Management of Financial Flows in Southeast Asia

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Abstract

International capital flows are highly sensitive not only to interest rates and exchange rates but also to macroeconomic potential and stability, as verified by the surge of capital inflows to emerging markets in the first half of 1990's. Formats and end uses of these flows are very important because these characteristics affect external debt servicing capacity as well as vulnerability of recipient countries. What is more threatening is the colossal size of these capital flows as compared to foreign exchange reserves and typical economic profiles of small debtor countries. Due to those features, once allowed to move freely across border, foreign capital can have predominant impact on recipient economies in various respects including growth, stability, inflation, and effectiveness of domestic economic policies.

The miserable financial meltdown in southeast Asian economies in 1997 is a clear-cut evidence of the influences of capital flows. In the middle of 1990's, export downturn, upswing of U S. dollar value, and dollar-pegging exchange rates led to ominous current account deficits. Worse yet, financial institutions' asset quality deteriorated markedly as a result of financial deregulation adopted when both financial institutions and their regulators plus supervisors were not ready. All these negative factors weakened confidence of both lenders and borrowers to a large extent and raised widespread doubts about how the governments could maintain the prevailing exchange rate pegging policy. The situation was aggravated by speculators Consequently, a flood of capital outflows pressured Thailand to float her currency and sparked a financial crisis which was not only severe but also contagious.

Explicit lessons from such painful experiences are that the following issues deserve very strong attention from policy makers timing of measures, formats as well as end uses of capital flows, and policy consistency or coordination. Moreover, recipient countries have to care very much for investor confidence, since investors' decisions can lead to such a huge volume of capital flows that small developing countries are hardly able to endure

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1. Macroeconomic Imbalance

1.1 From a macro perspective, the strong momentum of current account deficits or savings-investment gap in southeast Asia in the mid-1990's was largely spurred by excessive investment funded by capital inflows. A crucial factor that contributed to the surge in capital inflows to emerging markets in the early to mid-1990's was the decline in asset yields in industrial countries. Weak economic performances of many industrial countries in that period led to accommodative monetary policies, abundant liquidity, and low interest rates. These in turn depressed dividend yields as well as ratios of corporate earnings to equity values. Declines in asset yields in industrial countries made the emerging countries an increasingly attractive investment opportunity. Moreover, exchange rates of ASEAN-4, Hong Kong, and Taiwan were closely linked to the U.S dollar, entailing little exchange risks to investment flows from industrial countries. In addition, international wealth-holders were impressed by Asian robust momentum of economic growth and high interest rates throughout the first half of 1990's (Table 1)

1.2 The unusually successful performances of Asian economies attracted rapid growth of net capital inflows to the region during the early to mid-1990's. At that time, Indonesia, Malaysia, and Thailand experienced average real GDP growth above 7% p.a. The Philippines was the only laggard among ASEAN-4, yet its growth gradually rose to above 5% by 1995-96. These swift Asian growth paths were heavily fuelled by external trade. Quick and outward-oriented growth was not the only feature that attracted foreign investors. Macroeconomic stability played an important role as well.

1.3 By developing country standard, inflation was moderate or below 10%, except the Philippines in 1989-91. And the absence of significant fiscal imbalances in most cases confirmed the discipline of macroeconomic policies. Among the ASEAN-4, only the Philippines incurred persistent general government deficits in the late 1980's and 1990's. Thailand, in contrast, recorded general government surpluses

every year between 1988 and 1996 Given such healthy fiscal positions, the sizable external current account deficits were not due to public dissaving but shortfalls of private saving relative to private investment. Moreover, those shortfalls were not associated with low savings but rather with extraordinarily high investment, which was linked to these countries' growth records. In other words, a sizable part of this investment was financed by foreign capital attracted by relatively high returns.

2. Capital Formats

2.1 Formats of capital inflows posed challenges in terms of their contributions to productivity and repercussions upon recipient countries' macroeconomic policies as well as financial systems. In these respects, foreign direct investment and other long-term flows were superior to short-term flows, especially the ones into banks and other financial institutions. Unlike China and Vietnam (where foreign direct investment dominated net private inflows), ASEAN-4 and Korea before the crisis chose to rely upon growing shares of short-term debts (Table 2) which brought about a large degree of volatility to flows of funds across border. In Thailand, for example, short-term inflows were abundant amounting to 7-10% of GDP each year during 1994-96, while foreign direct investment languished at about 1% of GDP.

2.2 Remarkable increases of net capital inflows into almost every region (except Africa) in the first half of 1990's are immediately evident in Table 3. Asia kept on capturing the largest portion (42%) of developing countries' net private capital flows. Another distinguished feature of Asia is that its net capital inflows in the form of short-term credits, listed under the category "other net investment," represented the biggest among all continents'. This verifies that Asian countries attracted strong attention from international investors and financial intermediaries in the early 1990's. That is particularly so in ASEAN-4. Table 4 demonstrates that ASEAN-4 absorbed rising net private capital flows. Within all members of ASEAN-4, Thailand was the most reliant (10.2% of GDP in 1989-95) and debt commitments far overwhelmed both foreign direct investment and portfolio investment.

2.3 Among the incentives encouraging borrowings from abroad were capital account liberalization, relatively high domestic interest rates by international standards, and exchange rate policies that appeared to provide assurance that the price of foreign currency would not increase to outweigh interest differentials. Burgeoning capital inflows resulted in growing foreign exchange reserves, increasing commercial banks' liquidity and foreign liabilities. Any country's foreign exchange reserves should then be measured not just in terms of import spending but also foreign liabilities. For instance, Thailand's foreign exchange reserves more than doubled between early 1992 and early 1996 (reaching the peak at US$ 38 billion), while during the same period its commercial banks' foreign liabilities grew from US$5 billion to US$ 46 billion, or from 6% to 24% of their total liabilities.

2.4 One salient feature of the Thai economy, which is similar to some of its Asian neighbors, is the prevalence of family businesses. This tightly knit family relationship is applicable to a large number of business segments in Thailand, including local public companies listed in the stock market. Along the growth path, even though these family businesses were considerably dynamic, they always tried their best to retain management authority within their families. That is an underlying reason why both domestic and foreign debts were hinged upon to a much larger extent than equity as a source of finance. Even among non-financial firms listed in the equity market, their average debt-to-asset ratios surged from 1.58 in 1994 to 1.98 in 1996. In the meantime, their debt servicing capacity, as measured by the ratio of before-tax and before-interest revenue to debt outstanding, fell from 14.2% to 10.7%.

2.5 Family businesses did not neglect tapping funds from the local stock market. But the funds mobilized from such source were not meant to substitute for debts. Instead, they were intended to serve as a stepping stone for further borrowing via debt instruments.

2.6 Two other reasons favor debt financing. First, similar to those in several other countries, Thailand's tax system allows private corporations to deduct interest payments, but not dividends, as expenses before tax computation. Such allowance gives a privilege to debt financing (over equity) in lowering the overall cost to

borrowing entities Moreover, this tax distortion is also resorted to as a means to evade tax burden. For instance, instead of directly utilizing their own funds as equity, private companies deposited such funds at financial institutions and borrowed the same amount back so as to gain tax deduction. Second, tedious procedure of raising funds via equity and the absence of bond markets encourages borrowers to count upon debts as a primary source of financing.

2.7 Access to offshore funds or BIBF corresponded well to the preference of Thai family businesses, as low foreign interest rates together with minimal exchange risks (due to basket-pegged exchange rate policy) helped reduce their operating costs but not their management control. It is thus unsurprising to find that private non-bank entities accounted for most of the colossal increase in the country's external debt outstanding after the authority liberalized capital account.

3. Usage and Impact

3.1 Streams of abundant capital inflows accelerated growth of private sector credits. In Thailand, for example, the growth of private sector credits rose from 20% in 1992 to 30% in 1994 or more than twice the growth rate of nominal GDP. Overheating or excessive credit growth fuelled demand expansion and raised momentum of inflation as well as external current account deficits--especially in Malaysia and Thailand. Malaysia's inflation more than doubled from 1.9% p.a. in 1987-89 to 4.0% p.a. in 1990-95 while her current account moved from an annual surplus of 4.8% of GDP to an annual deficit of 6.2% of GDP during the same interval. Rates of inflation during 1993-96 were in most cases higher than the weighted average of trading partners' inflation rates, thus contributing to the erosion of competitiveness. There were also clear signs of asset price inflation, particularly in real estate as well as equity markets.

3.2 The underlying cause of all the above-mentioned problems is how foreign capital was (mis)used. Instead of funding export projects or foreign exchange earning/saving activities, a sizable portion of those capital inflows rushed into short-term and speculative sectors such as real estate and stock markets. That is true even in the case of foreign direct investment. The data from Thailand reveal that

during the period of capital glut (1993-96) 37% or roughly a third of net foreign direct investment clustered in the real estate sector (see Table 5)

3.3 After 1995 two external factors aggravated the strains on the current account of ASEAN-4 : downturn of export markets and upswing of the U.S. dollar exchange rate. The trade-weighted average growth of trading partners' imports weakened from 11-12% in 1994-95 to 8% in 1996. This slackening was attributed to the following : a widespread deceleration of imports by industrial countries stemming from sluggish economic activity in Europe and a decumulation of inventories, a glut in the global electronics market that resulted in a sharp fall in prices, and a slowdown of growth in much of the Asian region itself--including China, India, Malaysia, and Thailand--partly in response to measures undertaken in some countries to contain the emerging overheating pressures As regards exchange rates, after 1995 the U.S. dollar recovered at a very quick pace (Chart 1). For example, it rose from 94.06 yen in 1995 to 108.78 yen in 1996 and 121.06 yen in 1997. Because ASEAN-4 pegged their exchange rates closely to the U.S. dollar, their substantial currency appreciation meant that the degree of competitiveness in international arena dwindled to a large extent.

