatility of the volume of the currency exchange becomes very high in a short period of time. The policy authority should therefore keep an eye on the volume of the

currency exchange reported by banks on daily basis. If the signs of increase of volatility of the currency exchange volume can be seen, policy authorities should check the reasons of the sudden increase. The Central Bank plays an important role in the currency exchange between its home currency and overseas currency such as the US dollar; therefore it should slow the process of the currency exchange. Otherwise too much volatility of the currency exchange will cause various ill effects on real economic activities.

The following are the policy recommendations drawn from the literature survey, country case studies and empirical analysis.

First, domestic financial systems and prudential regulatory frameworks need to be strengthened further. Given that cross-border capital flows should be liberalized to improve financial market efficiency and ensure high growth, it is imperative to strengthen further the domestic financial systems and prudential regulations. Major progress has made in the countries (as indicated in the country studies), but there appears to be some room to catch up with the standards of developed economies in terms of governing the financial sector and its regulatory frameworks.

Second, there is a need to build the monitoring capacity of key financial and regulatory institutions in order to immediately and effectively assess the volatility of capital flows, detect abnormal fluctuations as early as possible, and monitor other nonbank financial entities which also engage in cross-border financial transactions. Central banks and finance ministries are to monitor the amounts of capital inflows and outflows on a daily, weekly, monthly, and annual basis. When the volume of the volatility turns abnormal, it should warn the market participants and immediately check the causes of the volatility.

Of course there are several factors attributed to the volatility of the flows. One is based on trade flows of both current and future contract and the second is based on the purpose of financial activities such as purchasing and selling of stocks and bonds. Procedures to slow down the capital flows should be introduced by reducing the speed of exchanging the dollar into domestic currency. Since currency exchange transactions are in principle conducted through foreign exchange banks, which reports all the data to the Central bank and the Ministry of Finance, the monitoring powers of these institutions are key to the early detection and effective address of capital flow volatility.

By studying trend and seasonal fluctuations, causes of volatility can be identified and

analyzed based on econometric methods. Volatility testing of capital flows and exchange rate fluctuations should be continuously implemented. Progressive research on capital flow and exchange rate analyses is crucially important to detect abnormal inflow and outflow of capital, and will function as an early warning signal of a crisis.

Emphasis must be put on strengthening the monitoring powers of financial institutions that function as settlement facilities. Tracing the records of international transactions by such financial institutions would help the authorities thoroughly assess the current situation of capital inflows/outflows. In addition, in some countries, large amounts of cross-border transactions are made, taking the forms of remittance, through postal services and other financial institutions other than commercial banks. The Central Banks should obtain the capacity to monitor international capital transactions by such institutions.

Third, various forums dealing with the international exchange of cross border financial information must be supported and disclosure of information to the public should be encouraged. Frequent dialogue among financial regulators of countries allows similarities and differences in regulatory systems to surface and encourage the idea of convergence of regulations. Regional mechanisms of financial cooperation indicated in Appendix-B will be suitable to provide the opportunity to set up such meetings.

For investors, a portfolio's after-tax rates of return are important to compare net effective returns among various markets. Among Asian countries, the tax rates and legal systems are different such that after-tax rate of returns are much affected by the differences. Income tax rate, capital gains tax, tax rate on dividends and tax rate of interest income vary among Asian economies. Furthermore, each country has a different system of reporting capital transactions to the authorities.

If these country comparisons are listed in one booklet or in an internet-accessible site, investors can immediately see the differences among countries and this makes financial investment across countries much smoother. If an independent institution made these comparisons, reliability of the information will be enhanced.

Fourth, there's a need for more efficient mobilization of domestic financial resources in order to reduce the bias in investing in one's home country and instead encourage financial investment across various countries in the Asian region. Some bias toward home country investment is seen from records which indicating that domestic financial investment far exceeds

overseas financial investment in many Asian countries. Several reasons are behind this; primarily the currency risk based on fluctuations of the exchange rate, and the lack of information about another country's investment potentials.

Reducing home country bias is important to improve financial investment across Asian countries. Continuous supply of the economic data of these countries will enhance capital flows among them. Such data include macroeconomic information such as economic growth rate and interest rates; sectoral data such as data on various producing sectors, i.e., the food industry, machinery industry, agricultural sector; and microeconomic data such as company data. The continuous dissemination of changes in the economic environments of various countries in the region can reduce information asymmetry and help accelerate overseas' capital flows.

In addition, establishing an insurance system to secure bank deposits would reduce the financial risks to the depositors. This will then lead to domestic households switching their investment toward domestic uses.

Lastly, an emergency facility to prevent a capital flow crisis must be established. For example, when signs of abnormal capital flows are found, policy authorities could slow down the speed of the currency exchange and in the process, calm down overheated transactions.

Taxes, which can be set to zero rate during 'normal' periods of capital flow, may be gradually increased during 'abnormal' periods to slow down the speed of overseas capital transactions, and dampen its potential to overheat.

1. INTRODUCTION

'Unsuspected' is one of the words often used when retelling and describing the financial storm which shook Asian economies in 1997 and left a nightmarish economic aftermath in a region which, just a few years earlier, was the darling of international money and capital resources. The Asian Financial Crisis (AFC) experience was unprecedented in terms of cost and level of contagion, and has left many economies in the region badly shaken.

The AFC experience made Asian countries 'acutely aware of the need to promote regional financial cooperation to prevent resurgence of a crisis and to attain stable economic growth'.[1] Tanikawa [2004] pointed out that East Asian countries are of the consensus that they need to create a regional cooperation mechanism for monetary and exchange rate policies "that is not dependent on the United States". Hence, armed with a renewed sense of regional cooperative spirit, respective governments and key economic representatives formally agreed to establish "self-help and support mechanisms in East Asia" at the ASEAN+3 summit held in November 1999.[2]

Leading among the initiatives under the ASEAN+3 umbrella are the Chiang Mai Initiative (CMI), Asian Bond Markets Initiative (ABMI) and the Economic Review and Policy Dialogue (ERPD). Also included is the monitoring of short-term capital flows, whose unchecked imprudent management and volatility was one of the major culprits of the 1997 AFC.

The World Economic and Social Survey [2005] reports that "private capital flows to developing countries have been highly volatile and reversible; as a consequence, they have been a major factor in causing developmentally costly currency and financial crises". To minimize the whiplash of capital flow's volatility, relevant data are now exchanged on a voluntary basis to facilitate effective dialogue and such have been taking place between and among Japan, Korea, the Philippines, Thailand, Indonesia and Vietnam.

Efforts to intensify the pursuit the regional economic objectives using the ASEAN+3 initiatives bring to the fore the salient role of institutions in helping steer the regional economic boats of its member-nations. How much do member-nations stand to gain from this new wave of Asian regional economic cooperation? The core of this research aims to examine whether and how existing regional institutional mechanisms and regulatory frameworks assist member-countries in

[1] As contained in the Background of the Regional Financial Cooperation Among ASEAN+3.
[2] See Tanikawa.

efficiently utilizing capital flows and prevent the fertilization of another currency crisis. In particular, it examines whether and how existing institutional ties among ASEAN+3 countries influence their capacity to harness opportunities brought by capital flows. Based on the analysis, policy recommendations are made on the desirable financial institution and regulatory frameworks.

This paper is organized as follows. Part-2 provides the background of the study and some analytical perspectives used throughout the paper. Much of these perspectives is gathered from existing literature and data, and is used in the individual and integrated country analyses in subsequent sections of this paper.

Part-3 is interspersed with brief annotations of major liberalization measures undertaken selected economies of Asia during the period 1990 – 2004, and introduces major institutions involved in capital flow movements and these institutions' regulatory and supervisory frameworks. It also describes the state of corporate governance and prudential regulations in these economies.

Part-4 introduces an economic analysis on the regional characteristics of cross-border financial transactions in East Asia. Empirical analysis focuses on the regional financial integration. Detailed analysis is in ATTACHMENT-A.

Part-5 contains recommendations to enhance the efficiency with which capital market elements and regulatory bodies in ASEAN+3 countries could stably work in tandem to maximize country gains from capital flows in particular, and from regional integration arrangements in general. A brief review of the institutionalization of regional financial efforts concerning capital flows is in ATACHMENT-B.

2. ANALYTICAL ANCHOR AND BACKGROUND OF THE STUDY

Financial liberalization, with its promise of high growth, accelerated productivity gains, declining unemployment and removal of distortions caused by government intervention was the flagship the Asian region several years prior to the onset of the AFC. Internationally mobile capital, according to its proponents, "facilitates the efficient global allocation of savings by channeling financial resources to its most productive uses, thereby increasing economic growth and welfare around the world."[3] In other words, developing economies, by opening their current and capital accounts, would benefit by having capital flows channeled to them from developed and capital-abundant countries.

For the past two decades, liberalization paved the way to making financial capital extraordinarily mobile. The numbers were impressive. From US$590 billion in 1989, approximately US$1.5 trillion moved across borders everyday by 1998. If every dollar invested has a promised return and an attendant risk, imagine the level and nature of risks involved with the volume of capital flowing across territories the world over.

Risk, a natural accompaniment of any business undertaking that promises a certain return over a period of time, becomes compounded in a liberalized environment where capital is allowed to flow with very minimum friction across borders. The attendant risks and volatility of large capital flows, when miscalculated and/or poorly managed, could lead to disastrous financial and real economic effects especially in markets characterized by unsound banking practices, weak financial infrastructure and frail macroeconomic fundamentals. Such was the AFC scenario when a series of less-than-optimal decisions drove the local currencies of the worst crisis-affected countries into a sharp steep dive.

2.1 SOME ANALYTICAL PERSPECTIVES: LINKS BETWEEN CAPITAL FLOWS, EXCHANGE RATES AND VULNERABLE FINANCIAL SYSTEMS

In 1996, UD$123 billion flowed into Asia. One year later, this figure shrunk to US$12 billion. The reversal of short-term portfolio flows was, as Kaminsky [2003] described, 'even more brutal, with flows declining from an inflow of US$69 billion in 1996 to and outflow of US$104 billion in 1998'. The massive capital flight occurred in a contagious fashion throughout most of the Asian region, driving a host of currency values to pit-levels and nearly snuffing out business

[3] See De Brouwer, page 76.

confidence. The social effects were tremendous. Unemployment rates increased and persisted for extended periods. Real income and output fell. Poverty increased and a number of banks went belly-up. The following accounts what the literature says about balance of payment adjustments, foreign exchange regimes and biting more capital flows than one's economy could chew.

CAPITAL FLOWS may take the following forms:[4]

1. Direct Investment (FDI), which according to IMF classification, is a purchase of more than 10 percent of equities in a particular company;
2. Portfolio Investment consists of equities, bonds and other securities investment. It differs from Direct Investment in that the foreign investor purchases a local firm's securities without exercising control over the firm.
3. Other Types of investments ("other capital flows") include all financial transactions not covered by direct investment, portfolio investment, financial derivatives or other assets. These usually consist of trade credits, bank deposits and lending, transaction in currency and cross-border transfers between bank branches.

Capital flows may either be *net capital inflows* or *net capital outflows*.[5] Net capital inflows make it possible for a country to run current account deficits without drawing down on its foreign reserves. Net capital inflows necessarily imply that more resources are available for an economy to use for investments, which will result in higher growth and will consequently invite more investments.

THE EXCHANGE RATE-CAPITAL FLOW LINK. Amidst a plethora of crisis-causing factors, the growing body of AFC literature always point to the role played by the link between exchange rate and capital flows from at least three angles:

FIRST is the role that exchange rate policies played in the pre-crisis period in encouraging enormous capital inflows. In globalized markets, investors move capital from their domestic markets to markets where returns are higher, such as a host of Asian economies. Exchange rate movements, which asset owners in global financial markets keep track of, are important because it determine the relative amount of risk burden on foreign investors' local currency denominated assets. Any sudden shift in the nominal currency value becomes an indicator for assessing country

[4] Such capital flow definitions were used by Ito [1999] and Alfaro, Kalemli-Oszan and Volosovych [2005].
[5] Ito (1999), page 6.

risk and the significance of the Asian market in their roster of portfolio destinations.

SECOND is the trigger (presumably *overvalued* exchange rates due to the so-called *de facto* dollar peg of the countries involved), which set off the crisis in already-vulnerable economies. The *de facto* dollar peg with high interest rates invited short-term portfolio investments. Investors and borrowers mistook the stability of the exchange rate as the non-existence of exchange rate risk.

A subset of this factor is the weak financial sector, which complicated the currency crisis. Large capital inflows were channeled through undercapitalized, poorly regulated and badly supervised domestic financial institutions [Das, 2005]. It did not help that many of the banks in the worst AFC-hit countries were seriously burdened by non-performing loans (NPLs) and had huge liabilities denominated in US dollars. A weak banking system becomes an indicator for foreign speculators to attack the local currency. When attacked, the central bank could employ a high interest rate policy to encourage capital to stay (or come in). But weak banks would make this policy counterproductive from the domestic banking policy. Knowing this, speculators are more willing to attack a currency with weak banking system.

THIRD is the role of exchange rates once the crisis unfolded. Between June 1997 and August 1998, the Indonesian rupiah depreciated by 82.9 percent vis-à-vis the dollar, the Malaysian ringgit by 40.9 percent, the Philippine peso by 39.3 percent, the Thai baht by 39.7 percent, and the Korean won by 33.3 percent. The erosion in the values of these Asian currencies made it difficult for banks and businesses to pay back debts. For a number of these entities, defaulting on their loans was the only way out.

THE BALANCE OF PAYMENTS AND EXCHANGE RATE REGIMES

The standard monetary approach to the balance of payments (BOP) posits that for any given BOP deficit, money stock would have to be contracted to restore external balance.[6] A reduction in money supply will raise interest rates and quell spending, reducing income and imports.

- Under a fixed exchange rate regime, a BOP deficit calls for a sale of foreign exchange, hence the stock of high-powered money is reduced.
- On the other hand, in a surplus country, the central bank buys foreign exchange and thereby

[6] A major portion of this segment was taken from Dornbusch and Fischer (1994), Chapter 20.

increases the level of high-powered money and expands the money supply.[7]

Given this link between money supply and external balance, the adjustment process leads to the right money stock to that external payments will be in balance.

When the size of capital inflows becomes larger than the current account deficits, there is an appreciation pressure on the currency. For Asian countries, which were on a *de facto* dollar peg, resisting pressures to appreciate the currency was accomplished by intervening in the foreign exchange market. It was important for these countries to maintain the stability of the exchange rate to nurture exporting industries and further invite FDI inflows.

As intervention continued, however, the levels of foreign reserves among these countries soared in the 1990s. Intervention can be sterilized or left unsterilized.[8] If left unsterilized, intervention increases the monetary base and lowers interest rates. The stimulating effect of lower interest rates on investment demand may cause inflation, especially if the economy is already at full employment, which is often the case for Asian countries that attract massive capital flows [Ito, 1999]. To avoid inflation, intervention can be sterilized. This is done via a combination of foreign exchange intervention or domestic open market operation to keep the money stock constant (in levels or in proportion to GDP in a growing economy). Theoretically, sterilized intervention will keep the interest rate level the same.[9]

Interception of sterilization operations by the Central Bank offset the impact of foreign exchange movement on the money supply via open market operations. With sterilization, a deficit country that is selling foreign exchange and correspondingly reducing its money supply may offset this reduction by open market purchases of government bonds that restore the money supply to its previous level. In the sense that sterilization procedures leave an open avenue for financing government spending through bond flotation, it nurtures an environment conducive to persistent external deficits because 'the link between the external imbalance and the equilibriating changes in

[7] Ibid:613.

[8] STERILIZATION refers to the offsetting of the monetary effects of BOP surpluses or deficits on the domestic money supply of a country. If a country has a surplus on foreign payments under a fixed exchange rate regime, the foreign currency will be exchanged domestic currency thereby adding to the country's foreign reserves. Both reserves and the domestic money supply will increase. To offset the expansionary effects of these forces, the government directs the central bank to engage in open market operations to offset the increase in the money supply, which is a consequence of the surplus. The reverse will hold for a foreign surplus. Under a flexible exchange rate system, on the other hand, the foreign exchange should adjust, so that balance should always be maintained with no consequences for the domestic money supply [MIT Dictionary of Modern Economics (4th ed.), 1997]

[9] But in practice, the interest rate may rise due to the sterilized intervention. For example, suppose the initial capital flows were in the form of FDI. The domestic end of sterilization is most likely done in the short-term money market. Then, the short-term interest rate may increase, while the long-term interest rate will decline. The higher short-term interest rate will invite more capital inflows in the form of portfolio investment. Hence, sterilized intervention may increase capital flows [Ito, 1999].

the money stock is broken' [ibid.].

THE PROBLEM OF INCOMPATIBLE TRINITY

In a capsule, the incompatibility trinity problem refers to impossibility of satisfying and sustaining the following all at the same time: (1) maintaining a condition of perfect capital mobility, (2) maintaining a fixed exchange rate and (3) having monetary independence (i.e., the central bank' ability to set domestic interest rates different from world interest rates).

Consider, for example, a situation where there is unrestricted capital flows, and perfect substitutability between domestic and financial assets [Krugman, 1999]. How effective is monetary policy in influencing the level of income? It depends on the exchange rate regime.

- *In a fixed exchange rate*, an expansionary monetary policy raises output and decreases interest rate, albeit temporarily. The reduction in interest rates will lead to capital outflow, a reduction in foreign exchange reserves and consequently a reduction in money supply. Equilibrium is restored when the economy goes back to its original position. Hence, monetary policy is ineffective in influencing output given our initial assumption.
- On the other hand, fiscal policy is effective in raising income under the assumptions of fixed exchange rate and perfect capital mobility. Expansionary fiscal policy will induce an increase in interest rates, which will lead to capital inflow and 'a consequent increase in money supply that accommodates the increased money demand arising from increased income' [ibid.].
- Under a flexible exchange rate and perfect capital mobility, expansionary monetary policy will reduce interest rate, increase income and lead to a currency depreciation. Reduced interest rates encourage local investments and a depreciated currency encourages exports, both supportive of the increased output.

It is impossible for a small open economy to have free capital flow, a fixed exchange rate and independent monetary policy. The theoretical cure to this impossibility problem is to float the exchange rate or to adopt some forms of capital controls, ala Chile and post-AFC Malaysia.[10]

THE CRUNCH AND THE CRASH

[10] Examples of capital controls on short-term flows include raising the reserve requirement on banks by nonresidents, or imposing withholding taxes on short-term instruments held by nonresidents [Ito, ibid.].

Had most of the capital flows into Asia been in the form of foreign direct investment (FDI), the AFC would not have occurred with such severity. FDI flows are generally found to be less volatile than portfolio flows as they tend to be driven by long-term considerations [Das, 2005]. But a reversal of "flows" occurred in a number of Asian countries, primarily because a significant portion of the type of capital flows which went into these countries were the reversible type - portfolio and "other types" of capital flows such as bank lending and cross-border transfers – flows that can move out of a market just as quickly as it could move in.

Since Asian countries are connected to each other via trade and investment flows, economic growth in one country creates a growth multiplier, which positively influences other countries within the region. This multiplier was reinforced by two factors.

- One is the long-term trend of yen appreciation, which made Asian products more price-competitive against Japanese goods in world markets and was a cause of the shift of Japanese production plants to low-wage high-quality worker countries in Asia.
- Second is the apparent 'stability' of Asian currencies, which were virtually pegged to the US dollar. This gave investors the impression of low currency risk as well as low credit risk.

High economic growth fueled more capital inflows and, given the backdrop of the two factors just mentioned, led to higher exports and higher growth. This cycle persisted in Asia in the 90's but became unsustainable. The yen depreciation from 1995-1997 dampened the price competitiveness of Asian goods, leading to their large current account deficits. A currency crisis ensued as most Asian countries' currencies depreciated. Capital flight occurred. Stewing in its own pot of vulnerabilities, the banking systems of the AFC-affected countries succumbed to a currency crisis, which led to a banking crisis, which fed further into the currency crisis, which exploded into an economic crisis.

2.2 IN A CAPSULE: AN EXPRESS AFC POST-MORTEM

CAPITAL FLOW DETERMINANTS. Why did so much capital flow into Asia? Capital flows to East Asia were the product of several factors.

ENVIRONMENT FOR PROFIT AND OPPORTUNITY. These include the pursuit of perceived large profit opportunities in a low interest rate environment, the diversion of Japanese investment offshore, the expansion of institutional investors and country funds, the development of regional ratings, and the easing of local capital controls [Grenville and Gruen, 1999]. Liberalization offered anxious foreign investors the opportunity to profit from the so-called "miracle" economies of Asia. Measured either in current or constant US dollars, net private capital inflows to Asia in the mid-1990s were unprecedented in terms of the size of the flow. To note, the flows were large relative to the size of the recipient crisis-affected economies of Indonesia, Korea, Malaysia, the Philippines and Thailand. In 1996 alone, the net inflow of private foreign capital into the five countries most affected by the crisis, amounted to US$93 billion [Crotty, 2000].

THE CREDIT CRAZE. With this increasing depth of liberalization, domestic macroeconomic environments allowed large inflows of short-term, unhedged capital, which gave birth to a credit boom. Private corporations became highly leveraged entities with large domestic and external debt. In a newly liberalized but insufficiently regulated financial markets, the domestic banking sector began to develop systemic vulnerabilities.

In the credit sector, the flows of funds were largely driven by developments on the *supply* side. There was the growth of the mutual funds industry, the increasing vigorous competition among financial institutions to encourage and facilitate flows and the interest rate/exchange rate changes in the capital-supplying countries. On the demand side, three factors highlighted the crisis-affected countries' incentives for borrowing abroad. First, de-facto fixed exchange rate arrangements coupled with high domestic interest rates encouraged foreign borrowing by domestic firms or by domestic banks and other financial institutions for domestic relending. Second, excessive risk taking, which was passed on to the rest of the domestic economy, was motivated by explicit or implicit government guarantees of financial institutions' liabilities. Third, there was the need to borrow abroad since domestic financing costs were high.

A massive credit expansion fueled a wave of investments, some of which took the form of 'actual construction…but there was also a lot of pure speculation, mainly in real estate, but also in

stocks' [Intal and LLanto, 1998]. The Bangkok International Banking Facility (BIBF), a Thai offshore lending institution, attracted over US$50 billion in just three years since it was launched in the early 1990's [Bello, 1997.]. In the Philippines, nearly US$9.4 billion in foreign investment was injected into the economy in 1996 alone. Estimates indicate that nearly three-fourths of it was 'portfolio investment seeking quick and high returns in the stock or the bond market' [ibid.].

INFLOWS BY SHORT TERM BANK LOANS. Since most of the capital inflow was neither FDI nor portfolio investment, but rather short-term capital bank loans, a speculative investment boom surfaced. Domestic corporations were prompted to borrow funds directly from international lenders or indirectly from domestic financial institutions that had access to external financing, and to over-invest in industries prone to asset bubbles, particularly the real estate sector, and in inefficient manufacturing sectors. Between 1986-1990 and 1991-1995, investment as a percentage of GDP rose from less than 32% to almost 38% in South Korea, from 23% to 39% in Malaysia, and from 33% to over 41% in Thailand.[11] In the Philippines, a special survey of 25 sample commercial banks in 1996 revealed "the combined loans and equity exposure of these banks to the real estate sector amounted to 52% of the unimpaired capital of the sample banks."[12]

The capital inflows also fed into a system of corporate finance that relied primarily on bank financing and where domestic bond markets were severely underdeveloped. Corporate debt-to-equity ratios had climbed despite the fact that productivity in the manufacturing sector in many East Asian countries had already started to decline in the pre-crisis period. In South Korea for example, the debt-to-equity ratio of Korean corporations exceeded 317 percent by the end of 1996, twice that of the United States and four times that of Taiwan. The top thirty Korean *chaebols* had even higher leverage, exceeding 400 percent in 1996 [Claessens et al, 1998].

One argument proposes that an overvalued exchange rate coupled with high interest rates could be one catalyst for crises of the AFC type. Presupposing that, the abandonment of the semi-fixed exchange rate trigger markets to focus more on fundamental vulnerabilities.[13] When semi-fixed exchange rates are left free to float, macroeconomic/structural policies come under question, vulnerabilities suddenly become pressing and market confidence wanes. Market expectations then determine the exchange rate according to how the market perceives the crisis will evolve. For example, Indonesia (which relied heavily on intervention bands) allowed the band to

[11] UNCTAD Report, 1998.
[12] Intal, P. and G. Llanto (1998) citing a BSP report in 1996.
[13] Grenville, S. and D. Gruen (1999).

widen 12% on July 11, 1997, the same day the Philippine peso was floated. The market reaction to this move was in contrast to its past pattern. This time, the rupiah depreciated rapidly. Despite interventions from Bank Indonesia, the pressure on the rupiah did not let up and on August 14, 1997, the rupiah was floated [Djiwandono, 1998].

Patterns of indebtedness varied across countries. The net foreign liabilities of financial institutions rose from 6 percent of domestic deposit liabilities in 1990 to one-third by 1996. In Indonesia, corporations were the primary borrowers from mostly offshore foreign sources. In South Korea, corporations borrowed heavily from domestic sources, while Korean banks increased their exposure by relying on foreign borrowing. In Thailand, finance companies and commercial banks – availing themselves of foreign-currency-denominated loans at low interest rates – borrowed heavily from abroad to invest in projects with low rates of return, such as construction and real estate. Countries with relatively low external debt (in particular short-term debt relative to foreign exchange reserves), such as Malaysia and the Philippines, were not affected significantly, at least in the initial phase of the AFC.[14]

RISK OF REVERSE FLOWS**.** That capital flows have the potential for being notoriously and highly volatile is a fact. During the crisis, bank loans were the most volatile and underwent the most violent reversal.[15] Total capital inflows peaked at an amount equivalent to over 6 percent of the combined national income of the five crisis-affected countries, while outflows in 1998 amounted to more than 7 percent of combined GDP. This is consistent with the abrupt change from current account deficit to surplus, although it is worth noting that since East Asian central banks were acquiring reserves in the first half of the 1990s, capital flows were substantially larger than these countries' current account deficits.[16] Aside from their potentially reversible nature, institutional quality and macroeconomic policy may also influence the risk of capital flow volatility occurring [Das, 2005].

The widening of the risk premium on emerging market securities and subsequent credit ratings downgrade reflected the violence of the reversal in capital flows.[17] Banks' unconsolidated assets in the affected countries rose by about US$60 billion in 1996 to June 1997, but fell by almost US$110 billion in the next year and a half in December 1998. Indonesia, Korea and Thailand

[14] See ADB Key Indicators (2005).
[15] See De Brouwer.
[16] See Pacific Economic Papers 317, July 2001.
[17] Ibid.

experienced the most striking fall in bank lending (i.e. loan repayment).[18]

Assets in Thailand were the first to contract, spreading to Indonesia and Korea in the last quarter of 1997. Banks' assets in Korea contracted significantly in March 1998, reflecting in part the reversal of repurchase agreements and despite the loan rollover agreement in late December 1997. Repayment of loans continued throughout 1998, except in China, the Philippines, and Taiwan. To a lesser extent, net debt issues also declined.

What was even more boggling was that even though inter-bank lending accounted for only 45 percent of total bank lending during the peak of the inflow in mid-1997, it accounted for 75 percent of the fall in bank lending during the crisis. The concentration of outflows in the inter-bank market reflected the market's shallow liquidity and short maturity profile. Furthermore, before the crisis, short-term (less than one year) debt generally exceeded long-term debt in East Asia, notably in Korea where over 70 percent of bank claims in June 1996 were due in one year.

No financial system in the world, no matter how modern or well regulated, could have withstood such drastic capital flow volatility without experiencing economic trauma. Foreign banks pulled US$36 billion out of the area in 1997. For some of the loans meant to finance long-term investments, repayment of principal out of profits became impossible, while forced sale of assets purchased with the loans only worsened the collapse in their prices.

ECONOMIC CONTRACTION**.** The irresponsible deregulation of domestic financial markets and the weakening of controls over international capital flows across Asia brought the fastest growing area on earth to its knees. Within months, the financial crisis evolved into a full-blown crisis of systemic proportions. Growth in the most severely hit economies contracted soon after the onset of the crisis, and all registered negative GDP growth rates in 1998. The violent shift from high growth to stagnation in Asia lowered global growth to about 2 percent a year in 1998 and 1999.[19]

The major reason these East Asian economies underwent such a rapid economic contraction is that financial and corporate sectors were virtually paralyzed by the steep exchange rate depreciation, the subsequent interest rate hikes, and by shrinking domestic demand. In an attempt to prevent further depreciation, all governments in the crises-affected countries raised

[18] Ibid.
[19] Pacific Economic Papers. 2001. Bank and Corporate Restructuring in Crisis-affected East Asia: From Systemic Collapse to Reconstruction. 317:July.

domestic interest rates. The combination of steep currency depreciations and rise in interest rates adversely affected the balance sheets of domestic firms. The cost to corporations of servicing domestic debt, mainly in the form of loans from commercial banks and non-bank financial institutions, suddenly inflated due to depreciation and high domestic interest rates. Furthermore, steep currency depreciation and austere macroeconomic policy prompted the contraction of aggregate demand, resulting to worsening position of corporate cash flows and profits.

Corporate difficulties fed into the deterioration of the banking sector. The increasing number of non-performing loans further aggravated the already deteriorating portfolios of commercial banks. Thus, instead of extending new loans to the corporate sector, assets of financial institutions were towards safer government bonds and central bank certificates. The lack of bank credit further aggravated the corporate sector's difficulties. Banking sector distress, corporate sector difficulties and macroeconomic deterioration mutually reinforced the rapid economic contraction. A huge balloon of nonperforming loans (NPLs) originating from corporate loans resulted in a "destruction of savings on a scale more usually associated with a full scale war" [Ziegler (2003) as cited in Das, 2005].

Another reason for the unexpectedly rapid contraction of the crisis-affected economies is the large multiplier effects from falling demand. Because of the degree of regional economic integration through trade and investment, one country's economic contraction and import decline meant another's export decline, spreading negative shocks across the region. Regional economic linkages reinforced mutual contraction and magnified the severity and depth of the economic crisis in these countries beyond expectations.

Particularly in Indonesia, the most critical factor in the collapse of the corporate and banking sector and the resulting contraction in aggregate demand was the corporate sector's large external debt. It is estimated that 70-80 percent of the firms in Indonesia suffered losses that exceeded their equity. The abrupt cut-off in new financing inflated debt-to-equity ratios, leaving many corporations whipped by a cash crunch. This resulting insolvency of corporations led to the inability of Indonesian banks to collect interest on loans to their corporate borrowers. In addition, some quality banks in Indonesia suffered from the steep depreciation of the rupiah because of large foreign currency deposit liabilities to local residents.

2.3 STRUCTURAL WEAKNESSES AND OTHER SUBPLOTS

Aside from the economic factors, fundamental structural weaknesses also played a crucial role in determining the depth and scope of the crisis.

WEAK PRUDENTIAL REGULATIONS. Lack of prudential risk management on the part of commercial banks; ineffective banking regulation and supervision; poor accounting, auditing and disclosure practices; and weak corporate governance --- all these weaknesses reinforced each other and made credit analysis and risk management largely redundant. This, in part, explains why large amounts of external corporate funding were made through debt rather than through equity (which requires closer monitoring of firms). Pre-existing prudential safeguards were weak and were undermined by the close relationship between corporations and banks, coupled with their influence on governments. Also, high corporate leverage was exacerbated by controlling owners' refusal to disclose relevant information and by the inadequate legal/court protection afforded to minority shareholders.

MORAL HAZARD. A term widely used in the insurance field, moral hazard technically refers to "*the effect of certain types of insurance systems in causing a divergence between the private marginal cost of some action and the marginal social cost of that action thus resulting in an allocation of resources which is not optimal*".[20] In the context of financial liberalization and capital flows, this sub-optimal allocation of resources took the form of imprudent lending behavior of banks and investors alike, on the assumption that deposits were implicitly guaranteed and that the government would bail out banks. Banks, fearless due to the inherent expectation that the government will scoop them out of the mud, went on a lending frenzy to investors who bet their borrowed chips on bubble-prone assets such as real estate or finance companies owned by individuals close to or had relatives sitting on the thrones of power.

Reliance on implicit government approval of large loans (to sectors, if not to firms) was rampant and bailing out major banks from facing their liabilities was justified because they were "too big to fail." Moreover, the cross-ownership structure of banks (where banks and other financial institutions are part of the conglomerate and subservient to it) did not afford them any motivation to impose effective corporate governance. In Korea for example, *chaebols* (conglomerates) were prohibited by legislation from having a controlling ownership in banks, but the largest Korean

[20] As defined in the MIT Dictionary of Economics (4th ed.), 1997.

chaebols have instead influenced bank lending through the government and have obtained much of their credit through their control of non-bank financial institutions.

While it is true that there was a moral hazard problem in the crisis-affected economies, it was not enough to solely account for the large volume and dramatic reversal of flows in 1997 – 1998. Nor could it solely be blamed for the differences in the severity of the impact faced by the five badly affected countries. For example, the AFC lashed out at Indonesia and Korea more than it did Malaysia and the Philippines. Besides, if explicit and implicit guarantees did hold, investors would not have fled and capital flight shouldn't have occurred. But investors did flee, and capital flight did happen. In order to avoid the moral hazard problem, the strengthening of prudential regulations on the part of borrowers and burden-sharing on the part of lenders is strongly suggested.[21]

CONTAGION OF FINANCIAL CRISES. Bank runs exacerbated the crisis picture but it did not cause it. Banks were caught in a liquidity crisis because investors shifted away from their regular behavior of allowing lending to be rolled over. In Korea and Thailand, for example, banks did not have enough dollars to repay their short-term obligations when rollovers were refused. They were not necessarily insolvent but they did have a major liquidity crunch. If bank runs were solely responsible for the crisis, a solution worth exploring would be "to make the IMF the international lender of last resort"[22].

