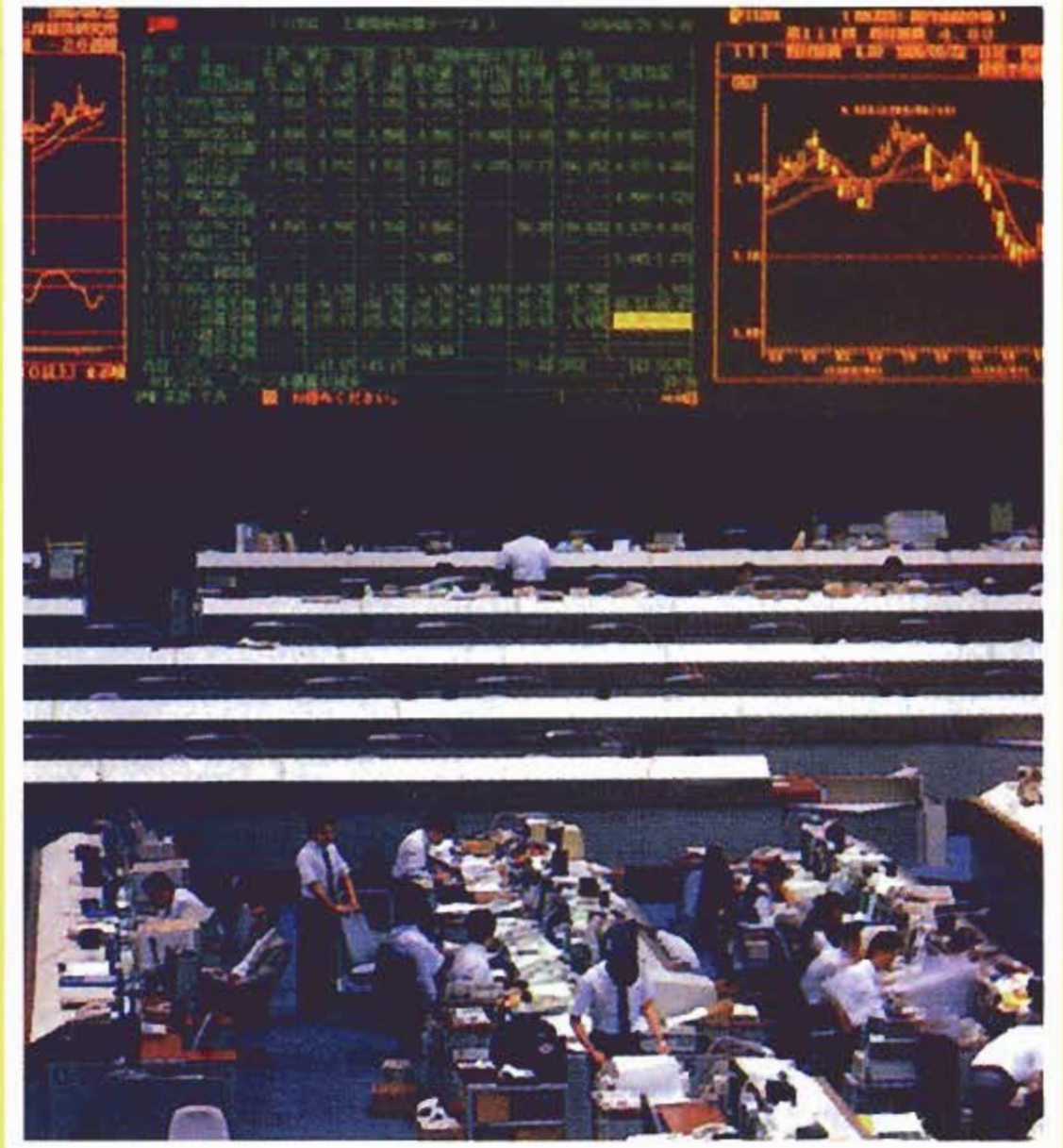
Research Studies: Macroeconomic Policy & Planning Series No. 12
July 1998

Capital Account Liberalization and Financial Crises in East Asia: Lessons for Sri Lanka



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Institute of Policy Studies, Sri Lanka.