3.4 On top of capital account liberalization, the financial deregulation undertaken by ASEAN-4 in consonance with the global pressure raised the degree of risks and vulnerability to deterioration of financial institutions' asset quality. Such adverse impact was due to three primary causes First, amid stronger competition due to foreign capital, limited experience among local financial institutions in the pricing and management of risks in new areas of business practice led to imprudent lending or credit commitments. Second, inadequacies in the regulations and supervision of financial institutions served as loopholes to modern practices in banking and finance. Third, inefficiency on the part of central authorities' regulatory personnel, due to their lack of experience, further worsened structural weaknesses of the Asian financial sector In short, the management of, and the supervision plus regulations of, financial institutions paid too little attention to prudent analysis and containment of risks. Consequently, asset quality declined to an alarming degree while the number/amount of non-performing loans as well as bankruptcies grew unprecedentedly. It should be noted as well that negative effects of initial imprudence were exacerbated by

subsequent events, i.e. economic slowdown, tighter financial policies, decline in domestic real estate and equity markets, and eventual currency depreciation that placed in difficulty customers with uncovered foreign currency liabilities. Overall, in addition to threatening deficits on the external account, weak financial sector further undermined confidence of both debtors and investors, leading to Asian financial crisis.

4. Critical Stage

4.1 After periodic episodes of speculative attack in 1996, the Thai baht came under downward pressure again in January-February 1997, as currency traders questioned more about the sustainability of the U.S. dollar peg in the presence of a large current account deficit and erosion of external competitiveness due to the dollar's continual rise against the yen and growing excess (Thai minus U.S) inflation. Though the authorities were at that time able to defend the baht through spot and forward intervention and temporary rise in interest rates, market traders viewed the measures as inadequate, especially when fundamental weaknesses in the financial sector were not remedied and equity prices continued sliding. Meanwhile, there was little market nervousness in neighboring ASEAN-4 countries, which were less affected by the export slowdown in 1996 and encountered far smaller current account deficits. However, as the situation in Thailand deteriorated, worries that financial sectors in these countries might also be exposed to property gluts contributed to a downturn in equity prices, particularly in Malaysia and the Philippines.

4.2 Severe pressures on the Thai baht reemerged in early May 1997, prompting the central bank to intervene heavily in the spot and forward markets, before moving on May 15 to introduce capital and exchange controls, aimed at segmenting the onshore and offshore markets, and allow interest rates to rise. However, these measures failed to restore confidence in the currency, and strong pressures continued in the second half of May and June. On this occasion, the neighboring ASEAN-4 countries suffered limited spillover effects, but these pressures abated fairly quickly as the authorities intervened in their exchange markets, raised

interest rates, and, in the case of Malaysia, introduced limits on swaps by nonresidents not related to commercial transactions.

4.3 Underlying these currency attacks was a tightening in global financial conditions resulting from the sudden rise in Japanese bond yields and the sharp rebound of yen, which reduced the attractiveness of borrowing in Japan to finance investment in high-yielding markets elsewhere, including Thailand which was heavily reliant on short-term capital inflows. International investors--commercial banks, investment banks, and hedge funds--played a role alongside domestic investors in taking short positions against the baht, which they viewed as providing a one-way bet given the exchange rate peg, weak fundamentals, and relatively low funding costs.

4.4 Large and continual capital outflows made it inevitable for Thailand to abandon its exchange rate peg against the U.S. dollar-dominated basket on July 2 and allow the baht to float. After dropping initially by 10%, the baht continued to falter because of intensified worries about politics, an economic package to support the new exchange regime, and weaknesses in the financial system. The fall of the baht value immediately raised doubts about the viability of exchange rate arrangements in neighboring countries.

4.5 The initial victim was the Philippines, where the authorities had also maintained an exchange rate peg to the U.S dollar. After trying briefly to defend the peg through interest rate hikes and intervention, the authorities floated the peso on July 11, and subsequently imposed restrictions on the sale of nondeliverable forward contracts to nonresidents in an attempt to limit speculation against the peso. Spillover effects spread quickly to Malaysia, where the authorities opted to allow the ringgit to depreciate rather than raise interest rates, and also to Indonesia, where on July 21 the rupiah fell sharply within the official intervention band Subsequent measures to tighten liquidity condition in Indonesia failed to stem the growing exchange market pressures, and the authorities allowed the rupiah to float on August 14. At the time of the rupiah's float, the Thai baht weakened by a cumulative 18% against the U.S. dollar, compared with more moderate falls of other ASEAN-4 currencies by around 10%.

4 6 The situation, however, worsened markedly in September and October 1997, reflecting concerns about the effects of currency depreciation and higher domestic interest rates on highly leveraged corporate and financial sector balance sheets, and about the authorities' commitment to implement policies needed to restore exchange rate stability. The imposition of controls on capital outflows during the crisis further undermined investor confidence Although hedge funds played a role in the crisis of the Thai baht, they were not a major driving force behind the downward pressures on ASEAN currencies in the third quarter of 1997. Instead, domestic investors, debtors seeking to hedge their foreign currency exposures, and international commercial as well as investment banks played important roles in paring down domestic currencies. By mid-October, the cumulative declines of currency value versus the U.S. dollar exceeded 30% for Indonesia and Thailand and 20% for Malaysia and the Philippines.

4.7 As the southeast Asian crisis deepened, spillover effects began to spread to other countries in Asia, reflecting the same concerns (export competitiveness and soundness of financial system) The Singapore dollar and New Taiwan dollar weakened moderately in July, and the Hong Kong dollar came under temporary attack in early August. Contagion of financial crisis could easily occur in other parts of the world because of three primary reasons. First, financial markets around the world are linked up with each other to a large degree by technological advancement. Second, owners of surplus funds ordinarily diversify their investments to different countries or continents in order to maximize returns while limiting risks. Third, financial crisis in one country or continent typically has adverse psychological impact upon investor confidence in other countries or continents. Therefore, globalization of financial crises, as a result of the one in southeast Asia, could come as no surprise.

4.8 Table 3 demonstrates that the 1997 reduction in developing countries' net private capital inflows were entirely due to Asia. Within Asia, Thailand was not the only country which saw a drastic plunge of net capital inflows. The Philippines, Indonesia, and Malaysia were in a similar plight.

5. Consequences

5.1 Ordinarily, foreign capital serves a crucial driving force in most developing countries' economic development The pace of economic growth in ASEAN-4 therefore slackened to a marked extent in 1997, as displayed in Table 1. Industrial countries, on the other hand, were largely unaffected. Given a prolonged recession in Japan since the bubble burst, it remains ambiguous how much of her economic showdown in 1997 was attributed to the southeast Asian financial crisis.

5.2 The correlation between net capital inflows and economic growth is reconfirmed by the data in Table 4 and Table 1. In 1997 Thailand suffered the most, as net private capital outflows reached 10.9% of GDP, the total opposite of what had happened 6 years earlier (which had seen net inflows of 8-12% of GDP p.a.). That is why her economy came to a standstill in 1997, while other ASEAN members' encountered only minor setbacks. Meanwhile, the momentum of economic downturn was more than enough to offset the inflationary impact of currency depreciation.

6. Lessons

6.1 One very important reason why Thailand spearheaded the Asian financial crisis is that not only did a dominant portion of her external debts belong to financial markets which were highly sensitive to up-to-date news (unlike foreign direct investment), but an enormous share of those financial debts were short-term (Table 2), making the country's financial status extremely vulnerable to changes in market sentiments. Consequently, sudden decrease of investor confidence can, and did, spur foreign creditors or investors to immediately retrieve their funds. Simultaneously, once panicked by possible or further currency devaluation and therefore more debt burden, short-term debtors rushed to terminate, instead of rolling over, their external debt obligations These pressures generated primary momentum behind detrimental net capital outflows from Thailand in 1997.

6.2 It should be noted that the southeast Asian crisis differs from many previous crises in that the affected countries had high saving rates and government surpluses. However, their excessive investment, rigid exchange rates, too early a

domestic financial liberalization, lack of transparency, and ineffective law enforcement created doubts among traders and speculators about sustainability of stable exchange rates. The resulting vulnerability to capital outflows was reinforced by heavy reliance upon short-term external debts.

6.3 Korea serves as another good example of excessive investment, lax discipline, government intervention, and high vulnerability. Large corporate conglomerates (chaebols) opted for heavy dependence on debt instead of equity finance. Corporate entities that encountered financial difficulties were kept alive by debt rollovers, often demanded by government authorities. The vulnerability of the banking system was increased by large exposures to chaebols, compulsory lending to small- and medium-sized enterprises, politically influenced lending, and credit channeling from abroad Therefore, a large number of Korean firms received increasing amounts of short-term foreign currency debts, little of which were hedged.

6 4 The management of, and the supervision plus regulations of, Korean financial institutions paid too little attention of prudent analysis and containment of risks. According to unofficial estimates, at the end of 1996 banks' nonperforming loans, net of reserves, already reached 70% of their equity, indicating very poor asset quality. During 1997, an unprecedented number of chaebols moved into bankruptcy as a result of several factors, including excessive investment (in such sectors as steel and autos) and cyclical downturn.

6.5 Strong government intervention (via directed credits, regulations, and subsidies) heavily influenced Korean industrial structure. Worse yet, true fiscal positions were not as tight as they appeared to be, because of extrabudgetary and quasi-fiscal operations The resulting lack of market discipline contributed to the problem of unproductive or excessive investment that played an important role in the buildup to the crisis. Fortunately, those substantial short-term external debts of Korea were clustered among few conglomerates, so debt renegotiations were much easier and more successful than the similar attempts in Indonesia, where not only were debts widely scattered but political instability debilitated investor confidence.

6 6 Singapore, in contrast, was least affected by the recent capital account crisis because it had prudent banking regulations and rigorous supervision. Neither cronyism nor nepotism nor corruption distorted the allocation of resources. Public officers acted as referees, not participants in the market, and good transparency functioned to check abuses of power and privilege.

6.7 Even though Singapore faced considerable net outflows of portfolio investment in 1996-97, such event represented temporary market reactions to export downturn (especially electronics) and Asian financial crisis. Given that Singapore has a firm command on economic and institutional fundamentals, those disturbances turned out to be only transitory.