Contagion or the transmission of effects to economies linked through trade and finance channels is usually associated with herd behavior, a model which explains that investors behave in a herd because it profits them to behave as others do.[23] Contagion's effects tend to be more pronounced regionally than globally. Measuring for the temporal variations of contagion-causing factors using an autoregressive conditional hazard model (ACH), Zhang [2001] confirmed the role that contagion played in the AFC. Particularly in Indonesia, Korea and Thailand, regional duration dynamics played a domineering role [Das, 2005].

EARLY WARNING SIGNALS. Early warning signals (EWS) take a host of factors as presumptive indicators of a market's vulnerability to a financial crisis. Frankel and Rose [1996],

[21] Ito, 1999.
[22] This was suggested in Ito's (1999) paper.
[23] This was developed by Scharfstein and Stein [1990] and Banerjee [1992], as noted by Ito [1999].

Eichengreen and Rose [1996], Goldstein [1996], and Kaminsky, Lizondo and Reinhart [1997] were among the early contributors to EWS literature.[24]

Approaches to constructing EWS models most often take the form of the signaling approach [Kaminsky, Lizondo and Reinhart, 1998] or use of probit/logit [for example Berg and Patillo, 1999], depending on which hypothesis about the cause of the AFC they wish to test. One hypothesis attributes it to sudden changes in investor and market expectation eventually leading to a contagion. The other hypothesis blames it on structural and policy distortions. The signaling approach monitors a set of high frequency leading indicators that tend to behave differently. These are then examined whether they have individually or collectively reached a threshold of values usually associated with the onset of a financial crisis. Probit/logit models, on the other hand, make use of a large sample to test for statistical significance of the explanatory variables. The EWS model by Zhuang and Dowling [2002] discriminates between the two hypotheses mentioned above and their results suggest that weaknesses in economic and financial fundamentals indeed played an important role in giving birth to AFC.

Goldstein relied on seven factors to function as indicators of crisis vulnerability and these include (1) a mismatch between short term liabilities and liquid assets; (2) large current account deficits; (3) rising interest rates; (4) weak banking system and large fiscal deficits; (5) boom in bank lending followed by a fall in asset prices; (6) an overvalued exchange rate; and (7) high susceptibility of contagion due to a similar crisis elsewhere [Ito, ibid]. On the other hand, Zhuang and Dowling [2002] used 6 sets of indicators as outlined in the **TABLE-1**.

[24] As cited by Ito (1999).

2.4 RECOVERY EFFORTS AND STRATEGIES

Economic recovery came as a result of increased confidence brought by the initial economic adjustment and counter-cyclical macroeconomic policy and by the various measures of structural reforms, particularly, financial and corporate restructuring. In addition, strong growth in the US and Europe strengthened external demand in East Asia, thus supporting a mutually reinforcing recovery because of the deepening trade linkages with the region. The export expansion and the favorable current account balance, together with a threefold increase in portfolio and foreign direct investment inflows, were sufficient to offset continuing outflows of capital from the banking sector.[25]

The worst period of output contraction ended during the first or second quarter of 1999 for the economies hit by the crisis. The crisis-affected countries grew by 5 percent in 1999 and 6 percent in 2000. The pace of recovery, however, has been uneven. The most dramatic improvement in output (and exports and employment) was recorded by Korea, which registered economic growth of 11 percent in 1999 and 9 percent in 2000. Indonesia, despite its political turmoil, has shown signs of an incipient economic rebound at 0.8 percent in 1999 and a modest 4.8 percent in 2000.

Roadmaps for financial and corporate reformation were created and resulted in some progress, despite substantial fiscal costs.[26] There are similarities in the basic frameworks, although actual implementation of restructuring varied to reflect the differences in initial conditions, the structure of the corporate system and the institutional capacities of central banks and other relevant institutions.

RESTRUCTURING STRATEGIES AND IMPACT

Strategies to address the systemic crisis in the financial sector include[27]: (1) closing, merging, or temporarily nationalizing non-viable and insolvent financial institutions; (2) recapitalization of undercapitalized institutions; (3) governments injecting liquidity (from public funds) into the banking sector to prevent bank runs; (4) governments subsequently guaranteeing all deposits and other financial liabilities; (5) transferring the bad loans of weak (but viable) financial institutions to public (and, more recently in Thailand, private) asset-management corporations; (6)

[25] See ADB ARIC.
[26] See Table 2 of Pacific Economic Papers, page 9.
[27] See Das [2005] and Lindgren, et al [1999].

strengthening of prudential regulations and supervisory norms while simultaneously supervising weak institutions; and (7) increase the potential for foreign participation in domestic financial systems.

As a result of these strategies, **market confidence was restored**. Banking sectors have been opened to foreign strategic investors and technical expertise to further promote competition, to gain new capital, and improve corporate governance and management. Capital adequacy has been restored (to levels that are on average above the minimum standard of the Bank of International Settlements) by the resolution of NPLs and injection of capital (in all countries, except Indonesia). With the exception of the Philippines, non-performing loans in East Asian countries have declined over the past years.[28] All in all, the underlying weakness in loan portfolios, the pace and sustainability of economic recovery and the profitability of banks will determine the amount of capital needed for financial sector restructuring.

The governments have become an important holder of corporate assets through the acquisition of banks and bank assets.[29] In Indonesia, the government holds 70 percent of banking assets, while the governments of Korea, Thailand and Malaysia own 60 percent, 30 percent and 20 percent of banking assets, respectively.

Financing government intervention in post-crisis reforms with bond issues and implicit guarantees to the financial system may increase the burden on governments if more banks need to be re-capitalized. In Korea, Malaysia, and Thailand, public funds were injected into undercapitalized banks and some non-performing loans were transferred to centralized, publicly owned asset-management corporations.

Thailand however, tied the provision of public funds to more stringent conditions on bank owners and initially did not create one centralized institution to dispose of the non-performing loans of private banks, leaving the banks to create majority-owned asset-management corporations themselves. However, it did establish centralized agencies to resolve the bad assets of finance companies – the Financial Sector Restructuring Authority (FRA) as an asset disposal agency and the Asset Management Corporation (AMC) as the bidder of last resort.

[28] However, the capital base of individual banks may be eroded over time due to low and even negative profitability in addition to weak portfolios that need to be covered by loan loss provisions.
[29] See Table 6, Pacific Economic Papers, page 30.

In addition to the costs of financial sector restructuring, increase in government spending is manifested through currency depreciations, increase in the interest burden (in local currency) on foreign debt, and expansionary fiscal spending (and decline in tax revenues) as governments tried to stimulate economies out of recession.

Large public sector debt has built up. Government debt has already risen to 30-50 percent of GDP in Korea, Malaysia and Thailand, and to 90-100 percent of GDP in Indonesia and the Philippines.[30] These figures may not reflect the governments' underlying debt obligations because they do not include contingent liabilities, such as further re-capitalization costs and the debts of public infrastructure corporations and other state-owned enterprises.

The cross-ownership structure in the banking and corporate sectors, aside from distorting credit allocation in favor of affiliated firms, hindered the process of restructuring. The end result is that non-affiliated firms and small-medium enterprises (SMEs) have found it difficult to obtain finance, particularly since the crisis. The process of crisis-resolution provided East Asian countries with an opportunity to further dilute cross-ownership structures. In Korea and Thailand, temporarily nationalized banks have been re-privatized.

[30] See ADB Key Indicators (2005).

2.5 POST-AFC: POLICY LESSONS AND NEW OPPORTUNITIES FOR REGIONAL ECONOMIC COOPERATION

A United Nations report stated that financial deregulation and capital account liberalization appear to be the best predictors of crisis in developing countries.[31] Stiglitz [1998] notes that 'the AFC would have not occurred were it not for the liberalization of capital accounts'. Three major sentiments on the bottom-line impact of financial liberalization are worth pondering.

First, excessive financial market liberalization has created serious speculative boom-bust cycles damaging to economic growth. The financial collapse that originated in Thailand in 1997, spread to most nations in the Pacific region, and moved on to ensnare Russia and Brazil, is but one example of the dangers of today's liberalized capital markets.

Second, the degree of free mobility of cross border capital in recent decades and the subsequent leap in the magnitude and speed of capital movements across national boundaries, have caused governments around the world to shy away from expansionary budget and interest rate policies because they displease global investors. Governments that reduce interest rates or used budget deficits to stimulate growth and lower unemployment are often punished by capital flight, which raises interest rates and can trigger exchange rate crises. The experiences of Thailand and Indonesia make good examples.

Third, the ongoing liberalization movement has substantially reduced the economic power of developing countries governments. As Das [2005] puts it, the AFC demonstrated that even small policy mis-steps and hasty reactions by governments, the international community and market participants could turn into a financial panic and deep crisis.

According to some literature, one of the lessons of the AFC is that in the face of globalized finance and open capital accounts, it may be necessary for countries that adopt a floating exchange rate regime to really allow the exchange rate to float [ibid.] Maintaining a peg in the face of imprudent fiscal and monetary policies while maintaining an open international capital account may be a recipe for an eventual currency crisis within a short span of time.[32]

Minimum levels of institutional and regulatory capacity are crucial in order to safeguard the

[31] UNCTAD Trade and Development Report 1998, page 55.
[32] See Intal, Pontines and Mojica.

economic stability of countries undertaking financial liberalization. An appropriate policy framework that reinforces sustainable absorption of capital flows and rapid economic expansion will only be operative if implemented against the backdrop of sound and pragmatic fiscal, monetary and financial market policies. Prudential regulations, well-crafted supervision procedures and good corporate governance are fundamental in acquiring a sustainable financial policy framework.

The AFC aftermath brought with it the rationale and opportunity for renewed economic cooperation among Asian countries. According to Kawai [2004], the AFC prompted regional economies to realize the importance of closer economic cooperation among themselves, which were increasingly interdependent, and to undertake various initiatives for the institutionalization of such interdependence. A summary of nine major AFC policy lessons and recommended measures for crises prevention, management and resolution in the context of strengthened regional economic links of cooperation and integration is presented in **TABLE-2**.

2.6 THE ROLE OF INSTITUTIONS

The AFC delivered a strong message home: the regional economies of Asia are 'institutionally ill prepared' to ride the waves of global financial liberalization without the risk of drowning. Calls for reforms at the national and regional level were made imperative [Das 2005]. No matter how different economic and social systems among the countries in the region are, they are unanimous in the belief that the economic logic for strengthening regional frameworks for trade and investment integration is overriding.

A common denominator among Asian economies, post-AFC, is the conviction that the benefits of economic integration and its institutionalization outweigh the costs [Kawai, 2004]. Such sentiment is shared among Asian governments and key institutional players, and has served as foundation for the strengthening of financial infrastructures and institutions across Asia.

In view of this, it has become imperative for institutions and regulatory frameworks to be reviewed, renewed and strengthened. Only through these measures would the financial and capital markets in Asia develop and stand its ground despite the onslaught of globalized finance, and harness the resource potentials of capital flows despite its unpredictability and testy nature. Ultimately, the quality of macroeconomic outcomes Asian economies seek to achieve depends on the quality and capability of institutions (e.g., central banks, finance ministries, banks, stock exchanges, credit rating firms, etc.) to manage the challenges of internationally mobile capital and regional financial integration.

TABLE-1. LIST OF LEADING INDICATORS USED IN THE ZHUANG AND DOWLING EWS MODEL

LEADING INDICATOR	RATIONALE
CURRENT ACCOUNT (Real exchange rate; exports; imports; trade balance as a ratio of GDP; current account balance as a ratio of gross domestic investment.)	Weak exports, excessive import growth, and currency overvaluation could lead to deterioration of the current account, and historically have been associated with currency crises in many countries. External weaknesses and currency overvaluation could also lead to the vulnerability of the banking sector since a loss of competitiveness and the external market might lead to a recession, business failures, and a decline in the quality of loans. Banking crises could also lead to currency crises.
CAPITAL ACCOUNT (Foreign reserves; M2/foreign reserves; short term debt/foreign reserves; foreign liabilities/foreign assets; deposits in BIS banks/foreign reserves.)	With increasing globalization and financial integration, capital account problems could make a country highly vulnerable to shocks. Manifestations of capital account problems could include declining foreign reserves, excessive short-term foreign debt, debt maturity and currency mismatches, and capital flight.
FINANCIAL SECTOR (M2 multiplier; domestic credit/GDP; excess real M1 balances; Central bank credit to the public sector/GDP; domestic real interest rate; lending-deposit rate spread; real commercial bank deposits)	Currency and banking crises have been linked to rapid growth in credit fueled by excessive monetary expansion in many countries, while contractions in bank deposits, high domestic real interest rates, and large lending-deposit rate spreads often reflect distress and problems in the banking sector.
REAL SECTOR (Industrial production; stock prices)	Recessions and a bust in asset price bubbles often precede banking and currency crises.
GLOBAL ECONOMY (US real interest rate; US GDP growth; world oil prices; dollar-yen real exchange rate)	Foreign recessions could spill over to domestic economies. And lead to domestic recessions. High oil world prices pose a danger to the current account position, and could also lead to domestic recessions. High world interest rates often induce capital outflows. For many East Asian countries, the depreciation of the yen against the dollar could put other regional currencies under pressure.
FISCAL SECTOR (Fiscal balance/GDP; Government consumption/GDP)	Large fiscal deficits could lead to a worsening in the current account position, which could in turn put pressure on the exchange rate.

Source: Juzhong Zhuang and J. Malcolm Dowling, 2002. ERD Working Paper No.26 entitled "*Causes of the 1997 Asian Financial Crisis: What can an Early Warning System Model Tell Us?*.

TABLE-2. SUMMARY OF POLICY LESSONS FROM THE AFC and RECOMMENDED MEASURES

OBJECTIVE	National Measures	Global Measures	Regional Measures
	Improve mechanisms for crisis prevention, management and resolution at the national level.	*Improve mechanisms for crisis prevention, management and resolution at the global level.*	*Improve mechanisms for crisis prevention, management and resolution at the regional level.*
PREVENTING OR REDUCING THE RISK OF CRISES	***AVOID LARGE CURRENT ACCOUNT DEFICITS FINANCED THROUGH SHORT-TERM UNHEDGED CAPITAL INFLOWS.***		
	*Secure adequate foreign exchange reserves. *Maintain sound fiscal and monetary policy. *Adopt a viable exchange rate regime. *Establish orderly capital account liberalization.	*Improve transparency and disclosure by IFIs. *Strengthen IMF surveillance and policy advice. *Remove regulatory biases to short-term and excessive international lending.	*Strengthen regional policy dialogue and surveillance. *Maintain intra-regional exchange rate stability. *Develop a regional early warning system. *Reduce "double mismatch".
	AGGRESSIVELY REGULATE AND SUPERVISE FINANCIAL SYSTEMS TO ENSURE THAT FINANCIAL INSTITUTIONS MANAGE RISKS PRUDENTLY.		
	*Strengthen regulatory and supervisory frameworks over financial institutions. *Allow prudential regulation as financial safeguards and cushions. *Improve information transparency. *Introduce limited deposit insurance.	*Tighten regulations over financial institutions that lend to highly leveraged institutions. *Support implementation of international standards and codes.	*Establish regional initiatives to improve regulatory and supervisory frameworks.
	ERECT AN INCENTIVE STRUCTURE FOR SOUND CORPORATE FINANCE TO AVOID HIGH LEVERAGE AND EXCESSIVE RELIANCE ON FOREIGN BORROWING.		
	*Establish good corporate governance. *Introduce greater competition to produce, factor and financial markets. Develop capital market-based finance. *Better information disclosure.	*Identify best practice corporate governance and its implementation tailored to specific country conditions	*Develop regional capital markets for mobilization of regional savings. *Undertake regional initiatives for better corporate governance.
MANAGING CRISES	***MOBILIZE TIMELY EXTERNAL LIQUIDITY OF SUFFICIENT MAGNITUDE.***		
	*Restore market confidence through coherent policy packages. *Reduce moral hazard problems.	*Strengthen IMF liquidity support, including CCL	*Establish a regional liquidity support facility to contain crises and contagion.
	ADOPT APPROPRIATE MACRO AND STRUCTURAL POLICIES TO REFLECT THE SPECIFIC CONDITIONS AND RALITY OF THE ECONOMY.		
	*Adopt appropriate monetary and fiscal policy contingent on the specific conditions of the economy.	*Streamline IMF conditionality on macroeconomic and structural policies	*Strengthen regional capacity to formulate needed adjustment policies.
	BAIL-IN PRIVATE INTERNATIONAL INVESTORS.		
	*Impose official stand-stills. *In extreme cases, allow involuntary private sector involvement (PSI)	*Establish international rules of the game through private sector involvement (PSI)	*Involve regional creditors from outside the region.
RESOLVING THE SYSTEMIC CONSEQUENCES OF CRISES	***MOVE SWIFTLY TO ESTABLISH RESOLUTION MECHANISMS FOR IMPAIRED ASSETS AND LIABILITIES OF BANKS AND CORPORATIONS.***		
	*Establish procedures for bank exits, recapitalization and rehabilitation. *Establish legal procedures and formal frameworks for corporate insolvencies and workouts.	*Establish international frameworks for PSI in external debt resolution. *Strengthen capacity for official budgetary support.	*Finance regional programs to help accelerate bank and corporate restructuring through regional MDBs and bilateral donors.
	CUSHION THE EFFECTS OF CRISES ON LOW-INCOME GROUPS THROUGH SOCIAL POLICIES TO AMELIORATE THE INEVITABLE SOCIAL TENSIONS.		
	*Strengthen social safety nets and to mitigate social consequences of crises.	*Finance the activity through the World Bank and other international organizations.	*Finance regional programs to help mitigate social impact through regional assistance.

Source: Revision of Table 8 in Kawai [2002a] and Table-1 in Kawai, Newfarmer and Schmukler [2003], as cited in Kawai [2004].

3. CORPORATE GOVERNANCE, PRUDENTIAL REGULATIONS and INSTITUTIONAL STRENTHENING MEASURES

The AFC exposed the weak institutional backbone to which major financial and corporate structures were attached. Anemic legal and regulatory systems, nontransparent and inconsistent accounting and auditing standards, poor banking practices, thinly regulated capital markets, ineffective management by corporate board of directors and disregard for minority shareholders' rights all conspired to exacerbate the financial and economic storm which swept across Asia less than a decade ago.

Corporate governance maybe defined as **a set of rules that define the relationship between shareholders, managers, creditors, the government, employees and other internal and external stakeholders in respect to their rights and responsibilities, or the system by which companies are directed and controlled**.[33] The objective of any system of corporate governance is to create added value for stakeholders.

The principle of promoting good corporate governance is rooted on the fact that most businesses are externally financed. Hence the sources of these funds must be assured, through a system of good corporate governance, that their funds are being utilized and managed in the most efficient, productive and profitable manner. By providing an effective system of protection to creditors and debtors, good governance assures that the element of trust (which is essential in any business environment) is sustained between and among all business stakeholders.

The principles covered by a system of good corporate governance include:[34]

- The rights of shareholders, who should be timely and properly informed about the company, who should be able to participate in decisions concerning fundamental corporate changes, and who should share in the profits of the company;
- Equitable treatment of shareholders, especially minority and foreign shareholders, with full disclosure of material information and prohibit abusive self dealing and insider trading;
- The role of stakeholders, which should be recognized as established by law and active co-operation between corporations and stakeholders in creating wealth, jobs and financially sound enterprises;

[33] This definition was taken from the Cadbury Committee of the United Kingdom, based on the definition contained in www.fcgi.or.id/English.
[34] These elements were taken from www.fcgi.or.id/English/

- Timely and accurate disclosure and transparency on all matters material to company performance, ownership and its stakeholders; and
- The responsibilities of the board in the management, the supervision of the management and the accountability to the company and shareholders.

Because practices, regulations and the institutional make-up vary across countries, there is not just one system of governance that might be effective for a country or a group of countries. In view of this, the World Bank Group's Corporate Governance Department, under the joint World Bank-IMF program of Reports on the Observance of Standards and Codes (ROSC), carried out corporate governance assessments that capture both the formal and informal dimensions of corporate governance practices in each country. Under the ROSC Program, the World Bank oversees the preparation of assessments on corporate governance; accounting and auditing; and insolvency regimes and creditor rights. The corporate governance ROSC then serves as a benchmark of the country's observance of corporate governance against the OECD Principles of Corporate Governance.

While corporate governance is a primary undertaking of the companies themselves, the government plays an important supporting role by issuing and enforcing adequate regulation on such areas as company registration, disclosure of financial company data and rules on the responsibilities of commissioners and directors. Observance of the principles of good governance are therefore reinforced and strengthened by government action through a stronger and wider enforcement of laws, introduction of new regulations and increasingly strong public scrutiny over corporate actions.

On a macro level, promoting a system of good governance, together with prudent regulations, help develop capital markets by strengthening structures that broaden investor class, provide sound financial channels and institutionalizes market discipline. This is both a challenge and an imperative especially for Asian economies whose performances, during the AFC season, demonstrated a major lack of competency in this area.

Another reason why developing Asian economies have to pursue a system of good governance and prudential regulations is that unlike developed economies which possess highly developed financial and capital markets, the countries hardest hit by the AFC all share the common trait of proceeding with economic deregulation and globalization without first securing the maturity

and readiness of its financial infrastructures.

A study on the state of corporate governance and finance in Indonesia, Korea, Malaysia, the Philippines and Thailand identified some commonalities among these countries which impact on how the companies in these countries are being governed and financed. These common denominators include the following:

(1) Most companies in these countries started as family businesses and later evolved into corporations, which are still under the control of the founders' families.
(2) Governments have had a hand in developing specific industries, directing funds towards them and determining the degree of allowable competition.
(3) They have all engaged in financial liberalization even if capital markets were not well developed. Thin trading, shallow liquidity, weak regulatory framework and underdeveloped market infrastructures characterized these countries' equities markets.

The subsequent section presents the state of corporate governance and prudential regulations in selected economies of Asia. It is important to note that the dictum of the merits of corporate governance has been based largely on the Anglo-American model, which put a premium on the putting sound regulatory frameworks in place. However, such may not be the best recipe for Asian economies, especially since most Asian companies are family-owned and -controlled, meaning, the owners of such companies might pursue their private interests more expeditiously and often at the expense of minority shareholders whose rights are often weakly protected by corporate laws. This system of corporate ownership as well as the imbedded institutional and socio-cultural norms (role of creditor banks and employees, for example) must be included in the governance paradigm as well.

3.1 THE CASE OF INDONESIA

Several factors made the restructuring in Indonesia daunting. These include: (a) The depth of its structural problems; (b) The weak and vulnerable condition of the banking sector during pre-crisis period; (c) The high levels of foreign debt; (d) Substantial currency depreciations; (e) The tight constraints imposed by the fiscal costs of bank re-capitalization; and (f) The lack of political consensus on the direction of reform.

3.1.1 BANKING SECTOR

Among the countries included in this study, Indonesia's banking system stood out as the most distressed because of its weaker pre-crisis conditions, the extent of depreciation suffered by its currency in a scenario where the private sector was exposed to very large external liabilities, and the sharp decline of its economic growth in 1998.

Policies introduced to reform the banking system are focused on (a) the resolution of non-viable private banks; (b) government-assisted recapitalization programs for potentially viable private banks; (c) measures to recover liquidity support previously extended to troubled banks by Bank Indonesia; (d) the merger, reform, and recapitalization of state banks; and (e) a strengthened banking supervision system.

Established in 1997, the Indonesian Bank Restructuring Agency (IBRA) was tasked to oversee bank restructuring. IBRA set up an Asset Management Unit (AMU) to directly manage problem loans of banks under its supervision. Amendments in legislation, which were approved in late 1998, bolstered the legal powers of IBRA. Banks were then re-grouped for the purpose of restructuring in the first half of 1998. Of the 128 private banks, 32 were included in Category A, i.e. banks with a capital adequacy ratio (CAR) of over 4 per cent. Another 62 banks formed Category B with a CAR of between -25 per cent and 4 per cent. The rest was put in Category C with a CAR of less than -25 per cent. Injection of capital by owners who were trying to avoid closure and seeking better treatment, inhibited banks from moving from one category to another [Simanjuntak, n.d.].

Bank Indonesia introduced a recapitalization program for potentially viable private banks. Although Indonesian banks have, on average, achieved the 8 percent capital adequacy standard by 2001, there are still a number of those unable to raise sufficient profits that will allow them to meet

the standard. Four state banks required around Rp276 trillion for recapitalization. In addition, sovereign bonds amounting to Rp650 trillion were issued to enable banks to meet a capital adequacy standard of at least 4 percent and to honor guarantees of deposits and liabilities of closed banks. Troubled banks were given four years to pay the liquidity support extended to them.

Banks that were deemed ineligible for recapitalization were closed, merged, or sold. In 1999, Bank Mandiri was established to amalgate the four older state-owned banks that failed in 1998. These banks were Bank Dagang Negara (BDN), Bank Export-Import Indonesia (Exim), Bank Bumi Dayak (BBD), and Bank Pembangunan Indonesia (Bapindo). The new bank, whose name means "self-reliant bank", will have almost a third of total bank assets and may later be sold. By 2001, 70 banks were closed and another 12 were nationalized so that only 159 banks were left in operation. The number of banks continued to decrease as mergers and acquisitions took place. Some of the stronger banks are likely to make strategic alliances with foreign partners, and the banks under the control of IBRA are expected to be sold to strategic investors.

To protect depositors, Bank Indonesia issued a blanket guarantee in an attempt to discourage depositors from further withdrawal. This protection scheme was limited to small depositors of up to Rp20 million, which accounted for 90 percent of the number of depositors in the banking system. It should be noted that through 4 state banks, 12 nationalized banks, 26 regional development banks and majority stakes in 7 "private" recapitalized banks, government-owned institutions now control 70 per cent of the banking system's deposits.

3.1.2 CORPORATE SECTOR

In March 1998, 46.7 percent ($64.6 billion) of Indonesia's total external debt was accounted for by corporate debt. The corporate sector had more than Rp600 trillion (US$75 billion at Rp8,000/$1) in debt from domestic commercial banks. During the same period, 80 percent of the total amortization payments on foreign debt were private. More than two thirds of private debt was short-term and the average maturity of all private debt was estimated to be only 18 months.

To encourage negotiation between creditors and debtors, the Jakarta Initiative was launched on September 1998. Aside from encouraging negotiation, the initiative was aimed at establishing the legal and policy framework needed to facilitate corporate restructuring. The initiative proposes the idea that creditors should agree to a standstill for a certain period to allow debtors to operate

normally after obtaining fresh financing. A number of prominent companies have been subject to restructuring deals under the initiative, they include Garuda (a national flag carrier), Astra International (automotive), and Ciputra (property business). In November, Semen Cibinong (cement industry) became the first Indonesian company to resume paying part (25 percent) of the interest on its $1.2 billion debt. By end-November, the Jakarta Initiative Task Force had conducted negotiations for 52 companies with Rp2.4 trillion of domestic debt and $6.7 billion of foreign exchange debt [ADB, 2001].

The initiative also offered firms the option of restructuring via debt-to-equity swaps. Only a small number of firms explored this option. To sustain and strengthen the momentum on corporate restructuring, the government introduced regulation that provides tax neutrality for mergers and removes other tax disincentives for restructuring. One issue that must be ironed out, however, is that significant regulation on debt-equity swaps would have to be issued in the context of corporate restructuring [ADB, 2001].

In some cases corporate debt restructuring will be a matter for the AMCs that now own the NPLs. Some have argued they have poor incentives to do this but if the necessary expertise is concentrated in this one body, it may operate more efficiently than if it is diffused among a number of banks [Hawkins, 1999].

3.1.3 PRUDENTIAL REGULATORY AND SUPERVISORY REFORMS

Lack of supervisory capability is often cited as one of the reasons for financial system weaknesses. Asymmetric information leads to adverse selection and moral hazard problems that have an important impact on financial systems and justifies the need for prudential supervision [Mishkin, 2001].

Although Bank Indonesia has initiated prudential regulatory and supervisory reforms as early as 1991, progress has been slow and was exacerbated by (a) premature banking liberalization; (b) insufficient banking consolidation; and (c) poor development of organizational capabilities. Political interference and lack of law enforcement are also primary concerns.

In July 1999, Bank Indonesia entered into an agreement with the IMF and presented the “Master Plan”. The plan was meant to enhance the efficiency of banking regulation in order to meet international standards set by Basel Core Principles for Effective Banking Supervision. Three

strategies were set by the plan: (a) risk-based supervision; (b) a clear responsibility for the supervision and regulatory functions within the Board of Governors; and (c) a uniform supervision standards for all public and private banks. Indonesia has also moved towards the adoption of international standards for loan classification and minimum capital adequacy ratios but in a phased manner. An 8 percent capital adequacy ratio was set for compliance by 2001.

Since July 2000, Bank Indonesia also carried out an intensive supervision by placing an on-site supervision team in each of the systemically important banks to ensure that they were well managed and did not pose a high risk to the stability of the banking system.

The financial system is recovering from its fragility but the pace of asset disposal has been slow. For example, in the process of reducing the NPL ratio to 18.8 percent by December 2000, IBRA acquired approximately 82 percent of the NPLs of banks. This resulted to the government owning around 80 percent of the banking system's total assets. Amendments to the bankruptcy law were also announced on April 22, 1998, which took effect in 120 days. The new commercial law and regulations are based largely on Chapter 11of the US Bankruptcy Law. The ADB provided assistance in improving the payments system. The Jakarta Electronic Clearing System was established in 1998 to provide a fast and secure clearing process.

Indonesian banking sector was so badly hit by the Asian crisis that all commercial banks went bankrupt. Although the government made a lot of effort to rehabilitate the damaged banking industry, weakness of private commercial banks has been persisting and even large commercial banks are still suffering from liquidity problems. The banking sector reform in Indonesia was slowed down in 2001. The progress in the resolution of NPLs has been unsatisfactory and the privatization of commercial banks under the control of government was delayed.

One of the important factors affecting the slow-down of bank reforms is the political instability and the lack of government initiatives to pursue financial reforms [Kishi and Okuda, n.d.]. What Indonesia needs is to speed up the process of its asset disposal and accelerate corporate debt restructuring to all its obligators. An improvement in the legal system to provide a more reliable protection for creditors is necessary, although, admittedly, such process will take time. Another bottleneck in the reform process was the lack of vigorous implementation of prudential regulations due to insufficient ability of Bank Indonesia supervision staff. The banking system also needs to address the relative shortage of skilled and talented personnel in order to significantly improve the

management capacities of its private banks.

3.1.4 CORPORATE GOVERNANCE[35]

Two important laws govern the state of corporate governance in Indonesia. One is the Indonesian Company Law of 1995, and the other is the Capital Market Law. **The Indonesian Company Law of 1995** is the most important framework for the current legislation on corporate governance. Under this Law, a company is a separate legal entity in which Directors (Direksi) and Commissioners (Komisaris) represent the company.

General Meeting of Shareholders. The General Meeting of Shareholders is the most powerful organ in a company. It has the power to approve or disapprove i.e. the consolidation, merger, acquisition, bankruptcy and dissolution of the company and the appointment and dismissal of commissioners and directors.

Board of Commissioners. The Board of Commissioners (Komisaris) has to supervise and advise the Directors in the running of the company. The Komisaris is required by the Company Law to carry out, in good faith and with full responsibility, its duties in the best interests of the company. It is empowered by law to suspend a director and must sign, together with the Direksi, the Annual Report of the company. Thus, it shares legal responsibility for misleading financial statements. Each member of the Komisaris must disclose to the company, by virtue of the Company Law, any shareholding interests held by that member or his family in the company or other companies. ***The performance of responsibility of the Komisaris is however as yet quite rare.***

Board of Directors. The Board of Directors (Direksi) is fully responsible for the management of the company. Each Direksi-member is fully and personally liable if he/she is at fault or neglects to perform his/her tasks in good faith and with a full sense of the responsibility for the interest and business of the company. The Direksi is required by the Company Law to carry out, in good faith and with full responsibility, its duties in the best interests of the company. Each member is personally liable for any misconduct or negligence in carrying out these responsibilities.

The Direksi must administer the company's books of accounts, prepare and submit to the

[35] This section was sourced from the official website of the Forum on Corporate Governance in Malaysia (FCGI).

Annual GMOS an Annual Report and annual financial statement as well as establish and maintain a Register of Shareholders and Minutes of the GMOS. A member of the Direksi must also disclose to the company, by virtue of Article 87 of the Company Law, any shareholding interests held by him or his family in the company or other companies. The Direksi shall comply with Article 43 of the Company Law requiring that the company organize and maintain a Register of Shareholders, and a Special Register containing information regarding the shareholdings of members of the Direksi and Komisaris and their families in such company and/or in other companies and the dates such shares are acquired and disposed of. The Direksi shall cause the Register of Shareholders and the Special Register to be readily available for examination by the Komisaris and shareholders at the office of the company.

Under the current rules a publicly listed company is required to appoint a corporate secretary, and such secretary acts as an investor relations officer. In addition, it is being proposed that the corporate secretary shall also act as a compliance officer and keeper of corporate documents such as the Register of Shareholders and the Special Register of the company, and Minutes of any GMOS, as well. One of the members of the Direksi may be designated as a corporate secretary. The Deed of Establishment of each company containing of the Article of Association, which must be ratified, approved or accepted by the Minister of Law and Legislation and the standards set forth thereby, will further define the responsibilities and the rights of the shareholders, both majority and minority, and the Direksi and Komisaris.

The **Indonesian Capital Market Law** is the second major regulatory framework, next to the Company Law. It is found in the rules and regulations issued by the Indonesian Capital Market Supervisory Agency, or "BAPEPAM". The Company Law applies to all limited liability companies established under Indonesian law, whereas the capital market rules and regulations are applicable to "public companies" as defined in the Capital Market Law (i.e., a company of which the shares are held by at least 300 persons and having a paid-up capital of Rp3 billion).