National Library of Sri Lanka-Cataloguing-In-Publication Data

Weerakoon, Dushni
Capital account liberalization and financial crises in East Asia : Lessons for Sri Lanka / Dushni Weerakoon ; Rozana Salih .- Colombo : Institute of Policy Studies, 1998 .- 28 p ; 28cm .- (Macroeconomic policy and planning series ; No.12)

ISBN 955-9122-69-X

i. 339.5 DDC 21 ii. Title
iii. Salih, Rozana jt.au iv. Series
1. Panics (Finance) 2. Macroeconomics
3. Finance -- East Asia

ISBN 955-9122-69-X

Price

Please address orders to:
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The views expressed in this publication are those of the authors and do not necessarily represent those of the Institute of Policy Studies.

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1. Introduction

Alongside trade and payments liberalization, the rapid integration of financial markets in the 1990s has hastened the process of globalization in international trade and finance. Total capital flows to the developing world soared to US$ 303 billion in 1996 from US$ 237 billion in the previous year, thanks to a sharp rise in private flows to a record US$ 234 billion (up from US$ 160 billion in 1995). And nowhere has this phenomenon of increased access to international capital markets been more notable than in the rapidly growing economies of East Asia[1].

Under perfect market conditions, it is contended that the potential benefits of free capital movements (facilitating an efficient global allocation of resources and channelling them into the most productive uses) outweigh the costs (increased vulnerability of an economy to swings in investor confidence). The magnitude and composition of inflows and their productive deployment in the economy may be beyond the control of national governments, in economies where the private sector has become dominant. The latter is typically allowed unrestricted access to external finance in the belief that it has the capacity to assess carefully the costs and benefits on which borrowing and investment decisions are made. However, when the market's judgement is impaired by the existence of market failures (the existence of asymmetric information, incompleteness of contingent markets), it can lead to excessive borrowing from abroad, or excessive lending by international financial markets which may eventually undermine macroeconomic stability.

If the first best option of removing market imperfections is not feasible, then the desirability or otherwise of opening the capital account rests on the perceived ability of governments to deal with capital flows. An increased inflow of capital confronts governments with its own set of problems, including whether to accept or resist such capital inflow, or how much to accept and how much to resist. The impressive growth performances of the East Asian economies, driven by a surge in foreign capital inflows in the 1990s, were regarded as successful examples of macroeconomic management. In the aftermath of the financial crises of 1996/97, the policy-mix adopted by most East Asian economies has come under criticism -- particularly the adoption of a virtually fixed rate of exchange. Together with weak financial sectors, they can be identified as the main reasons for the crisis that engulfed the region.

In Sri Lanka, foreign capital inflows to bolster investment and hence the rate of growth is regarded as an even greater necessity in the context of a low rate of savings in the country. Is a free and open capital account, however, desirable in the light of the East Asian experience? Do policymakers have the necessary manoeuverability and the flexibility to fine-tune economic policy to deal with the macroeconomic consequences of large and sustained capital inflows? And even if Sri Lanka were to adopt an open capital account regime, would it necessarily lead to an increase in foreign capital inflows and if so, what type of inflows are likely to occur or is an outflow of capital more likely?

This paper examines the underlying causal factors that combined to produce the East Asian financial crisis and attempts to draw useful lessons for Sri Lanka as it endeavours to emulate their development experience. Section 2 discusses the changing trends in foreign capital flows in the 1990s that underlay the emergence of instability in capital movements across borders and the means open to governments to deal with a surge in foreign capital flows. Section 3 discusses the financial crisis in East Asia with particular attention to the role of the financial sector; Section 4 examines Sri Lanka's past experience in dealing with a surge in capital inflows and the lessons to be learnt from the East Asian experience; and Section 5 summarizes with the concluding remarks.

[1] East Asia is used commonly to include South Korea, Thailand, Indonesia and Malaysia for the purposes of this paper.