6.8 In the countries most affected by the crisis, the key factors that led to the difficulties are the following (a) failure to dampen overheating pressures manifested itself in large external deficits and property plus stock market bubbles; (b) too long a peg of exchange rates encouraged excessive foreign borrowing without hedging; (c) formats of foreign borrowing mattered very much in that short-term debts generated extreme vulnerability while foreign direct investment was at the opposite end; (d) lax rules and financial oversight precipitated deterioration of banks' asset quality; (e) poor transparency induced speculation; (f) political disarray and uncertainties weakened investor confidence

7. Outlook

7.1 In 1998 and 1999 the U.S. Federal Reserve is likely to raise its interest rate because of the following reasons. Thus far, several economic data demonstrate that the U.S. economy is nearing the peak of its business cycle. For instance, the unemployment rate dipped to the lowest level in two decades. Elevating interest rates will certainly serve as a preemptive measure against inflation. Even though it has been argued that various U.S. industrial sectors have already achieved considerable restructuring benefiting from advancement of technology, records in the past rarely indicate that incremental worker productivity outstripped inflationary pressure for a long period of time. It is the pace of inflation, instead, that tends to persist if not subdued at its earliest. Once the U.S. starts to hike its interest rate, the Asian financial

crisis will deteriorate as the U.S. now serves as a vital export market for most emerging Asian countries. Worse yet, higher interest rates will accelerate recycling of funds back to the U.S.

7.2 What is more threatening is the shifting of capital flows towards Europe mainly due to currency unification in 1999 Under the new tightly linked Euro currency system, European business entities will receive better credit rating from international capital markets owing to firm currency commitments of credible monetary authorities, such as the Bundesbank and the newly established European Central Bank, regarding minimal exchange risks and sustainability of Euro. Moreover, given that European corporates are inclined to hinge more upon commercial banks' funding than their American rivals who typically lean towards debentures and securities issuances, international financial institutions will be tempted to feed more funds to European corporates than those elsewhere. Unsurprisingly, the IMF believes that Middle East and Europe will represent the only continent which receives more net private capital inflows in 1998 (Table 3).

7.3 Asia, in contrast, is suffering the loss of investor confidence after the financial crisis in 1997. Its total net private capital inflows plunged from US$ 102.2 billion in 1996 to US$ 38 5 billion in 1997 and only US$ 1.5 billion in 1998. Such drop was largely attributed to short-term net outflows, while sizable net portfolio outflows were also distressing. The situation in 1998 is like the converse of 1996 except foreign direct investment which remains firm, reflecting promising long-term prospects as viewed by foreign direct investors.

7.4 Another factor which may aggravate the Asian balance sheet is that the Euro currency unification requires stringent fiscal and monetary policies on the part of 11 participating member governments Therefore, higher interest rates are expected in Europe, attracting or retrieving funds from Asia. Meanwhile, in the midst of bleak status, the suffering Asian economies are not expected to raise their interest rates further, so they can hardly count upon interest rate differentials as a means to capture foreign capital. Instead, they have to improve their economic fundamentals to a

satisfactory and sustainable level, otherwise foreign investors can readily shift their funds elsewhere.

7.5 One notable feature in 1998 and 1999 is that the east Asian countries which are hard hit by the financial turmoil -- Thailand, Indonesia, and Korea -- will score current account surpluses as a result of imports declining more than exports. What is questionable is whether these surpluses are adequate to compensate for net capital outflows. If not, the consequential balance-of-payments deficits will exacerbate the prevailing financial distress as well as declining investor confidence.

8. Thailand

8.1 As Thailand's financial crisis triggered a series of economic difficulties in several east Asian countries, it is worth investigating the causes in detail. To be included as well are socio-political characteristics and private-public interactions, some of which are common across Asian cultures.

8.2 Two central policy issues, exchange rate and handling of problems at private financial institutions, deserve strong attention, since not only did they involve various parties and generate widespread repercussions, but they actually spurred up critical tension in financial markets and weakened investor confidence to a large degree.

8.3 In 1990 Thailand started recognizing Article VIII of the IMF, which led to three rounds of foreign exchange control liberalization (in May 1990, April 1991, and February 1994). Another pivotal episode was the establishment of the Bangkok International Banking Facilities (BIBF) in March 1993 to serve as a groundwork for international banking services and mobilizing capital across border to support regional economic growth. The Bank of Thailand (BOT) quoted more competition and development of financial system as underlying rationale An immediate question is whether the BOT was aware that once local exchange rate was not market-determined, opening up the country's capital account would totally nullify effectiveness of monetary policies, since capital inflows (outflows) induced by higher (lower) domestic interest rates would cancel the intended tightening (loosening) of domestic

liquidity. Conceptually, the only discretionary instruments that remained effective were exchange rate and fiscal policy.

8.4 Three perplexing points about BOT's actions are as follows. First, according to internal reports, before starting BIBF, BOT was well-aware that liberal capital transactions would limit the capability of monetary policy if exchange rates continued to be tightly pegged to the basket Second, that basket-pegged exchange rate policy, which was initiated in 1984, was kept in use even after the capital account was liberalized and BIBF went into effect. Third, fiscal policy was largely neglected as a means to tone down looming inflation and current account deficits. Instead, the BOT resorted to higher interest rates so as to contain credit expansion and expenditures Eventually, influx of capital inflows, induced by interest rate differentials and minimal exchange risks, instigated overheating of the economy.

8.5 Given that the authorities knew beforehand that liberalized capital account could negate monetary policy, their hesitation to float exchange rates must have been an outcome of conservatism and/or business plus political influences, particularly those heavily hinging upon external debts. One excuse for restricting exchange rate movement was to avoid bankrupcies of debtors and to uphold credibility of the nation However, a vicious circle or greater difficulties occurred as rigid exchange rates further encouraged foreign borrowings or higher external indebtedness which magnified the risk of bankrupcies, lower credibility, and other financial disruptions if floating exchange rate regime was chosen. Therefore, several parties voted for postponing a flexible exchange rate system again. In short, this exchange rate predicaments of Thailand demonstrate two prominent lessons for developing countries. First, policy consistency should be continually adhered to. For example, should foreign exchange funds be allowed to move in and out of the country liberally, their prices or exchange rates ought to be determined by market force or given an equal degree of freedom Second, once any policy change is deemed conceptually proper, it should be immediately implemented. Delaying it for whatever reasons tends to complicate the matter.

8.6 Another controversial function of the BOT was to rescue ailing private financial institutions. Despite rapid advancement in banking and financial liberalization, the BOT maintained its long-held responsibilities in not just monetary policy but also safeguarding private financial institutions. The latter involves regulations, supervision, and provisions of assistance. In 1985 a special unit called Financial Institution Development Fund (FIDF) was created and attached to the BOT. Its primary duty is to rehabilitate and develop financial system so as to attain stability. In principle, FIDF is supposed to offer assistance to ailing banks or finance companies in various formats, e.g. temporary emergency funds, purchasing shares in case of recapitalization, transfers of assets and liabilities, organizing mergers and acquisitions, participation in management teams. But in fact, most assistance from FIDF took only two forms, i.e. emergency funds and holding stakes in ailing firms or banks. As for its funding, FIDF tapped only short-term funds via either repurchase or interbank markets or issuances of short-term notes. Whenever FIDF cannot obtain enough funds, it often resorted to BOT as if the BOT served as an underwriter.

8.7 Various excuses were quoted for FIDF extension of liquidity aids, e.g. bank runs as a result of political instability, closure of some finance companies, flotation of exchange rate. In essence, the BOT offered liquidity funds to problem banks and finance companies in order to avoid panic and maintain confidence as well as stability in the financial system, because in Thailand there was no deposit insurance corporation Consequently, before the mandate of the IMF, the BOT tried its best to restore ailing private financial institutions.

8.8 Even though preserving stability of financial institutions facilitates development of the financial system, the rescue operations undertaken by FIDF as mentioned above should not belong to a central bank's territory, as they could easily interfere with appropriate monetary policy. In the case of Thailand, such interference is immediately evident. Chart 2 shows that before the financial crisis in 1997, when looming current account deficits and inflation needed to be corrected by deceleration of money supply growth, credit extension from FIDF did the opposite for the sake of healing problem banks and finance firms. In other words, amid the dilemma of stability at the micro- or macro-level, the BOT opted for the former at the expense of

the latter This represents the second incident of BOT's policy inconsistency. Worse yet, rescuing those financial patients at the near final stage tended to be futile in various respects and generate numerous adverse repercussions subsequently.

8.9 Problems of commercial banks and finance companies in 1994-96 stemmed from mismanagement spurred by untimely financial liberalization. New practices, newcomers (BIBF), and enormous capital inflows gave rise to strong competition. Such pressures, together with domestic financial institutions' inadequate experience, led to excessive and improper credit extension (e.g. in property sectors) without careful screening of project viability and likely risks versus returns. The economy was therefore overheated and finally reached the bubble status, similar to the Japanese economy. Over-investment was fueled by imprudent banks and finance companies which eventually encountered record high levels of non-performing loans, 35% of commercial banks' and 60% of finance companies' outstanding credits.

8.10 If more efficient and forceful supervision had been done by bank regulators, the crisis may not have occurred, or if so, must have been less severe. In the midst of high-tech financial era, bank examiners and regulators need to thoroughly understand banking plus business risks and move as quickly as possible to deal with bad loans and financial mismanagement. In contrast, the examiners and supervisors took up to a year to detect and notify the suspected or guilty banks or finance firms. Problems thus became too difficult or too late to solve. In most cases, aids from FIDF did not help rectify roots of the problems. They only palliated symptoms at the final stage, while exacerbating macroeconomic imbalances. That was why the IMF demanded a termination of continual aids from BOT to ailing financial institutions.

8.11 Maturity mismatching by FIDF created strong distortions in local money markets. As a large portion of assistance from FIDF came in the form of equity holding in ailing financial institutions, it should have been funded by long-term borrowing such as government bonds or securities. Instead, FIDF resorted to short-term borrowing, engendering pressure upon domestic liquidity. Such maturity mismatching aggravated the high interest rate environment as prescribed by the IMF.