The company shall disclose material information through its Annual Reports and financial statements to shareholders as well as its reporting to BAPEPAM, the relevant stock exchanges and the public in a timely, accurate, understandable and objective manner. Companies shall take the initiative to disclose not only matters required by law but also those of material importance to the decision-making of institutional investors, shareholders, creditors and other stakeholders with respect to the company. Members of the Komisaris and Direksi holding shares in the company and

any other "insiders" as meant in the elucidation of Article 95 of the Capital Market Law must not take advantage of their inside information in dealing with those shares.

In Indonesia, as in other Asian countries, the ownership of listed companies is highly concentrated, and the percentage of managers belonging to the controlling group is also very high. And as Indonesia's economy and companies inevitably integrate into the world economy for their loan and equity financing and trading of products, the observance of internationally agreed standards of corporate governance becomes imperative for Indonesia.

The Forum on Corporate Governance in Indonesia made an assessment on such areas of corporate governance as shareholders participation and protection, credit monitoring and protection, market for corporate control and product market protection and capital markets and corporate finance. Its notable findings consisted of the following:

(1) On shareholders participation and protection. The Boards of Commissioners have generally been ***ineffective in safeguarding the interests of shareholders, because family based shareholders have held dominant positions.*** Control mechanisms ('checks and balances'), such as representation of third party interests through independent commissioners and independent committees for remuneration, nomination, and audit have been lacking. Transparency is poor as disclosure practices, accounting standards and their implementation have been inadequate.

(2) On creditor monitoring and protection. The creditor's position and role in corporate governance ***is weak because creditors and banks themselves are poorly governed***. This is due to the weak internal control and inadequate regulatory frameworks for the bank and non-bank financial institutions and bank's apparently underdeveloped internal risk management system. Secondly, market scrutiny has been lacking as creditors and competitors are often part of conglomerates owned by the same families as those who owned the borrowing firms. Thirdly, legal protection of creditors has been weak due to the inefficient judiciary system in Indonesia. Moreover, insolvency laws and procedures have been generally inactive in Indonesia, both in protecting creditors and disciplining borrowers.

(3) On the market for corporate control and product market protection. The market for corporate control has been ***largely inactive***. The difficulties experienced in mounting hostile take-over reflect the concentration of ownership in companies. The high concentration of ownership of companies inhibits the market mechanism on the markets for corporate control and products.

(4) Capital Markets and Corporate Finance. Due to the early stage of development of the capital markets in Indonesia, ***the capital markets were dominated by external finance***, especially bank loans. Regulatory restrictions and ineffective legal procedures have limited the role of corporate bonds and corporate financing. Firms undertook extensive foreign borrowing because foreign interest rates were liberalized whereas domestic rates were regulated.

3.2 THE CASE OF MALAYSIA

Malaysia's approach to financial sector restructuring utilized an institutional framework that was created by the government in 1998. This framework was supported by three institutions: Danaharta, Danamodal and the Corporate Debt Restructuring Committee.

Its banking woes were not as pronounced as Indonesia's or Thailand's even prior to the crisis. Its risk-weighted capital adequacy ratio (for commercial banks) was 10.8 percent by end-1996. As the AFC unfolded, NPLs increased from 6 percent of total loans by end-1997 to about 23 percent by end-1998. Between October 1997 and March 1998, Malaysian authorities adopted a series of measures involving tightening of loan classifications and higher capital adequacy ratios but 'these were subsequently relaxed in September 1998'.[36]

The bank restructuring process has been progressing successfully. The government strengthened the legal system and enhanced prudential regulations of financial institutions. In order to promote market discipline and tighten disclosure-based regulations, Bank Negara Malaysia (BNM) required the banks to submit daily statements and pursued better accounting between support operations for distressed banks and day-to-day monetary management. BNM reduced the time it required to release data and the analysis of monetary trends from six to four weeks and launched its home page on the Internet. A supervisory early-warning system was developed with the World Bank in 1999 [Kishi and Okuda, n.d.].

To strengthen risk management, modules on risk-based examination techniques are incorporated in the examination manual, and prudential regulation standards were upgraded to conform to the international standards. All financial institutions were asked to disclose quarterly data on NPLs and capital adequacy ratios. The classification period of NPLs was reduced from six to three months (to mitigate the severe credit crunch caused by new regulations) and the suspension of interest in NPLs was tightened. The minimum requirement of general provision for bad and doubtful debts was raised to 1.5% [ibid.].

However, some requirements were relaxed to help economic recovery. In 1998, to ensure the survival of domestic banks the government announced a plan to consolidate the financial institutions so as to improve their competitiveness and stabilize the banking sector. The financial

36 Taken from Financial and Corporate Sector Restructuring in East and Southeast Asia: An Overview.

industry was reorganized in 2000, with 58 banks and non-banks consolidated into ten groups [see **TABLE-3**].

Under the strong leadership of the government, the resolution of NPLs and implementation of comprehensive bank restructuring program have progressed steadily and substantially. Loan approvals grew by 108.3 percent between 1999 (RM104 billion) and 2000 (RM131.7 billion). Loan disbursement, on the other hand, increased by 12.6 percent, from RM317.4 billion in 1999 to RM357.3 billion in 2000 [Ariff et al, n.d.].[37] However, market circumstances have yet to be fully competitive and the financial institutions' management is not fully independent. The disclosure of banks is still insufficient and strong government intervention into banking sector remains. Foreign banks' business operations are still regulated. And unhealthy co-integration between banking sector and the stock market in various forms are observed. In this regard, government intervention in the financial system depresses the independent management of banks and disturbs efficient resource allocations [Kishi and Okuda, n.d.].[38]

If Malaysia opens her banking sector more to foreign entities, it will likely improve the efficiency of its domestic banking sector as a whole, and in the process attract more FDI. Thirteen wholly foreign-owned commercial banks operate in Malaysia, and while the government has expressed its desire to reduce the number of Banks, BNM indicated its intent to issue 3 new licenses to foreign participants in Islamic banking in 2004 and 3 new additional commercial licenses in 2005. While the Financial Sector Master Plan aims to increase more competition and build greater financial sector resiliency, it deferred the introduction of new foreign competition in conventional banking until after 2007.[39]

CORPORATE GOVERNANCE

A World Bank's Report[40] on Malaysia's corporate governance contain a summary of the structure of the corporate sector and capital market in the country, as well as the legal, regulatory and professional best practices. It also records the registration and listing requirements in the capital market, the treatment of shareholders (including legal rights and treatment of shareholders, a feature on minority shareholders, statutory and other remedies, insider trading and self-dealing and share

[37] Check out www.unescap.org/drpad/publication/fin_2148/chap3.pdf.
[38] Check out www.mof.go.jp/jouhou/kokkin/tyousa/tyou041g.pdf.
[39] Taken from US Department of State Malaysia Investment Climate Statement 2005.
[40] Taken from http://www.worldbank.org/ifa/rosc_cg_malaysia.html

registration), management oversight (including structure and powers of the ultimate body governing the corporation, legal duties owed the members of the governing body; process for nominations to the governing body, and independent oversight of the management), and disclosure and transparency (i.e. disclosure of material financial and non financial performance; independent audit; disclosure of ownership; disclosures relating to the company's directors, managers and advisers; disclosures for related party transactions; and other disclosure provisions and risk management). Some of its highlights also conform to the findings of the study Corporate Governance and Finance in the Five Affected Countries[41] including the following:[42]

(1) **The concentrated nature of Malaysia's corporate ownership structure.** The five largest shareholders typically own more than 60 percent of shares in half of the listed companies. In 1998, the largest shareholder owned 30.3 percent, the top five shareholders owned 58.8 percent and the top 20 owned 80 percent of total outstanding shares of an average PLC (publicly listed company). Ownership data on large conglomerates indicate a similar concentration pattern. The nominee company is the largest shareholder group among the top five shareholders. The ownership structure, especially the extent of institutional holdings is due in part to the government's efforts to reallocate corporate shares to indigenous Malaysians and the countervailing efforts of non-indigenous Malaysians to maintain their ownership. There is minimal degree of cross-shareholdings despite the absence of laws explicitly prohibiting a company from owning shares of companies that own it.

(2) **Malaysia scores highest when it comes to the effectiveness of boards of directors as an oversight body**. This might be due to the government's efforts to strengthen the regulatory framework of the corporate sector, such as the introduction in 1996 of the Directors Code of Ethics.

(3) Rights and protection of shareholders in Malaysia are comprehensive and well defined. **Three major acts govern corporate activity: the Companies Act of 1965; the Securities Industry Act (SIA) of 1983; and the Securities Commission Act (SCA) of 1993.** The Companies Act is the chief legislation that governs such corporate matters as pre-incorporation, incorporation, operations and the duties and obligations of directors. It also deals with the rights of shareholders and protects shareholders by:

- stipulating regulations governing duties of company directors;
- requiring AGM approval for the acquisition or disposal by directors of assets of

[41] Taken from http://www.adb.org/Documents/Books/Corporate_Governance/Vol1/chapter3.pdf
[42] This section was sourced primarily from www.worldbank.org/ifa/rosc_cg_malaysia.html and www.adb.org/Documents/Books/Corporate_Governance/Vol1/chapter3.pdf.

substantial value, and for the issue of shares;

- prohibiting loans to directors or director-related parties, unless they are subsidiaries;
- disclosing and requiring shareholders' approval on substantial transactions in any non-cash assets involving directors or persons connected with directors;
- disclosing substantial shareholdings to the company and the KLSE (now Bursa Malaysia).

The SIA and SCA compose the legislative and regulatory framework of Malaysia's capital markets, under the authority of the Ministry of Finance (MOF). The SIA of 1973 set a milestone for the protection of investor interest by curbing excessive speculation, insider trading, share rigging and other forms of market manipulation. The SIA of 1983 provided a more effective control and supervision of the operations of dealers and tightened prohibitions on artificial trading and market rigging.

(4) The **Malaysian Code on Corporate Governance**, though voluntary in nature, was set out to promote good governance and best practices for listed companies. In March 1998, the Malaysian Institute of Corporate Governance (MICG) was created to create a pool of independent directors via education and training programs.

(5) **Malaysia scores high when it comes to the general quality of its auditing standards and financial reporting**. Its accounting standards are consistent with those issued by the International Accounting Standards Committee (IASC) in the 1980's. The Malaysian Accounting Standards cover issues not dealt with by the IASC ad reflect features particular to the Malaysian way of doing business.

(6) In general, creditors do not influence the companies' management and decision-making, apart from restrictions set out in loan covenants. Insolvency procedures, modeled after the English law, are a mix of creditor-oriented formal procedures and informal procedures, which bring together debtors and creditors to restructure loans.

(7) The Malaysian Code on Takeovers and Mergers (1987) was aimed at ensuring that all takeovers and mergers are conducted in an orderly manner and minority shareholders are protected. The new Malaysian Code on Takeovers and Mergers (1998) increased the market disclosure requirements related to takeovers, imposed criminal liabilities on parties providing false or misleading information, enhanced standards of disclosure in case of takeovers and provided amendments to

reduce the amount of time required for an acquirer to accumulate shares in a target firm.

(8) The government's intention of increasing the number of Bumiputra entrepreneurs led to the creation of business groups which were often owned by Bumiputras. This formed strong political affiliations and later became a breeding ground for crony capitalism. Such groups could easily obtain bank loans from government-controlled banks using political clout. The BNM also waived the single lender limit for government projects so that these projects would not be dependent on foreign funding.

TABLE-3. LIST OF BANKING GROUPS IN MALAYSIA

ANCHOR BANK	BANKING INSTITUTIONS IN A GROUP
MALAYAN BANKING BERHAD	MALAYAN BANKING BERHAD
	MAYBAN FINANCE BERHAD
	ASEAMBANKERS MALAYSIA BERHAD
	PHILEO ALLIED BANK BERHAD
	THE PACIFIC BANK BERHAD
	SIME FINANCE BERHAD
	KEWANGAN BERSATU BERHAD
BUMIPUTRA-COMMERCE BANK BERHAD	BUMIPUTRA-COMMERCE BANK BERHAD
	BUMIPUTRA-COMMERCE FINANCE BERHAD
	COMMERCE INTERNATIONAL MERCHANT BANKERS BERHAD
RHB BANK BERHAD	RHB BANK BERHAD
	RHB SAKURA MERCHANTS BANKERS BERHAD
	DELTA FINANCE BERHAD
	INTERFINANCE BERHAD
PUBLIC BANK BERHAD	PUBLIC BANK BERHAD
	PUBLIC FINANCE BERHAD
	HOCK HUA BANK BERHAD
	ADVANCE FINANCE BERHAD
	SIME MERCHANT BANKERS BERHAD
ARAB MALAYSIAN BANK BERHAD	ARAB-MALAYSIAN BANK BERHAD
	ARAB-MALAYSIAN FINANCE BERHAD
	ARAB-MALAYSIAN MERCHANT BANK BERHAD
	BANK UTAMA MALAYSIA BERHAD
	UTAMA MERCHANT BANK BERHAD
HONG LEONG BANK BERHAD	HONG LEONG BANK BERHAD
	HONG LEONG FINANCE BERHAD
	WAH TAT BANK BERHAD
	CREDIT CORPORATION MALAYSIA BERHAD
PEWIRA AFFIN BANK BERHAD	PEWIRA AFFIN BANK BERHAD
	AFFIN FINANCE BERHAD
	PEWIRA AFFIN MERCHANT BANKERS BERHAD
	BSN FINANCE BERHAD
	BSN MERCHANT BANK BERHAD
MULTI PURPOSE BANK BERHAD	MULTI PURPOSE BANK BERHAD
	INTERNATIONAL BANK MALAYSIA BERHAD
	SABAH BANK BERHAD
	MBF FINANCE BERHAD
	BOLTON FINANCE BERHAD
	SABAH FINANCE BERHAD
	BUMIPUTRA MERCHANT BANKERS BERHAD
	AMANAH MERCHANT BANK BERHAD

ANCHOR BANK	BANKING INSTITUTIONS IN A GROUP
SOUTHERN BANK BERHAD	SOUTHERN BANK BERHAD BAN HIN LEE BANK BERHAD CEMPAKA FINANCE BERHAD UNITED MERCHANT FINANCE BERHAD PERDANA DINANCE BERHAD PERDANA MERCHANT BANKERS BERHAD
EON BANK BERHAD	EON BANK BERHAD EON FINANCE BERHAD ORIENTAL BANK BERHAD CITY FINANCE BERHAD PERKASA FINANCE BERHAD MALAYSIAN INTERNATIONAL MERCHANT BANKERS BERHAD

SOURCE: BANK NEGARA MALAYSIA **as cited in Ariff, et al (n.d.)**

3.3 THE CASE OF SINGAPORE[43]

Singapore's financial sector remains robust despite fluctuations in regional economic performance and declines in asset prices. After weathering 3 major shocks – the AFC; the sharp drop in electronic exports in 2000-2001; and the SARS outbreak in 2003 - banks have remained liquid, and continue to be adequately provisioned for nonperforming asset exposures and conservative in their management practices. The insurance sector, the 2nd largest group of financial institutions, is well capitalized and generally profitable. The Monetary Authority of Singapore (MAS) between December 2001 and May 2003, completing a major part of the lion city's banking liberalization program, issued twenty wholesale bank licenses. By end-2004, Singapore has 23 Qualifying Full Banks (QFBs), 36 wholesale banks, 111 commercial banks, and 47 offshore banks.[44]

The nonfinancial corporate sector [see **TABLE-4**] has recorded consistent profitability from 1997 to 2001, despite fluctuations on returns to assets between 3 percent and 6 percent, and the return to equity between 6 percent and 14 percent. The average debt-equity ratio was 0.8 from 1999 – 2001. Liquidity is high (except 1998) and the share of total debt remained stable at approximately 70 percent.

Reforms have been implemented since 1998 in order to further capitalize on the country's international standing in the financial arena. These include:

1. Opening the financial industry to greater international competition;
2. Bringing regulatory and supervisory practices closer in line with international best practices on prudential regulations, supervision and disclosure-based regulations;
3. Developing deep and liquid fixed income and equity markets;
4. Promoting the asset management industry
5. Gradually liberalizing the restrictions on the use of S$.

3.3.1 PRUDENT REGULATIONS, the MAS and the BANKING SECTOR

The operation of local banks continues to be profitable and its foreign operations, under the MAS' consolidated supervision framework, appear to be managed efficiently. By end-September 2003, the total assets of local banks were valued at S$257 billion, equivalent to a 21 percent share

[43] A large component of this report was based on IMF Country Report No 04/140, 2005.
[44] US Department of State Singapore Investment Climate Statement 2005

of the total assets of the financial system. By September 2004, this figure increased to S$390 billion. Although the capital adequacy ratio (CAR) of local banks has been declining, they remain high by international standards [see **TABLE-5**]. Additionally, their liquidity position remains strong. The average ratio of overall NPLs[45] to total loans for local banks decreased from end-1999 (5.3 percent) to end-September 2003 (3.5 percent).

As of June 2004, global non-bank NPLs as a percentage of global non-bank loans were 5.5 percent, compared with 6.7 percent in December 2003. Regional country non-bank NPLs as a percentage of regional non-bank loans was 12.5 percent as at June 2004 (15.9 percent as at December 2003).

Increased presence of foreign banks strengthens incentives for local banks to perform better and in the process, boosts the resilience of the domestic financial system in general. Total assets of foreign banks (S$792.6 billion) represent 64 percent of the financial system's assets, or 509 percent of the country's GDP in 2002.

The MAS continues to ensure the smooth functioning of the country's payment and financial systems. It progressed from a rule-based to a risk-based approach in managing systemic liquidity. Regulatory and supervisory practices exhibit a high degree of observance of international standards and codes across all segments of the financial sector. An efficient legal system, accounting standards that follow international best practices, and ongoing initiatives to promote good governance and to strengthen the framework of disclosure practices will benefit the system as a whole.

The MAS has established a financial system crisis management framework to prepare the financial system for any eventuality and reduce the system's disruption in the event of a crisis and financial system confidence is maintained. This framework includes payments systems disruptions, real section shocks with financial sector implications, regional instability and conflicts and the failure of one or more systematically important institution.

The risk-based approach the MAS established for banks (also introduced for securities firms

[45] NPls are loans overdue for more than 90 days and comprise loss loans – including fully provisions loss loans not written off – as well as substandard and doubtful loans. Classified loans, on the other hand, include current loans that exhibit definable weaknesses that may jeopardize repayment, in addition to NPLs. The MAS uses NPLs and classified loans interchangeably, and publishes only the latter data [IMF Country Report No. 04/140, 2005].

in 2002 and the insurance industry in 2005) is well in place and progress have been ongoing in so far as consolidating different supervisory frameworks that govern various areas of the financial sector.

3.3.2 REFORMS AND INITIATIVES

In the insurance sector, a risk-based capital framework was adopted by the insurance industry in late 2004. In 2005, an insurance scheme to provide small depositor protection was introduced. Significant initiatives are currently being developed in consultation with the insurance industry – particularly the overhaul of capital standards to a more comprehensive and risk-based approach with new rules, giving specific attention to corporate governance and internal control. The implementation and enforcement of these initiatives, which are well advanced, will further improve observance.

In order to minimize contagion risk and conflicts of interest, banks were required separate financial and non-financial activities effective July 2004, in effect making them divest non-financial activities.

In light of the further adoption of the New Basel Capital Accord (Basel II), the MAS maintains close consultation with banks which have been enhancing internal rating infrastructures for credit risk measurement.

The 2nd generation of the MAS Electronic Payment Scheme (MEPS) was introduced in 2005 to improve the efficiency of the payments system. The securities and settlement systems are robust and do not cause major systemic risks. The efficiency of the MEPS-SGS (the central depository for government bonds and bills) is being improved with the implementation of a Society for Worldwide International Financial Telecommunication (SWIFT) channel, and an intraday liquidity facility will soon be introduced to improve liquidity on the cash side.

The IMF country assessment on Singapore's observance of Key International Standards and Codes reveal that:[46]

1. The MAS has established a sound prudential and regulatory framework for effective

[46] A large component of this report was based on IMF Country Report No 04/140, 2005, (Box7) page 27.

supervision of its commercial banking sector and has achieved a high level of observance of the Basel Core Principles (BCP). There are no weaknesses that raise financial stability concern.

2. The country has a high level of observance of the IAIS Insurance Core Principles.
3. Singapore has achieved a high degree of compliance with IOSCO Objectives and Principles of Securities Regulation. The framework for the oversight and regulation of securities markets, intermediaries, issuers, and collective investment schemes, is well developed, sophisticated, and meets international standards. The MAS should require periodic reporting of net asset values and ensure that the Collective Investment Scheme (CIS) operator has systems in place to calculate net assets value correctly.
4. CPSS-IOSCO Recommendations for Securities Settlement Systems: Neither the MAS Electronic Payment System – Singapore Government Securities (MEPS-SGS), which clears and settles SGS on a real time gross settlement basis – nor the Central Depository Private Limited (CDP) – which clears and settles equities and private debt securities – is subject to major vulnerabilities. While the MAS oversight objectives with respect to securities settlement systems are set out in various documents, it is recommended that the MAS publish a document on the oversight framework for securities settlement system and its approach to its administration.
5. The transparency of monetary policy framework has improved substantially in recent years. However, the authorities remain cautious about publishing certain information on the monetary policy framework and monetary operations. For example, the weights used in the trade-weighted exchange rate index or the precise limits of the band are NOT disclosed. Similarly, the extent of MAS intervention in the foreign exchange is NOT disclosed on a predetermined or timely schedule. Greater disclosure in these areas could be considered to the extent it does not compromise the monetary policy regime. The MAS has made steady progress toward improving transparency in financial policies in recent years and now meets many of the elements of the Transparency Code. It could further improve transparency through providing more detailed information on recent development in the financial sector and its supervisory activities in its regular publications, including regarding local financial institutions overseas operations.

Singapore's financial competency is also reflected in the fact that it has closely followed international best practices in accounting standards and disclosure. Under the Financial Reporting Standards based on the International Accounting Standards, all listed companies with market

capitalization in excess of S$75 million are required to report quarterly financial results. Moreover, all listed companies will be required by 2006 to change audit partners and change locally incorporated banks to change audit firms every 5 years. Rules on mergers and acquisitions are also aligned with international standards.

Despite its financial system's high level of technical competence and institutional structure, the MAS has to maintain close monitoring of risks from new financial products, the increasing foreign operations of local banks and cross-border transactions. ***Updated information on cross-border capital flows, for example, is vital for a timely assessment of the possible vulnerability impacts it might have on the country's financial sector***.

Singapore's CODE OF CORPORATE GOVERNANCE, which was released in April 2001, came into full effect in January 2003. The Code sets out recommended corporate governance and principles and practices in areas board composition, board performance, director's remuneration, accountability and communication with stockholders. The Council on Corporate Disclosure and Governance was formed in 2002 to promote good corporate governance, strengthen the framework of disclosure practices and reporting standards, and prescribe accounting standards in Singapore. Since 2003, companies listed on the SGX have been required to disclose their corporate governance practices and explain any deviation from the Code of Corporate Governance in their annual reports. The MAS will also guidelines for local banks and direct insurers which will include additional principles and guidance notes to enhance the roles played by the Boards and CEOs in carrying out their duties toward depositors and policy holders.

TABLE-4. SELECTED FINANCIAL SOUNDNESS INDICATORS FOR THE FINANCIAL CORPORATE SECTOR IN SINGAPORE, 1996 - 2001						
	1996	**1997**	**1998**	**1999**	**2000**	**2001**
DEBT-EQUITY RATIO	0.8	0.9	1.0	0.8	0.8	0.8
TOTAL CORPORATE DEBT/GDP	1.4	1.5	1.8	1.6	1.5	1.7
CURRENT RATIO (CURRENT ASSETS / CURRENT LIABILITIES)	1.0	1.0	1.0	1.0	1.1	1.1
RATIO OF SHORT TERM DEBT TO TOTAL DEBT	0.7	0.7	0.7	0.7	0.7	0.6
PROFITABILITY						
RETURN ON ASSET (PRE-TAX, IN %)	6.6	5.6	3.7	5.3	6.0	3.8
RETURN ON EQUITY (PRE-TAX, IN %)	13.9	11.6	6.0	11.7	13.3	7.3
Source: Singapore Dept. of Statistics, as cited in IMF Country Report No. 04/140, 2005.						

TABLE-5. FINANCIAL SOUNDNESS INDICATORS OF SINGAPORE'S COMMERCIAL BANKING SECTOR, 1998 – 2003
(in percent unless otherwise specified)

	1998	1999	2000	2001	2002	2003
CAPITAL ADEQUACY						
Regulatory capital to risk-weighted assets (local banks) 1/	18.1	20.6	19.6	18.1	16.9	17.8
Regulatory capital to risk-weighted assets (foreign banks) 2/	11.3	11.8	11.3	11.3	11.3	…
Regulatory Tier 1 capital to risk-weighted assets (local banks) 1/	16.0	17.4	16.4	11.6	11.3	11.6
Regulatory Tier 1 capital to risk-weighted assets (foreign banks) 2/	7.2	7.3	7.3	7.5	7.7	…
Shareholder's equity to assets (local banks)	10.0	11.0	10.0	10.0	11.0	11.0
LOAN CONCENTRATION						
Bank Loans	28.1	31.2	35.4	30.0	29.3	25.7
Non-bank loans of which:	71.9	68.8	64.6	70.0	70.7	74.3
Manufacturing loans	9.2	8.8	9.1	8.2	8.4	8.9
Building and construction loans	17.2	16.6	16.3	15.5	14.1	13.0
Housing loans	18.2	21.3	22.3	26.0	27.5	28.3
Loans to professional and private individuals	12.6	13.1	13.8	13.5	14.1	14.0
Loans to nonbank financial institutions	15.4	14.0	14.7	13.1	13.4	13.5
LIQUIDITY (Singapore operations only) 6/						
Liquid DBU assets to total DBU assets (local banks)	13.0	15.7	14.2	14.4	15.4	15.4
Liquid DBU assets to total DBU liabilities (local banks)	21.3	23.6	23.9	23.2	22.4	22.6
Total DBU deposits to total deposits (local banks)	74.5	75.4	71.7	70.3	71.8	71.9
Non-bank customers share of DBU deposits (local banks)	84.3	89.3	85.7	91.7	93.3	94.0
Liquid DBU assets to total DBU assets (foreign banks)	15.6	17.1	14.3	15.0	15.6	16.9
Liquid DBU assets to total DBU liabilities (foreign banks)	23.8	26.1	23.3	26.2	27.0	29.4

Source: MAS, as cited and culled from IMF Country Report No. 04/140 (2005).

1/ represents weighted average of 3 local banking groups and includes operations of foreign branches and subsidiaries.

2/ Data from a parent bank's annual report on the entire group's Tier 1 and total capital adequacy ratio.

6/ Liquid DBU assets include balances with the MAS, cash, SGS, and bills of exchange. Total DBU liabilities refer to the liabilities base used towards computing MAS minimum liquid assets requirement.

3.4 THE CASE OF THAILAND[47]

3.4.1 FINANCIAL SECTOR

The size of Thailand's banking sector (relative to GDP) is still large by international standards. That is, it exhibits a relatively high degree of reliance on banks compared to other channels of financial intermediation. Despite significant post-AFC declines in bank lending, its reliance on bank finance remains heavy compared to other countries. This scenario is expected to remain relatively unchanged unless significant and rapid developments in the capital market take place to outpace the growth of bank credit in the next few years. On the deposit side, the shift from bank deposits to institutional investor deposits is taking place. Between 1997 and 2002, the growth in institutional assets outpaced that of household deposits by more than 5 times [Disyatat and Nakornthab, 2003]

Since the AFC, the share of deposits has increased substantially. Commercial banks have reduced their reliance on foreign currency debt as a source of funds, accompanied by the lengthening maturity profile of their borrowings. (Note that prior to the crisis, two-thirds of their loans were short-term.) The decline in private credit in commercial banks' asset portfolio has been compensated for by higher investments in foreign assets and government securities. Their corporate bond holdings have also been increasing [ibid.].

The World Bank [2005] reports that 'the profitability of Thai commercial banks has continued to improve and their balance sheets have gradually strengthened. Strong loan growth and wider margin have been key contributing factors to the improvement in Thai banks' profitability. Wider margin was caused by the reduction in interest expense burden following the redemption of high cost hybrid capital. Improved profits enabled Thai banks to accumulate their capital base and increase their ability to absorb risk. However the performance varied between different sizes of banks classified by the Bank of Thailand (BOT). While large banks reported higher return on assets than medium and small banks, their asset quality appeared weaker as indicated by higher NPL ratios. Profitability and capital adequacy ratios of medium banks were not as high, but their NPL ratios were reported to be lower than large and small banks. The capital level of small banks was quite strong with average Tier-1 capital above 14 percent of total risk assets.'

[47] Significant portions of this report was sourced from World Bank's Thailand Economic Country Monitor, 2005 and the IMF's ROSC Corporate Governance Country Assessment Report for Thailand, June 2005. .

‘Several commercial banks increased their deposit and lending rates despite ample liquidity in the banking system. The BOT estimated that as of May 2005, the aggregate excess liquidity in the banking system was approximately Bt537 billion, higher than Bt452.4 billion, which was the level as of December 2004. Approximately 58 percent of the aggregate excess liquidity was concentrated in large banks while remaining banks had much less excess liquidity’ [ibid.].

In October 2005 the MOF’s proposal on a debt relief program for small individual debtors was approved. Under the program, financial institutions will give 50 percent haircut on the principals and 100 percent haircut on accumulated overdue interests to eligible debtors participating in the program subject to their ability to meet the new payment obligations. Debtors can choose to pay the remaining 50 percent amount all at once by June 2006 or apply for loans from the Government Saving Bank (GSB) to pay back financial institutions and pay the installments to GSB by June 2009. Individual debtors who are eligible for the program should have debt outstanding with financial institutions, which are classified as non-performing loans as of June 2005.

In addition, to be eligible, the debt outstanding of each borrower should not exceed Bt200,000 per each financial institution and the case should already be filed in court for legal actions. 16 banks, 3 finance companies, and 6 AMCs, agreeing to participate in the program, already signed the Memorandum of Understandings (MOUs) with the MOF. The program does not appear to have a significant impact on financial institutions since the total debt outstanding of eligible debtors are estimated to be less than 2 percent of NPLs of the financial system.

3.4.2 BOND MARKET

During the first half of 2005, fund raising activities in the bond market remained strong, while those in the stock exchanges have moderated. The financial sector, including banks and finance companies, have been quite active in mobilizing capital from the bond market since the third quarter of 2004. On the other hand, public offering and private placement of shares by the financial sector in the stock market have been limited during the period. In the non-financial sector, firms in the property and energy and utility sectors have been quite active in mobilizing funds from both the debt and equity markets since 2004. Firms in the transportation and construction material sectors have been more active in raising funds from the bond than the equity market [ibid.].

Ongartsittigul [2005][48] laid out development efforts to improve the primary and secondary markets for bond trading in Thailand. The current thrusts on bond market improvement in the primary market include (1) the issuance of government bond on a regular and systematic basis for building a benchmark yield curve; (2) developing government debt products (e.g. saving bond) as an alternative investment for retail investors; and (3) allowing foreign juristic person to issue THB bond. For the secondary market, it was suggested that (1) Improvements be made on the primary dealer system by requiring all primary dealers to make 2 way firm quote on benchmark issue–balance between obligation and privilege; (2) promote greater transparency on pre and post trade transaction, especially dealer to dealer VS. dealer to client; and (3) develop private repo market.

In October 2005, the MOF's proposal on a debt relief program for small individual debtors was approved. Under the program, financial institutions will give 50 percent haircut on the principals and 100 percent haircut on accumulated overdue interests to eligible debtors participating in the program subject to their ability to meet the new payment obligations. Debtors can choose to pay the remaining 50 percent amount all at once by June 2006 or apply for loans from the Government Saving Bank (GSB) to pay back financial institutions and pay the installments to GSB by June 2009. Individual debtors who are eligible for the program should have debt outstanding with financial institutions, which are classified as non-performing loans as of June 2005.

In addition, to be eligible, the debt outstanding of each borrower should not exceed Bt200,000 per each financial institution and the case should already be filed in court for legal actions. Sixteen banks, 3 finance companies, and 6 AMCs, agreeing to participate in the program, already signed the Memorandum of Understandings (MOUs) with the MOF. The program does not appear to have a significant impact on financial institutions since the total debt outstanding of eligible debtors are estimated to be less than 2 percent of NPLs of the financial system.

3.4.3 CORPORATE SECTOR

The performance and health of Thailand' corporate sector has improved significantly. An average debt- equity ratio of less than one and interest coverage ratio of nearly ten for all listed companies implies a significant turnaround, not only relative to 1998 but also to 2002. There was

[48] Domestic Bond Market Development: The Case of Thailand by Pravej Ongartsittigul, 22 June 2005.

little change in ownership, and more investigation is needed to ascertain whether there was significant operational restructuring in this process. Debt to equity (D/E) ratio of listed firms has declined. The D/E ratio for the market declined from almost 1.5 times in 2002 to less than 1 in 2004. The largest decline was in the construction sector in which the D/E ratio declined from 3.2 times in 1998 to 0.9 in 2004.

3.4.4 OTHER DEVELOPMENTS

The BOT's initiative on voluntary out-of-court mediation framework has a small positive impact on removing NPL overhang. At the closure of the CDRAC process in 2003, the BOT introduced a voluntary mediation framework led by the CDRAC for private banks and AMCs to accelerate debt restructuring for debtors in different stages of resolution, which would help lessen the backlog of NPL cases in the Civil Courts. There are two groups of target debtors under this framework: (1) cases that are in the court process; and (2) cases that are in the legal execution process after court judgments are rendered.

The BOT had selected a target group of 136,728 cases with the value of Bt 426,843 million, of which three-fifths are cases in the legal execution. In 20 months of operations through June 2005, progress remains moderate. Creditors have selected only 8.9 percent of the total target debtors by credit value, and only roughly half of the selected debtors have participated in the program. The completion rate is 1.5 percent of the total target debtors by value, an insignificant improvement from 0.18 percent completion rate in July 2003, 0.64 percent in December 2003, and 1.4 percent in December 2004.

The court-supervised mediation, an alternative to trial in resolving NPLs, continues to be in demand by small-medium-sized and consumer loans. The formal out-of-court mediation, administered by the Mediation Center for Financial Disputes (MCFD), continues to be in demand by creditors and debtors as an alternative to trial.

However, requests for mediation are mostly for small-medium-sized and consumer loans, while the larger and more complex NPL cases are not actively utilizing the process. In 2003, a total of 1,983 cases requested out-of-court mediation as compared to 1,476 cases in year 2002. At the end of 2004, 2,372 cases were requested while 1,844 cases were successfully mediated, and court filings withdrawn.

Corporatization of additional state-owned enterprises (SOEs) has taken place in 2005. The Telephone Organization of Thailand (TOT) Corporation, CAT Telecom, and Electricity Generating Authority of Thailand (EGAT) were corporatized this year. EGAT is currently awaiting its initial public offering (IPO) in the Stock Exchange of Thailand, which should take place before the end of this year. So far, seven SOES have been corporatized.

3.4.5 FINANCIAL SECTOR REFORMS

The BOT has tightened the regulation on consumer lending. To curb excessive consumer indebtedness, the BOT issued another regulation effective in July 2005 on consumer lending. Key elements of the regulation include:

(i) Setting a definition of consumer lending subjected to the supervision by the BOT,

(ii) Strengthening the qualification of non-bank financial institutions, which can provide consumer lending,

(iii) Reducing the ratio of loan amount to five times of average monthly salary of the borrower (or average cash outstanding during the past 6 months in the borrower's deposit account); and

(iv) Putting a ceiling on total effective costs (including 15 percent interest rate, penalty fee, service fee, and others) at 28 percent per annum. Lenders are required to disclose the effective rates of their lending.

This regulation aims to curb excessive growth in debts of lower income households especially from non-bank financial institutions and to provide consumer protection. However, this could limit access to formal financial services by the lower income group, which could instead turn to the informal source.

The BOT is in the process of strengthening the supervision regime of a financial conglomerate on a consolidated basis, although it is constrained by the current law. The BOT released in September 2005 a draft guideline on the consolidated supervision, and it is consulting the industry on the draft guideline. The guideline will clearly define the scope of a banking group, whose operations, including subsidiaries, affiliates, and other entities in which the group has substantive holdings, will be subject to a consolidated supervision. The guideline will specify intra-group transactions, required capital adequacy, and large exposure on a consolidated basis. The guideline will initially be implemented on a pilot basis for one year to ensure a smooth transition to

a full implementation.

In preparation for the full implementation of the Basel II, the BOT has developed specific measures for each of the three pillars, namely, minimum capital requirement, supervisory review, and market discipline. A series of consultative papers with specific policies and guidelines have been released for industry comments and the public hearing by 2005. The BOT has continued its bilateral dialogue with commercial banks to ensure their readiness to adopt the Basel II. Its bank supervisors are being prepared through intensive training programs.

A number of prudential guidelines to strengthen bank's risk management in the areas of internal rating system, loan portfolio management, credit scoring, risk model validation and credit and market risk stress testing have been issued. These tools should enable banks to better manage their risk and price loans according to customers' risk profile. *The BOT targets the full implementation of Basel II by the end of 2008.* Meanwhile, all financial institutions are required to submit by June 2006 their Basel II implementation plans for the BOT's approval.

The Department of Insurance (DOI) has recently completed the initial self-assessment on the supervision and regulation of the insurance industry in Thailand benchmarked against the IAIS Insurance Core Principles (28 ICPs). The preliminary self-assessment revealed that 11 ICPs are largely observed, 1 are observed, 12 are partially observed, 3 are not observed, and one is not applicable. The DOI has proposed legislative amendments and prepared an action plan to strengthen the supervisory and regulatory regime for insurance industries, especially in the capital adequacy and solvency and various governance principles. Three principles not observed are related to various corporate governance aspects including the corporate governance, suitability of persons, and risk assessment and management.

The DOI plans to issue in 2006, in consultation with the industry, the guideline on corporate governance based on best practices. Since the industry still lacks an adequate market infrastructure and technical expertise, the industry will be given a transition period to a full implementation of the guideline. In parallel, the DOI plans to reinforce the "Fit and Proper" management of insurance companies by introducing the Standards of Sound Business and Financial Practices.

The Anti-Money Laundering Office (AMLO) is in the process of requiring non-financial institutions to report suspicious transaction to restrain money laundering activities as well as

proposing amendments to the Anti-money Laundering Act. On July 2005, the AMLO organized a public hearing for adding a new section to Article 1639. This new article 16/1 states that non-financial businesses namely jewelers/gold shops and car dealers will have to report to AMLO in a prompt manner of suspicious transactions such as a non-regular spending over Bt400,000 and/or paying cash in small bills or the cases in which customers refuse to provide identification. Failure to report can result in a fine of Bt300,000 per account.

In addition, the AMLO has proposed amendments to the Anti-money Laundering Act to include more offences and to give the AMLO more authorities for the arrestment and investigation. The offences proposed to be added in the law include offences relating to natural resources, the environment, wildlife, foreign exchange, gambling, weapons of war, labor fraud, bidding collusion, share manipulation and excise tax. The amendment is currently pending approval by the Cabinet.

By end-2005, Thailand Security Depositary Company (TSD), a subsidiary of the Stock Exchange of Thailand (SET), will be responsible for clearing and settling trading of government securities. Currently, the BOT settles trading of government securities, while some trading of corporate bonds is settled by the TSD. TSD also clears and settles equities traded on the stock exchanges. The transfer of responsibilities for clearing and settlement of government securities from the BOT to TSD is the Phase I of the Bond Market Committee's plan to centralize the depository, clearing, and settlement functions for all securities at the TSD.

Phase II is to consolidate those of corporate bonds at TSD. Ultimately TSD will assume collateral management functions for securities borrowing and lending transactions. This should lead to a more efficient clearing and settlement system. The trading of government securities at TSD will be settled on a Real Time Gross Settlement (RTGS). Securities will be delivered through the TSD's system simultaneously with the payment transfer through the BOT's Bahtnet facility (DVP). In addition, the Committee also decided to consolidate the trading platforms of all securities to be under the SET. This should help eliminate the potential conflict of interest for Thai BDC, which has become a Self Regulatory Organization (SRO) for the bond market if it is allowed to compete with other operators.

Thailand is negotiating the liberalization of financial services under the Thailand-US Free Trade Agreement (FTA) framework. Under the FTA, the US requests for free market access to investment and trade in financial services especially in the insurance and mutual fund industries and

free transfers of capital with the exception of prudential reason to maintain safety, soundness, integrity, and financial responsibility. The Fiscal Policy Office (FPO), concerned that the Thai market is not ready for such liberalization, is in the process of assessing the impact of the financial services liberalization on domestic financial sector and formulating strategic options. In its opinion, time is needed to strengthen domestic financial institutions, to put in place some structural and managerial reforms, to analyze the risk and consequences of free transfers of capital, and to enhance supervisory capacity. In addition, the FPO still sees the necessity of maintaining state-owned specialized financial institutions as tools to carry out the government policies.

3.4.6 CORPORATE SECTOR REFORMS

The proposed amendments to the Civil Commercial Code on Legal Execution to expedite the sale of foreclosed properties, to the bankruptcy liquidation framework of the Bankruptcy Act, and to the Secured Transaction Act have not been undertaken. The amendments to the Civil Commercial Code on Legal Execution to expedite the sale of foreclosed properties40 have been awaiting Parliamentary consideration since early 2004. These are not procedural changes to expedite the sale process, but rather fees reductions to attract buyers to the foreclosed properties market.

The prevailing market consensus is the reduction in fees would minimally accelerate the sale process, and more rigorous amendments to the legal execution procedures are still needed to expedite the sale process. The Cabinet endorsed a three-point amendment to the individual bankruptcy liquidation framework of the Bankruptcy Act since ate 2003. Two years later, it is still under review by the Council of State before submission to the Parliament. The amendments only cover individual bankruptcies, while the corporate bankruptcy framework remains the same. The Secured Transaction Act, since 2003, has been awaiting a sub-cabinet review before submission to the Cabinet and then the Parliament for approval. The Act would greatly enhance the corporate restructuring framework by providing greater flexibility in collateralization of other assets besides the traditional pledging of real estate.

The efficacy of the reform in the judicial process to lessen the backlog in the Civil Courts remains an on- going concern due to delays in remedial actions. The courts are required to schedule continuous hearings, and cases must be presided by a set of two judges through judgments. In practice, there is limited number of days available to schedule continuous hearings. The earliest a new civil court case can be scheduled continuously through completion would be between 10-15

months. With the existing volume of more than 72,000 civil cases awaiting court judgments, the possibility of an accelerated NPL resolution is remote.

The institutional arrangement to carry out comprehensive legal reform is unclear. In July 2004, the Prime Minister established a new national committee, the National Legal Framework and Policy Committee (NLFPC) to replace the Legal Reform Committee for Development of Thailand (LRC). The Prime Minister chairs the NLFPC, most committee members drawn from the LRC, and with virtually the same mandate as the LRC. In practice, it is still unclear as to the objectives, missions and activities of the committee. Since its inception, the NLFPC has convened two meetings to establish several sub-committees, mandated responsible line ministries to review and submit suggestions for legal changes of the laws under their authorities. However, the scope of the review and the specific laws to be reviewed were not identified at the meetings.

3.4.7 CORPORATE GOVERNANCE ROSC

The recently completed corporate governance Report on Observance of Standards and Codes (ROSC) for Thailand indicates that Thailand's corporate governance practices are improving, but further reform is required [see **TABLE-6**]. The ROSC provides a benchmark for the observance of corporate governance practices against the OECD Principles of Corporate Governance.

The corporate governance ROSC on Thailand concludes that the corporate governance framework and actual practices of listed companies are generally either "largely observing" or "partially observing" the OECD Principles of Corporate Governance. There is, however, room for improvement to achieve full observance of OECD principles. The overall average score for observance of 32 OECD principles and sub-principles is 68 out of 100. Based on corporate governance ROSCs completed for several Asian countries at various times during the 2001-2005 period, Thailand's corporate governance framework and practices ***generally rank higher than those in Indonesia and the Philippines*** but lower than those in India and Korea.

While Thailand has made significant progress in improving the corporate governance framework and corporate governance practices since the crisis, the reform agenda remains incomplete [See **TABLE-7** for a comprehensive account of current and future reforms]. In recent years, significant corporate governance reforms have been introduced and are underway, including reforms in the structure and function of the board of directors of listed companies, the establishment

of the Thai Institute of Directors Association and the Department of Special Investigation, the adoption by the SET of 15 Principles of Good Corporate Governance, and draft legislation to reinforce the rights of minority shareholders.

In addition, the SEC has improved its monitoring of financial statements of listed companies and stepped up enforcement efforts and increased sanctions for violations. Most recently, the SEC has supported issuance of a Directors' Handbook and the establishment of a Director Registry System. The ICAAT also has intensified its efforts to improve skills and knowledge of accountants and auditors. In the area of financial reporting and disclosure, ***Thailand has announced a plan to fully adopt international accounting standards by 2006.***

While these are commendable efforts, the reform agenda remains incomplete, both in terms of legislative and regulatory reform, and in terms of changes in practices. Progress in revising relevant laws including the Public Limited Companies Act (PCA) and Securities and Exchange Act (SEA) and the drafting of class action lawsuits has been slow. Further steps need to be taken to improve corporate governance in Thailand, including enhancing protection of shareholder rights, particularly, the introduction of cost-effective legal channels for shareholders seeking redress. Focus should remain on the implementation and completion of the legislative and regulatory agenda, improving enforcement (prosecution process), enhancing financial reporting and disclosure consistent with international standards, and promoting business ethics and best practices.

TABLE-6. SUMMARY OF OBSERVANCE OF OECD CORPORATE GOVERNANCE PRINCIPLES: THAILAND AND WORLD AVERAGE

PRINCIPLE	THAILAND	ROSC AVERAGE
I. ENSURING THE BASIS FOR AN EFFECTIVE CORPORATE GOVERNANCE FRAMEWORK		
IA - Overall corporate governance framework	75	n.a.
IB - Legal framework enforceable and, transparent	75	n.a.
IC - Clear division of regulatory responsibilities	75	n.a.
ID - Regulatory authorities have sufficient authority, integrity and resources	75	n.a
II. THE RIGHTS OF SHAREHOLDERS AND KEY OWNERSHIP FUNCTIONS		
IIA - Basic shareholder rights	75	69
IIB - Rights to participate in fundamental decisions	50	64
IIC - Shareholders AGM rights	75	63
IID - Disproportionate control disclosure 75 50	75	50
IIE - Control arrangements should be allowed to function	50	56
IIF - The exercise of ownership rights should be facilitated	75	28
IIG - Shareholders should be allowed to consult with each other	75	n.a.
III. EQUITABLE TREATMENT OF SHAREHOLDERS		
IIIA - All shareholders should be treated equally	50	56
IIIB -Prohibit insider trading	75	56
IIIC - Board/Mgrs. disclose interests	75	45
IV. ROLE OF STAKEHOLDERS IN CORPORATE GOVERNANCE		
IVA - Legal rights of stakeholders are to be respected	75	69
IVB - Stakeholder redress	75	68
IVC - Performance-enhancing mechanisms	75	68
IVD - Stakeholder disclosure	75	75
IVE - “Whistleblower” protection	50	n.a.
IVF - Creditor rights law and enforcement	50	n.a.

PRINCIPLE	THAILAND	ROSC AVERAGE
V. DISCLOSURE AND TRANSPARENCY		
VA - Disclosure standards	75	73
VB - Accounting standards	50	77
VC - Independent audit annually	75	66
VD - External auditors should be accountable to the shareholders	75	n.a
VE - Fair & timely dissemination	75	67
VF - Research conflicts of interests	75	n.a.
VI. RESPONSIBILITIES OF THE BOARD		
VIA - Acts with due diligence, care	50	55
VIB - Treat all shareholders fairly	75	49
VIC - High ethical standards	50	68
VID - The board should fulfill certain key functions	50	46
VIE - The board should be able to exercise objective judgment	50	41
VIF – Access to information	75	68

Source: World Bank. June 2005. Report on the Observance of Standards and Codes Corporate Governance Country Assessment – Thailand.

TABLE-7. THAILAND'S FINANCIAL AND CORPORATE SECTOR REFORM: OBJECTIVES AND MEASURES

OBJECTIVE	MEASURES
A. Enable sharing of credit information among financial Institutions	**Measures taken over last 6 months and their significance:** • The House of Representatives endorsed in September 2005 the proposed amendments to the Credit Information Business Act. The enactment of the proposed amendments will reduce onerous legal risk for the Credit Bureau and their members and provide more flexibility for the operations of Credit Bureau. The current Act, effective in 2003, has many positive attributes but mandates large fines and criminal penalties against the bureaus or their members for all violations, including negligence. Notifications issued by the Credit Information Protection Committee and the legal opinion issued by the Council of State subsequent to the enactment of the Act helps reduce legal liabilities imposed by the law. However the proposed amendment still limits the types of business that the Credit Bureau can offer. The Senate ad-hoc Committee is considering the draft amendment. • The legal process for a merger of the Central Credit Information Service Co., Ltd. and Thai Credit Bureau has been completed. The newly merged credit bureau was renamed National Credit Bureau. Credit databases have now grown to more than 20 million accounts, covering more than 10 million consumers.
B. Formulate and implement a medium-term strategy for Thai financial sector	**Measures taken over last 6 months and their significance**: • A preliminary draft Master Plan for Grass-Root Financial Services has been completed. The draft Master Plan was prepared by the Microfinance System Development Committee (MSDC), which is chaired by the Finance Minister and its members comprise of representatives from concerned agencies. The Master Plan has three strategic focuses: (1) strengthening microfinance intermediaries and their human resource and improving their service providing capacities, (2) rationalize role and responsibilities of the government agencies involved in microfinance intermediation, and (3) fostering the microfinance network for sharing of experience. The MSDC will organize a public hearing on the draft Master Plan in mid November. **Measures to be taken in the next 6-12 months:** • The Master Plan for Grass-Root Financial Services will be submitted to the Finance Minister for his approval. The drafted Master Plan is currently under the consideration by

TABLE-7. THAILAND'S FINANCIAL AND CORPORATE SECTOR REFORM: OBJECTIVES AND MEASURES	
OBJECTIVE	**MEASURES**
	the Permanent Secretary of the MOF. After the Finance Minister's approval, the MSDC will organize a public hearing to receive feedback, fine tune and finalize the Master Plan. • Amendment to the BAAC Act to transform the BAAC into a rural bank was submitted to the Parliament (Lower House) for endorsement. After the endorsement by the lower House, the draft amendment would be submitted to the Senate, which will set up the Committee to consider the Act. The transformation of BAAC into a rural bank is one of government's measures to improve access to finance in the rural areas, using BAAC's established branch network.
C. Transit from the current blanket government guarantee on deposits to limited deposit insurance	**Measures to be taken in the next 6-12 months:** • The Deposit Insurance Institution Act will be submitted to the Parliament. The draft Deposit Insurance Institution Act, endorsed by the Cabinet in November 2004, is being reviewed by the Office of the Council of State. Once the legal review is completed, the draft law will be submitted to the Parliament for its consideration. Upon the enactment of the law, the Deposit Insurance Agency will be set up with an initial capital of Bt1 billion to offer a limited guarantee on deposits at financial institutions. This will replace the blanket guarantee, currently offered by the BOT's Financial Institutions Development Fund (FIDF).
D. Remove legal impediments and provide an enabling environment for derivative products	**Measures to be taken in the next 6-12 months:** • The Thailand Futures Exchange (TFEX) will open in November 2005. The TFEX has been granted a license from the Securities and Exchange Commission (SEC) since February 2005 to operate a futures exchange. The TFEX is currently accepting member companies. Rules and regulations on futures trading on the exchange are being developed and to be submitted for the SEC's approval. The first product to be traded on the TFEX is the SET 50 Index Futures. The establishment of an organized derivatives exchange would add more players and liquidity to the financial market and provide investors tools to manage their risk.
E. Develop the domestic financial markets, including bond, capital, and money markets.	**Measures taken over last 6 months and their significance:** • SEC approved in October 2005 the transformation of the Thai Bond Dealing Center (Thai BDC) to the Thai Bond Market Association (Thai BMA). Besides its role as an

TABLE-7. THAILAND'S FINANCIAL AND CORPORATE SECTOR REFORM: OBJECTIVES AND MEASURES

OBJECTIVE	MEASURES
	information center, Thai BMA will function as a self regulatory organization for the bond market. Its current roles include (i) disseminate quotations, reference prices and closing prices of marking-to-marking information; (ii) perform the duties of market monitoring and surveillance; (iii) be the center of bond information and market standards and conventions; (iv) develop financial tool, analytical tool, and training courses for the bond market; and (v) facilitate the discussion on the bond market development. **Measures to be taken in the next 6-12 months**: • The BOT targets to launch the Master Plan for the Development of Money and Foreign Exchange Markets in Thailand by the second quarter of 2006. The BOT is taking the lead to formulate, on a consultative basis, a three-year plan, which will compliment the Financial Sector Master Plan. Its objectives are to improve the efficiency of financial intermediaries, broaden the range of financial instruments, and streamline regulations related to the money and foreign exchange markets in Thailand. The BOT expects to have a preliminary draft master plan by the end of the year, once the investigation and identification of problems facing Thailand's financial markets have been concluded. A public hearing will be organized to streamline the Plan before its final launch early the second quarter of 2006. • By the end of the year (2005), Thailand Security Depositary Company (TSD) will be responsible for clearing and settling trading of government securities, which is currently performed by the BOT. This is the phase I of the Bond Market Committee's plan to centralize the depository, clearing, and settlement functions for all securities at TSD. Phase two is to consolidate those of corporate bonds at TSD. Ultimately TSD will be able to assume a collateral management function, especially of securities borrowing and lending activities. This should lead to a more efficient clearing and settlement system. • The Thai Bond Market Association (BMA) will develop pricing models and a market/model convention to price new complex derivatives products and illiquid bonds. Thai BMA has been assigned by the sub-committee of the Bond Market Committee to develop pricing models and a market/model convention to price illiquid bonds and their complex derivatives, which is expected to be completed early next year. Appropriate valuation of bonds and their derivatives is

TABLE-7. THAILAND'S FINANCIAL AND CORPORATE SECTOR REFORM: OBJECTIVES AND MEASURES	
OBJECTIVE	**MEASURES**
	critical to further development of the Thai bond market. However limited market liquidity and not well-functioning market-making mechanism make the task of Thai BMA in providing fair value of bonds and their derivatives challenging.
F. Rationalize state holding of specialized financial institutions, state owned enterprises, and state commercial banks	**Measures taken over the last 6 months and their significance**: • SME bank has taken an initial step to implement a Public Service Account (PSA). The SME bank has proceeded with an initial implementation of the PSA by separating social and commercial activities on its income statement since early 2005. It has yet to separate accounts on its balance sheet. A public service account reports costs and performance of social mandate activities in separation from commercial activities. This is an initial step to improve the transparency of financial reports by specialized financial institutions (SFIs). By properly costing and budgeting socially mandate activities, the MOF can hold SFIs accountable for costs and benefits. The FPO has yet to finalize its proposal and a definite timeframe for the implementation of the PSA by remaining state owned financial institutions. Currently through the electronic information transfer, FPO can receive timely financial reports from all SFIs.
G. Enable corporate sector restructuring through reduced fees on the sale of foreclosed properties and streamlined the "buyer-take-possession" procedure following the sale of foreclosed properties	**Measure taken over the last 6 months and their significance:** • In September 2005, the Revenue Department announced new tax incentives for the purchase of pre-owned residential properties. The incentives in the forms of reduced property transfer fees and reduced tax rates are intended to attract home buyers to the secondary residential property market, and also to promote the home mortgage financing for the financial sector. The measure was made effective retroactive to January 2005 and will expire December 2006. **Measure to be taken in the next 6-12 months:** • The amendments to Code of Civil Procedures on Legal Execution to reduce the fees on the sale of foreclosed properties, and to allow for an immediate "buyer-take-possession" following the sale of foreclosed properties are awaiting Parliamentary approval. The amendments would lower the fees of 5 percent for properties auctioned, 3.5 percent for property discharging, and 5% for

TABLE-7. THAILAND'S FINANCIAL AND CORPORATE SECTOR REFORM: OBJECTIVES AND MEASURES

OBJECTIVE	MEASURES
	sales not through the auction by at least half in each category. Although these are not procedural reforms to streamline the auction process, it is expected that the lower fees would attract more buyers to the foreclosed properties market. Similarly, the immediate "buyer-take-possession" would eliminate the redundant requirement for the buyer to petition and obtain court order to transfer legal ownership of the properties, thus, reducing the transaction cost and time for both the seller and the buyer. The Ministry of Justice expects the Parliament to approve the amendments during the current Parliamentary session. **Measures planned to be taken, but have been delayed indefinitely or have been cancelled**: • The draft amendments to the Asset Management Corporate Act (AMC Act) to allow the Government AMC to purchase distressed assets from private financial institutions have been withdrawn from Parliamentary consideration. The amendments to allow private banks and AMCs to sell their distressed assets to the Government AMC were intended to accelerate the resolution of distressed assets in private banks, and at the same time to lessen their bad debt portfolios and reduce the level of NPLs in the financial system. • The Courts of Justice's proposed remedial actions to lessen the backlog of cases in the Civil Court have not been approved. The Courts of Justice has proposed establishing special hours for trial, increasing the number of judges, and increasing budgetary resources for the Civil Courts, but after two years the proposals have not gained approval from the Judicial Commission. • The Secured Transaction Act has not been reviewed by the Joint Senate-House of Representatives Committee. The law would allow for more flexible collateralization of liquid assets other than the traditional real estate properties. Thus providing both creditors and debtors with more legal options in securing new credits as well as in debt restructuring. The draft law was approved by the Cabinet in mid-2003 and was submitted to the Parliament shortly thereafter. It is still awaiting review by the Joint Senate- House of Representatives Committee.

Source: World Bank's Thailand Economic Monitor November 2005.

3.5 THE CASE OF THE PHILIPPINES

In the aftermath of the AFC, initial assessment pointed out that, comparatively, the Philippine economy was not as badly hit as its Asian neighbors such as Indonesia or Thailand. So the government then felt that it need not embark on adopting comprehensive policies to resolve the banking crisis or undertake reform efforts of proportions similar to those undertaken by Thailand, for example. It helped that the Philippines has already undergone a series of reforms during the late 80s and early part of the 90s. Analysts have noted that such reforms must have cushioned the AFC blow to a significant extent. In addition, the country's banking industry has favorable features including, (1) well trained employees, (2) deep (but sometimes superficial) influence of American style banking , and (3) bankers are basically conservative. Still, financial sector reform policies were conducted to strengthen the banking sector and enhance the supervisory and regulatory framework.

Prudential regulation standards were upgraded to conform to international standards. Revisions were made to make some regulations more relevant – for example, the single-borrower limits of deposit-taking nonbank financial institutions were made consistent with those of commercial banks. Changes were also allowed to enable the Bangko Sentral ng Pilipinas (BSP) to identify the problem banks and to take measures to enforce prudential requirements. Furthermore, to promote risk management, sensitivity was added to market risks as another component of the CAMEL ratings.[49]

It also acted to strengthen the financial sector infrastructure (i.e. the BSP hired international consultants to modernize on-site examinations) and to upgrade human resources. One problem that remained however was the level of non-performing loans of local commercial banks which increased continuously since 1997 and reached to more than 18 percent of all loans in 2001. Due to deteriorating loan quality and increasing market competition, mergers ensued.[50]

In order to address the objective of strengthening banks by raising capital and encouraging consolidation, the BSP issued amendments to its risk-based capital framework to incorporate market

[49] See Kishi and Okuda [n.d.].
[50] Equitable Bank merged with Philippine Commercial International Bank in 1999. In 2000, Bank of the Philippine Islands, Prudential Bank, Global Business Bank, Bank of Commerce, Metrobank, and Security Bank merged with Far East Bank and Trust Company, Pilipinas Bank, Asian Bank & Philbanking, Traders Royal Bank, Solidbank, and Federal SMBank, respectively. [ibid.].

risk and expand the coverage to include quasi-banks.[51] Guidelines were issued as well on the capital treatment of credit-linked notes and similar credit derivative products. BSP rules and regulations were also issued governing the use of banks' internal credit risk rating systems to ensure the soundness and effectiveness of credit risk management processes. Thrift banks, which were allowed to operate foreign currency deposit units (FCDUs), were given two years from March 2002 to comply with the minimum FCDU capital requirements.[52]

3.5.1 THE BANKING SECTOR [see TABLE-8]

Kishi and Okuda [n.d.] identified a number of factors, which contributed to the problem of weak bank regulations and supervision. Among these are (1) the overexposure of a bank to DOSRI and insufficient transparency of DOSRI loans; (2) weak guidelines on restructured loans of banks, (3) insufficient ability of BSP supervision staff, (3) limited report requirement on interest rates of banks, (4) bank secrecy law makes it impossible for BSP and PDIC examiners to verify individual deposit balances.

Hence, to address these multitude of problems and tighten provisioning requirements and regulatory oversight, the BSP issued regulations regarding the management of large exposures, credit risk concentrations, single borrower limits, connected and/or related party transactions and other governance-related measures. Regarding foreclosed assets, banks were required to re-appraise values every two years, beginning 2002. Provisioning requirements were rationalized with further differentiation depending on security, risk and status, but in general, they remain low.

In order to level the playing field between peso and foreign currency intermediation, regulatory issuances included guidelines on the conversion and transfer of foreign-currency denominated loans and foreclosed assets on the books of FCDUs/EFCDUs to peso loans and foreclosed assets on the books of a regular banking unit.

To deal effectively with problem banks, the **General Banking Act of 2000** increased the BSP's capacity to take prompt corrective action on the matter. The Philippine Deposit Insurance Company's (PDIC) charter was amended in July 2004, strengthening its ability to deal with problem banks. Stress testing of commercial banks is now being undertaken to determine how banks would

[51] This was undertaken in March 2004 and September 2003, as per IMF (2005) accounts.
[52] This was taken from an IMF report (2005) on the Philippines' Progress on Structural Reform Agenda.

react to various scenarios. Results are relayed to concerned banks that maybe required to take remedial action.

A legal framework was established to encourage banks to sell nonperforming assets to third parties. In January 2003, the **Special Purpose Vehicle (SPV) Act** was passed. In March 2004, the **Securitization Act** was passed, providing scope for the strengthening of the SPV framework. The Bureau of Internal Revenue (BIR) also issued SPV tax incentives in June 2004. As of September 2004, the BSP has issued sixty-eight certificates of Eligibility (COE) to 18 banks, creating a scope for NPA transfers totaling PhP4.5 billion. Three banks have pending COE applications involving PhP10.1 billion worth of nonperforming assets (NPAs). Thirty-six SPVs have registered with the Securities and Exchange Commission (SEC), and availment of incentives under the SPV Law is finally gaining momentum.

As regards taxes, the **Documentary Stamp Tax (DST) Law** rationalizing the taxation of debt and equity instruments was signed into law under R.A. 9243 on February 2004. Value-added tax on financial transactions and taxation of FCDU/OBUs, which took effect in 2003, were repealed.

To strengthen corporate governance, the BSP implemented Circular No.456 (dated October 4, 2004) ensure the proper management of banking operations. It required banks to have:

1. An audit committee to provide oversight of the banks' financial reporting, control, and internal/external audit functions;
2. Corporate governance committee, tasked to review and evaluate the qualifications of all persons nominated to the board as well as those nominated to other positions requiring appointment by the board of directors, and ensure the board's effectiveness and due observance of corporate governance principles and guidelines.
3. Risk management committee to be responsible for the development and oversight of banks' risk management program.

3.5.2 THE CORPORATE SECTOR

The SEC is minimizing debt-restructuring incidents by (1) imposing more stringent requirements on financial disclosure, bringing the accounting system up to international standards; (2) regulating external auditors more closely; (3) implementing the Code of corporate governance,

which applies to all corporations (domestic or foreign) whose securities are registered or listed. The Code requires these corporations to formulate, submit (to SEC) and adopt a Manual of Corporate Governance. These Manuals are given to directors and subject to inspection by stockholders, and are to be adhered to under penalty of law.

The passage of the **Securitization Act** in March 2004 facilitated restructuring by permitting asset management companies to finance their acquisitions of distressed assets through capital markets and institutional investors. This Act is also expected to contribute to the development of corporate bonds market by overcoming the problems of small size and low credit quality of most issuers.

A Financial Sector Forum (composed of the SEC, BSP, Insurance Commission and PDIC) was established as a voluntary cooperative endeavor of the concerned agencies to provide an institutionalized framework for coordinating supervision and regulation, while preserving each agency's mandate. The FSF has three target areas:

1. The harmonization and coordination of supervisory and regulatory methods and policies, identification and filling in of gaps and elimination of overlapping functions in the current supervisory regime;
2. Reporting and information exchange and dissemination; and
3. Consumer protection and education to curb unethical and unlawful business practices and reduce the incidence of financial scams.

Steps were also undertaken to improve the compliance, enforcement and surveillance capabilities of the Philippine Stock Exchange (PSE). The SEC approved PSE's new rules for listed companies under corporate rehabilitation in December 2004.

TABLE-8. PHILIPPINE BANKING SECTOR INDICATORS, 1999-2004							
	1999	2000	2001	2002	2003	2004 (Q1)	2004 (Q2)
CAPITAL ADEQUACY							
Total Capital accounts to Total Assets	14.5	13.6	13.6	13.4	13.1	12.7	12.8
Net worth to Risk Assets Ratio	17.5	16.2	16.1	16.7	16.7	16.4	16.8
Capital Adequacy Ratio (solo basis)			14.5	15.5	16.0		
Capital Adequacy Ratio (consolidated basis)			15.6	16.9	17.5		
ASSET QUALITY							
NPL ratio 1/	14.6	16.6	19.0	16.6*	16.1	16.3	15.9
NPL ratio 2/	21.0	24.0	27.7	26.5*	26.1	26.5	26.2
Distressed asset ratio 3/	24.4	27.7	31.7	31.0*	30.9	31.1	31.0
NPL coverage ratio 4/	45.2	43.7	45.3	50.2*	51.5	51.0	51.9
NPL coverage ratio 5/	29.8	28.6	29.6	30.1*	30.9	30.4	30.6
Net NPL to total capital 6/	28.3	34.5	37.6	28.9*	27.4	27.9	26.4
Net NPA to total capital 7/	56.3	69.6	78.9	73.3*	72.4	74.1	71.8
PROFITABILITY							
Net interest income to average earning asset*	4.5	3.9	3.8	3.8	3.7	3.8	3.9
Return on assets	0.4	0.4	0.4	0.8	1.1	1.1	1.1
Return on equity	2.9	2.6	3.2	5.8	8.5	8.6	8.3
Cost-to-income ratio	72.2	81.8	80.7	71.4	68.9	69.3	70.7
LIQUIDITY							
Liquid assets to total assets	26.4	29.0	30.0	32.3	32.3	33.6	34.9
Source: Philippine authorities and IMF Staff calculations, as cited in IMF Staff Report for the Philippines, 2004							
1/ NPL over total loan portfolio excluding interbank loans (TL).							
2/ NPL plus ROPOA over TL plus ROPOA.							
3/ NPL plus ROPOA plus current restructured loans over TL plus ROPOA.							
4/Loan loss reserves over NPLs.							
5/ Allowances for probable losses on NPAs over NPAs.							
6/ NPL minus loan loss reserves over capital.							
7/ NPA minus allowances for probable losses on NPAs over capital.							
* change in series largely due to new NPL definition in 2002.							
** Operating Expenses (net of bad debts and provisions) to total operating income.							