8.12 Given that policy discretion of FIDF was not transparent, various sources claimed that BOT provided preferential treatments to particular banks and finance companies due to close connections or acquaintance with the involved executives. In addition, political influences played some roles in the determination of which finance firms should or should not be entitled to receive assistance from FIDF In any case, one distinct defect of rescuing private financial institutions was the moral hazard among executives in the financial circle. Once those executives learned that the central authorities could hardly let any financial institution go under, they were inclined to take more risks and be less cautious. This generated a vicious circle for the BOT, i.e. the more it helped remedy ailing finance companies, the more risks others will take, and the larger number of sickening firms will come in the future.

8.13 As formally recommended by a special commission scrutinizing the BOT, the responsibility of regulating and supervising private financial institutions should be under a separate organization from the BOT such as a deposit insurance corporation (FDIC) which acts as a risk evaluator and (partial) guarantor for deposits. Segregating FDIC from BOT will resolve the policy dilemma at BOT. Meanwhile, the process of supervision at FDIC should be quick and transparent, which will stimulate the market force to compel problem banks and finance firms to rectify themselves. Otherwise, they will receive lower rating and less guarantee from FDIC, unlike FIDF and BOT which revealed nothing but guaranteed everything (including principal plus interest). The above suggestions correspond with the two lessons mentioned in (8.5), i.e. policy consistency and timely or immediate actions.

9. Indonesia

9.1 Before encountering the financial crisis in 1997, the suffering Asian countries had to cope with five similar problems : high current account deficits, large short-term external debts, weak financial institutions with high proportions of non-performing loans, inflexible exchange rates, and political uncertainties. It is therefore tempting to conclude that these are primary causes of the financial debacle. But after detailed scrutiny, one will find that the genuine origin of the crisis lies at mismanagement of capital flows and mishandling of financial deregulation. Such

errors were outcomes of improper or inconsistent macroeconomic (exchange controls, exchange rate, monetary, fiscal) policies, immaturity of market participants as well as regulators, and market distortions instigated by the state. The Indonesian experience substantiates the just-mentioned hypothesis

9.2 Between 1990 and 1996 the widening current account deficits of Indonesia were the result of overinvestment in land-based industries (hotel and tourist resorts, amusement and industrial parks, real estates, commercial buildings and shopping malls), excessive infrastructure, and other non-tradables. Those investments were made possible or largely funded by external private debts which would not have been so attractive if exchange risks had been high or domestic interest rates had been kept low. And pressures on current account balance must have subsided to some degree if fiscal expenditures had been adequately curtailed. Instead, the lack of appropriate policy coordination engendered excessive spending to such an extent that foreign creditors started to doubt about the country's financial credibility and therefore withdrew their invested funds.

9.3 Despite the absence of capital controls, the authorities did not float the rupiah exchange rate until August 1997 The rupiah was very much tied to the U.S. dollar via a basket of currencies On some occasions, it was devalued against the U.S. dollar (50% in November 1978, 40% in June 1983, and 31% in September 1986). To encourage inflows of foreign investment, between January 1979 and December 1991 Bank Indonesia (BI) or the central bank extended a subsidy on exchange rate to domestic borrowers. Under the so-called exchange rate swap facility, banks, non-bank financial institutions, and customers with foreign-exchange borrowing contracts were provided with forward covers.

9.4 Ordinarily, BI specified its "intervention band" around the central rate, within which it was ready to intervene so as to support its exchange rate. Between 1992 and 1997 BI widened the intervention band six times as a means to generate some exchange risks and allow more degree of freedom for the monetary authorities to exercise control over monetary aggregates. However, continual encouragement from the state together with rather rigid exchange rates led to a surge in private sector

foreign borrowings throughout the 1990's Indonesian external debts thus grew rapidly from US$ 66.9 billion in 1990 to US$ 131.4 billion in 1997 or around twice the size of her export value. Within this amount, roughly a half was private and short-term with average maturity of 1.5 years. Most of the private sector's external borrowings were explicitly or implicitly guaranteed by the state. These included foreign borrowings to finance infrastructure projects, largely owned by politically well-connected groups.

9.5 Other than capital account liberalization, financial deregulation was another prime mover towards the crisis. Interest rates were liberalized in June 1983 and other restrictions were relaxed since October 1988, e.g. regulations on asset portfolios, reserve requirements, new entrants, privatization, and greater access to offshore markets. The market environment became move competitive not only because of new entrants but also because of easier credit access for all concerned parties especially bank clients, as they can tap funds from abroad directly. Unsurprisingly, domestic credits expanded at an excessive pace, i.e. 24.3% p.a. between 1992 and 1996. That was partly responsible for the growing current account deficits What was more worrisome was that banks engaged themselves in riskier activities. Worse yet, their inexperienced officers together with inadequate capital base gave rise to high proportions of bad debts and insufficient loan loss provisions or coverage One driving force behind such ominous risk taking was that foreign banks were allowed to penetrate in domestic economy and so was larger ownership of foreign investors in domestic assets.

9.6 Clear-cut examples of immaturity on the part of Indonesian banks and their customers were mismatches of maturities and currencies. When domestic interest rates were high, there was a strong temptation to borrow in short-term foreign currencies to fund longer-term projects The risks of maturity mismatching were particularly strong for unlisted banks which had no access to mobilize long-term funding via shares, bonds, or securities Given that the rupiah depreciation was historically predictable and rather low, a large portion of the external debts were unhedged. The resulting exchange rate vulnerability, in addition to poor risk management, represented shortcomings of Indonesian commercial banks. In other

words, they were not ready to successfully cope with financial deregulation as well as open capital account.

9.7 Problems of bad debts were particularly severe at state-owned banks, since they offered subsidized credits to government projects or acquiesced in erratic government policies As of November 1996, 68% of the banking system's bad debts belonged to state-owned banks. Protected from closure on constitutional ground and having their losses covered by the public budget, these banks tended to be overstaffed and have overextended branching networks. Meanwhile, the lack of incentives and lending skills (including risk appraisal) made these state-owned banks' performances far inferior to their private counterparts.

9.8 More worrisome was the fact that the six state-owned banks controlled a sizable portion (over 30%) of bank assets in Indonesia. Given that these banks were subject to government direction, they extended special credits to particular industries and politically well-connected business groups. Overall, financial deregulation did not end government intervention in lending decisions of state-owned banks and finance companies.

9.9 On the part of regulators, the implemented rules and regulations were very weak, partly because of structural weaknesses in the legal and accounting systems. Besides, bank regulators were both inefficient and prone to frauds as well as collusion or bribes. It was thus easy to find private banks belonging to business conglomerates and offering leniency to affiliated companies.

9.10 The absence of a deposit insurance scheme or bailout program allowed Bank Indonesia (BI) to provide supports to ailing banks on an ad-hoc and non-transparent basis (which was similar to the Thai case). These supports included capital injection, liquidity credits, and emergency assistances It turned out that BI's supports to distressed banks grew rapidly, weakening moral discipline in the financial system while aggravating macroeconomic imbalances (inflation and current account deficits) of the country

9.11 Partly responsible for the widening external deficit was fiscal behavior. Though the government often ran budget surpluses, these surpluses were not adequate to counter rapid expansion of "off-budget expenditures" and government sponsored projects. There were no data on these "off-budget expenditures" but the list of involved projects, e.g. aircraft and national car industries, was demanding as well as lengthy. Another strain on the fiscal position arose from revenue losses stemming from the introduction of tax incentives for the national car program and other pioneering projects. In sum, while exchange rate and monetary policies were misused via several channels, no appropriate fiscal measures were undertaken to counteract the adverse macroeconomic effects therefrom.

10. Malaysia

10.1 Malaysia differed from her southeast Asian neighbors in that she gave stronger emphasis to foreign direct investment (FDI) than other formats of capital inflows The underlying reasons were not only financing and technology transfer but also marketing. Reciprocally, Malaysia's well-developed infrastructure and administration, together with well-educated workforce, were attractive to most foreign direct investors seeking locations for their production plants overseas. Therefore, the statistics in Table 4 are not surprising. In 1989-95 Malaysia's FDI/GDP (6.5%) far exceeded those of the Philippines (1.6%), Thailand (1.5%), and Indonesia (1.3%). This characteristic allowed Malaysia to depend less upon external debt than her ASEAN-4 neighbors, both in absolute terms and relative to GDP (see Table 2). In other words, owing to her preference for long-term capital, Malaysia was, among ASEAN-4, the least vulnerable to volatility in international capital markets. Nevertheless, exchange control liberalization in December 1994 (allowing residents to hold foreign currency accounts) and the June 1995 measure (which liberalized the capital markets) added more uncertainties to the streams of cross-border transactions.

10 2 Although FDI had several benefits as mentioned above, it engendered considerable repatriation of profits (or investment income) as a large debit item on the invisible (or services-plus-transfers) account. Another sizable net payment item on such account was insurance and freight. Local companies providing transport

services, such as the Malaysian International Shipping Company, did not expand as fast as trade. In fact, these investment income payments due to FDI and shipping were so plentiful that made deficits on the invisible account larger than Malaysia's trade surpluses in the early 1990's. In other words, Malaysian current account deficits then were largely attributed to service payments.

10.3 After the 1995 liberalization, private sector external debts more than tripled commercial banks' foreign liabilities between 1995 and 1997. More worrisome was that only a quarter of total Malaysian bank lending went to manufacturing, agriculture, mining, and other productive activities. In the stock market, there was no evidence of fund raising for productive investment. In contrast, a considerable portion of corporate foreign borrowings were over-invested in "non-tradables," aggravating the prospect of the country's current account.