4. CROSS-BORDER CAPITAL FLOWS IN EAST ASIA: AN ECONOMIC ANALYSIS

Data and empirical analysis made in this project suggest that regional financial integration is very weak (see **ATTACHMENT-A** for details of the economic study), if any, in East Asia and most of it can be explained by trade integration in the region.

4.1 GEOGRAPHIC DISTRIBUTION OF PORTFOLIO AND OTHER FINANCIAL INVESTMENT

In terms of geographic distribution of the cross-border portfolio investment, the major destination of portfolio investment for East Asia is the United States and Europe, which constitute 31.5% and 34.1%, respectively, in total international portfolio assets held by East Asia. In comparison, East Asian assets constitute only 4.9% of the total holdings for 8 East Asian economies. The share of East Asian assets is only 1.3% in Japan. Malaysia has the largest East Asian asset share, amounting to 46% of its international portfolio assets. In comparison, most of Europe holds more than one half of their portfolio assets within Europe. The share of European portfolio asset holdings is 58% of the total international portfolio assets held by 17 European countries.

The general patterns are similar to those for portfolio asset holdings by East Asia and Europe. The major source of portfolio investment in East Asia comes from the United States and Europe, which constitutes 42.8% and 37.2%, respectively, in total international portfolio assets invested in East Asia (reported by 67 source countries) amounting to US$1.1 trillion. The share of asset holdings by 9 East Asian economies (including China) constitutes only 8.2%. In comparison, the total portfolio asset invested in Europe amounts to about US $8.7 trillion, of which the share of intra-Europe holdings is over 60%. The amount of the total portfolio asset invested in an average East Asian economy amounts to US$113 billion, which is far smaller than that in an average European economy, amounting to US$510 billion.

Among the East Asian economies, the bilateral financial linkages are a relatively small fraction of its GDP. The cross-border portfolio asset invested in an average East Asian economy amounts to 26.4% in terms of its GDP, of which 9.8%p is held by the United States, 8.1%p by Europe, and 5.0%p by East Asia. The comparable figure for an average European economy is 90.0%, of which 14.1%p is held by the United States, 59.0%p by Europe, and 6.9%p by East Asia.

Overall, the data show that East Asian economies are far less financially integrated among them, compared to European economies. East Asian economies tend to be more closely financially linked with the United States and Europe rather than among them.

4.2 WEAK FINANCIAL LINKAGE WITHIN EAST ASIA

Empirical evidence, based on Gravity Model study, suggests that financial integration is closely associated with trade integration. This may imply that East Asia can be further financially integrated as it continues to promote the growth of intra-regional trade. However, as the intra-region trade-to-GDP ratio is already very high for East Asia, comparable to the intra-region ratio for Europe, it is not clear that further regional trade integration can create substantial cross-border finance. Furthermore, ***the finding that regional financial integration in East Asia is much weaker than in other regions, after controlling for the degree of intra-region trade integration, suggests that there are other structural and institutional impediments to financial integration in this region and they need be addressed by policies, particularly designed to promote the growth of Asian financial markets***. In this section, we suggest a few policies and institutional frameworks that can enhance the degree of regional financial integration in East Asia. [53]

There are several institutional and structural characteristics in East Asian financial systems that constrain regional financial integration. In general, the underdevelopment of financial markets hinders trade in regional securities between different East Asian countries. In East Asia, where financial systems have been traditionally bank-oriented, securities markets have been relatively less developed. The inadequate financial and legal structure, low auditing and accounting standards, low transparency, and weak corporate governance have hampered the development of capital markets in East Asia. This underdevelopment of financial markets and institutions in East Asian economies must be the primary cause of lower degree of financial integration in the region. Therefore, among others, East Asian economies must make efforts to improve own financial infrastructures while working together for a harmonization of financial markets within the region in the areas of rules, regulations, taxes and so on.

In particular, bond markets are underdeveloped in East Asia. In terms of the composition of domestic financing, East Asia relies less on bond markets than equity or bank loans, and many Asian domestic bond markets are small relative to those of developed economies such as the US

[53] See Lee, Park and Shin (2004), Eichengreen and Luengnaruemitchai (2004), Eichegreen and Park (2005a, 2005b), and Park, Park, Leung, and Sangsubhan (2004) for detailed discussions.

and Japan. The bond markets in East Asia still lack liquidity and remain largely fragmented.

Eichengreen and Luengnaruemitchai [2004] investigate empirically the determinants of bond market development in a cross-section of developed and developing economies. They find that while geographical and historical factors play an important role on bond market development, policies and institutional factors have more crucial influences on it. They suggest that improved regulation, enhanced transparency, stronger investor protection, and stable macroeconomic policies are important for the development of deep and liquid bond markets in East Asia.

After the financial crisis of 1997~98, there has been considerable progress in the development of the regional bond markets. The basic motive is to mobilize the region's vast pool of savings for direct use in the region's long-term investment, thereby reducing the double mismatch problem and diversifying the means of financing.

Prominent among these developments is the launch of the Asian Bond Fund (ABF) in June 2003, which attempts to pool the international reserves of Asian central banks and invest in Asian bonds. The Executives Meeting of East Asia-Pacific Central Banks (EMEAP) contributed US$1 billion to invest in dollar-denominated, sovereign and quasi-sovereign bonds issued by Asian entities. The central banks established another fund, the so-called ABF II, which is intended to invest in local currency-denominated Asian bonds.

The development of the regional bond market has also been intensively and extensively discussed among ASEAN+3 countries through the Asian Bond Market Initiative (ABMI), which has now made several concrete achievements such as (a) issuance of Ringgit denominated bonds by ADB in Malaysia and permission given to multilateral development banks to issue local currency denominated bonds in Thailand, (b) creation of a new scheme of cross-country primary CBOs by Korea and Japan, (c) provision of credit guarantee by JBIC and NEXI for bond issued by Asian multilateral companies, and (d) launch of the Asian Bonds Online Website [Park, Park, Leung, and Sangsubhan, 2004]. There has been much progress for the establishment of infrastructure on regional credit rating, clearing and settlement system.

Regardless of the efforts to development of the regional bond markets, there are preliminary tasks that need to be fulfilled. The most important prerequisite is the deregulation and opening of the domestic financial systems so that more local currency bonds are issued, domestic investors are

allowed to invest in foreign bonds, and foreign borrowers can issue bonds denominated in different currencies in East Asia's domestic markets.

It is still true that a number of countries in East Asia remain behind the capital market liberalization process by relying frequently on capital controls. Restrictions on capital account transactions and on entering foreign financial institutions must be an impediment to the process of integrating financial markets across economies in the region. Eichengreen and Park [2005b] provide evidence that a lower level of capital market liberalization and an underdevelopment of financial markets and institutions particularly in potential lending countries are the main factors contributing to the difference between the intra-Europe and intra-East Asia integration in the cross-border bank lending market. Chelley-Steeley and Steeley [1999] show evidence that the abolition of exchange controls helped equity markets to become more closely integrated in Europe.

East Asia also needs further financial and monetary cooperation for exchange rate stabilization among regional currencies. Higher degree of exchange rate volatility contributes to a lower degree of financial integration in East Asia. A number of studies show that higher exchange rate volatility will lead to fewer transactions in trade in assets, as well as trade in goods. Danthine et al. [2000] and Fratzscher [2001] provide evidence that the introduction of the Euro has increased the degree of financial integration in Euro countries. Spiegel [2004] also argues that overall international borrowing is facilitated by the creation of monetary unions, particularly based on the evidence from Portugal's Accession to the EMU. Evidence supports that the degree of financial integration has increased significantly after the introduction of Euro. Blanchard and Giavazzi [2002)] show that correlations between current account positions and per capita incomes increase more for future European Monetary Union (EMU) countries in 1990s, suggesting that monetary integration enhanced financial integration.

Another special feature after the financial crisis is that East Asia had accumulated a substantial amount of dollar reserve assets. East Asia, with a 'fear of floating' against the US dollar, have intervened in the foreign exchange market so as to moderate excessive volatility of exchange rates and moreover to maintain competitiveness of export sectors. They were also inclined to build up a capacity to draw on reserves in contingency so that it reduces vulnerabilities to any future possible external disturbances. The East Asian economies tended to hoard their reserves in low-yielding US Treasuries and other dollar denominated financial assets. This strong tendency of East Asia to invest in dollar-denominated safe-assets must have had a negative impact on regional

integration. This post-crisis experience has provoked questions on what is the optimal exchange rate regime for East Asia. Whether East Asia can emulate the European experience of monetary integration by taking necessary steps to build requisite institutions and policies that eventually lead to the formation of a monetary union must be an important issue.

5. SUMMARY REMARKS AND POLICY RECOMMENDATIONS

Do existing regional institutional ties provide countries with the opportunities to maximize the gains from allowing capital to flow freely? How do such institutional arrangements help ASEAN+3 member countries to better manage capital flow movements and mitigate the negative externalities associated with short-term capital flows? What institutional mechanisms and arrangements may be targeted to enhance the efficiency of capital market institutions in order for East Asian countries to maximize gains from capital flows, liberalization and greater financial integration?

East Asian countries have all benefited, in varying degrees, from financial liberalization. Having opened up their economies to globalized finance made it possible for these countries to attract large inflows of capital, which helped fund their economic growth and development. However, capital flow volatility, the unexpected scale of capital flow reversal, the significant levels of financial and other economic risks which these countries allowed themselves to be subject to (as a consequence of opening up their capital accounts and due to a combination of weak banking infrastructure, poor corporate governance, moral hazard, loose supervisory and control powers of major institutions over entities directly involved in capital flow movements and underdeveloped capital markets) simultaneously conspired and led to the birth of a crisis that exacted significant economic and social losses for the entire Asian region.

The AFC was a painful wake-up call that exposed the systematic vulnerabilities of what were then the economic darlings in the field of globalized finance. The affected economies now realize only too well that the high rates of economic growth they experienced were not enough of a parachute in case the winds of financial liberalization change course and require drastic economic action, as it did in 1997-1998. The AFC forced the governments of Asian countries to seriously reassess their readiness and management capabilities of freely flowing capital. “Financial institutions had to be restructured and reformed, capital markets broadened and deepened, and supervision and regulation standards brought up to international best practices” [Wang, 2002].

The post-AFC period of financial reconstruction for severely affected Asian countries emphasized the urgency for countries in the region to establish great financial and monetary cooperation to prevent, or least, be better at dealing with similar future crisis which may affect the region again. In addition to strengthening domestic financial and corporate sectors, Asian countries

were of the consensus that to efficiently manage globalized finance, globalized frameworks have to be put in place to "reduce capital flow volatility and enhance borrower countries' capacity to mitigate undesirable impacts of globalization, including macroeconomic and exchange rate policymaking" [Kawai, 2004].

Kawai [2004] presented in a summary of policy objectives and courses of action to be undertaken at the national, regional and global levels in order to prevent, manage and resolve a crisis [see Table-2 in Part-2]. It is against this backdrop that the logic for Asian regional economic cooperation is illuminated. The increasing trade and FDI integration and the market-driven financial integration of Asian economies (via increasing liberalization of the financial system, extension of cross-border loans, opening of equities and securities markets), which impact on these countries' macroeconomic interdependence supported the establishment of formal mechanisms, which helped institutionalize economic integration **[An account of developments in institutionalization efforts related to capital flows is in ATTACHMENT-B].**

In short, the currency crisis caused by cross-border capital flows was directly linked to too much volatility of the amount of capital, which flowed to East Asia in such a short period of time. The 1997 AFC can be seen as a product of the extensive flows of foreign capital, which flowed into Asia in such a short time period. This sudden inflow of money flown into both corporate and banking sectors caused the sudden increase of bank loans and capital flows into corporate sector. Due to easy access to the funding market, companies expanded their investment and business activities without making careful plans.

The virtual fixed exchange rate with the US dollar also accelerated the inflow of capital from abroad. All the currency exchanges from US dollar to its domestic currency, such as Thai bath, Malaysian ringgit, Indonesian rupiah, etc. have to go through exchange facility at banks. Therefore, if the monitoring of banks' exchange volume can be well established, the policy authority can notice sudden changes in the currency exchange market.

There are financial crises caused by sudden inflow of capital and the sudden outflow of capital. In such cases, the volatility of the volume of the currency exchange becomes very high in a short period of time. The policy authority should, therefore, keep an eye on the volume of the currency exchange reported by banks on a daily basis. If the signs of increase of volatility of the currency exchange volume can be seen, the policy authority should check the reasons of the sudden

increase of the volume of the currency exchanges. The Central Bank plays an important role in the currency exchange between its home currency and overseas currency such as US dollar; hence it should slow the process of the currency exchange. Otherwise too much volatility of the currency exchange will cause various ill effects to the real economic activities.

The following are the policy recommendations drawn from the literature survey, country case studies and empirical analysis.

RECOMMENDATION-1: FURTHER STRENGTHENING OF DOMESTIC FINANCIAL SYSTEMS AND PRUDENTIAL REGULATORY FRAMEWORK

Given that cross-border capital flows should be liberalized to improve the efficiency and ensure the high growth, it is imperative to strengthen further the domestic financial systems and prudential regulations. Major progress has been made in the countries, as indicated in the country studies, but there appears to be some room to catch up with the standards of developed economies in terms of governance of the financial sectors and regulatory framework.

RECOMMENDATION-2: BUILDING MONITORING CAPACITY TO ASSESS VOLATILITY OF CAPITAL FLOWS

MONITOR AND TEST THE VOLATILITY OF THE AMOUNT OF THE CAPITAL FLOWS. The Central banks and the Ministry of Finance are to monitor the amounts of capital inflow and outflow on a daily, weekly, monthly, quarterly and annual basis. When the volume of the volatility turns abnormal, it should warn the market participants and immediately check the causes of the volatility. Of course there are several factors attributed to capital flow volatility. One is based on trade flows of both current and future contract and the second is based on the purpose of financial activities such as purchasing and selling of stocks and bonds. Procedures to slow down the capital inflow and outflow should be introduced by reducing the speed of exchanging the dollar into domestic currency. This is technically plausible since transactions between foreign currencies and the domestic currency are in principle conducted through foreign exchange banks which reports all the data to the Central bank and the Ministry of Finance minutes by minutes.

EARLY DETECTION BASED ON ABNORMAL FLUCTUATIONS. Establishing trends and seasonal fluctuations (using daily, weekly, monthly, quarterly and annual monitoring data), and the associated causes of volatility should always be analyzed using econometric methods.

Volatility testing of capital flows and exchange rate fluctuations should be continuously implemented. This will help determine whether such volatilities are dependent on certain economic conditions or if they are caused by some other unexplainable factors.

Continuous research on the capital flow and exchange rate analysis is crucially important to detect abnormal inflow and outflow of capital. It will become an early warning signal of the crisis.

MONITORING TRANSACTIONS OF FINANCIAL INSTITUTIONS. The emphasis should be placed on strengthening the monitoring capabilities of financial institutions that function as settlement facilities. Tracing the records of international transactions by such financial institutions would help the authorities assess thoroughly the current situations of capital inflows/outflows. In addition, in some countries, large amounts of cross-border transactions are made, taking the forms of remittance, through postal services and other financial institutions other than commercial banks. The Central Banks should obtain capacity to monitor international capital transactions by such institutions.

RECOMMENDATION-3: INTERNATIONAL INFORMATION EXCHANGE AND INFORMATION DISCLOSURE TO THE PUBLIC

REGULATORS MEETINGS. Frequent dialogue among financial regulators of countries allows similarities and differences in regulatory systems to surface and encourage the idea of convergence of regulations. Regional mechanisms of financial cooperation indicated in Appendix-B will be suitable to provide the opportunity to set up such meetings.

DISCLOSURE INFORMATION AND COUNTRY COMPARISONS ON SUCH AREAS AS LEGAL SYSTEM, TAX RATES AND CAPITAL TRANSACTION PROCEDURES. For investors, a portfolio's after-tax rates of return are important to compare net effective returns among various markets. Among Asian countries, the tax rates and legal systems are so different such that after-tax rate of returns are much affected by the differences. Income tax rate, capital gains tax, tax rate on dividends and tax rate of interest income vary among Asian economies. Furthermore, each country has a different system of reporting capital transactions to the authorities.

If country comparisons can be seen at a glance, it would be beneficial not only to institutional investors but also to individual investors. If these country comparisons are listed in one

booklet or in an internet-accessible site, investors can immediately see the differences among countries and this makes financial investment across countries much smoother. If an independent institution made these comparisons, reliability of the information will be enhanced.

RECOMMENDATION-4: MORE EFFICIENT MOBILIZATION OF THE DOMESTIC FINANCIAL RESOURCES

HOME COUNTRY BIAS AND ENCOURAGEMENT OF FINANCIAL INVESTMENT ACROSS COUNTRIES. Many countries show some bias toward home country investment. Records indicate that domestic financial investment far exceeds overseas financial investment in many Asian countries. This is due to several reasons, primarily the currency risk based on fluctuations of the exchange rate and the lack of information about other countries' investment potentials.

Avoiding home country bias is important to improve financial investment across countries. Continuous supply of the economic data of various countries will enhance capital flows among the countries. Such data include: (a) macroeconomic data such as economic growth rate and interest rates, (b) sectoral data such as data on the food industry, machinery industry, agricultural sector, and (c) microeconomic data such as company data. These piles of data will help facilitate foreign capital inflows into the country. Continuous dissemination of information on changes in the economic environments of various countries in the region can reduce information asymmetry, which could accelerate overseas capital flows.

ESTABLISHING INSURANCE SYSTEM TO SECURE BANK DEPOSITS. In addition, establishing an insurance system to secure bank deposits would reduce the financial risks to the depositors. This will then lead to domestic households switching their investment toward domestic uses.

RECOMMENDATION-5: ESTABLISHING AN EMERGENCY FACILITY TO PREVENT CAPITAL FLOW CRISIS

GRADUAL CAPITAL EXCHANGE. When signs of abnormal capital flows are found, policy authorities can slow down the speed of currency exchange transactions. This gradual exchange of home currency with US dollar will calm down overheated transactions.

TAX ON CROSS-BORDER CAPITAL TRANSACTIONS. Chile levied tax on international capital transaction when it was faced with massive capital inflow from abroad. Tax rates, which may be set to zero rates during 'normal' periods, may be gradually increased during 'abnormal' periods. This will slow down the speed of overseas capital transactions and reduce, as well, its potential to cause overheating.

6.1 ATTACHMENT-A: PATTERNS AND DETERMINANTS OF CROSS-BORDER FINANCIAL ASSET HOLDINGS IN EAST ASIA

1. INTRODUCTION

We have observed a rapid increase of international capital mobility in East Asia since the early 1990s, as the economies of the region have continued to deregulate their financial markets. The continuous financial opening process has made East Asian economies integrated into global financial markets. However, it is not clear that the international financial liberalization and integration process has contributed to the integration of financial markets within the region. Several studies claimed that the degree of financial market linkage in East Asia remains low, particularly compared to that in Europe, and that the integration of financial markets in this region has been occurring more on a global level rather than on a regional level [Eichengreen and Park (2004); Kim, Lee and Shin (2005)]. In this regard, it is important to understand the patterns of the cross-border capital flows and the forces that have influenced them in East Asia.

The purpose of this section is to analyze the patterns of cross-border capital flows in East Asia and then to investigate the forces that have determined the degree of East Asian financial integration. We compiled the data on cross-border holdings of international financial assets including equity portfolio, long-term and short-term debt securities, and bank claims from 1997 to 2004. Using this data set, we analyze the geographical composition of cross-border financial asset holdings in East Asia and compare it to that in Europe. Then, we adopt a gravity model of bilateral financial asset holdings to investigate what has determined the patterns of cross-border holdings of international financial assets in East Asia. Based on the results of empirical investigation, we discuss the effects of the institutional features such as capital account restrictions, exchange rate regimes, and domestic financial regulation on cross-border capital flows in East Asia.

2. STYLIZED PATTERNS OF INTERNATIONAL FINANCIAL ASSET HOLDINGS IN EAST ASIA

2.1 DATA

We have compiled two data sets on cross-border holdings of portfolio assets and bank claims in order to judge stylized patterns of the geographical distribution of financial assets holdings. The International Monetary Fund (IMF) has recently published data on international portfolio asset holdings. The IMF conducted the Coordinated Portfolio Investment Survey (CPIS) for the first time in 1997, and annually since 2001.

The first CPIS involved 20 economies and the CPIS 2001 expanded to the participation of 67 source economies including several offshore and financial centers. In each case, the bilateral positions of the source countries in 223 destination countries/territories are reported.[54] The CPIS provides a breakdown of a country's stock of portfolio investment assets by country of residency of the nonresident issuer. Problems of survey methods and under-reporting of assets by participating countries are pointed out as shortcomings of the CPIS data [Lane and Milesi-Ferretti, 2003]. Nevertheless, the CPIS survey presents a unique opportunity for the examination of foreign equity and debt holdings of many participating countries.

Data on international bank claims are from the Bank for International Settlements (BIS). It is the consolidated international bank claims of BIS reporting banks by nationality of lenders and borrowers. We gathered these data for 25 reporting countries including two reporting banks from East Asia (Japan and Taiwan) and 15 European countries from the BIS *Quarterly Review*.[55] The data are available from 1983 on a biannual basis, but most countries report more complete bilateral data from 1999. We have also obtained compatible data for South Korea from its supervisory authority. Note that although the data set includes only three countries in East Asia reporting consolidated foreign bank claims, the other countries, such as Hong Kong, Indonesia, Malaysia, the Philippines, Singapore, and Thailand, are included as the country of destination for the bank loans.

2.2 GEOGRAPHICAL DISTRIBUTION OF CROSS-BORDER FINANCIAL ASSET HOLDINGS

[54] Refer to the IMF website at http://www.imf.org/external/np/sta/pi/cpis.htm for details.
[55] Refer to the BIS website at http://www.bis.org/statistics/histstats10.htm for details.

PORTFOLIO INVESTMENT

Tables A1 and A2 provide the geographical distribution of bilateral portfolio asset holdings for East Asia, compared to that for Europe in 2003. **TABLE-A1-A** shows the amount of bilateral portfolio assets in million US dollars held by each East Asian and European economy, and **TABLE-A1-B** shows the ratio of international portfolio asset holdings to GDP. The GDP value in the denominator of these ratios refers to the East Asian or European country paired with four major destinations including the United States, Europe, Japan and East Asia (10 economies including Japan). **Tables A2-A and A2-B** show the cross-border portfolio assets invested in East Asian or European economies by these major regions. In other words, **TABLE-A1** shows "where East Asian economies invest their cross-border portfolio financial assets", while **TABLE-A2** shows "which country invests in East Asia".

According to **TABLE-A1-A**, the total recorded level of portfolio asset holdings of the eight East Asian economies is about US$2.2 trillion, which is about 13.4% of world total portfolio assets that amount to US$16.5 trillion. Japan, Hong Kong and Singapore are the major investors in East Asia. Japan holds international portfolio assets of about US$1.7 trillion or 10.5% of the total international portfolio asset. Hong Kong and Singapore hold US$335 billion and US$144 billion, respectively. The average amount of the total portfolio asset holding for East Asian economies is about US$278 billion, which is about a half of that for European economies (US$539 billion).

The major destination of portfolio investment for East Asia is the United States and Europe, which constitute 31.5% and 34.1%, respectively, in total international portfolio assets held by East Asia. In comparison, East Asian assets constitute only 4.9% of the total holdings for 8 East Asian economies. The share of East Asian assets is only 1.3% in Japan. Malaysia has the largest East Asian asset share, amounting to 46% of its international portfolio assets. In comparison, most of Europe holds more than one half of their portfolio assets within Europe. The share of European portfolio asset holdings is 58% of the total international portfolio assets held by 17 European countries.

When scaling portfolio holdings by GDP, small economies with financial and offshore centers dominate the picture (**TABLE-A1-B**). For instance, Hong Kong, Singapore, Ireland, and Switzerland have total assets amounting to several times their own domestic output levels. For a typical East Asian economy, on the other hand, bilateral financial linkages are a relatively small

fraction of its GDP. The average ratio of international portfolio holdings to GDP for East Asia amounts to 52.9%, of which 9.4% point (%p) is held in the United States, 16.9%p in Europe, and 8.6%p in East Asia. For 17 European countries, the comparable average ratio of international portfolio holdings to GDP amounts to 108.0%, of which 21.2%p is held in the United States, 62.1%p in Europe, and 3.6%p in East Asia.

Tables A1-A and A1-B also report information for the U.S. The U.S. is the largest foreign investor. It holds cross-border assets amounting to about US$ 3.1 trillion or 19.1% of the total international portfolio assets. At the end of 2003, the share of East Asia in the international investment portfolio of the US (14.3%) is far above the average of Europe (3.2%).

Tables A2-A and A2-B show the geographical distribution of the total portfolio assets invested in East Asian or European economies. The general patterns are similar to those for portfolio asset holdings by East Asia and Europe depicted in **Tables A1-A and A1-B**. The major source of portfolio investment in East Asia comes from the United States and Europe, which constitutes 42.8% and 37.2% respectively in total international portfolio assets invested in East Asia (reported by 67 source countries) amounting to US$1.1 trillion. The share of asset holdings by 9 East Asian economies (including China) constitutes only 8.2%. In comparison, the total portfolio asset invested in Europe amounts to about US $8.7 trillion, of which the share of intra-Europe holdings is over 60%. The amount of the total portfolio asset invested in an average East Asian economy amounts to US$113 billion, which is far smaller than that in an average European economy, amounting to US$510 billion.

Among the East Asian economies, the bilateral financial linkages are a relatively small fraction of its GDP. The cross-border portfolio asset invested in an average East Asian economy amounts to 26.4% in terms of its GDP, of which 9.8%p is held by the United States, 8.1%p by Europe, and 5.0%p by East Asia. The comparable figure for an average European economy is 90.0%, of which 14.1%p is held by the United States, 59.0%p by Europe, and 6.9%p by East Asia.

Tables A3 to A8 provide the geographical distribution of portfolio investment holdings separately for each asset- equity, long-term debt, and short-term debt securities.

The geographical distribution for equity and debt securities asset holdings show stylized patterns that are broadly similar to those for total portfolio assets. **TABLE-A3-A** and shows that the

total amount of equity assets held by East Asia is smaller that that by Europe and the share of East Asian equity assets in total equity asset holdings by East Asia is far lower than that of European equity asset holdings by European economies. The share of East Asian equity assets in total holdings is 10.5% for 8 East Asian economies. This number is much smaller than the comparable intra-region share for 17 European countries (41.2%). Japan, Hong Kong, and Singapore- the three largest investors in East Asia- hold international portfolio assets of about US$274.5 billion, US$152.8 billion, and US$42.7 billion, respectively and the intra-East Asian share of its holdings is 3.9%, 17% and 28%, respectively. **TABLE-A3-B** shows that the cross-border portfolio asset holdings by an average East Asian economy amounts to 19.1% in terms of its GDP, of which 2.1%p is held in the United States, 4.3%p in Europe, and 3.9%p in East Asia. For an average European country, the ratio of international portfolio holdings to GDP is about 37.6%, of which 9.4%p is held in the United States, 15.6%p in Europe, and 2.6%p in East Asia.

Tables A4-A and A4-B show that the amount of equity assets invested in an average East Asian economy (86.0 billion) by international investors is smaller than that invested in an average European country (173.8 billion). The major source of equity asset investment in East Asia is the United States and Europe. The share of intra-East Asia holdings in total world equity assets invested in East Asia is only 3.9%, while the comparable intra-Europe share amounts to 45.8%. The international equity asset invested in an average East Asian economy amounts to 19.1% in terms of its GDP, of which 8.2%p is held by the United States, 6.3%p by Europe, and 1.9%p by East Asia. The comparable figure for an average European economy is 29.7%, of which 9.9%p is held by the United States, 15.1%p by Europe, and 1.1%p by East Asia.

Tables A5 and A6 show the geographical distribution of long-term debt securities. **TABLE-A5** shows that only 2.7% of the total long-term securities asset holdings by 8 East Asian economies is invested within East Asia, which is far lower than the intra-Europe share of long-term debt securities holdings by Europe that amounts to 66.9%. On the other hand, **TABLE-A6** shows that 23.3% of the world total long-term debt securities assets invested in East Asia is made by 9 East Asian economies (including China). The big discrepancy between the two intra-East Asia shares is attributed to the fact that Japan holds a very small share of long-term debt securities issued by other East Asian economies (0.8%). Note also that the amount of the world total long-term debt securities assets invested in East Asia is only US$185 billion, which is far smaller than the amount of total long-term debt securities assets invested by East Asia (mostly by Japan) of US$1.6 trillion.

TABLE-A7 shows that in the short-term debt securities market, East Asian short-term debt securities constitutes about 12.1% of the total short-term securities asset holdings by 8 East Asian economies (US$113 billion), which is far lower than the share of European short-term debt securities in total short-term securities asset holdings by European countries that amounts to 59.0%. On the other hand, as **TABLE-A8** shows, the share of short-term debt securities holdings by East Asian economies in the world total short-term debt securities assets invested in East Asia is much higher, reaching 71.6%, but the amount of the world total short-term debt securities assets invested in East Asia is much smaller, only US$18.3 billion, compared to US$592 billion for Europe.

Overall, the data show that East Asian economies are far less financially integrated among them, compared to European economies. East Asian economies tend to be more closely financially linked with the United States and Europe rather than among them.

BANK LENDING

Tables A9 and A10 report geographical distribution of cross-border bank claims for East Asia, Europe and the U.S. at end-2003. We have data for three East Asian reporting countries (Japan, South Korea and Taiwan). In **TABLE-A9**, the share of intra-East Asia bank claims in total cross-border bank claims for the three East Asian economies is 9.5%. It is 17.3% in Japan, 36% in South Korea, and 26% in Taiwan. The comparable intra-region share for Europe is 51.8%. East Asia is a small investor in the international bank lending markets. While Europe holds about US$10.7 trillion international bank claims in total and about US$5.5 trillion claims within Europe, East Asia holds only about US$1.4 trillion total claims in international bank lending markets and US$131 billion within East Asia. TABLE-A10 shows a similar pattern for geographical distribution of the total cross-border bank claims held in 10 East Asian economies (including China and Taiwan). The share of East Asian economies' holdings in world total cross-border bank claims against East Asia is 10.1%, whereas the comparable intra-Europe share is 83.9%.

3. A GRAVITY-MODEL OF DETERMINANTS OF CROSS-BORDER FINANCIAL ASSET HOLDINGS

SPECIFICATION OF THE GRAVITY MODEL AND DATA

We set up a gravity model of the bilateral financial asset holdings. The gravity model was originally developed as an explanation for the gravitational forces. Initially, economists to study international

trade without firm theoretical grounds adopted the model. In its basic form, trade between two countries depends positively on their total income and negatively on the distance between them. The model can be extended to include other variables, depending on the study's purpose. Great empirical success of the gravity model to explain the bilateral trade flows has motivated a number of theoretical models that can justify it.[56]

While the gravity model of bilateral trade flows has a long history, there have been relatively few attempts made to use a gravity model in explaining exchanges of financial assets. The main reason is that unlike goods, financial assets are weightless, hence distance cannot represent for transaction costs. Recently, however, Portes and Rey [2005] find that a gravity model performs at least as well in asset trade as goods trade.[57] Portes and Rey interpret that information friction is positively correlated with distance, justifying that financial asset trade is also negatively related to distance. Following their model, we set up an extended gravity model as follows:

$$\begin{aligned}\ln(Assets_{ijt}) = {} & \beta_0 + \beta_1 \ln(GDP_{it}) + \beta_2 \ln(GDP_{jt}) + \beta_3 \ln(GDP_i / Pop_i)_t + \beta_4 \ln(GDP_j / Pop_j)_t \\ & + \beta_5 \ln(Area_i) + \beta_6 \ln(Area_j) + \beta_7 \ln Dist_{ij} + \beta_8 Border_{ij} + \beta_9 Language_{ijt} \\ & + \beta_{10} ExComColony_{ij} + \beta_{11} ExColony_{ij} + \delta YEAR_t + \varepsilon_{ijt}\end{aligned} \qquad (1)$$

where i and j denote countries, t denotes time, $Assets_{ijt}$ denotes the financial assets of country j held by country i at time t, *GDP* is real GDP, *Pop* is Population, *Area* is the size of land area of the country, *Dist* is the distance between i and j, *Border* is a binary variable which is unity if i and j share a land border, *Language* is a binary variable which is unity if i and j have a common language, *ExComColony* is a binary variable which is unity if i and j were ever colonies after 1945 under the same colonizer, *ExColony* is a binary variable which is unity if i ever colonized j or *vice versa*, and *Year* denotes a set of binary variables which are unity in the specific year t.

Note that this framework separates between country i's holdings of country j's financial assets and its reverse, that is, country j's holdings of country i's financial assets for the dependent variable. The usual gravity model of goods trade considers the bilateral trade (an average of exports and imports) between country i and j as one dependent variable. We adopt the different specification for asset trade because the bilateral holdings of assets, a stock variable, between country i and j are fairly asymmetric, and often unilateral transaction data are only available.

[56] See Anderson (1979), Bergstrand (1985), and Evenett and Keller (2002) for the theoretical background of the gravity equation.
[57] See subsequent researches including Buch (2002, 2003), Yildrim (2003), and Lane and Milesi-Ferritti (2003).

The underlying GDP data are the purchasing-power adjusted values from Penn-World Tables 6.1, as described in Heston, Summers, and Aten [2002]. We updated the Summers-Heston data by using information on real GDP from the World Bank's *World Development Indicators* (*WDI*). A number of country specific variables such as distance, land area, language, land border, and colony relationship were obtained from Rose [2000].[58]

The data set has features of a panel structure consisting of 12,888 annual observations from 2001 to 2003 for the portfolio data, and 4,867 observations for the bank claims data. East Asian country pairs constitute about 1 % in each data set, while the proportion of European country pairs is much larger amounting to about 6 % for the portfolio data set and about 10 % for the bank claims.