10.4 Almost every party agrees that, other than capital account and financial liberalization as well as imprudent supervision of banks, rigid exchange rate or excessive pegging to the U.S. dollar is another significant factor instigating widespread currency speculation and subsequent turmoil. After the Thai baht was floated on 2 July 1997, the Malaysian authority rushed to defend its ringgit. Such effort demonstrated the underlying interest of those responsible for substantial increases of unhedged short-term borrowings in U S. dollar from abroad by politically influential business groups. According to the BIS estimate in 1997, well over half of foreign borrowings in east Asian countries were short-term: Malaysia 56%, Thailand 66%, Indonesia 59%, and South Korea 68%. These short-term debts raised the degree of debtor countries' vulnerability to capital flight. It thus came as no surprise that the continual surge of U.S. dollar, to which the ringgit and other southeast Asian currencies were pegged, sparked a stream of capital withdrawals and financial meltdown in 1997

10.5 The ominous savings-investment gap in 1997 was exacerbated by Malaysian direct investment abroad. Such investments were frequently encouraged by the government and sometimes involved abuse of inter-government relations to favor Malaysian investors, e.g. in logging. There were also strong reactions to the

cabinet's decision to rescue selected businessmen by utilizing employee provident funds, because the government failed to ensure clear-cut transparency and accountability in the use of the facility. Various other adverse incidents were quoted as outcomes of nepotism and cronyism.

10.6 After the 1997 financial crisis, policy responses on the fiscal front raised some doubts about the government's credibility and suggested that part of the crisis may have been attributed to similar policy errors in the past. In the 1998 budget there was little evidence of belt-tightening as far as government expenditure was concerned. For instance, the lower, instead of higher, corporate income tax is unlikely to bring about lower consumer prices, asserted as justifying rationale. Trade taxes were increased and non-tariff barriers re-introduced. But in view of the much cheaper ringgit and the slowdown in car sales, these measures seem unnecessary. The higher taxes on imported cars and CKD units will mainly favor Proton and Perodua, the government's national cars which have not made much progress in terms of overseas sales. The government also did not take an opportunity to cancel most of the postponed mega-projects which are economically indefensible (e.g. Genting-Camerons highland highway, Northern Regional International Airport, and Malacca Straits bridge to Sumatra). Such reluctance did not help inspire confidence in official policy responses to the crisis. Worse yet, it has become increasingly evident that the government's fiscal surplus in recent years was not due to either taxes or expenditures, but rather to sales of public assets as part of the privatization policy, often in dubious circumstances or at heavily discounted prices, both with negative impact on economic and social welfare.

11. Philippines

11.1 Statistics from the Philippines' national income account as displayed below reveal two outstanding features of the economy. First, in the early 1990's or before the Asian financial crisis, the Philippine economy grew at the slowest rate among ASEAN-4 That must have been an outcome of various economic prescriptions from the IMF which offered several rounds of financial assistance at the times of past crises. Unlike her ASEAN neighbors, being able to contain the pace of

her economic growth helped the Philippines restrict the extent of her current account deficits and currency speculation. Unsurprisingly, in the second half of 1997 or after the Thai baht sparked the currency contagion, the Philippine peso was almost the least loser (-16%), as compared to Thai baht (-22%), Indonesian rupiah (-20%), and Malaysian ringgit (-10%).

11.2 Second, the Philippines' gross national savings relative to GNP was the lowest in the region at 18-20% in 1991-96. This peculiar character is largely explained by income, interest rates, bank availability, and real effective exchange rate. The 1984-85 depression and the 1991-92 recession had strong adverse impact upon household savings rate, since the 1983 real per capita income did not re-emerge even in 1996 Government savings tended to be negatively related to interest rates because high interest payments represented a significant part of government spending. Though there are few questions about the positive correlation between bank availability and successful savings mobilization, bank stability started to matter when competition grew as a result of financial deregulation (1981-83) and foreign exchange liberalization (1991-92), especially in the absence of prudent supervision and regulations. The liquidity crisis in 1981 and a severe balance-of-payments crisis in 1983, which resulted in numerous bank failures, shook saver confidence to a large extent One study (Lamberte, Lim, Vos, 1992) finds real effective exchange rate to be negatively related to the national savings rate. Another explanation for low savings is that in recent years there are a large number of Filipinos working abroad and the amount of their remittances to be converted into peso partly depends on the nominal exchange rate. Meanwhile, domestic inflation cuts the peso purchasing power and thus the incentive for conversion. Empirical evidences indicate that by 1996 the real peso, as measured by real effective exchange rate, appreciated 38.4% higher than the 1988 level, therefore discouraging conversion of workers' earnings from abroad.

Key Macroeconomic Data of Southeast Asian Countries, 1991-96

Panel A: Per Capita Income and Recent GDP Growth Rates

	1995 Per Capita (US $)	GDP Growth Rates (% per year)					
		1991	1992	1993	1994	1995	1996
Indonesia	980	7 6	7 0	4 1	4 0	7 6	6.0
Malaysia	3,890	8 7	8 0	9 0	9 1	10 1	8.8
Philippines	1,050	-0 6	0 3	2 1	4 4	4.4	5 5
Singapore	26,730	7 3	6 2	10 4	10 5	8 8	7 0
Thailand	2,740	8 5	8 1	8 3	8 9	8 7	6.7

Panel B: Gross National Saving Rates (as % of GNP)

	1991	1992	1993	1994	1995	1996
Indonesia	30 4	32 3	32 8	31.9	31.4	33 7
Malaysia	29 9	34 1	35 3	35 5	36.4	38.8
Philippines	18.2	19 4	18 1	19.0	19 0	20 5
Singapore	45 8	46 5	45 9	49 2	49 9	49 7
Thailand	35 4	34 5	34 2	35 2	35 0	35 3

Panel C: Change in Consumer Prices (% per year)

	1991	1992	1993	1994	1995	1996
Indonesia	9 4	7 6	9 6	8.5	9.4	7 9
Malaysia	4 4	4 7	3 6	3 7	3 4	3 5
Philippines	18 7	8 9	7 6	9 0	8 1	8.4
Singapore	3 4	2 3	2 3	3 1	1 7	1 4
Thailand	5 7	4 1	3 4	5 1	5 8	5.9

Panel D: Current Account Balances (as % of GNP)

	1991	1992	1993	1994	1995	1996
Indonesia	-3 5	-2 1	-1 4	-1 6	-3 6	-4.1
Malaysia	-9 2	-3 9	-4 6	-6 0	-9 0	-6 3
Philippines	-2 2	-1 8	-5 5	-4 5	-3 3	-4 1
Singapore	11 1	11 1	7 3	15 9	17 6	15.3
Thailand	-7 8	-5 8	-5 2	-5 8	-8 3	-8.1

Panel E: Central Government Budget Surpluses (as % of GNP)

	1991	1992	1993	1994	1995	1996
Indonesia	-0 7	-0 4	-0 4	0 2	-0 2	-
Malaysia	-2 0	-0 8	0 2	2 3	0 9	0 6
Philippines	-2 1	-1 2	-1 5	1 0	0 6	0 3
Singapore	4 7	5 4	4 6	3 4	7 4	5 4
Thailand	4 3	2 6	1 9	2 7	3 0	0 9

Source. ADB (1997)

11.3 To demonstrate the importance of inflows from Filipinos overseas (including both contract workers and emigrants), one should compare annual economic growth as measured by GDP and the one by GNP (equalling GDP plus net factor income from abroad). While the growth rate according to the former in 1996 stayed at 5 5%, the one based on the latter surged to 6.9%. In absolute terms, a World Bank study put funds received from overseas Filipinos at nearly US$ 6 billion in 1994 or close to three-quarters of the trade deficit and equivalent to some 9% of GDP in that year. Furthermore, another peculiar item on the Philippines' invisible account -- inflows through the conversion of foreign currency deposit units (FCDU) to peso -- plays a significant role. Ever since the foreign exchange liberalization in 1991-92, exporters of goods and services were given freedom to place their dollar earnings in these accounts as they saw fit. Typically, they did so when they expected the peso to depreciate and vice versa or when there are attractive peso assets to invest in. The latter response occurred in 1994 and 1995. In 1994 the peso strengthened against the dollar and 20% of the equity in the state oil refinery became available in the market, and so did some other attractive corporate issues. Consequently, peso conversion rose by 180% between 1993 and 1995. In 1996, with the peso stable against the dollar, the booming property market acted as a magnet.

11.4 Though remittances from Filipinos abroad are significant in size or they can cushion a large portion of trade deficits, they are highly subject to market sentiments about expected exchange rate movements, foreign trade status, and politics For instance, in the first half of 1997 net factor income registered a year-to-year growth of only 19.1%, down sharply from 91 5% recorded in the first half of 1996. The slackening was largely attributed to the jittery that hit the Philippine equity and foreign exchange markets in the wake of property and banking crisis in Thailand. FCDU was caught in a similar dilemma It complied well with globalization and financial liberalization. Nevertheless, it added strong momentum to exchange rate speculation and volatility which has become an extremely formidable task for any small country's central bank to handle. That is so because these deposits (FCDU) have grown very rapidly in recent years, from U.S.$ 2.56 billion in 1990 to U.S.$

14 52 billion in 1996, exceeding gross international reserves of the Philippines by a wide margin

11 5 One reason why the Philippines did not encounter as severe a foreign exchange crisis in 1997 as Thailand and Indonesia is that among different formats of foreign capital, she resorted most to foreign direct investment (FDI), similar to Malaysia. FDI is unquestionably less responsive to shifts of market sentiments and liquidity in the short run than portfolio investment and foreign loans In 1991-96 net FDI represented 50% of total net private capital inflows to the Philippines, much larger than Indonesia (38%) and Thailand (11%). Malaysia had the highest FDI/GDP ratio averaging 6.5% in 1989-95. In other words, FDI helped not only in fueling economic growth, financing current account deficits, and transferring technology but also in cushioning turbulent reactions to adverse market conditions.

11.6 Another crucial item is interest. Because of the Philippines' substantial and continual foreign borrowing in the past, interest payments constituted a heavy burden in the current account. Fortunately, those interest payments tended to ease in recent years, in part due to debt rescheduling and restructuring agreements (stretching maturities and counting more upon official creditors) since the mid-1980's, culminating in two deals in 1990 and 1991 for debt buyback and the conversion of some commercial bank debts to long-term bonds.