TABLE-A11, column (1) present the estimation results of specification (1) for total portfolio assets. We apply a random effect estimation technique.[59] The result shows that the gravity model fits the data very well and most estimated coefficients are statistically significant with the expected signs. To summarize briefly, the estimated coefficients for log of GDP of source country, log of GDP of destination country, log of per capita GDP of source country, log of per capita GDP of destination country, common land border dummy, common language dummy, ex-common colonizer dummy, and ex-colony-colonizer dummy are significantly positive. The estimated coefficient for the bilateral distance is significantly negative. Area of source country is significantly negative, while area of destination country is significantly positive, which seems to indicate that a larger country tends to invest less in international assets, controlling for other variables, but receive more cross-border financial investment.

The above regression results suggest that a gravity model can be used as a benchmark to appropriately explain normal financial asset holdings. Now we add a dummy variable for intra-East Asia asset holdings in column (2) in order to investigate how deeply financial integration is entrenched in East Asia relative to a normal flow predicted by the gravity model. We find that the coefficient of the intra-East Asia dummy is significantly positive (0.427, s.e.=0.129), indicating that there is some evidence of regional financial integration among East Asian economies. The estimated

[58] The data set is available on the web page, http://faculty.haas.berkeley.edu/arose/, maintained by Andrew Rose.

[59] We do not adopt the fixed-effect "within" estimation results. This method can provide more consistent estimates by controlling for the influences from omitted country-specific factors. One drawback of this fixed-effect approach is, however, that since the fixed effect estimator exploits variation over time, we cannot obtain the estimates for time-invariant factors such as distance, area, land border, common language, and, more importantly, a regional dummy that will be investigated later.

coefficient indicates that East Asia invests 1.53 times more among themselves than random pairs of countries in other regions do.[60]

In order to compare the degree of financial integration in East Asia with that for Europe, we have also added the intra-Europe dummy variable and reported the estimation result in column (3) of **TABLE-A11**. Even after the intra-Europe dummy is added, the estimated coefficient of intra-East Asia dummy is statistically significant (0.578, s.e.=0.116). The coefficient of intra-Europe dummy is significantly positive and large in magnitude (2.235, s.e.=0.074), which implies that European countries make portfolio investments particularly more among themselves. The estimated coefficients indicate that Europe invest 9.3 times more among themselves than a random pair of countries do. This estimation result implies than the regional financial integration is much deeper in Europe than in East Asia.

Column (4) investigates whether East Asian economies are more closely linked to the global (U.S.) financial market than among themselves? To answer this question, we added two more dummies for East Asia-US and Europe-US. The coefficients of East Asia-US and Europe-US dummy variables measures how East Asian and European countries are relatively more intertwined to the US market than a random-pair of countries do. In column (4), we find that the coefficients of two dummy variables is positive and statistically significant: the estimate of Europe-US dummy is 4.234 (s.e.=0.158) and that of East Asia-US dummy is 3.241 (s.e.=0.202). The estimate of East Asia (Europe)-US is relatively larger in magnitude than that on intra-East Asia (Europe) dummy. This indicates, perhaps surprisingly, that world financial integration plays more important role than regional integration both for East Asia and Europe. However, the global integration is relatively more important than the regional integration for East Asia, compared to Europe. When we compare the relative importance of the global market vis-a-vis the regional market for East Asia with that for Europe, we realize that East Asia is relatively more integrated with the global market instead of regional market. The estimated coefficients of intra-East Asia and East Asia-US dummy are 0.647 and 3.241, while the corresponding figures for Europe were 2.350 and 4.234. The estimated coefficient of the global integration is more dominatingly larger in magnitude only for East Asia.

We suspect the significance of intra-East Asian dummy may reflect the strong intra-region trade in East Asia. Financial integration must be strongly associated with trade integration. In order

[60] This figure is calculated as $e^{0.427}=1.53$.

to test this conjecture, we add bilateral trade as an additional regressor to the specifications of **TABLE-A11**, and report the results in **TABLE-A12**. This conjecture seems to be supported by the fact that the estimate of the intra-East Asia dummy turned significantly negative in the regressions where bilateral trade is added as an explanatory variable in columns (2), (3) and (4) of **TABLE-A12**. The interpretation of the estimates may need some cautions because the inclusion of bilateral trade, though one-year lagged value is used, can be subject to endogeineity bias. Any omitted region- or country-specific factors in East Asia must influence both bilateral goods trade as well as asset trade. Nevertheless, the results are quite suggestive. Except the intra-East Asia dummy, the other dummy variables including East Asia-US, intra-Europe, and Europe-US dummy enter all statistically significantly with positive coefficients. Hence, this result seems to support the view that the regional financial integration in East Asia is mainly due to the trade integration taking place in the region [Kim, Lee and Shin, 2004].

Now we turn to the regressions for each type of international portfolio assets and cross-border bank claims. In columns (1)~(4) of **TABLE-A13**, we report the regression results from the specification (4) of **TABLE-A11** after replacing the dependent variable by equity portfolio, long-term debt securities, short-term debt securities, and bank claims respectively. For most of usual gravity factors, we find similar results as in **TABLE-A11**. One notable difference is that the estimated coefficient on per capita GDP of source country is significantly negative. Hence, with controlling other variables including total GDP of source and destination country, a country with higher per capita GDP tend to invest less in international debt securities issued by other countries, while it receives more investment in own debt securities from other countries. This seems an interesting finding that needs further investigation.

For equity portfolio and long-term debt securities, in columns (1) and (2) of **TABLE-A13**, the results are similar to those for total portfolio asset: There exists some degree of regional financial integration among East Asian economies. But, the degree of intra-region integration in East Asia is relatively lower than that in Europe. East Asia is relative more integrated to the global market than to the regional markets, compared to Europe, in equity and long-term debt transactions.

Unlike equity and long-term debt securities, we find little intra-region integration in short-term debt securities markets. In column (3), the estimated coefficient of intra-East Asia dummy is small in magnitude and statistically insignificantly different from zero (-0.063, s.e.=0.047). This may reflect that the size of short-term debt securities market is East Asia is quite

small and East Asian investors, particularly Japanese, tend to invest little in East Asian short-term debt securities.

On the contrary, we find much stronger evidence of regional integration in bank claims among East Asian economies. The coefficient of intra-East Asia dummy in column (4) is positive and statistically very significant. The estimate (1.254) is larger than that for East-US dummy (0.665) and comparable to that for intra-Europe dummy(1.662).

The significance of regional financial integration in East Asia in terms of equity and long-term debt securities as well as bank claims may be the result of heavy trade integration in the region too. We test this in columns (1)~(4) of **TABLE-A14** by adding bilateral trade as an additional explanatory variable to the specifications of columns (1)~(4) in **TABLE-A13**. The estimates of the intra-East Asia dummy turn significantly negative in the regressions for equity, long-term and short-term debt securities. The estimate is also negative in the regression for bank claims, but it is statistically insignificant.

4. HOW TO ENHANCE REGIONAL INTEGRATION OF EAST ASIAN FINANCIAL MARKETS

The data and empirical results in the previous sections suggest that regional financial integration is very weak, if any, in East Asia and most of it can be explained by trade integration in the region.

Empirical evidence in the previous section suggests that financial integration is closely associated with trade integration. This may imply that East Asia can be further financially integrated as it continues to promote the growth of intra-regional trade. However, as the intra-region trade-to-GDP ratio in East Asia is already very high, even comparable to the intra-region ratio for Europe, it is not clear that further regional trade integration can create substantial cross-border finance. Furthermore, the finding that regional financial integration in East Asia is much weaker than in other regions, after controlling for the degree of intra-region trade integration, suggests that there are other structural and institutional impediments to financial integration in this region and they need be addressed by policies, particularly designed to promote the growth of Asian financial markets. In this section, we suggest a few policies and institutional frameworks that can enhance the

degree of regional financial integration in East Asia.[61]

There are several institutional and structural characteristics in East Asian financial systems that constrain regional financial integration. In general, the underdevelopment of financial markets hinders trade in regional securities between different East Asian countries. In East Asia, where financial systems have been traditionally bank-oriented, securities markets have been relatively less developed. The inadequate financial and legal structure, low auditing and accounting standards, low transparency, and weak corporate governance have hampered the development of capital markets in East Asia. This underdevelopment of financial markets and institutions in East Asian economies must be the primary cause of lower degree of financial integration in the region. Therefore, among others, East Asian economies must make efforts to improve own financial infrastructures while working together for a harmonization of financial markets within the region in the areas of rules, regulations, taxes and so on.

In particular, bond markets are underdeveloped in East Asia. In terms of the composition of domestic financing, East Asia relies less on bond markets than equity or bank loans, and many Asian domestic bond markets are small relative to those of developed economies such as the US and Japan (**TABLE-A15**). The bond markets in East Asia still lack liquidity and remain largely fragmented.

Eichengreen and Luengnaruemitchai (2004) investigate empirically the determinants of bond market development in a cross-section of developed and developing economies. They find that while geographical and historical factors play an important role on bond market development, policies and institutional factors have more crucial influences on it. They suggest that improved regulation, enhanced transparency, stronger investor protection, and stable macroeconomic policies are important for the development of deep and liquid bond markets in East Asia.

After the financial crisis of 1997~98, there has been considerable progress in the development of the regional bond markets. The basic motive is to mobilize the region's vast pool of savings for direct use in the region's long-term investment, thereby reducing the double mismatch problem and diversifying the means of financing. Most prominent among these is the launch of the Asian Bond Fund (ABF) in June 2003, which attempts to pool the international reserves of Asian

[61] See Lee, Park and Shin (2004), Eichengreen and Luengnaruemitchai (2004), Eichegreen and Park (2005a, 2005b), and Park, Park, Leung, and Sangsubhan (2004) for detailed discussions.

central banks and invest in Asian bonds. The Executives Meeting of East Asia-Pacific Central Banks (EMEAP) contributed US$1 billion to invest in dollar-denominated, sovereign and quasi-sovereign bonds issued by Asian entities.

The central banks established another fund, the so-called ABF II, which is intended to invest in local currency-denominated Asian bonds. The development of the regional bond market has also been intensively and extensively discussed among ASEAN+3 countries through the Asian Bond Market Initiative (ABMI), which has now made several concrete achievements such as (a) issuance of ringgit-denominated bonds by ADB in Malaysia and permission given to multilateral development banks to issue local currency denominated bonds in Thailand, (b) creation of a new scheme of cross-country primary CBOs by Korea and Japan, (c) provision of credit guarantee by JBIC and NEXI for bond issued by Asian multilateral companies, and (d) launch of the Asian Bonds Online Website [Park, Park, Leung, and Sangsubhan, 2004]. There has been much progress for the establishment of infrastructure on regional credit rating, clearing and settlement system.

Regardless of the efforts to development of the regional bond markets, there are preliminary tasks that must also be fulfilled. The most important pre-requisite is the deregulation and opening of the domestic financial systems so that more local currency bonds are issued, domestic investors are allowed to invest in foreign bonds, and foreign borrowers can issue bonds denominated in different currencies in East Asia's domestic markets.

It is still true that a number of countries in East Asia remain behind the capital market liberalization process by relying frequently on capital controls. Restrictions on capital account transactions and on entering foreign financial institutions must be an impediment to the process of integrating financial markets across economies in the region. Eichengreen and Park [2005b] provide evidence that a lower level of capital market liberalization and an underdevelopment of financial markets and institutions particularly in potential lending countries are the main factors contributing to the difference between the intra-Europe and intra-East Asia integration in the cross-border bank lending market. Chelley-Steeley and Steeley [1999] show evidence that the abolition of exchange controls helped equity markets to become more closely integrated in Europe.

East Asia also needs further financial and monetary cooperation for exchange rate stabilization among regional currencies. Higher degree of exchange rate volatility must contribute to a lower degree of financial integration in East Asia. A number of studies show that higher

exchange rate volatility will lead to fewer transactions in trade in assets, as well as trade in goods. Danthine et al. [2000] and Fratzscher [2001] provide evidence that the introduction of the Euro has increased the degree of financial integration in Euro countries. Spiegel [2004] also argues that overall international borrowing is facilitated by the creation of monetary unions, particularly based on the evidence from Portugal's Accession to the EMU. Evidence supports the hypothesis that the degree of financial integration has increased significantly after the introduction of the Euro. Blanchard and Giavazzi [2002] show that correlations between current account positions and per capita incomes increase more for future European Monetary Union (EMU) countries in 1990s, suggesting that monetary integration enhanced financial integration.

Another special feature after the financial crisis is that East Asia had accumulated a substantial amount of dollar reserve assets. East Asia, with a 'fear of floating' against the US dollar, have intervened in the foreign exchange market so as to moderate excessive volatility of exchange rates and moreover to maintain competitiveness of export sectors. They were also inclined to build up a capacity to draw on reserve in contingency so that it reduces the vulnerabilities to the any future possible external disturbances.

The East Asian economies tended to hoard their reserves in low-yielding US Treasuries and other dollar denominated financial assets. This strong tendency of East Asia to invest in dollar-denominated safe-assets must have had a negative impact on regional integration. This post-crisis experience has provoked questions on what is the optimal exchange rate regime for East Asia. Whether East Asia can emulate the European experience of monetary integration by taking necessary steps to build requisite institutions and policies that eventually lead to the formation of a monetary union must be an important issue.

TABLE-A1. TOTAL PORTFOLIO ASSET HOLDINGS BY EAST ASIA AND EUROPE IN 2003

A. Amount in million US$

	PORTFOLIO ASSETS HELD IN EACH REGION				
Source Country	**USA**	**Europe**	**Japan**	**East Asia *.**	**Total**
Hong Kong	46670	90297	10443	54686	334912
Indonesia	450	276	3	205	1814
Japan	620208	608173	.	21871	1721314
Korea	7961	2871	243	1368	17343
Malaysia	301	389	19	763	1664
Philippines	2535	716	14	256	3681
Singapore	22605	55973	3457	29095	143875
Thailand	1764	563	0	80	2748
Average	*87812*	*94907*	*1772*	*13541*	*278419*
	(31.5)	(34.1)	(0.6)	(4.9)	(100)
Austria	20426	145910	1910	2620	206807
Belgium	32390	285306	2004	3247	417785
Denmark	29131	71793	2989	5537	126994
Finland	8737	88407	925	1559	107412
France	152142	994453	29881	37920	1367001
Germany	133346	765107	25764	32106	1205127
Greece	4822	16028	45	66	33996
Iceland	881	1361	69	170	3687
Ireland	222525	456613	17657	26409	811644
Italy	98845	381471	11683	15927	791064
Netherlands	217186	460379	18623	29758	782593
Norway	42254	110746	12153	14156	184358
Portugal	5841	64644	126	126	97290
Spain	36771	298674	1426	2556	432701
Sweden	65613	98273	8504	10890	213706
Switzerland	95804	284273	12306	16050	654432
United Kingdom	431712	721464	118497	188027	1729515
Average	*94025*	*308524*	*15562*	*22772*	*539183*
	(17.4)	(57.2)	(2.9)	(4.2)	(100)
United States	.	1700000	291850	447089	3134244
		(54.2)	(9.3)	(14.3)	(100)

* 10 countries including Japan

B. Percent of the Source Country's GDP

Source Country	PORTFOLIO ASSETS HELD IN EACH REGION				
	USA	**Europe**	**Japan**	**East Asia *.**	**Total**
Hong Kong	29.8	57.6	6.7	34.9	213.8
Indonesia	0.2	0.1	0.0	0.1	0.9
Japan	14.4	14.1	.	0.5	40.0
Korea	1.3	0.5	0.0	0.2	2.9
Malaysia	0.3	0.4	0.0	0.7	1.6
Philippines	3.1	0.9	0.0	0.3	4.6
Singapore	24.7	61.3	3.8	31.9	157.5
Thailand	1.2	0.4	0.0	0.1	1.9
Average	*9.4*	*16.9*	*1.3*	*8.6*	*52.9*
Austria	8.1	57.6	0.8	1.0	81.7
Belgium	10.7	94.5	0.7	1.1	138.4
Denmark	13.7	33.9	1.4	2.6	59.9
Finland	5.4	54.6	0.6	1.0	66.4
France	8.7	56.6	1.7	2.2	77.8
Germany	5.5	31.8	1.1	1.3	50.1
Greece	2.8	9.3	0.0	0.0	19.7
Iceland	8.4	12.9	0.7	1.6	35.1
Ireland	144.8	297.0	11.5	17.2	528.0
Italy	6.7	26.0	0.8	1.1	53.9
Netherlands	42.5	90.0	3.6	5.8	153.0
Norway	19.1	50.1	5.5	6.4	83.5
Portugal	3.9	43.7	0.1	0.1	65.8
Spain	4.4	35.6	0.2	0.3	51.6
Sweden	21.8	32.6	2.8	3.6	70.9
Switzerland	29.9	88.8	3.8	5.0	204.4
United Kingdom	24.1	40.2	6.6	10.5	96.4
Average	*21.2*	*62.1*	*2.5*	*3.6*	*108.0*
United States	.	15.1	2.7	4.1	28.6

* 10 countries including Japan
Source: International Monetary Fund. (http://www.imf.org/external/np/sta/pi/cpis.htm)

TABLE-A2. TOTAL PORTFOLIO ASSETS INVESTED IN EAST ASIA AND EUROPE IN 2003

A. Amount in million US$

Host Country	PORTFOLIO ASSETS HELD BY EACH REGION				
	USA	**Europe**	**Japan**	**East Asia *.**	**Total**
China	13738	10419	2518	24837	53891
Hong Kong	37661	37873	7181	12130	101780
Indonesia	5072	3120	141	2826	17673
Japan	291850	264562	.	14179	640846
Korea	53429	35848	5289	21022	124184
Malaysia	7953	8101	1705	13453	32608
Philippines	5046	4873	1314	3347	14837
Singapore	25001	15075	2707	9243	55692
Thailand	7339	7253	1016	7287	25402
Average	*48150*	*41856*	*2150*	*9276*	*112558*
	42.8	37.2	1.9	8.2	100
Austria	10372	146525	11205	12895	190588
Belgium	16987	153876	15296	17485	231942
Denmark	22141	69923	7144	9906	118522
Finland	41126	103179	6743	7677	165691
France	183425	671931	90335	105843	1090209
Germany	186611	959861	154751	172932	1543115
Greece	5935	118441	4424	4808	140189
Iceland	143	8645	314	461	10697
Ireland	33470	218784	33713	40438	323338
Italy	66931	693464	58380	60966	928263
Netherlands	182193	714909	61329	74540	1070618
Norway	21243	38558	10808	13635	82399
Portugal	5276	88753	1449	2028	104123
Spain	51547	345414	21760	23827	460039
Sweden	45257	124330	21598	24559	231035
Switzerland	119715	136531	9375	11183	302818
United Kingdom	663120	651778	99549	176075	1670051
Average	*97382*	*308524*	*35775*	*44662*	*509626*
	19.1	60.5	7.0	8.8	100
United States	.	1.60E+06	620208	702494	2822191

* 10 countries including Japan

Source: International Monetary Fund. (http://www.imf.org/external/np/sta/pi/cpis.htm)

B. Percent of the Host Country's GDP

Host Country	PORTFOLIO ASSETS HELD BY EACH REGION				
	USA	**Europe**	**Japan**	**East Asia *.**	**Total**
China	1.0	0.7	0.2	1.8	3.8
Hong Kong	24.0	24.2	4.6	7.7	65
Indonesia	2.4	1.5	0.1	1.4	8.5
Japan	6.8	6.2	.	0.3	14.9
Korea	8.8	5.9	0.9	3.5	20.5
Malaysia	7.7	7.8	1.6	13	31.4
Philippines	6.3	6	1.6	4.2	18.4
Singapore	27.4	16.5	3	10.1	61
Thailand	5.1	5.1	0.7	5.1	17.8
Average	*9.8*	*8.1*	*1.4*	*5.0*	*26.4*
Austria	4.1	57.9	4.4	5.1	75.3
Belgium	5.6	51	5.1	5.8	76.8
Denmark	10.4	33	3.4	4.7	55.9
Finland	25.4	63.7	4.2	4.7	102.4
France	10.4	38.2	5.1	6	62
Germany	7.8	39.9	6.4	7.2	64.2
Greece	3.4	68.8	2.6	2.8	81.4
Iceland	1.4	82.2	3	4.4	101.8
Ireland	21.8	142.3	21.9	26.3	210.3
Italy	4.6	47.2	4	4.2	63.2
Netherlands	35.6	139.8	12	14.6	209.3
Norway	9.6	17.5	4.9	6.2	37.3
Portugal	3.6	60	1	1.4	70.4
Spain	6.1	41.2	2.6	2.8	54.9
Sweden	15	41.2	7.2	8.1	76.6
Switzerland	37.4	42.7	2.9	3.5	94.6
United Kingdom	36.9	36.3	5.5	9.8	93
Average	*14.1*	*59.0*	*5.7*	*6.9*	*90.0*
United States	.	14.6	5.7	6.4	25.8

* 10 countries including Japan

Source: International Monetary Fund. (http://www.imf.org/external/np/sta/pi/cpis.htm)

TABLE-A3. TOTAL EQUITY ASSET HOLDINGS BY EAST ASIA AND EUROPE IN 2003

A. Amount in million US$

Source Country	EQUITY ASSETS HELD IN EACH REGION				
	USA	**Europe**	**Japan**	**East Asia *.**	**Total**
Hong Kong	8016	34743	3290	26520	152831
Indonesia	1	9	0	2	16
Japan	142798	84870	.	10612	274457
Korea	961	194	171	288	3416
Malaysia	93	47	19	640	853
Philippines	143	.	.	2	166
Singapore	6973	8969	2089	11939	42739
Thailand	42	33	0	31	248
Average	*19878*	*16108*	*696*	*6254*	*59341*
	33.5	27.1	1.2	10.5	100
Austria	8472	22106	1346	1761	44045
Belgium	12024	58976	1425	2423	140276
Denmark	14070	25402	2839	5102	52079
Finland	4940	24444	921	1553	36493
France	53238	203490	15796	20884	337712
Germany	63797	198740	13680	18456	440814
Greece	1408	1445	35	42	3949
Iceland	837	1110	69	170	3362
Ireland	66227	94761	11433	19628	211415
Italy	38500	102739	9968	13505	331012
Netherlands	140070	128774	14859	24113	327136
Norway	23076	37522	5185	6665	76359
Portugal	1083	5238	105	105	11453
Spain	8787	50220	1034	2081	83407
Sweden	46630	52316	6665	8995	141731
Switzerland	52079	82880	8929	11757	293656
United Kingdom	200870	261894	81686	138016	749802
Average	*43300*	*79533*	*10351*	*16192*	*193218*
	22.4	41.2	5.4	8.4	100
United States	.	1.10E+06	255496	392415	2080302
		52.9	12.3	18.9	100.0

* 10 countries including Japan
Source: International Monetary Fund. (http://www.imf.org/external/np/sta/pi/cpis.htm)

B. (Percent of the Source Country's GDP)

	EQUITY ASSETS HELD IN EACH REGION				
Source Country	**USA**	**Europe**	**Japan**	**East Asia *.**	**Total**
Hong Kong	5.1	22.2	2.1	16.9	97.5
Indonesia	0.0	0.0	0.0	0.0	0.01
Japan	3.3	2	.	0.2	6.4
Korea	0.2	0.03	0.03	0.05	0.6
Malaysia	0.1	0.05	0.02	0.6	0.8
Philippines	0.2	.	.	0	0.2
Singapore	7.6	9.8	2.3	13.1	46.8
Thailand	0.03	0.02	0.0	0.02	0.2
Average	*2.1*	*4.3*	*0.6*	*3.9*	*19.1*
Austria	3.3	8.7	0.5	0.7	17.4
Belgium	4	19.5	0.5	0.8	46.5
Denmark	6.6	12	1.3	2.4	24.6
Finland	3.1	15.1	0.6	1	22.5
France	3	11.6	0.9	1.2	19.2
Germany	2.7	8.3	0.6	0.8	18.3
Greece	0.8	0.8	0.02	0.02	2.3
Iceland	8	10.6	0.7	1.6	32
Ireland	43.1	61.6	7.4	12.8	137.5
Italy	2.6	7	0.7	0.9	22.5
Netherlands	27.4	25.2	2.9	4.7	64
Norway	10.4	17	2.3	3	34.6
Portugal	0.7	3.5	0.1	0.1	7.7
Spain	1	6	0.1	0.2	9.9
Sweden	15.5	17.3	2.2	3	47
Switzerland	16.3	25.9	2.8	3.7	91.7
United Kingdom	11.2	14.6	4.6	7.7	41.8
Average	*9.4*	*15.6*	*1.7*	*2.6*	*37.6*
United States	.	10.1	2.3	3.6	19
Hong Kong	5.1	22.2	2.1	16.9	97.5

* 10 countries including Japan
Source: International Monetary Fund. (http://www.imf.org/external/np/sta/pi/cpis.htm)

TABLE-A4. TOTAL EQUITY ASSETS INVESTED IN EAST ASIA AND EUROPE IN 2003

A. Amount in million US$

Host Country	EQUITY ASSETS HELD BY EACH REGION				
	USA	**Europe**	**Japan**	**East Asia *.**	**Total**
China	13064	8944	2094	19625	45788
Hong Kong	36210	35223	5594	7901	92889
Indonesia	4406	2542	89	922	12597
Japan	255496	175975	.	5569	493763
Korea	49121	27702	708	3579	92822
Malaysia	4075	4862	296	3258	14544
Philippines	1634	683	158	325	3027
Singapore	21932	12579	1280	4096	42857
Thailand	6477	6746	393	4759	21291
Average	*42150*	*29590*	*946*	*3379*	*85977*
	49.0	34.4	1.1	3.9	100
Austria	3927	7998	191	262	13742
Belgium	10621	23481	802	982	47600
Denmark	10429	10060	671	2475	29775
Finland	35162	51589	1892	2016	97198
France	130761	217076	11872	13283	409700
Germany	103239	164860	8713	9446	324638
Greece	3957	5260	309	501	10972
Iceland	3	117	0	0	413
Ireland	22191	96321	3215	6322	142826
Italy	38971	88296	3764	3952	155448
Netherlands	115792	167946	5831	6278	321313
Norway	11972	8180	399	430	22767
Portugal	3949	6107	290	302	11869
Spain	43801	81956	3721	3978	145384
Sweden	27529	40567	2113	2232	79529
Switzerland	117910	120751	8204	8875	278145
United Kingdom	420684	261492	32883	67531	863045
Average	*64759*	*79533*	*4992*	*7580*	*173786*
	37.3	45.8	2.9	4.4	100
United States	.	736108	142798	159027	1228012

* 10 countries including Japan

Source: International Monetary Fund. (http://www.imf.org/external/np/sta/pi/cpis.htm)

B. Percent of the Host Country's GDP

Host Country	EQUITY ASSETS HELD BY EACH REGION				
	USA	**Europe**	**Japan**	**East Asia *.**	**Total**
China	0.9	0.6	0.1	1.4	3.2
Hong Kong	23.1	22.5	3.6	5	59.3
Indonesia	2.1	1.2	0.04	0.4	6
Japan	5.9	4.1	.	0.1	11.5
Korea	8.1	4.6	0.1	0.6	15.3
Malaysia	3.9	4.7	0.3	3.1	14
Philippines	2.0	0.8	0.2	0.4	3.8
Singapore	24	13.8	1.4	4.5	46.9
Thailand	4.5	4.7	0.3	3.3	14.9
Average	*8.2*	*6.3*	*0.7*	*1.9*	*19.1*
Austria	1.6	3.2	0.1	0.1	5.4
Belgium	3.5	7.8	0.3	0.3	15.8
Denmark	4.9	4.7	0.3	1.2	14.1
Finland	21.7	31.9	1.2	1.2	60
France	7.4	12.4	0.7	0.8	23.3
Germany	4.3	6.9	0.4	0.4	13.5
Greece	2.3	3.1	0.2	0.3	6.4
Iceland	0.03	1.1	0.0	0.0	3.9
Ireland	14.4	62.7	2.1	4.1	92.9
Italy	2.7	6	0.3	0.3	10.6
Netherlands	22.6	32.8	1.1	1.2	62.8
Norway	5.4	3.7	0.2	0.2	10.3
Portugal	2.7	4.1	0.2	0.2	8
Spain	5.2	9.8	0.4	0.5	17.3
Sweden	9.1	13.5	0.7	0.7	26.4
Switzerland	36.8	37.7	2.6	2.8	86.9
United Kingdom	23.4	14.6	1.8	3.8	48.1
Average	*9.9*	*15.1*	*0.7*	*1.1*	*29.7*
United States	.	6.7	1.3	1.5	11.2

* 10 countries including Japan
Source: International Monetary Fund. (http://www.imf.org/external/np/sta/pi/cpis.htm)

TABLE-A5. LONG-TERM DEBT SECURITIES HOLDINGS BY EAST ASIA AND EUROPE IN 2003

A. Amount in million US$

	LONG-TERM DEBT SECURITIES HELD IN EACH REGION				
Source Country	**USA**	**Europe**	**Japan**	**East Asia *.**	**Total**
Hong Kong	33652	48879	6553	22264	154096
Indonesia	367	267	3	202	1715
Japan	463351	512126	.	10726	1407173
Korea	6963	2625	72	1083	13833
Malaysia	208	330	.	122	800
Philippines	1601	149	13	243	2202
Singapore	14311	20170	1316	9916	57580
Thailand	1526	514	0	49	2224
Average	*65247*	*73133*	*995*	*5576*	*204953*
	31.8	35.7	0.5	2.7	100
Austria	11546	121443	563	842	159527
Belgium	18663	216436	575	814	264307
Denmark	14629	45565	151	436	73562
Finland	3695	59462	5	7	66278
France	84038	697638	12900	15292	909723
Germany	64634	558624	12084	13650	750020
Greece	3368	14085	10	24	29444
Iceland	43	248	0	0	319
Ireland	69564	262058	6224	6781	385738
Italy	60167	273155	1686	2394	453666
Netherlands	76083	328403	3640	5515	449007
Norway	18209	71402	6968	7492	105187
Portugal	4566	47604	22	22	71083
Spain	27226	237234	389	473	327488
Sweden	17510	42234	1839	1896	66010
Switzerland	42024	191006	3377	4294	335424
United Kingdom	210752	392475	.	7692	875658
Average	*42748*	*209357*	*2967*	*3978*	*313085*
	13.7	66.9	0.9	1.3	100
United States	.	402604	35682	53718	868948
		46.3	4.1	6.2	100.0

* 10 countries including Japan

Source: International Monetary Fund. (http://www.imf.org/external/np/sta/pi/cpis.htm)

B. Percent of the Source Country's GDP

Source Country	LONG-TERM DEBT SECURITIES HELD IN EACH REGION				
	USA	**Europe**	**Japan**	**East Asia *.**	**Total**
Hong Kong	21.5	31.2	4.2	14.2	98.4
Indonesia	0.2	0.1	0.0	0.1	0.8
Japan	10.8	11.9	.	0.2	32.7
Korea	1.2	0.4	0.01	0.2	2.3
Malaysia	0.2	0.3	.	0.1	0.8
Philippines	2	0.2	0.02	0.3	2.7
Singapore	15.7	22.1	1.4	10.9	63
Thailand	1.1	0.4	0.0	0.03	1.6
Average	*6.6*	*8.3*	*0.7*	*3.3*	*25.3*
Austria	4.6	48	0.2	0.3	63
Belgium	6.2	71.7	0.2	0.3	87.5
Denmark	6.9	21.5	0.1	0.2	34.7
Finland	2.3	36.7	0.0	0.0	40.9
France	4.8	39.7	0.7	0.9	51.8
Germany	2.7	23.2	0.5	0.6	31.2
Greece	2	8.2	0.01	0.01	17.1
Iceland	0.4	2.4	0.0	0.0	3
Ireland	45.3	170.5	4.0	4.4	250.9
Italy	4.1	18.6	0.1	0.2	30.9
Netherlands	14.9	64.2	0.7	1.1	87.8
Norway	8.2	32.3	3.2	3.4	47.6
Portugal	3.1	32.2	0.01	0.01	48.1
Spain	3.2	28.3	0.05	0.1	39
Sweden	5.8	14	0.6	0.6	21.9
Switzerland	13.1	59.7	1.1	1.3	104.8
United Kingdom	11.7	21.9	.	0.4	48.8
Average	*8.2*	*40.8*	*0.7*	*0.8*	*59.4*
United States	.	3.7	0.3	0.5	7.9
Hong Kong	21.5	31.2	4.2	14.2	98.4

* 10 countries including Japan
Source: International Monetary Fund. (http://www.imf.org/external/np/sta/pi/cpis.htm)

TABLE-A6. LONG-TERM DEBT SECURITIES INVESTED IN EAST ASIA AND EUROPE IN 2003

A. Amount in million US$

	LONG-TERM DEBT SECURITIES HELD BY EACH REGION				
Host Country	**USA**	**Europe**	**Japan**	**East Asia *.**	**Total**
China	667	658	422	2399	4018
Hong Kong	1419	2447	1574	3693	8065
Indonesia	666	549	50	1019	4091
Japan	35682	50433	.	7957	105577
Korea	4217	3360	4555	15176	24218
Malaysia	3878	3154	1409	6205	13988
Philippines	3403	4180	1156	2330	11043
Singapore	2951	2396	969	4396	11158
Thailand	835	447	591	1430	2909
Average	*5895*	*7441*	*1145*	*4690*	*20117*
	29.3	37.0	5.7	23.3	100.0
Austria	5244	136156	11014	12270	171622
Belgium	5143	109341	14148	14696	157771
Denmark	9987	55713	6471	7412	81657
Finland	5542	48537	4851	5655	64765
France	41421	410868	77412	86999	610956
Germany	69022	738555	145032	161286	1123463
Greece	1978	112816	4115	4292	128751
Iceland	130	7730	220	367	9215
Ireland	8452	107948	30209	33031	159413
Italy	24956	580899	54616	56912	743570
Netherlands	57988	503672	52835	62572	685804
Norway	8195	28992	10216	12997	56541
Portugal	1128	73384	1159	1722	82417
Spain	6293	258174	18039	19780	306729
Sweden	12755	75931	19423	22139	130133
Switzerland	1090	11914	1147	1801	19219
United Kingdom	143280	298442	61219	81129	569497
Average	*23683*	*209357*	*30125*	*34415*	*300090*
	7.9	69.8	10.0	11.5	100.0
United States	.	726717	463351	521979	1413454