11.7 The heavy influx of foreign funds in 1994-96 provoked an overly rapid loan growth, averaging 30% p.a in 1991-96. This led to the problem of adverse selection. Banking sources indicated increasing reliance on unaudited financial statements in the granting of new loans and overexposure to the property sector in 1995-96, as banks became flushed with funds. The overbuilding of the real estate sector and the imminent currency crisis generated more non-performing loans. Moral hazard, resembling the 1980's crisis, reappeared. After the 1997 crisis the central authorities are in the midst of revising various facets of financial markets, including information technology, taxation, regulations, supervision, and governance.

12. Conclusions

12.1 Painful experiences suffered by southeast Asian countries in the 1997-98 financial crisis clearly indicate that policy consistency or coordination is extremely essential for any country to survive in the current arena of mobile capital. Incidents of policy inconsistency were plentiful and they were accountable for the past crises For example, even though funds were allowed to move across border without constraints as a result of capital account liberalization, their prices or exchange rates were kept rigid. When current account deficits surged frighteningly as a consequence of financial deregulation and more competition, fiscal policy was ignored or not tightened. Instead, the central authorities offered aids to ailing financial institutions for the purpose of averting bankruptcies. Those aids markedly aggravated current account deficits.

12.2 Timing is another vital issue. Before adopting any policy in whichever direction, the government ought to ensure that all pertinent parties are ready. For instance, the Asian financial crisis in 1997-98 was partly due to the fact that financial deregulation was opted when domestic financial institutions were immature to cope with strong competition from abroad while the central monetary authorities were not adequately experienced in supervision and regulation. Without good timing of policy implementation, the government could easily encounter vicious circles. Two explicit examples of these circles occurred when flotation of exchange rate was postponed and when ailing financial institutions were rescued.

12 3 Business and political influences are also important factors which may lead to some policy inconsistency and/or improper timing. That is understandable as decision-makers of macroeconomic issues frequently encounter some trade-off. But what the central authorities should constantly bear in mind is that macroeconomic policy errors regarding their consistency and timing are often difficult to rectify and tend to have a series of adverse repercussions.

12.4 Formats as well as end uses of foreign borrowings are very crucial because they have immediate implications upon the vulnerability as well as debt servicing capacity of debtor countries. The countries which leaned towards foreign

direct investment (e.g. Malaysia and the Philippines) were less susceptible than the ones which heavily counted upon short-term loans (e.g. Thailand and Indonesia). The degree of vulnerability is highly meaningful, especially in the case of small developing countries since capital flows are not only mobile to large extent but also huge relative to those countries' foreign exchange reserves or monetary aggregates.

12 5 In short, the financial crises that southeast Asian countries encountered were outcomes of mismanagement of capital flows together with mishandling of financial deregulation.

Table 1: Important Economic Statistics

Economic Growth (%)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
- USA	3 4	1 2	-0 9	2 7	2 3	3 5	2 3	3 4	3 9	4.4	4 2
- UK	2 1	0 6	-1 5	0 1	2 3	4 4	2 8	2 6	3 5	2 6	2 1
- Germany	3 7	5 7	13.2	2 2	-1 2	2 9	1 9	1 3	2 0	2 1	1.6
- Japan	4 7	4 8	3 8	1 0	0 3	0 6	1 5	3 9	0 9	-2 5	2
ASEAN-4											
- Thailand	12 2	11 2	8 6	8 1	8 7	8 6	8 8	5 5	-0 4	-10 2	4.2
- Malaysia	9 2	9 7	8 6	7 8	8 3	9 3	9 4	8 6	7.7	-7.4	5 6
- Indonesia	7 5	7 2	7 0	6 5	6 5	7 5	8 2	7 8	4 9	-13	0 3
- Philippines	6 2	3 0	-0 6	0 3	2 1	4 4	4 7	5 8	5 2	-0 6	3 3

Inflation (%)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
- USA	4.8	5 4	4 2	3 0	3 0	2 6	2.8	2.9	2.3	1 6	2.2
- UK	7 8	9.5	5 9	3 7	1 6	2 5	3.4	2.4	3 1	2 7	2 3
- Germany	2.8	2 7	1 6	5 1	4 5	2 7	1 8	1 5	1 8	0 6	0 7
- Japan	2 3	3 1	3 3	1 7	1 3	0 7	-0 1	0 1	1 7	0 6	-0 3
ASEAN-4											
- Thailand	5 4	6 0	5 7	4 1	3 4	5.0	5 8	5 8	5 6	8.1	0 3
- Malaysia	2 8	2 6	4 4	4 8	3 5	3.7	5 3	3 5	2 7	5 3	2 8
- Indonesia	6 4	7 8	9 4	7 5	9 7	8 5	9 4	8.0	6 7	58	20 8
- Philippines	11 4	13 2	18 5	8 6	6 9	8 4	8 0	9 0	5 9	9.7	6 7

Current Account/GDP (%)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
- USA	-1 9	-1 6	-0 2	-1 0	-1 5	-2.1	-1.8	-1.9	-2 1	4 5	4 2
- UK	-4 3	-3 3	-1 4	-1 7	-1 7	-0 3	-0 5	0 1	0 6	4 7	4 3
- Germany	4 7	3 2	-1 0	-1 0	-0 7	-1 0	-1 0	-0 6	-0 3	9 0	8 3
- Japan	2 0	1 2	2 0	3 0	3 1	2 8	2 2	1 4	2 2	4 1	4.7
ASEAN-4											
- Thailand	-3 5	-8 5	-7 7	-5 7	-5 1	-5 6	-7 9	-7 9	-2 2	12.7	9 1
- Malaysia	0 8	-2 0	-8 9	-3 8	-4 8	-7 8	-10.0	-4 9	-4 8	12 9	15.8
- Indonesia	-1 2	-2 8	-3 7	-2 2	-1 3	-1 6	-3 3	-3 3	-2 6	4 2	3.7
- Philippines	-3 4	-6 1	-2 3	-1 9	-5 5	-4 6	-4 4	-4 7	-5 4	2.4	9.4

Exchange Rates

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
- UK	1 6397	1 7847	1 7694	1 7655	1 5020	1 5316	1 5785	1 5617	1 6377	1.6564	1.6182
- Germany	1 8800	1 6157	1 6595	1 5617	1.6533	1 6228	1 4331	1 5048	1 7341	1 7591	1 8358
- Japan	137 96	144 79	134 71	126 65	111 20	102 21	94 06	108 78	120 99	130 91	113 91
ASEAN-4											
- Thailand	25 70	25 59	25 52	25 40	25 32	25 15	24 92	25 34	31 36	41 36	37 84
- Malaysia	2 7088	2 7049	2 7501	2 5474	2.5741	2 6243	2 5044	2 5159	2 8132	3 9244	3 8000
- Indonesia	1770 1	1842 8	1950 3	2029 9	2087 1	2160 8	2248 6	2342 3	2909 4	10013 6	7855 2
- Philippines	21 74	24 31	27 48	25 51	27 12	26 42	25 71	26 22	29 47	40 89	39 09

Table 1 (continued)

Interest Rates (%)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
- USA	9 1	8 2	5.8	3 7	3 2	4 6	5 9	5 4	5 6	5 5	5 3
- UK	11 5	12 5	10 3	7 5	4 0	3 7	4 1	3 1	3 6	4 5	n.a
- Germany	5 5	7 1	7 6	8 0	6 3	4.5	3 9	2 8	2 7	2 9	2 4
- Japan	2 0	3 6	4 1	3 4	2 1	1 7	0 9	0 3	0.3	0 3	n.a
ASEAN-4											
- Thailand	9 5	12 3	13 7	8 9	8 6	8 5	11 6	10 3	10 5	10 7	4 7
- Malaysia	4 9	5 9	7 2	8 0	7 0	4 9	5 9	7 1	7 8	8.5	n.a
- Indonesia	18.6	17 5	23 3	19 6	14 6	12 5	16.7	17.3	20.0	39 1	n.a
- Philippines	14 1	19 5	18 8	14 3	9 6	10 5	8.4	9.7	10.2	12 1	8.2

Periodical Averages

	Economic Growth (%)		Current Account/GDP (%)		Inflation (%)	
	1987-89	1990-99	1987-95	1990-99	1987-89	1990-99
Thailand	11 7	5 3	-2 3	-2 9	3 9	5 0
Malaysia	7 8	6 8	4 8	-1 8	1 9	3 9
Indonesia	6 1	4 3	-1 9	-1 3	7 9	14.6
Philippines	5.8	2.8	-1 9	-2 3	8 3	9.5

Sources. International Financial Statistics, 2000, World Economic Outlook, September 2000, Bank of Thailand's Key Economic Indicators, various issues

Table 2: External Debt Outstanding

(Billions of U.S dollars)