* 10 countries including Japan

Source: International Monetary Fund. (http://www.imf.org/external/np/sta/pi/cpis.htm)

B. Percent of the Host Country's GDP

Host Country	LONG-TERM DEBT SECURITIES HELD BY EACH REGION				
	USA	**Europe**	**Japan**	**East Asia *.**	**Total**
China	0.05	0.05	0.03	0.2	0.3
Hong Kong	0.9	1.6	1	2.4	5.1
Indonesia	0.3	0.3	0.02	0.5	2
Japan	0.8	1.2	.	0.2	2.5
Korea	0.7	0.6	0.8	2.5	4.0
Malaysia	3.7	3.0	1.4	6.0	13.5
Philippines	4.2	5.2	1.4	2.9	13.7
Singapore	3.2	2.6	1.1	4.8	12.2
Thailand	0.6	0.3	0.4	1.0	2.0
Average	*1.6*	*1.6*	*0.7*	*2.3*	*6.1*
Austria	2.1	53.8	4.4	4.8	67.8
Belgium	1.7	36.2	4.7	4.9	52.3
Denmark	4.7	26.3	3.1	3.5	38.5
Finland	3.4	30.0	3.0	3.5	40
France	2.4	23.4	4.4	4.9	34.8
Germany	2.9	30.7	6.0	6.7	46.7
Greece	1.1	65.5	2.4	2.5	74.8
Iceland	1.2	73.5	2.1	3.5	87.7
Ireland	5.5	70.2	19.7	21.5	103.7
Italy	1.7	39.6	3.7	3.9	50.6
Netherlands	11.3	98.5	10.3	12.2	134.1
Norway	3.7	13.1	4.6	5.9	25.6
Portugal	0.8	49.6	0.8	1.2	55.7
Spain	0.8	30.8	2.2	2.4	36.6
Sweden	4.2	25.2	6.4	7.3	43.1
Switzerland	0.3	3.7	0.4	0.6	6
United Kingdom	8	16.6	3.4	4.5	31.7
Average	*3.3*	*40.4*	*4.8*	*5.5*	*54.7*
United States	.	6.6	4.2	4.8	12.9

* 10 countries including Japan
Source: International Monetary Fund. (http://www.imf.org/external/np/sta/pi/cpis.htm)

TABLE- A7. SHORT-TERM DEBT SECURITIES HOLDINGS BY EAST ASIA AND EUROPE IN 2003

A. Amount in million US$

	SHORT-TERM DEBT SECURITIES HELD IN EACH REGION				
Source Country	**USA**	**Europe**	**Japan**	**East Asia *.**	**Total**
Hong Kong	5001	6672	600	5900	27985
Indonesia	82	.	.	0	82
Japan	14059	11175	.	530	39684
Korea	38	56	0	0	94
Malaysia	0	12	.	0	12
Philippines	790	.	.	.	1313
Singapore	1320	26835	52	7238	43556
Thailand	196	17	0	0	276
Average	*2686*	*5596*	*82*	*1709*	*14125*
	19.0	39.6	0.6	12.1	100
Austria	408	2361	0	16	3236
Belgium	1703	9889	4	10	13201
Denmark	432	825	0	0	1354
Finland	103	4502	.	.	4641
France	14866	93324	1186	1747	119566
Germany	4916	7743	0	0	14293
Greece	45	500	0	0	602
Iceland	1	3	0	0	6
Ireland	86735	99796	0	0	214492
Italy	178	5573	29	29	6386
Netherlands	1033	3201	125	129	6450
Norway	970	1821	0	0	2811
Portugal	193	11804	0	0	14754
Spain	758	11222	3	3	21806
Sweden	1473	3725	0	0	5965
Switzerland	1701	10388	.	0	25351
United Kingdom	20090	63302	.	278	104055
Average	*7977*	*19411*	*79*	*130*	*32881*
	24.3	59.0	0.2	0.4	100
United States	.	151990	672	956	184994
		82.2	0.4	0.5	100.0

* 10 countries including Japan

Source: International Monetary Fund. (http://www.imf.org/external/np/sta/pi/cpis.htm)

B. Percent of the Source Country's GDP

Source Country	SHORT-TERM DEBT SECURITIES HELD IN EACH REGION				
	USA	**Europe**	**Japan**	**East Asia *.**	**Total**
Hong Kong	3.2	4.3	0.4	3.8	17.9
Indonesia	0.04	.	.	0	0.04
Japan	0.3	0.3	.	0.01	0.9
Korea	0.01	0.01	0	0	0.02
Malaysia	0	0.01	.	0	0.01
Philippines	1.0	.	.	.	1.6
Singapore	1.4	29.4	0.06	7.9	47.7
Thailand	0.1	0.01	0	0	0.2
Average	*0.8*	*4.3*	*0.1*	*1.5*	*8.5*
Austria	0.2	0.9	0	0.01	1.3
Belgium	0.6	3.3	0	0	4.4
Denmark	0.2	0.4	0	0	0.6
Finland	0.1	2.8	.	.	2.9
France	0.8	5.3	0.1	0.1	6.8
Germany	0.2	0.3	0	0	0.6
Greece	0.03	0.3	0	0	0.3
Iceland	0.01	0.0	0	0	0.1
Ireland	56.4	64.9	0	0	139.5
Italy	0.01	0.4	0	0	0.4
Netherlands	0.2	0.6	0.02	0.03	1.3
Norway	0.4	0.8	0	0	1.3
Portugal	0.1	8.0	0	0	10
Spain	0.1	1.3	0	0	2.6
Sweden	0.5	1.2	0	0	2
Switzerland	0.5	3.2	.	0	7.9
United Kingdom	1.1	3.5	.	0.02	5.8
Average	*3.6*	*5.7*	*0.0*	*0.0*	*11.0*
United States	.	1.4	0.01	0.01	1.7

* 10 countries including Japan
Source: International Monetary Fund. (http://www.imf.org/external/np/sta/pi/cpis.htm)

TABLE-A8. SHORT-TERM DEBT SECURITIES INVESTED IN EAST ASIA AND EUROPE IN 2003

A. Amount in million US$

Host Country	*Short-term debt securities held by Each Region*				
	USA	**Europe**	**Japan**	**East Asia *.**	**Total**
China	7	0	1	2809	3141
Hong Kong	32	200	12	533	821
Indonesia	0	29	2	881	948
Japan	672	1347	.	652	3026
Korea	91	373	25	2264	2729
Malaysia	0	84	0	3989	4075
Philippines	9	13	0	692	716
Singapore	118	103	458	753	1658
Thailand	27	63	32	1095	1199
Average	*105*	*246*	*59*	*1207*	*1686*
	6.3	14.6	3.5	71.6	100.0
Austria	1201	2368	0	362	5056
Belgium	1223	21059	345	1736	26309
Denmark	1725	4152	2	20	6857
Finland	422	3052	0	6	3690
France	11243	43988	1051	5561	68357
Germany	14350	56446	1007	2182	92591
Greece	0	362	0	14	407
Iceland	10	599	93	93	868
Ireland	2827	14514	289	1068	20840
Italy	3004	24271	0	97	29208
Netherlands	8413	43287	2663	5613	62064
Norway	1076	1389	193	198	2954
Portugal	199	5670	0	3	6243
Spain	1453	5283	0	66	7914
Sweden	4973	7834	61	187	21392
Switzerland	715	3862	24	504	5210
United Kingdom	99156	91843	5447	27057	232066
Average	*8941*	*19411*	*657*	*2633*	*34825*
	25.7	55.7	1.9	7.6	100.0
United States	.	135605	14059	21486	180735

* 10 countries including Japan

Source: International Monetary Fund. (http://www.imf.org/external/np/sta/pi/cpis.htm)

B. Percent of the Host Country's GDP

Host Country	*Short-term debt securities held by Each Region*				
	USA	**Europe**	**Japan**	**East Asia *.**	**Total**
China	0	0	0	0.2	0.2
Hong Kong	0.02	0.1	0.01	0.3	0.5
Indonesia	0	0.01	0	0.4	0.5
Japan	0.02	0.03	.	0.02	0.1
Korea	0.02	0.06	0	0.4	0.5
Malaysia	0	0.1	0	3.9	3.9
Philippines	0.01	0.02	0	0.9	0.9
Singapore	0.1	0.1	0.5	0.8	1.8
Thailand	0.02	0.04	0.02	0.8	0.8
Average	*0.0*	*0.0*	*0.1*	*0.8*	*1.0*
Austria	0.5	0.9	0.0	0.1	2
Belgium	0.4	7	0.1	0.6	8.7
Denmark	0.8	2	0.0	0.01	3.2
Finland	0.3	1.9	0.0	0	2.3
France	0.6	2.5	0.1	0.3	3.9
Germany	0.6	2.3	0.04	0.1	3.9
Greece	0	0.2	0	0.01	0.2
Iceland	0.1	5.7	0.9	0.9	8.3
Ireland	1.8	9.4	0.2	0.7	13.6
Italy	0.2	1.7	0	0.01	2
Netherlands	1.6	8.5	0.5	1.1	12.1
Norway	0.5	0.6	0.1	0.1	1.3
Portugal	0.1	3.8	0	0.0	4.2
Spain	0.2	0.6	0	0.01	0.9
Sweden	1.6	2.6	0.02	0.1	7.1
Switzerland	0.2	1.2	0.01	0.2	1.6
United Kingdom	5.5	5.1	0.3	1.5	12.9
Average	*0.9*	*3.3*	*0.1*	*0.3*	*5.2*
United States	.	1.2	0.1	0.2	1.7

* 10 countries including Japan

Source: International Monetary Fund. (http://www.imf.org/external/np/sta/pi/cpis.htm)

TABLE-A9. CROSS-BORDER BANK CLAIM HOLDINGS BY EAST ASIA AND EUROPE IN 2003

A. Amount in million US$

	Bank Claims Held in Each Region				
Source Country	**USA**	**Europe**	**Japan**	**East Asia *.**	**Total**
Japan	488871	441207	.	90776	1238176
Korea	10750	10744	2596	18150	50788
Taiwan China	30862	19051	4289	21802	83238
Average	*176828*	*157001*	*2295*	*43576*	*457401*
	38.7	34.3	0.5	9.5	100
Austria	3736	51957	995	4053	97814
Belgium	80825	484517	6038	24331	658014
Denmark	4086	71084	87	87	82235
Finland	7807	43785	359	849	57794
France	312637	669639	130574	179163	1353403
Germany	466975	1.60E+06	95941	162279	2576382
Greece	7425	24610	341	450	49948
Ireland	14088	281635	16416	16416	341728
Italy	25341	190880	3568	9305	328810
Netherlands	319987	649418	33702	75629	1190837
Norway	2069	10458	134	134	17192
Portugal	6857	49584	159	167	68854
Spain	27140	204188	575	1616	409445
Sweden	24903	163659	560	1897	216935
Switzerland	753963	537021	71290	108193	1565027
United Kingdom	540555	489272	48903	274479	1637409
Average	*162400*	*345107*	*25603*	*53691*	*665739*
	24.4	51.8	3.8	8.1	100
United States	.	409820	69552	165825	838340
		48.9	8.3	19.8	100.0

* 10 countries including Japan

B. Percent of the Source Country's GDP

	Bank Claims Held in Each Region				
Source Country	**USA**	**Europe**	**Japan**	**East Asia *.**	**Total**
Japan	11.4	10.3	.	2.1	28.8
Korea	1.8	1.8	0.4	3	8.4
Taiwan China	10.8	6.7	1.5	7.6	29.1
Average	*8.0*	*6.3*	*0.6*	*4.2*	*22.1*
Austria	1.5	20.5	0.4	1.6	38.6
Belgium	26.8	160.5	2.0	8.1	218
Denmark	1.9	33.5	0.04	0.04	38.8
Finland	4.8	27	0.2	0.5	35.7
France	17.8	38.1	7.4	10.2	77
Germany	19.4	65.5	4.0	6.8	107.2
Greece	4.3	14.3	0.2	0.3	29
Ireland	9.2	183.2	10.7	10.7	222.3
Italy	1.7	13	0.2	0.6	22.4
Netherlands	62.6	127	6.6	14.8	232.8
Norway	0.9	4.7	0.1	0.1	7.8
Portugal	4.6	33.5	0.1	0.1	46.6
Spain	3.2	24.3	0.1	0.2	48.8
Sweden	8.3	54.3	0.2	0.6	71.9
Switzerland	235.5	167.8	22.3	33.8	488.9
United Kingdom	30.1	27.3	2.7	15.3	91.2
Average	*27.0*	*62.2*	*3.6*	*6.5*	*111.1*
United States	.	3.7	0.6	1.5	7.7

* 10 countries including Japan
Source: The Bank for International Settlements. (http://www.bis.org/statistics/histstats10.htm).

TABLE-A10. CROSS-BORDER BANK CLAIMS HELD IN EAST ASIA AND EUROPE IN 2003

A. Amount in million US$

	Bank Claims held by Each Region				
Host Country	**USA**	**Europe**	**Japan**	**East Asia *.**	**Total**
China	4714	30241	11623	15766	51952
Hong Kong SAR	19348	183371	23440	37220	248028
Indonesia	2781	21877	5697	7526	32653
Japan	69552	409642	.	6885	495740
Korea	17375	49768	12134	14572	86479
Malaysia	9503	26976	5002	6323	43101
Philippines	4614	13210	2563	3712	21967
Singapore	15900	72098	17483	24746	119258
Taiwan China	17587	34381	4005	4385	56941
Thailand	4451	17484	8829	9593	31597
Average	*16111*	*82881*	*7915*	*11496*	*113576*
	14.2	73.0	7.0	10.1	100.0
Austria	6330	178293	4220	4339	190590
Belgium	13725	255915	12982	13686	286834
Denmark	9820	108422	4034	4291	123497
Finland	2056	48890	3523	3681	54824
France	31147	499441	58218	61153	600717
Germany	74242	711776	96717	100471	900662
Greece	6050	83383	2970	3091	92993
Iceland	59	6844	309	347	7250
Ireland	8984	236873	13397	14818	268570
Italy	27325	517649	34207	34874	583371
Luxembourg	8280	212934	38686	44939	269746
Netherlands	33980	406780	30960	32615	481812
Norway	8266	89465	2843	3043	101011
Portugal	2284	121464	1652	1877	128499
Spain	15460	309778	16456	16891	344772
Sweden	7013	95435	8631	8869	113658
Switzerland	13478	116946	8073	8571	141391
United Kingdom	141321	1.50E+06	103329	113446	1864669
Average	*22768*	*305572*	*24512*	*26167*	*364159*
	6.3	83.9	6.7	7.2	100.0
United States	.	2.60E+06	488871	530483	3358676
		77.4	14.6	15.8	100.0

B. Percent of the Host Country's GDP

Host Country	*Bank Claims held by Each Region*				
	USA	**Europe**	**Japan**	**East Asia *.**	**Total**
China	0.3	2.1	0.8	1.1	3.7
Hong Kong SAR	12.3	117	15	23.8	158.3
Indonesia	1.3	10.5	2.7	3.6	15.7
Japan	1.6	9.5	.	0.2	11.5
Korea	2.9	8.2	2.0	2.4	14.3
Malaysia	9.2	26	4.8	6.1	41.5
Philippines	5.7	16.4	3.2	4.6	27.3
Singapore	17.4	78.9	19.1	27.1	130.6
Taiwan China	6.1	12	1.4	1.5	19.9
Thailand	3.1	12.2	6.2	6.7	22.1
Average	*6.0*	*29.1*	*5.4*	*7.6*	*44.1*
Austria	2.5	70.4	1.7	1.7	75.3
Belgium	4.5	84.8	4.3	4.5	95
Denmark	4.6	51.2	1.9	2	58.3
Finland	1.3	30.2	2.2	2.3	33.9
France	1.8	28.4	3.3	3.5	34.2
Germany	3.1	29.6	4.0	4.2	37.5
Greece	3.5	48.4	1.7	1.8	54
Iceland	0.6	65.1	2.9	3.3	69
Ireland	5.8	154.1	8.7	9.6	174.7
Italy	1.9	35.3	2.3	2.4	39.7
Luxembourg	31.2	803.6	146	169.6	1018.1
Netherlands	6.6	79.5	6.1	6.4	94.2
Norway	3.7	40.5	1.3	1.4	45.7
Portugal	1.5	82.1	1.1	1.3	86.9
Spain	1.8	36.9	2	2	41.1
Sweden	2.3	31.6	2.9	2.9	37.7
Switzerland	4.2	36.5	2.5	2.7	44.2
United Kingdom	7.9	83.3	5.8	6.3	103.9
Average	*4.9*	*99.5*	*11.2*	*12.7*	*119.1*
United States	.	23.7	4.5	4.8	30.7

* 10 countries including Japan

Source: The Bank for International Settlements. http://www.bis.org/statistics/histstats10.htm.

TABLE-A11. DETERMINANTS OF TOTAL INTERNATIONAL PORTFOLIO ASSET HOLDINGS

	(1)	*(2)*	*(3)*	*(4)*
GDP of source country	0.124	0.118	0.121	0.104
	[0.009]	[0.009]	[0.009]	[0.008]
GDP of destination country	0.148	0.142	0.142	0.125
	[0.009]	[0.009]	[0.008]	[0.008]
Per capita GDP of source	0.175	0.182	0.114	0.092
	[0.013]	[0.013]	[0.012]	[0.011]
Per capita GDP of destination	0.133	0.139	0.08	0.064
	[0.011]	[0.011]	[0.011]	[0.010]
Area size of source	-0.029	-0.026	-0.037	-0.042
	[0.007]	[0.007]	[0.006]	[0.006]
Area size of destination	0.033	0.036	0.026	0.019
	[0.007]	[0.007]	[0.006]	[0.006]
Distance	-0.156	-0.151	-0.016	-0.024
	[0.017]	[0.017]	[0.016]	[0.015]
Border	0.660	0.661	0.549	0.576
	[0.091]	[0.091]	[0.083]	[0.075]
Common language	0.126	0.119	0.161	0.139
	[0.036]	[0.036]	[0.032]	[0.030]
Ex-common colonizer	0.152	0.151	0.191	0.141
	[0.069]	[0.069]	[0.063]	[0.058]
Ex-colony-colonizer	-0.109	-0.097	-0.13	-0.137
	[0.105]	[0.105]	[0.095]	[0.086]
Intra-East Asia dummy		0.427	0.578	0.647
		[0.129]	[0.116]	[0.104]
Intra-Europe dummy			2.235	2.35
			[0.074]	[0.067]
East Asia-US dummy				3.241
				[0.202]
Europe-US dummy				4.234
				[0.158]
Observation	12888	12888	12888	12888
R-squared	0.358	0.357	0.433	0.514

Note: The dependent variable is source country's cross-border holding of destination country 's total portfolio assets. It is taken logarithm after adding 1 to include all the observations with value zero. All other explanatory variables except the dummy variables are taken logarithm. Random effect estimation technique is used. Robust standard errors of the estimated coefficients are reported in parentheses. Intercept and year dummy variables are included (not reported).

TABLE-A12. DETERMINANTS OF TOTAL INTERNATIONAL PORTFOLIO ASSET HOLDINGS: CONTROLLING BILATERAL TRADE

	(1)	*(2)*	*(3)*	*(4)*
Bilateral trade (lagged)	0.686	0.733	0.667	0.591
	[0.015]	[0.016]	[0.015]	[0.015]
GDP of source country	-0.097	-0.097	-0.075	-0.064
	[0.009]	[0.009]	[0.009]	[0.008]
GDP of destination country	-0.070	-0.071	-0.052	-0.040
	[0.009]	[0.009]	[0.008]	[0.008]
Per capita GDP of source	0.197	0.181	0.125	0.106
	[0.011]	[0.011]	[0.011]	[0.010]
Per capita GDP of destination	0.140	0.126	0.080	0.067
	[0.010]	[0.010]	[0.009]	[0.009]
Area size of source	-0.004	-0.011	-0.021	-0.027
	[0.006]	[0.006]	[0.005]	[0.005]
Area size of destination	0.054	0.047	0.037	0.030
	[0.006]	[0.006]	[0.006]	[0.005]
Distance	0.030	0.029	0.121	0.103
	[0.015]	[0.015]	[0.014]	[0.013]
Border	-0.086	-0.141	-0.152	-0.050
	[0.077]	[0.077]	[0.070]	[0.066]
Common language	0.046	0.061	0.101	0.099
	[0.030]	[0.029]	[0.027]	[0.026]
Ex-common colonizer	-0.104	-0.118	-0.064	-0.073
	[0.058]	[0.058]	[0.054]	[0.051]
Ex-colony-colonizer	-0.281	-0.324	-0.329	-0.300
	[0.087]	[0.086]	[0.079]	[0.074]
Intra-East Asia dummy		-1.071	-0.818	-0.614
		[0.108]	[0.099]	[0.093]
Intra-Europe dummy			1.704	1.854
			[0.062]	[0.058]
East Asia-US dummy				1.429
				[0.176]
Europe-US dummy				3.251
				[0.136]
Observation	12888	12888	12888	12888
R-squared	0.358	0.357	0.433	0.514

Note: The bilateral trade variable is log (1+real bilateral trade volume). See notes to TABLE-A11.

TABLE-A13. DETERMINANTS OF VARIOUS TYPES OF INTERNATIONAL FINANCIAL ASSET HOLDINGS

	Equity	*Long-term Securities*	*Short-term Securities*	*Bank Claims*
GDP of source country	0.021	0.146	0.032	0.522
	[0.007]	[0.008]	[0.004]	[0.019]
GDP of destination	0.132	0.065	0.018	0.244
	[0.006]	[0.007]	[0.004]	[0.016]
Per capita GDP of source	0.097	-0.020	-0.023	0.481
	[0.010]	[0.011]	[0.006]	[0.033]
Per capita GDP of destination	-0.014	0.095	0.027	0.216
	[0.008]	[0.009]	[0.005]	[0.022]
Area size of source	0.014	-0.093	-0.019	-0.179
	[0.005]	[0.006]	[0.003]	[0.014]
Area size of destination	-0.033	0.05	0.007	0.04
	[0.005]	[0.005]	[0.003]	[0.013]
Distance	0.023	-0.016	0.007	-0.22
	[0.013]	[0.013]	[0.007]	[0.033]
Border	0.517	0.487	0.300	1.161
	[0.063]	[0.065]	[0.031]	[0.157]
Common language	0.149	0.074	0.066	0.456
	[0.025]	[0.026]	[0.013]	[0.071]
Ex-common colonizer	0.133	0.140	0.006	--
	[0.053]	[0.056]	[0.030]	--
Ex-colony-colonizer	-0.122	-0.139	-0.038	0.689
	[0.072]	[0.074]	[0.034]	[0.134]
Intra-East Asia dummy	0.545	0.426	-0.063	1.254
	[0.089]	[0.089]	[0.047]	[0.236]
Intra-Europe dummy	2.838	2.334	0.656	1.696
	[0.168]	[0.166]	[0.079]	[0.301]
East Asia-US dummy	1.472	2.164	0.648	0.665
	[0.055]	[0.055]	[0.024]	[0.108]
Europe-US dummy	4.081	3.394	2.088	1.662
	[0.131]	[0.130]	[0.054]	[0.234]
Observation	11862	11960	10068	4867
R-squared	0.329	0.432	0.211	0.622

Note: The dependent variable is source country's holding of each type of destination country's financial assets. See notes to Table-A11.

TABLE-A14. DETERMINANTS OF VARIOUS TYPES OF INTERNATIONAL FINANCIAL ASSET HOLDINGS: CONTROLLING BILATERAL TRADE

	Equity	*Long-term Securities*	*Short-term Securities*	*Bank Claims*
Bilateral trade (lagged)	0.445	0.484	0.151	0.781
	[0.013]	[0.013]	[0.007]	[0.027]
GDP of source country	-0.107	0.001	-0.014	0.200
	[0.008]	[0.008]	[0.005]	[0.019]
GDP of destination	0.003	-0.070	-0.028	-0.054
	[0.007]	[0.007]	[0.004]	[0.018]
Per capita GDP of source	0.112	0.000	-0.015	0.446
	[0.009]	[0.010]	[0.006]	[0.030]
Per capita GDP of destination	-0.010	0.093	0.027	0.196
	[0.008]	[0.008]	[0.004]	[0.018]
Area size of source	0.026	-0.075	-0.015	-0.148
	[0.005]	[0.005]	[0.003]	[0.012]
Area size of destination	-0.020	0.056	0.011	0.060
	[0.005]	[0.005]	[0.003]	[0.011]
Distance	0.116	0.083	0.039	-0.007
	[0.012]	[0.012]	[0.007]	[0.028]
Border	0.048	-0.047	0.125	0.220
	[0.057]	[0.058]	[0.031]	[0.132]
Common language	0.117	0.034	0.058	0.299
	[0.023]	[0.023]	[0.012]	[0.059]
Ex-common colonizer	-0.051	-0.067	-0.062	--
	[0.048]	[0.050]	[0.030]	--
Ex-colony-colonizer	-0.247	-0.258	-0.078	0.541
	[0.064]	[0.065]	[0.033]	[0.109]
Intra-East Asia dummy	-0.424	-0.597	-0.366	-0.317
	[0.083]	[0.080]	[0.047]	[0.199]
Intra-Europe dummy	1.486	0.870	0.211	-0.169
	[0.151]	[0.145]	[0.077]	[0.253]
East Asia-US dummy	1.101	1.767	0.529	0.318
	[0.050]	[0.048]	[0.024]	[0.089]
Europe-US dummy	3.348	2.610	1.856	0.907
	[0.116]	[0.112]	[0.052]	[0.190]
Observation	11862	11960	10068	4867
R-squared	0.329	0.432	0.211	0.622

Note: See notes to Tables A12 and A13.

TABLE-A15. VOLUME OF DIFFERENT TYPES OF FINANCING IN ASIAN ECONOMIES AND SELECTED COUNTRIES IN 2003

	Bank Loans	*% of GDP*	***Stock Market Capitalization***	*% of GDP*	***Bond Market***	*% of GDP*	*Public Sector Bonds*	*(% in total bond)*	*Private Sector Bonds*	*(% in total bond)*
	$ bn	%	$ bn	%	$ bn	%	$ bn	%	$ bn	%
Hong Kong	239.3	150.4	714.6	449.3	71.8	45.2	22.8	31.7	49.1	68.3
Indonesia	45.7	21.5	54.7	25.8	6.2	2.9	4.6	74.0	1.6	26.0
Korea	571.3	94.4	298.2	49.3	380.0	62.8	201.8	53.1	178.2	46.9
Malaysia	104.6	101.4	168.4	163.2	78.9	76.5	36.4	46.1	42.5	53.9
Philippines	23.5	29.9	23.2	29.5	2.3	3.0	1.5	64.6	0.8	35.4
Singapore	101.6	108.5	148.5	158.6	62.6	66.9	39.3	62.7	23.4	37.3
Taiwan	374.5	129.2	379.0	130.7	126.8	43.7	76.2	60.1	50.6	39.9
Thailand	113.5	75.7	119.0	79.4	63.6	42.4	48.2	75.9	15.3	24.1
Average	**196.8**	**93.1**	**238.2**	**112.7**	**99.0**	**46.8**	**53.8**	**54.4**	**45.2**	**45.6**
Japan	4,533	97.5	2,953	63.5	5,981	128.6	4,989	83.4	992	16.6
United States	8,321	73.9	14,173	125.8	20,137	178.8	12,004	59.6	8,134	40.4
U. K.	2,792	142.1	2,426	123.4	1,031	52.5	583	56.5	448	43.5

Sources: International Financial Statistics, International Federation of Stock Exchanges, Japan Securities Dealers Association, IFC Bond Database, Thai Bond Dealing Centre, Thomson Financial, CEIC, and various central banks; reproduced from Park, Park, Leung, and Sangsubhan (2004).

Notes:

1. Bank loans are domestic credit extended to the private sector. All bank loan data, except Taiwan, are reported on line 32d in the International Financial Statistics (September 2003).
2. outstanding bond data are as of end-2003, except for Japan and Singapore (end-2002), Indonesia (end-2000) and the Philippines (end-1999). Figures are local-currency denominated debt.
3. Bond figures for Hong Kong, Korea, Malaysia, Taiwan, the United States, the United Kingdom, and Japan are from central banks. Figures for Indonesia and the Philippines are from IFC Emerging Markets Information Centre Bond Database. Figures for Thailand are from the Thai Bond Dealing Centre. Figures for Singapore are estimates based on data from MAS and Thomson Financial.
4. Public sector refers to government bodies and quasi-government entities. Private sector refers to non-public sector and includes financial institutions, corporations, and overseas institutions.

6.2 ATTACHMENT-B: REGIONAL FINANCIAL COOPERATION WITHIN ASIA

Early attempts to promote regional financial cooperation to the effects of the original ASEAN-5's establishment of US$100 million Asian Swap Agreement (ASA) facility in August 1977. This was increased to US$200 million a year later to provide immediate short-term liquidity shortage solutions for members in crisis, using short term swap facilities. This was followed by the proposal to establish the Asian Monetary Fund (AMF) to supplement the resources of the IMF but was NOT supported by the US, the IMF and China, and so was put under the rug.

In November 1997, the Manila Framework Group (MFG) was established "to develop a concerted framework for Asia-Pacific financial cooperation to restore and enhance financial stability prospects in the region" [Kawai, 2004.].

Cognizant of the importance of establishing a framework by which policy dialogue and policymaking may be enhanced, the ASEAN established a Surveillance Process in October 1998. This process involved (1) a monitoring mechanism of key economic and financial variables, which might indicate the onset of a crisis; and (2) peer review mechanism to support appropriate policy response of concerned members.

The New Miyazawa Initiative, in October 1998, significantly contributed to the resolution of the crisis and facilitated the recovery process, via Japan's US$30 billion.

Shortly after, the US decided to assist in the economic recovery process of AFC-affected countries by establishing, together with Japan, the Asia Growth and Recovery Initiative (AGRI). However, despite support from the World Bank and the Asian Development Bank (ADB), it did not generate additional resources for Asia's restructuring process nor did it yield visible results [Kawai, 2004]. The good thing that came out of it though was the strengthening of the bond guarantee function of the World Bank and the ADB.

THE CHIANG MAI INITIATIVE (CMI), A HALLMARK MEASURE TO IMPROVE REGIONAL SELF-PROTECTION

In May 2000, the Finance Ministers of ASEAN+3 countries agreed to establish a regional network of bilateral swap agreement (BSA) for its members, and were thus referred to as the

CHIANG MAI INITIATIVE. The idea behind BSAs is for a country (under speculative attack) to be able to borrow foreign currency, usually US dollars, from another member country and use these funds to buy its own currency to stabilize the exchange rate. The general terms of borrowing are 90 days maturity, renewable up to seven times, with interest based on LIBOR plus a spread.[62]

The following tables record the progression of BSAs under the CMI.

TABLE-B1. BILATERAL SWAP ARRANGEMENTS UNDER CMI, as of October 2002

BSAs	CURRENCIES	SIZE (US$)
Japan-China	**Yen-RMB**	**3 billion equivalent**
Japan-Malaysia	**USD-Ringgit**	**3.5 billion**
Japan-Philippines	**USD-Peso**	**3 billion**
Japan-Korea	**USD-Won**	**7 billion**
Japan-Singapore	**USD-S$**	*
Japan-Thailand	**USD-Baht**	**3 billion**
China-Malaysia	**USD-Ringgit**	**1.5 billion**
China-Philippines	**USD-peso**	**3 billion***
China-Korea	**RMB-Won**	**2 billion equivalent**
China-Thailand	**USD-Baht**	**2 billion**
Korea-Malaysia	**USD-Ringgit**	*
Korea-Philippines	**USD-Peso**	*
Korea-Thailand	**USD-Baht**	**1 billion**

Note: * under negotiation
Source:http://www/mof/gp/jp/jouhou/kokkin/pcmie.htm, as cited in Wang[2002:91].

[62] For the 1st drawing and 1st renewal, the spread is 150 basis points and for every two renewals 50 additional basis points, subject to a maximum of 300 basis points

TABLE-B2. BILATERAL SWAP ARRANGEMENTS UNDER CMI, as of end-2003

BSAs	CURRENCIES	SIZE (US$)
Japan-Korea	**USD-Won**	**7 billion*(1-way)**
Japan-Thailand	**USD-Baht**	**3.billion (1-way)**
Japan-Philippines	**USD-Peso**	**3 billion (1-way_**
Japan-Malaysia	**USD-Ringgit**	**3.5 billion** (1-way)**
China-Thailand	**USD-Baht**	**2.0 billion (1-way)**
Japan-China	**Yen-RMB**	**3 billion***(2-way)**
China-Korea	**RMB-Won**	**2 billion*** (2-way)**
Korea-Thailand	**USD-Won or USD-Baht**	**1 billion (2-way)**
Korea-Malaysia	**USD-Won or USD-Ringgit**	**1 billion (2-way)**
Korea-Philippines	**USD-Won or USD-Peso**	**1 billion (2-way)**
China-Malaysia	**USD-Ringgit**	**1.5 billion (1-way)**
Japan-Indonesia	**USD-Rupiah**	**3.0 (1-way)**
China-Philippines	**RMB-Peso**	**1 billion*** (1-way)**
Japan-Singapore	**USD-S$**	**1 billion (1-way)**
Korea-Indonesia	**USD-Won or USD-Rupiah**	**1 billion (1-way)**
China-Indonesia	**USD-Rupiah**	**1 billion (2-way)**

Notes:
* This amount includes US$5 billion committed under the New Miyazawa Initiative.
**This amount includes US$2.5 billion committed under the New Miyazawa Initiative.
***The amounts are US equivalents.
Source: Kawai, 2004:22

TABLE-B3. STATUS OF THE BSA NETWORK, as of NOVEMBER 2004

BSAs	CURRENCIES	TOTAL SIZE (US$)
Japan-Thailand	**USD-Baht**	**3 billion**
Japan-Malaysia	**USD-Ringgit**	**1 billion**
China-Thailand	**USD-Baht**	**2.0 billion**
Japan-China	**Yen-RMB**	**6 billion**
Korea-Thailand	**USD-Baht**	**2 billion**
China-Korea	**RMB-Won**	**4 billion**
Korea-Malaysia	**USD-Ringgit**	**2 billion**
Korea-Philippines	**USD-Peso**	**2 billion**
China-Malaysia	**USD-Ringgit**	**1.5 billion**
Japan-Indonesia	**USD-Rupiah**	**3 billion**
China-Philippines	**RMB-Peso**	**1 billion**
Japan-Singapore	**USD-S$**	**1 billion**
Korea-Indonesia	**USD-Rupiah**	**2 billion**
China-Indonesia	**USD-Rupiah**	**1 billion**
Japan-Korea	**USD-Won**	**2 billion**
Japan-Philippines	**USD-Peso**	**3 billion**

Source: ASEAN Secretariat, 2005

One feature of the CMI is that its short-term liquidity support is equivalent only to 10

percent of the BSA facility. The remaining 90 percent is provided under an IMF program or an activated CCL. In this sense, the amount of liquidity available through CMI is very small compared to what global financial markets can mobilize. Nevertheless, ***the BSAs under the CMI act as a strong symbolic effect, signaling markets that liquidity is available and can be extended, if necessary. By sending a strong positive signal to the region, this form of institutional commitment therefore benefit member countries in managing capital flows by taming liquidity-related anxieties, and reducing the volatility of market sentiment and herd behavior.***

Apart from providing member countries an institutional structure to help stabilize their exchange rates, the CMI is also an avenue by which these countries have improved the efficiency with which they utilize their financial resources, particularly the build-up of reserves. [See Table-B4] Post-AFC, most Asian countries started to accumulate foreign exchange reserves to ensure themselves of a buffer in the event of a future speculative currency attack. For example, Korea's total reserves increased from US$20.4 billion in 1997 to almost US$96 billion in 2000. Thailand, the country first hit by the crisis, has almost doubled its 1997 reserves of US$26.8 to US$49.8 billion by end-2004. ***By enabling member countries to pool their excess reserves and create new credit facilities for themselves, the CMI provided a channel by which countries may balance, more effectively, the opportunity costs of holding large reserves against its perceived benefits*** [Wang, 2002].

TABLE-B4. Post-AFC Development in International Reserves (US$ billions)

	1997	1998	2000	2002	2004
Indonesia	16.6	22.7	28.5	32.0	36.3
Malaysia	20.8	25.6	29.5	34.2	66.4
Philippines	8.7	10.8	15.0	16.3	16.2
Singapore	71.2	74.9	80.1	82.0	112.2
Thailand	26.8	29.5	32.6	38.9	49.8

Source: ADB Key Indicators, 2005.

In order for the CMI to function effectively, a regional economic and financial surveillance system must be in place to support the facilitations of BSAs, and hasten the activation and disbursement process of swaps. Frequent exchange of information and policy dialogue are essential components of any meaningful financial and economic cooperation framework. Several

surveillance mechanisms have been established not only to analyze the macro-financial policies and environments of member countries, but to identify, as well, vulnerable economic spots. It is hoped that through frank and candid exchanges of views, countries maybe coaxed into formulating and executing sound and viable policies. **Table-B5** indicates that except for China's non-membership in the SEACEN, these countries participate in regional forums, especially those involving finance ministries and central banks.

TABLE-B5. REGIONAL FORUMS for FINANCE MINISTRIES AND CENTRAL BANKS[/A]

	ASEAN	ASEAN+3	MFG[/B]	APEC	ASEM[/C]	SEANZA	SEACEN	EMEAP
China	...	x	x	x	x	x	…	x
Indonesia	x	x	x	x	x	x	x	x
Korea	…	x	x	x	x	x	x	x
Malaysia	x	x	x	x	x	x	x	x
Philippines	x	x	x	x	x	x	x	x
Singapore	x	x	x	x	x	x	x	x
Thailand	x	x	x	x	x	x	x	x

Notes:
A => APEC (Asia Pacific Economic Cooperation); ASEAN (Association of South East Asian Nations); EMEAP (Executives Meeting of East Asia-pacific Central Banks; MFG (Manila Framework Group); SEACEN (Southeast Asian central Banks); SEANZA (Southeast Asia, New Zealand and Australia).
B => MFG includes IMF, WB, ADB and BIS.
C => ASEAN includes the European Commission

Source: Kuroda and Kawai (2002), as cited in Kawai (2004).

The most important of these surveillance mechanisms, as far as capital flow is concerned, is the ASEAN+3 EPRD process introduced in May 2000. This is because its focus is on monitoring regional capital flows and strengthening banking and financial mechanisms. It also supports reforms aimed at enhancing self-help and support mechanisms in East Asia and reforms related to international financial architecture. However, the mechanisms for assessing regional financial vulnerabilities is not yet as effective because (apart from ADB provision of data on member countries) there has yet to be an independent, professional organization that will prepare comprehensive analytical assessment papers to review and support the surveillance process.

SEACEN EXPERT GROUP (SEG) ON CAPITAL FLOWS[63]

The SEACEN Centre established the SEACEN Expert Group (SEG) on Capital Flows in May 2000. This was a direct response to the call for ways of managing capital flows to ensure

[63] Basic information on the SEG was sourced from the SEACEN website.

stability in regional financial markets. On 1 June 2001, the SEACEN Board of Governors (BOG) also approved the proposal by the SEG to set up an electronic data exchange facility at the SEACEN Centre. The SEG (co-chaired by BNM of Malaysia and BSP of the Philippines) has 17 member central banks, viz. the 14 SEACEN member central banks, and 3 SEACEN observers, namely the Reserve Bank of Australia, Hong Kong Monetary Authority and Bank of Japan.

The SEG's objectives are centered on (1) the development of a regional framework to promote information sharing on capital flows among members; and (2) the drawing up of concrete and practical proposals that SEG members can implement individually or collectively to enhance the management of capital flows. However, it seems that much of the work and accomplishments of SEG are linked to the first objective, specifically with respect to exchange of information. For example, in order to promote the sharing of capital flows data, the SEG has created the SEG Directory (to facilitate the exchange of information and clarification among members) and the SEG Data Templates on Capital Flows (which SEG members report on a regular basis). An electronic data exchange facility was also established but online information on capital flow-related data are secure and maybe accessed only by authorized SEG officials. Regular teleconferencing exchanges are also held to discuss trends, developments, issues and related concerns.

SEG also contributes to capacity building by holding several workshops to enhance expertise in the areas of compilation and usage of international finance statistics, risk management of capital flows and development of early warning systems. This is done with the help of experts from the Ministry of Finance of Japan, Bank for International Settlements (BIS), the World Bank, the International Monetary Fund (IMF) and international bankers.

The SEG has to accelerate its efforts and be more aggressive in mobilizing resources within its membership in order to achieve, ***as soon as possible***, its second objective which is the establishment of "concrete and practical proposals that SEG members can implement individually or collectively to enhance the management of capital flows". The attainment of this objective will have a major and direct impact on how countries within the region may approach the critical management of capital flows to maximize individual country benefits. Information sharing and surveillance are undoubtedly useful in crisis prevention, but are just means to an end. Without a concrete "Asian framework for capital flow management", no amount of policy-dialogue and information exchange will suffice as effective and sustainable means of preventing, managing and resolving the next round of crisis.

7. LIST OF TABLES

In PART 2:

Table-1. List of Leading Indicators Used in the Zhuang and Dowling EWS Model

Table-2. Summary of Policy Lessons from the AFC and Recommended Measures

In PART 3:

Table-3. List of Banking Groups in Malaysia

Table-4. Selected Financial Soundness Indicators for the Financial Corporate Sector in Singapore, 1996 - 2001

Table-5. Financial Soundness Indicators of Singapore's Commercial Banking Sector, 1998 - 2003 (in percent unless otherwise specified)

Table-6. Summary of Observance of OECD Corporate Governance Principles: Thailand and World Average

Table-7. Summary of Observance of OECD Corporate Governance Principles: Thailand and World Average

Table-8. Philippine Banking Sector Indicators, 1999-2004

In PART 6.1 (Attachment-A):

Table-A1. Total Portfolio Asset Holdings by East Asia and Europe in 2003

Table-A2. Total Portfolio Assets Invested in East Asia and Europe in 2003

Table-A3. Total Equity Asset Holdings by East Asia and Europe in 2003

Table-A4. Total Equity Assets Invested in East Asia and Europe in 2003

Table-A5. Long-term Debt Securities Holdings by East Asia and Europe in 2003

Table-A6. Long-term Debt Securities Invested in East Asia and Europe in 2003

Table- A7. Short-term Debt Securities Holdings by East Asia and Europe in 2003

Table-A8. Short-term Debt Securities Invested in East Asia and Europe in 2003

Table-A9. Cross-Border Bank Claim Holdings by East Asia and Europe in 2003

Table-A10. Cross-Border Bank Claims held in East Asia and Europe in 2003

Table-A11. Determinants of Total International Portfolio Asset Holdings

Table-A12. Determinants of Total International Portfolio Asset Holdings: Controlling Bilateral Trade

Table-A13. Determinants of Various Types of International Financial Asset Holdings

Table-A14. Determinants of Various Types of International Financial Asset Holdings: Controlling Bilateral Trade

Table-A15. Volume of Different Types of Financing in Asian Economies and Selected Countries in 2003

In PART 6.2 (Attachment-B):

Table-B1. Bilateral Swap Arrangements Under CMI, as of October 2002

Table-B2. Bilateral Swap Arrangements Under CMI, as of October 2003

Table-B3. Status of the BSA network, as of NOVEMBER 2004

Table-B4. Post-AFC Development in International Reserves (US$ billions)

Table-B5. Regional Forums for Finance Ministries and Central Banks

8. REFERENCES

ADB KEY INDICATORS. 2005.

Alexander, Arthur. 2003. *Korea's Capital Investment: Returns at the Level of the Economy, Industry, and Firm.* Special Studies Series 2. Washington. Korea Economic Institute.

Alfaro, L., S. Kalemli-Ozcan and V.Volosovych. 2005. *Capital Policies in a Globalized World: The Role of Policies and Institutions*. August.
(www.nber.org/books/ICF/alfaro-et-al8-12-05.pdf)

Amess, Kevin and Demetriades, Panicos. *Financial Liberalization and the South Korean Financial Crisis: Some Qualitative Evidence.*

APEC. *Facilitating Cross-border Flows: the True Measure of Liberalization*.
(apecsec.org.sg/chap2.html)

Ariff, M., S. Azmi and E.Y.S. Lin. *Governance Re-invented: Progress, Constraints and Remaining Agenda in Bank and Corporate Restructuring in Malaysia.*
(www.unescap.org/drpad/publication/fin_2148/chap3.pdf)

ASEAN+3 Research Group Studies.
http://www.mof.go.jp/jouhou/kokkin/ASEAN+3research.htm

ASEAN VISION 2020. http://www.aseansec.org/2357.htm

Asian Development Bank. 2001. *Corporate Governance and Finance in East Asia: A Study of Indonesia, Republic of Korea, Malaysia, Philippines, and Thailand Volume 2.* Edited by Juzhong Zhuang, David Edwards, and Ma. Virginita Capulong.

Baig, Taimur. 2001. *Characterizing Exchange Rate Regimes in post-Crisis East Asia.* IMF Working Paper WP/01/152. October.

Batunanggar, Sukarela. *Indonesia's Banking Crisis Resolution: Lessons and the Way Forward.* December 2002.
http://www.bi.go.id/NR/rdonlyres/FF08B4FB-08A8-4835-9B39-E35EB615545A/517/ibcr0212.pdf

Bello, Walden. *Siamese Twins: The Currency Crises in Thailand and the Philippines*.
(www.focusweb.org/publications/1997/Siamese%20Twins.htm)

Canlas, Dante B. 1999. Banking Risks, Financial Crises and Bank Regulation in the Philippines (Chapter 5*). In Studies on Governance and Regulation: The Philippines*, D. B. Canlas and S. Fujisaki, eds. Tokyo: Institute of Developing Economies Japan External Trade Organization. 77-98.

Capital Investment and Policy Concerns – Malaysia.
(http:// www.idrc.ca/en/ev-68157-201-1-DO_TOPIC.html)

Carlsson, Charlotte. *Go with the Flows?: Capital Account Liberalisation*. Globalization (2001).

ISSN:1935-9794.
(http://globalization.icaap.org/content/v1.1/brettonwoods.html)

Chai-Anant, Chayawadee. 2003. *Effect of Policies on Capital Flows to Emerging Markets: Evidence from a Detailed Data Sheet*. Bank of Thailand Discussion Paper (October).

Cheong, Inkyo. 2005. *East Asian Economic Integration: Korea's Perspectives.* Draft 2005-01-26.
(http://www.rieb.kobe-u.ac.jp/academic/ra/seminar/2004/seminar-datails/cheong.pdf)

Chino, Tadao. *Speech on ASEAN+3 Seminar on Management of Short-term Capital Flows and Capital Account Liberalization*.
(http:// www.adb.org/Documents/Speeches/2002/ms2002133.asp)

Cho, Yoon Jay. 2003. *The Political Economy of the Financial Liberalization and Crisis in Korea*. In C.H. Lee (ed.). Financial Liberalization and the Economic Crisis in Asia. Routledge.

Choi, Byung-Sun. 1993. *Financial Policy and Big Business in Korea: The Perils of Financial Regulation.* In S. Haggard, C.H. Lee, and S Maxfield (eds.). The Politics of Fiance in Economic Development. Cornell University Press. Ithaca.

Chua Hak Bin. 2003. *FDI in the Financial Sector: The Experience of ASEAN Countries over the Last Decade*. Monetary Authority of Singapore. March. A27

Committee on Singapore's Competitiveness: Executive Summary. November 11, 1998.
(http://unpan1.un.org/intradoc/groups/public/documents/APCITY/UNPAN004867.pdf)

Corporate Governance and Finance in the Five Affected Countries. *Corporate Governance and Finance in East Asia.*
(http://www.adb.org/Documents/Books/Corporate_Governance/Vol1/chapter1.pdf)
(http://www.adb.org/Documents/Books/Corporate_Governance/Vol1/chapter2.pdf)
(http://www.adb.org/Documents/Books/Corporate_Governance/Vol1/chapter3.pdf)
(http://www.adb.org/Documents/Books/Corporate_Governance/Vol1/chapter4.pdf)

Corsetti, G., P. Pesenti and N. Roubini. 1998. *Fundamental Determinants of the Asian Crisis: A Preliminary Empirical Assessment*. November.

Current Situation of Capital Flows in the East Asian Region.
(www.mof.go.jp/jouhou/hokkin/tyousa/tyou073d.pdf)

Danareksa Research Institute. 2004. *Toward a Regional Financial Architecture for East Asia* (Executive Summary). February.

Das, Dilip. 2005. *Anatomy of a Crisis: Asia as Ground Zero*. CJES Research Papers, No. 2005-4. Center for Japanese Economic Studies. Australia: Macquarie University.
(http://www.econ.mq.edu.au/cjes/research/2005-4Das.pdf)

Davies, Mervyn. *Capital Flows Are Not Always Good News.*
(http://www.globalagendamagazine.com/2003/mervyndavies.asp)

De Brouwer, Gordon. *Capital Flows to East Asia: The Facts.*

(http://econpapers.repec.org/bookchap/rbarbaacv/acv1999-05.htm)

Dekle, Robert and Mahmood. Pradhan. 1997. *Financial Liberalization and Money Demand in ASEAN Countries: Implications for Monetary Policy*. IMF Working Paper WP/97/36 (March).

Di Giovanni, Julian. 2002. *What Drives Capital Flows? The Case of Cross-Border M&A Activity and Financial Deepening*. Center for International and Development Economics Research Paper C01-122. (http://repositories.cdlib.org/iber/cider/C01-122)

Disyatat, P. and D. Nakornthab. 2003. *The Changing Nature of Financial Structure in Thailand and Implications for Policy*. Bank of Thailand Discussion Paper (November).

Djiwandono, Soedradjad. *Banking System Soundness and Macroeconomic Management: The Recent Indonesian Experience.* http://www.pacific.net.id/pakar/sj/banking.html

Doing Business and Investing Worldwide Series 2000. *PricewaterhouseCoopers*.
(http://efpo.fpo.go.th/efiscal/PWGuides/individualguides/DOCS/wcd00000/wcd00010.htm)

Edwards, Sebastian. May 29, 2005.
(http:// www.nber.org/books/ICF/introduction6-3-05.pdf)

Edwards, Sebastian. 1999. *The Mirage of Capital Controls*. May.
(http://www.anderson.ucla.edu/faculty/sebastian.edwards/for_aff.pdf)

Eichengreen, B. and P. Luengnaruemitchai. 2004. *Why Doesn't Asian Have Bigger Bond Markets?* NBER Working Paper 10576 (June).
(www.nber.org/papers/w10576)

Eichengreen, B., and T.J. Pempel. 2002. *Why Has There Been Less Financial Integration in East Asia than in Europe?*
(http:// globetrotter.berkeley.edu/NewGeog/FinanInteg.pdf)

Enoch, Charles. *Interventions in Banks during Banking Crises: The Experience of Indonesia.* IMF Policy Discussion Paper No- 00/2. March 2000.

Financial and Corporate Sector Restructuring in East and South-East Asia:
An Overview. (http://www.unescap.org/drpad/publication/fin_2148/chap1.pdf)

Frankel, Jeffrey A. 1992. *The Recent Liberalization of Korea's Foreign Exchange Markets, and Tests of U.S. versus Japanese Influence.* Seoul Journal of Economics, 5: 1 (Spring).

Fung, Ben; George, Jason; Hohl, Stefan; and Ma, Guonan. 2004. *Public Asset management Companies in East Asia.* BIS Occasional Paper No. 3. February.

Geneva WTO Ministerial Statement 1998.
(http://www.wto.org/english/thewto_e/minist_e/min98_e/anniv_e/sing_e.htm)

Ghosh S and Pangestu M. 1999. *Macro financial linkages and build up of vulnerabilities.* A background paper prepared for the ADB-World Bank Study on Managing Global Financial Integration in Asia: Emerging Lessons and Prospective Challenges. Draft, March.

Globalization: The role of Institution Building in the Financial Sector – The Case Study of China. August 2003. http://www.g8.utoronto.ca/g20.20030831_cs_chi.pdf

Globalization: The Role of Institution building in the Financial Sector, The Case of Indonesia. http://www.g8.utoronto.ca/g20/20031026_cs_indo.pdf

Gottschang, Thomas. 2001. The *Asian Financial Crisis and Banking Reform in China and Vietnam.* College of the Holy Cross, Department of Economics Faculty Research Series, Working Paper No. 02-02. August.

Griffith-Jones, S. and Leape, J. *Capital Flows to Developing Countries: Does the Emperor Have Clothes?* (http://www.gapresearch.org/finance/Doestheemperorhaveclothesjan2002.pdf)

Hamada, Miki. 2003. *Transformation of the Financial Sector in Indonesia.* IDE Research Paper No. 6. Institute of Developing Economies (IDE-JETRO). September.

Hernandez, L. and P. Montiel. 2001. *Post-crisis Exchange Rate Policy in Five Asian Countries: Filling in the "Hollow Middle"*? IMF Working Paper WP/01/170 (November).

Hirano, Toshihisa. *Financial Sector FDI in Asian Economies: Some Stylized Facts and Observations*. Bank of Japan. (http://www.bis.org/publ/cgfs22boj1.pdf)

Hishikawa, Isao. 2003. *Financial Sector FDI in Asia: Brief Overview.* Bank of Japan. March. (http://www.bis.org/publ/cgfs22boj2.pdf)

Intal, P. and G. Llanto. 1998. *Financial Reform and Development in the Philippines, 1980-1997: Imperatives, Performance and Challenges*. Philippine Institute of Development Studies.

International Monetary Fund (IMF). 2005. *Philippines: 2004 Article IV Consultation and Post-Program Monitoring Discussions – Staff Report; Staff Statement; Statement by the Executive Director for the Philippines; and Public Information Notice on the Executive Board Discussion*. February.

International Monetary Fund (IMF). 2004. *Singapore: Financial System Stability Assessment, including Reports on the Observance of Standards and Codes on the following topics: Banking Supervision, Insurance Regulation, Securities Regulation, Payment and Settlements Systems, Monetary and Financial Policy*. IMF Country Report No.04/104.

International Monetary Fund (IMF). 2004. *Labuan, Malaysia: Assessment of the Supervision and Regulation of the Financial Sector – Review of Financial Sector Regulation and Supervision*. IMF Country Report No. 04/391. December.

International Monetary Fund (IMF). 2004. *Transparency and Anti-Money Laundering.* (http://www.imf.org)

Ito, Takatoshi. 1999. *Capital Flows in Asia*. NBER Working Paper Series 7134 (May). (http://www.nber.org/papers/w7134)

Ji, Donghyun and Park, Jaeha. *The Korean Banking Sector: Current Issues and Future Direction.*

http://www.adb.org/Documents/Books/Rising_to_the_Challenge?Korea?korea-bnk.pdf.

Juzhong Zhuang and J.Malcolm Dowling. 2002. *Causes of the 1997 Asian Financial Crisis: What Can an Early Warning System Model Tell Us*? ERD Working Paper No.26 (October). Asian Development Bank. (http://www.adb.org/Documents/ERD/Working_Papers/wp026.pdf)

Kaminsky, Graciela L. 2003. *International Capital Flows: a Blessing or a Curse?* May. (http://www.un.org/docs/ecosoc/meetings/2005/docs/kaminsky.pdf)

Kaminsky, G., C. Reinhart & C.A. Vegh. 2004. *When it Rains, it Pours: Procyclical Capital Flows and Macroeconomic Policies*. NBER Working Paper Series 10780 (September). (http://www.nber.org/papers/w10780)

Kapur, Basant K. 2005. *Capital Flows and Exchange Rate Volatility: Singapore's Experience.* NBER Working Paper Series 11369 (May). (http://www.nber.org/papers/w11369)

Kawai, Masahiro. 2004. *Regional Economic Integration and Cooperation in East Asia.* June 7. (http://www.oecd.org/dataoecd/43/7/33628756.pdf)

Kishi, Masumi and Hidenobu Okuda. *Prudential Regulation and Supervision of the Financial System in East Asia.* (http://www.mof.go.jp/jouhou/kokkin/tyousa/tyou041g.pdf)

Krueger, Anne O. 2004. *"The Gorgeous East": What the Asian Economies Can Teach the World.* Keynote address presented at Harvard Project for Asian and International Relation (HPAIR) Business Conference. Shanghai, China. (http://www.imf-org/external/np/speeches/2004/082104.htm)

Lai, Quan B. *Currency Crisis in Thailand: The Leading Indicators.* (http://titan.iwu.edu/~econ/ppe/2000/quan.pdf)

Lamberte, Mario B. 2001. *The Philippine Payment System: Efficiency and Implications for the Conduct of Monetary Policy*. Philippine Institute for Development Studies Discussion Paper Series No. 2001-20 (November).

Lau, Lawrence J. 2004. *Remarks on "Asian Regional Economy in a Multilateral Setting"*. January.

Lindgren, Carl-Johan; Baliño, Tomas J.T.; Enoch, Charles; Gulde, Anne-Marie; Quintyn, Marc; and Teo, Leslie. 1999. *Financial Sector Crisis and Restructuring Lessons from Asia.* International Monetary Fund Occasional Paper No. 188. Washington DC.

Lipsey, Robert E. 2000. *Interpreting Developed Countries' Foreign Direct Investment*. NBER Working Paper Series 7810 (July). (http://www.nber.org/papers/w7810).

Ma, Guonan and McCauley, Robert N. 2005. *Are China's capital controls still binding?* In the joint RIETI/BIS/BOC Conference *Globalization of Financial Services in China: Implications for Capital Flows, Supervision and Monetary Policy.* Beijing, China. 19 March. http://www.rieti.go.jp/en/events/05031901/pdf/5-1_ma_2.pdf.

Manlagnit, M.C. and M.B. Lamberte. 2004. *Evaluating the Impacts of Competition Policy Reforms on the Efficiency of Philippine Commercial Banks*. Philippine Institute for Development Studies (PIDS) Discussion Paper Series No. 2004-46 (December).

McKay, Huw. 2005. *What About the Capital Account*? July 26.
(www.atimes.com/atimes/China/GG26Ad02.html)

McKinnon, Ronald I. 2001. *The Dollar Standard and its Crisis-Prone Periphery: New Rules for the Game*. August.
(www.stanford.edu/~mckinnon/briefs/EADilemma.pdf)

Mo, YK. 1999. *A Review of Recent Banking Reforms in China. BIS Policy Papers No. 7:October. In Strengthening the Banking System in China: Issues and Experience*. A joint BIS/PBC conference in Beijing, China.

Monetary Authority of Singapore (MAS). *MAS Monetary Policy Statement - October 11, 2005.*
(www.mas.gov.sg/masmcm/bin/pt1Monetary_Policy_Statement_11Oct05.htm)

Monetary Authority of Singapore (MAS). 2005. *Recent Economic Developments in Singapore, August 24*. (http://www.mas.gov.sg/masmcm/bin/pt1Home.htm)

Nasution, Anwar. 2000. *The Meltdown of the Indonesian Economy in 1997-1998: Cause, Responses and Lessons.* ASEAN Economic Bulletin. August.

Nayak, P.Jayendra. *Comment on 'Capital flows to Asian Developing Countries: Past Trends and Future Prospect'* by Pradumna B. Rana.

Ngiam Kee Kin. 2003. *Singapore's Financial Services Sector: The Road Ahead.* Institute of Southeast Asian Studies. February.
(www.tcf.or.jp/data/20030220-21_Kee-Jin_Ngiam.pdf)

Noland, Marcus. 2005. *South Korea's Experience with International Capital Flows.* National Bureau of Economic Research Working Paper No. 11381 (May).

Noland, Marcus. 2000. *The Philippines in the Asian Financial Crisis: How the Sick man Avoided Pneumonia*. Asian Survey 40(3) May – June. (http://www.jsor.org)

Oh, Junggun. Chapter IV. Governance *Reinvented: The Progress, Constraints, and Remaining Agenda in Bank and Corporate Restructuring in the Republic of Korea.* 2000.
http://www.unescap.org/drpad/publication/fin_2148/chap4.pdf.

Oh, Junggun and Park, Donghyun. *Financial Reform and Financial Crisis in Korea.*
http://www.ntu.edu.sg/nbs/sabre/working_papers/08-98.pdf.

Ojeda, R. H., R.K. McCleery and F. de Paolis. *The Economy-wide Impact of Financial Liberalization in China and India: A Computable General Equilibrium Simulation.*
(http://naid.sppsr.ucla.edu/pubs&news/public/rrseries.html)

Pangestu, Mari. 2003.*The Indonesian Bank Crisis and Restructuring: Lessons and Implications for*

other Developing Countries. G-24 Discussion Paper Series No. 23. November.

Park and Lee. *Post-Crisis Financial Reform in Korea: A Critical Appraisal* http://www.economics.hawaii.edu/research/workingpapers/WP_04-10.pdf

Poret, Pierre. 1998. *Liberalising Capital Flows: Lessons from Asia.* The OECD Observer 214 (October/November).

Portes, Richard and Rey, Helene. 1999. *The Determinants of Cross-Border Equity Flows.* NBER Working Paper Series 7336 (September). (www.nber.org/papers/w7336)

Prasad, E. and S. Wei. 2005. *The Chinese Approach to Capital Inflows: Patterns and Possible Explanations*. NBER Working Paper Series 11306 (April). (www.nber.org/papers/w11306)

Progress and Institutional Arrangements for the Chiang Mai Initiative, 06 October 2003. (http://aric.adb.org/docs/CMI_rev.pdf)

Rajan, Ramkishen S. 2004. *Asian Economic Cooperation and Integration: Sequencing of Financial, Trade and Monetary Regionalism*. July. (http://www.economics.adelaide.edu.au/staff/rrajan/pubs/Asiacointfinal.pdf)

Rajan, Ramkishen S. 2002. *Safeguarding Against Capital Account Crises: Unilateral, Regional and Multilateral Options for East Asia*. Center for International Economic Studies Discussion Paper No. 0201 (January).

Rana, Pradumna B. *Private Capital Flows to Asian Developing Countries: Past Trends and Future Prospects*.

Razin, Assaf. 2002. *FDI Contribution to Capital Flows and Investment in Capacity.* NBER Working Paper Series 9204 (September). (http://www.nber.org/papers/w9204) A26.

Regional Financial Cooperation Among ASEAN+3. (http://www.mof.go.jp/english/if/regional_financial_cooperation.htm)

Report of the Sub-regional Seminar on Governance Re-invented: the Progress, Constraints, and Remaining Agenda in Bank and Corporate Restructuring in East and South-east Asia. May 30 – June 1, 2001. South Korea.

Shanmugaratnam, Tharman. 2005. *Asian Fianacial Market Development and Integration.* Pravasi Bharatiya Divas 2005. January. Mumbai, India.

Shirai, Sayuri. (n.d.) *Banking Sector Reforms in the People's Republic of China: Progress and Constraints.* www.unescap.org/drpad/publication/fin_2206/part3.pdf

Siamwalla, Ammar. *Picking up the Pieces: Bank and Corporate Restructuring in Post-1997 Thailand.* (http://www.info.tdri.or.th/reports/published/picking.pdf)

Speech of Mr. Heng Swee Keat, Managing Director MAS, at the 32nd Annual Dinner of the Association of Banks in Singapore. July 14, 2005. (www.mas.gov.sg/masmcm/bin/pt1Speech_by_MD_Heng_Swee_Keat_at_ABS_dinner_2005.htm)

Sussangkarn, Chalongphob. 2000. *A Framework for Regional Monetary Stabilization*. NIRA Review (Autumn).

Tanikawa, Hiroya. 2004. *Pitfall of Envisaged "East Asian Economic Integration" - Implications of Expanding Imbalances in the Global Economy*. RIETI. June 8.
(http://www.rieti.go.jp/en/columns/a01_0132.html)

Thailand Monetary Policy.
(www.bot.or.th/BOTHomepage/BankAtWork/monetary&fxpolicies/)

The Joint Ministerial Statement of the 8th ASEAN+3 Finance Ministers' Meeting. May 4, 2005. Istanbul, Turkey.
(http://www.mof.go.jp/english/if/as3_050504.htm)

Vichyanond, Pakorn (n.d). *Management of Financial Flows in Southeast Asia.* Thailand Development Research Institute.
(http://www.unu.edu/hq/academic/Pg_area4/Vichyanond.html)

Wang Seok-Dong. 2002. *Regional Financial Cooperation in East Asia: The Chiang Mai Initiative and Beyond*. Bulletin on Asia-Pacific Perspectives 2002/03.

Williamson, John. 1999. *Whether and When to Liberalize Capital Account and Financial Services.* World Trade Organization Staff Working paper ERAD-99-03 (September).

Williamson, J., S. Griffith-Jones and R. Gottschalk. 2003. *Should Capital Controls have a Place in the Future International Monetary System*? May.
(http://www.stephanygj.com/_documents/Should_Capital_Controls_have_a_Place_in_the_Future_International_Monetary_System.pdf

World Bank. *Managing Capital Flows in East Asia*.
(http://www.itcilo.it/english/actrav/telearn/global/ilo/globe/eastasi2.htm)

World Bank. *Study on Korea's Corporate Bond Market and Its Implications on China's Bond Market Development.* World Bank Country Study Paper. January 2004.

World Economic and Social Survey 2005. *International Private Capital Flows.*

Xiao, Geng. 2004. *People's Republic of China's Round-tripping FDI: Scale, Causes, and Implications.* Asian Development Bank Institute Discussion Paper No.7. July.

Xiaopu, Zhang. *Capital Account Management and its outlook in China*. BIS Papers No 15.
http://www.bis.org/publ/bpppdf/bispap15f.pdf.

Yu Yongding. 2001. *On East Asian Monetary Cooperation*. Research Center for International Finance Working Paper Series No. 02. Chinese Academy of Social Sciences. August.

www.worldbank.org/ifa/Philippinesrosc.pdf

www.worldbank.org/ifa/rosc_sr_phl.pdf

www.worldbank.org/ifa/rosc_cg_malaysia.html

www.worldbank.org/ifa/rosc_cg_tha.pdf

www.worldbank.org/ifa/rosc_kor.htm

www.worldbank.org/ifa/rosc_china.html

www.worldbank.org/ifa/rosc_cg_idn.pdf

http://cf.heritage.org/index2004test/country2.cmf?id=singapore

9. List of Authors

Naoyuki Yoshino (Project Co-Leader)
Professor, Keio University
Director, Financial Research and Training Center of the Financial Services Agency

Koichi Suzuki (Project Co-Leader)
Executive Vice President, Daiwa Institute Research
Visiting Professor, Graduate School for Business Nihon University

Kazutomo Abe
Professor, Tokyo Denki University
Research Advisor, National Institute for Research Advancement

Soko Tanaka
Professor, Chuo University

Masaki Yamaguchi
Assistant Professor
Yamagata University

Jong-Wha Lee
Professor, Economics Department
Director, International Center for Korean Studies

Doo Yong Yang
Director, Korean Institute for International Economic Policy

STEVEN GOULDEN
Research Assistant, Daiwa Institute of Research

Mark Rushworth
Research Assistant, Daiwa Institute of Research