	1990	1991	1992	1993	1994	1995	1996	1997	1998
ASEAN-4									
External debt	142 3	165 6	181.7	202.8	242 1	279.0	299 2	316 5	315 9
Short-term debt	25 7	33 8	41 7	52.6	60.6	79 7	88 9	94 4	59 5
(% of total debt)	18 1	20.4	22 9	25.9	25.0	28 6	29 7	29 8	18 8
Long-term debt	116.6	131 8	140.0	150 2	181 5	199 3	210 3	222.1	256 4
(% of total debt)	81 9	79 6	77.1	74 1	75 0	71 4	70 3	70.2	81 2
Indonesia									
External debt	69 3	79.4	88.0	89.2	107.9	124.4	128.9	133.2	141.8
(% of GNP)	63 5	64 8	66.2	58 7	63 4	64 6	58 3	63.6	165 9
Short-term debt	11 1	14 3	18 1	18 0	19 5	26 0	32 2	32.9	20.1
(% of total debt)	16.0	18.0	20.6	20 2	18.1	20.9	25.0	24.7	14.2
Long-term debt	58 2	65.1	69.9	71.2	88.4	98 4	96.7	100.3	121.7
(% of total debt)	84.0	82.0	79.4	79.8	81.9	79.1	75.0	75.3	85.8
Debt-service ratio	33 3	34 3	32.6	33.6	30 7	29 9	36.6	30	33
Malaysia									
External debt	15.3	17 1	20.0	26.2	30.3	34.4	39.7	47.2	44.9
(% of GNP)	37 4	38 4	36 3	43.0	44 0	41 4	42 0	49.8	65 5
Short-term debt	1 9	2 1	3 6	7.0	6 2	7 3	11 1	14.9	8 7
(% of total debt)	12 4	12 3	18 0	26.7	20 5	21 2	28 0	31.6	19 4
Long-term debt	13 4	15 0	16 4	19.2	24 1	27 1	28 6	32.3	36 2
(% of total debt)	87 6	87 7	82 0	73.3	79 5	78 8	72.0	68.4	80.6
Debt-service ratio	12.6	7 4	9 1	8.7	8.9	7.0	9.0	7.5	8.7
Philippines									
External debt	29.6	31 3	31 9	34 7	38.3	37.1	39.8	44.8	46 3
(% of GNP)	67.1	68 6	59 2	62 7	58.3	48 7	47.2	52.2	67 9
Short-term debt	4.4	4 9	5 3	5 0	5.7	5 3	8.0	11.8	7 2
(% of total debt)	14.9	15 7	16 6	14 4	14.9	14.3	20.1	26.3	15.6
Long-term debt	25.2	26 4	26 6	29 7	32.6	31.8	31.8	33	39.1
(% of total debt)	85 1	84 3	83 4	85 6	85.1	85.7	79 9	73 7	84.4
Debt-service ratio	27 0	23.0	24 4	25 6	18.9	16.1	13.4	9.3	11.8
Thailand									
External debt	28.1	37.8	41.8	52.7	65 6	83.1	90 8	91 3	82.9
(% of GNP)	33 3	39.1	38 4	42 9	46 4	50 5	51.4	61.2	73.5
Short-term debt	8 3	12 5	14.7	22.6	29 2	41 1	37 6	34 8	23.5
(% of total debt)	29 5	33 1	35.2	42.9	44 5	49 5	41 4	38 1	28.3
Long-term debt	19 8	25 3	27.1	30 1	36 4	42 0	53 2	56.5	59.4
(% of total debt)	70 5	66 9	64.8	57 1	55 5	50 5	58.6	61.9	71.7
Debt-service ratio	16 9	13 0	13 8	13.0	13 4	11.6	12.7	15.5	19 2

Sources: Global Development Finance, 2000

Table 3: Net Capital Flows

(Billions of U S dollars)

	1984-89	1990-96	1992	1993	1994	1995	1996	1997	1998	1999
Total										
Net private capital flows	15.2	148 1	124 9	162 4	160 5	192 0	240 8	173 7	122.0	196 4
Net direct investment	12 9	63 1	37 4	56 2	84 3	96 0	114 9	138 2	119.6	119.7
Net portfolio investment	4 7	54 1	58 6	104 6	87 8	23 5	49 7	42.9	18.0	34 4
Other net investment	-2 5	30 9	n a	n a	-11 7	72 5	76 2	-7.3	-15.6	42 3
Net official flows	23 9	15 3	13 3	21 2	-2 5	34 9	-9 7	29.0	37 0	-8 9
Change in reserves	-13 8	-81 2	-68 0	-74 5	-77 2	-120 5	-115.9	-54 7	-67 1	-91.1
Developing countries										
Net private capital flows	18.2	131 2	119 7	142 0	136.6	156.1	207 9	154.7	99 5	168 6
Net direct investment	12 1	56 8	33 8	49 5	75.4	84.3	105 0	119 4	99 1	99 1
Net portfolio investment	4 2	49 3	51 6	88 9	85.0	20.6	42 9	40 6	19 4	32.2
Other net investment	1 9	25 1	34 3	3 6	-23 8	51 2	60 0	-5 3	-19 0	37 3
Net official flows	25 8	15 6	13 7	20 0	9 1	27 4	-3.4	17 5	28 6	5 7
Change in reserves	5 8	-55 7	-45 9	-40 7	-42.4	-65 6	-103 4	-55 2	-37 3	-80 8
Africa										
Net private capital flows	3 6	4 4	-	2 8	10 6	13 8	4 5	8 9	7 5	11.3
Net direct investment	1 1	2 9	2 0	2 0	3 6	4 2	5 3	7 7	6 0	6.9
Net portfolio investment	-0 8	-0 2	-0 7	0 8	0 5	1 4	-0 3	2 6	1 7	1.8
Other net investment	3 3	1 6	-1 2	-	6 5	8 1	-0 6	-1 3	-0.1	2.6
Net official flows	5 1	7 1	8 6	5 9	8 1	5.2	6 5	8 4	4 4	4.9
Change in reserves	0 2	-1 9	2 0	-	-4.4	-1 4	-6 4	-11 3	-2 2	-3.3
Asia										
Net private capital flows	13 0	55 9	21.0	53 4	63 1	91.8	102 2	38 5	1 5	58 8
Net direct investment	4 5	32 2	17 6	34 1	43 4	49 7	58 5	55 4	40.6	43 7
Net portfolio investment	1 5	6 8	1 0	11 7	11 3	10 8	10 2	-2 2	-7 0	5 3
Other net investment	7 0	16 9	2 4	7 6	8 3	31 3	33 5	-14 7	-32 1	9 8
Net official flows	7 7	8 4	10 5	9.9	6 2	5 1	9 3	17 7	24.7	7 0
Change in reserves	-2 1	-29 0	-14 6	-26 1	-39 7	-29 0	-48 9	-17 2	-24.4	-65.5
Middle East and Europe										
Net private capital flows	1 7	25 2	42 8	22 6	15 5	14 8	20 7	16.1	18.7	16 4
Net direct investment	1 1	3 0	1 3	1 8	4 2	5 1	4 3	5.1	4.6	5 8
Net portfolio investment	4 4	12 8	21 0	15 3	12.5	8 4	7 9	6.8	5 2	4 7
Other net investment	-3 8	9 4	20 5	5 5	-1 2	1.3	8 6	4 2	9 0	5 9
Net official flows	4 8	-1 8	-3 3	4 3	-1 2	-4 8	-5 8	-1 3	-1 5	-1 4
Change in reserves	7 2	-6 4	-10.8	6 7	-3 1	-9 4	-21 2	-14 3	-2 4	-3.4
Western hemisphere										
Net private capital flows	-0 2	45 7	55 9	63 3	47 4	35 7	80 5	91 1	71 7	82.0
Net direct investment	5 3	18 7	12 9	11 6	24.3	25 3	36 9	51 2	48 0	42.6
Net portfolio investment	-0 9	29 9	30 4	61 1	60 6	-0 1	25 2	33.5	19 5	20.4
Other net investment	-4 6	-2 8	12 6	-9 4	-37 5	10 5	18 5	6 5	4 2	19.0
Net official flows	8 2	1 8	-2.2	-0 1	-4 0	22 0	-13 4	-7 3	1 0	-4 8
Change in reserves	0 5	-18 4	-22 5	-21 3	4 7	-25 9	-27 0	-12 3	-8.3	-8.6
Countries in transition										
Net private capital flows	-1 0	12 8	7 7	12 1	18 4	29 8	21.3	34 5	35.4	39 2
Net direct investment	-0 2	6 3	4 2	6 0	5 4	13 2	13 1	18.2	18 5	20.0
Net portfolio investment	-	2 0	-0 8	3 6	4 1	2 9	2 2	7 3	8 8	9 6
Other net investment	n a	n a	n a	n a	n a	n a	n a	n a	8 2	9 6
Net official flows	0 2	0 5	-0 1	3 0	-11 0	8 4	-5.5	0 8	3.5	-4 4
Change in reserves	-3 6	-7 8	-6 0	-12 4	-8 5	-35 9	0 4	-6 2	-4 9	-8 6

Source World Economic Outlook, May 1998

Table 4: Net Capital Flows

(Per cent of GDP)

	1983-88	1989-95	1991	1992	1993	1994	1995	1996	1997
China									
Net private capital flows	1 2	2 5	1 7	-0 9	4 5	5 6	5 2	4 7	3 7
Net direct investment	0 4	2 9	0 9	1 7	5 3	5 9	4 8	4 6	4 3
Net portfolio investment	0 2	0 2	0 1	-	0 7	0 7	0 1	0 3	0 2
Other net investment	0 5	-0 6	0 7	-2 6	-1 5	-0 9	0 2	-0 3	-0 8
Net official flows	0 3	0 5	0 3	0 8	0 9	0.4	0 3	0 2	-0.1
Change in reserves	-0 4	-2 2	-3 7	0.5	-0 4	-5 6	-3 2	-4 0	-4.5
Indonesia									
Net private capital flows	1 5	4 2	4 6	2.5	3 1	3 9	6 2	6 3	1 6
Net direct investment	0 4	1 3	1 2	1.2	1 2	1 4	2 3	2.8	2 0
Net portfolio investment	0 1	0 4	-	-	1 1	0 6	0 7	0.8	-0 4
Other net investment	1 0	2 6	3 5	1 4	0 7	1.9	3 1	2 7	0 1
Net official flows	2 4	0 8	1 1	1 1	0 9	0 1	-0 2	-0 7	1 0
Change in reserves	-	-1 4	-2 4	-3 0	-1 3	0 4	-0 7	-2 3	1 8
Malaysia									
Net private capital flows	3 1	8 8	11 2	15 1	17 4	1 5	8.8	9 6	4.7
Net direct investment	2 3	6 5	8.3	8 9	7 8	5 7	4 8	5 1	5 3
Net portfolio investment	n a	n a	n a	n a	n.a	n.a	n.a	n.a.	n a
Other net investment	0 8	2 3	2 9	6 2	9 7	-4 2	4 1	4 5	-0 6
Net official flows	0 3	-	0 4	-0 1	-0 6	0 2	-0 1	-0.1	-0 1
Change in reserves	-1 8	-4 7	-2 6	-11 3	-17 7	4.3	2.0	-2 5	3 6
Philippines									
Net private capital flows	-2 0	2 7	1 6	2 0	2 6	5 0	4 6	9 8	0.5
Net direct investment	0 7	1 6	1 2	1 3	1 6	2 0	1.8	1 6	1.4
Net portfolio investment	-	0 2	0.3	0 1	-0 1	0 4	0 3	-0 2	-5 3
Other net investment	-2 7	0 9	0 2	0 6	1 1	2 5	2 4	8 5	4 5
Net official flows	2 4	2 0	3 3	1 9	2 3	0 8	1 4	0 2	0 8
Change in reserves	0 5	-1 1	-2 3	-1 5	-1 1	-1 9	-0 9	-4.8	2 1
Thailand									
Net private capital flows	3 1	10 2	10 7	8 7	8 4	8 6	12 7	9 3	-10.9
Net direct investment	0 8	1 5	1 5	1 4	1 1	0 7	0.7	0 9	1.3
Net portfolio investment	0 7	1 3	-	0 5	3 2	0.9	1 9	0 6	0.4
Other net investment	1 5	7 4	9 2	6 8	4 1	7 0	10 0	7 7	-12.6
Net official flows	0 7	-	1 1	0.1	0 2	0 1	0 7	0.7	4 9
Change in reserves	-1 4	-4 1	-4 3	-2 8	-3 2	-3 0	-4.4	-1.2	9 7

Source World Economic Outlook, December 1997

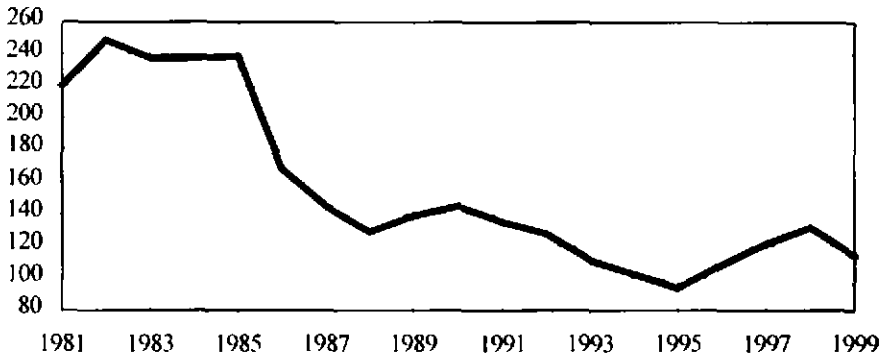
Table 5: Thailand's Net Flows of Foreign Direct Investment Classified by Sectors

(Percentage shares)

	1993	1994	1995	1996	1997	1998	1999p
1. Industry	26.1	16.0	28.3	31.2	49.6	42.7	35.6
1.1 Food & sugar	2.2	3 5	2 0	2.0	5.9	1.5	2.6
1.2 Textiles	-0.5	2 6	1.9	2.2	1.3	2.3	0.6
1.3 Metal & non-metallic	5.5	3 4	4.6	5.0	5.6	6.7	7.3
1 4 Electrical appliances	8.2	4.5	11.7	10.6	15.7	5.2	12.2
1.5 Machinery & transport equipment	3 6	0.9	7.2	4.8	10 9	12.6	10.9
1.6 Chemicals	11.7	2.5	4.7	8.1	5.1	4.5	0.2
1 7 Petroleum products	-9.4	-8.6	-8.1	-11.0	0.4	6.3	0.2
1 8 Construction materials	0 3	0 4	1.3	0 2	-0.3	0.4	1.1
1.9 Others	4.6	6 8	3.1	9.5	5.0	3.2	0.5
2. Financial institutions	3.7	0 5	1.3	3.2	3.2	16.4	6.9
3. Trade	12.7	25.8	22 3	24.0	28.9	20.3	29.3
4 Construction	8.8	5.3	1 8	3.1	4.9	3.9	-4.3
5. Mining & quarrying	7.2	3 9	2.8	0.9	0.6	0.5	-1.2
6. Agriculture	0.8	-0.5	0.5	0.1	0.0	0.0	0.1
7. Services	1.1	4.2	4.4	5.5	7.7	5.5	13.4
8. Real estate	40.2	33.5	42.6	33.2	2.9	0.5	4.2
9. Others	-0 5	11.2	-4.0	-1 1	2.2	10 2	16.0
Total	100.0	100.0	100.0	100 0	100.0	100.0	100.0

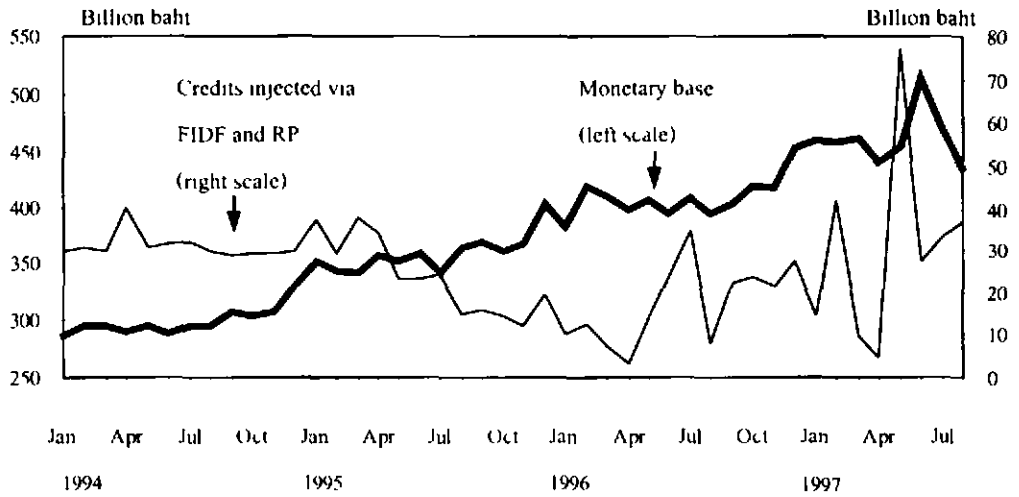
Source: Monthly Bulletins, Bank of Thailand

Chart 1: Exchange Rate (Yen per U.S. dollar)



Source International Financial Statistics, International Monetary Fund, 2000

Chart 2: Bank of Thailand's Rescue Credits



Source: Bank of Thailand

References

Akyuz, Y. 1998. *The East Asian Financial Crisis Back to the Future?* http://www.unicc.org/unctad/en/pressref/prasia98.htm

Boorman, J. 1998 *Reflections on the Asian Crisis Causes, Culprits, and Consequences*, paper prepared for the FONDAD conference on "Coping with financial crises in developing and transition countries: regulatory and supervisory challenges in a new era of global finance", March 1998.

Budnevich, C. and G. Le Fort. 1997. "Capital account regulations and macro-economic policy: two Latin American experiences" Banco Central de Chile. March. *Documento de Trabajo 06* Santiago, Chile

Corsetti, Giancarlo, Pesenti, Paolo, Roubini, Nouriel, 1998, "What caused the Asian currency and financial crisis?", *Asian Crisis Homepage*, March 1998, http://www.stern.nyu.edu/~nroubini/asia/AsianCrisis.pdf

Eichengreen, B. and R. Portes. 1995. *Crisis? What Crisis? Orderly Workouts for Sovereign Debtors* (London, CEPR).

Esquivel, G and F. Larrain. 1998. *Explaining Currency Crises*. Cambridge, Mass. Harvard Institute for International Development.

Ffrench-Davis, R. and S. Griffith-Jones (eds). 1995. *Surges in Capital Flows to Latin America* (Boulder, Lynne Reinner)

Goldfajn, I. and R.O. Valdes. 1997. *Are Currency Crises Predictable?* IMF Working Paper No 159 Washington, D.C International Monetary Fund.

Kaminsky, G., S. Lizendo, and C.M. Reinhart. 1998. "Leading Indicators of Currency Crises." *IMF Staff Paper*. Vol.45 No 1 (March).

Khan, M. and C. Reinhart 1995 "Macro-economic management in APEC economies; the response to capital flows', in M. Khan and C Reinhart (eds) *Capital Flows in the APEC Region.* Occasional Paper 122, IMF, Washington D C., March

Mishkin, F. 1996 "Understanding financial crises: a developing country perspective", *Proceedings of the World Bank Annual Conference on Development Economics,* pp 29-77

Obstfeld, M. 1995. *International Currency Experience New Lessons and Lessons Relearned.* Brookings Papers on Economic Activity, No.2, p.119-220.

Poret, P. 1998. *Liberalizing Capital Flows Lessons from Asia.* OECD.

Radelet, S and J. Sachs 1998. "The Onset of the East Asian Financial Crisis", 1st draft, 10 February 1998, http://www.hiid.harvard.edu/pub/other/eaonset.pdf

Reisen, H 1998. *Domestic Causes of Currency Crises Policy Lessons for Crisis Avoidance.* Technical Paper No.136. OECD.

Siamwalla, A., Y Vajragupta, and P Vichyanond. 1999 *Foreign Capital Flows to Thailand. Determinants and Impact.* Thailand Development Research Institute.

Stiglitz J. 1998. *The Role of International Financial Institutions in the Current Global Economy* Address to the Chicago Council on Foreign Relations, February 27, 1998, Chicago
http://www worldbank.org/html/extdr/extme/jssp022798 htm

Thailand Development Research Institute 1999 *Measures for Stabilization of Currencies in East Asia and Establishment of a Regional Monetary System.* Bangkok.

Vichyanond, P 2000. *Financial Reforms in Thailand.* Thailand Development Research Institute

Wade, R and F. Veneroso. 1998. *The Asian Financial Crisis. The Unrecognized Risk of the IMF's Asia Package*, draft manuscript, Russell Sage Foundation, February 1, 1998.

World Bank 1997. *Private Capital Flows to Developing Countries* (Washington D C., The World Bank)

Wyplosz, C. 1998. *Globalised Financial Markets and Financial Crises* (London, CEPR).