2. Capital Inflows to East Asia: causes and trends

Domestic capital markets in the Asian region, particularly in East Asia, have increasingly assimilated into the global market, exhibiting significant growth in the 1990s. Their assimilation has been helped by the liberalization of domestic capital markets as well as developments in the industrial economies. The latter include regulatory changes in the US and other financial centres in the late 1980s that resulted in increasing amounts of capital being managed by institutional investors in the form of mutual funds, pension funds, insurance companies and investment trusts, free to seek the highest rates of return on their investments. Simultaneously, these investors were also faced with the prevalence of low interest rates in the developed countries -- in the US, for example, an economic boom combined with low interest rates released a large volume of capital looking for high returns, while funds and banks from a depressed European market and recession-bound Japan were tempted by the high profit margins of East Asia. Interest rates in these economies were high, and risk very low as most

Box 1
Capital Account Liberalization in Some Selected East Asian Economies

In the sphere of capital account liberalization, the more financially liberal regimes in East Asia had liberalized almost all capital account transactions. Thus, these economies permitted banks and businesses to borrow offshore in foreign currencies, and opened the domestic financial market institutions and financial instruments to foreign participation and permitted the operation of foreign branches or affiliates in their economies. Since 1991, Thailand has permitted 100 per cent foreign ownership of firms that export all their output. In terms of portfolio investment, foreign investors were permitted to hold up to 49 per cent of the total shares of a listed company. In 1993, the Bangkok International Banking Facilities (BIBF) was launched, permitting commercial banks to carry out lending and other international investment banking operations.

Malaysia in 1987 permitted nonresidents to wholly own companies that export at least 80 per cent of their output. However, portfolio investment by foreign investors was limited to 30 per cent of listed shares of any one company. In 1989, foreign firms were granted permission to issue corporate bonds in the domestic market, while foreign securities companies and investment trust funds were allowed to promote foreign participation in the local stock market. Malaysia also established an international offshore financial centre in 1990. In the case of Indonesia, most restrictions on foreign equity ownership were abolished in the early 1990s to allow 100 per cent ownership in most industries. Foreign investor participation in the domestic stock market was limited to 49 per cent. Nonresidents have been permitted to establish joint venture securities' firms with residents, foreign banks were permitted to establish joint ventures with domestic banks, while a ceiling on foreign commercial borrowing by banks was removed in a series of reforms in the late 1980s. In 1992 domestic firms were permitted to list up to 30 per cent of their equity on foreign stock exchanges.

By contrast, South Korea, prior to the crisis was yet to fully liberalize its capital account transactions. It maintained a positive list of controls on capital flows -- that is, only those transactions specifically listed were allowed. Virtually all restrictions on direct investment by nonresidents were lifted and foreign investors were permitted to invest directly in the stock market, albeit with restrictions on total equity holdings of 25 per cent. At the same time, domestic institutional investors were also allowed to invest in foreign securities. Capital account liberalization was accelerated in 1995 focusing primarily on the deregulation of outflows. For instance, for the first time domestic residents were permitted to hold overseas deposit accounts.

currencies were pegged to the US dollar in some form or another.

An accelerated domestic reform agenda in the financial markets of most East Asian economies in the 1990s -- the liberalization of foreign exchange transactions, the adoption of flexible exchange rates and the removal of restrictions on capital flows -- also acted as a pull factor in attracting increased flows of foreign capital.[2] In fact, some economists argue that the weight of evidence suggests that falling rates of interest in industrialized economies, particularly in the US, was the prime force behind the renewed surge of capital flows to developing countries in the 1990s (Fernandez-Arias and Montiel, 1995).

The rest of the section examines the trend of capital inflows to East Asia in the 1990s, the policy tools used to deal with such inflows and their macroeconomic implications.

2.1 Capital Inflows to East Asia

The increased influx of capital into most East Asian countries during the 1990s has enabled them to run significant current account deficits. A current account deficit reflects a gap between domestic savings and investment, and can be further disaggregated into a public sector and private sector investment-savings gap. In the case of most of the East Asian economies running current account deficits, they were primarily a reflection of a gap in private savings and investment, given that in almost all these countries, the government fiscal position was in balance or even in surplus. To argue that in such circumstances, governments need not be overly concerned with current account deficits as they reflect private sector savings and investment decisions is, in the presence of market failures, invalid. The sustainability of large current account deficits for overall macroeconomic stability may be of equal importance even if they are private sector driven.

Provided that a current account deficit relative to GDP is not too large, the issue of its sustainability should not be cause for concern, assuming that certain other factors are prevalent. For example, if foreign savings are directed largely at investment that promotes tradeables, then sustainability of deficits becomes more assured as it strengthens a country's capacity to serve its foreign debt. The composition of foreign capital that comes into an economy can also determine the sustainability of high current account deficits on the assumption that short-term flows carry more inherent risks of volatility and reversibility.

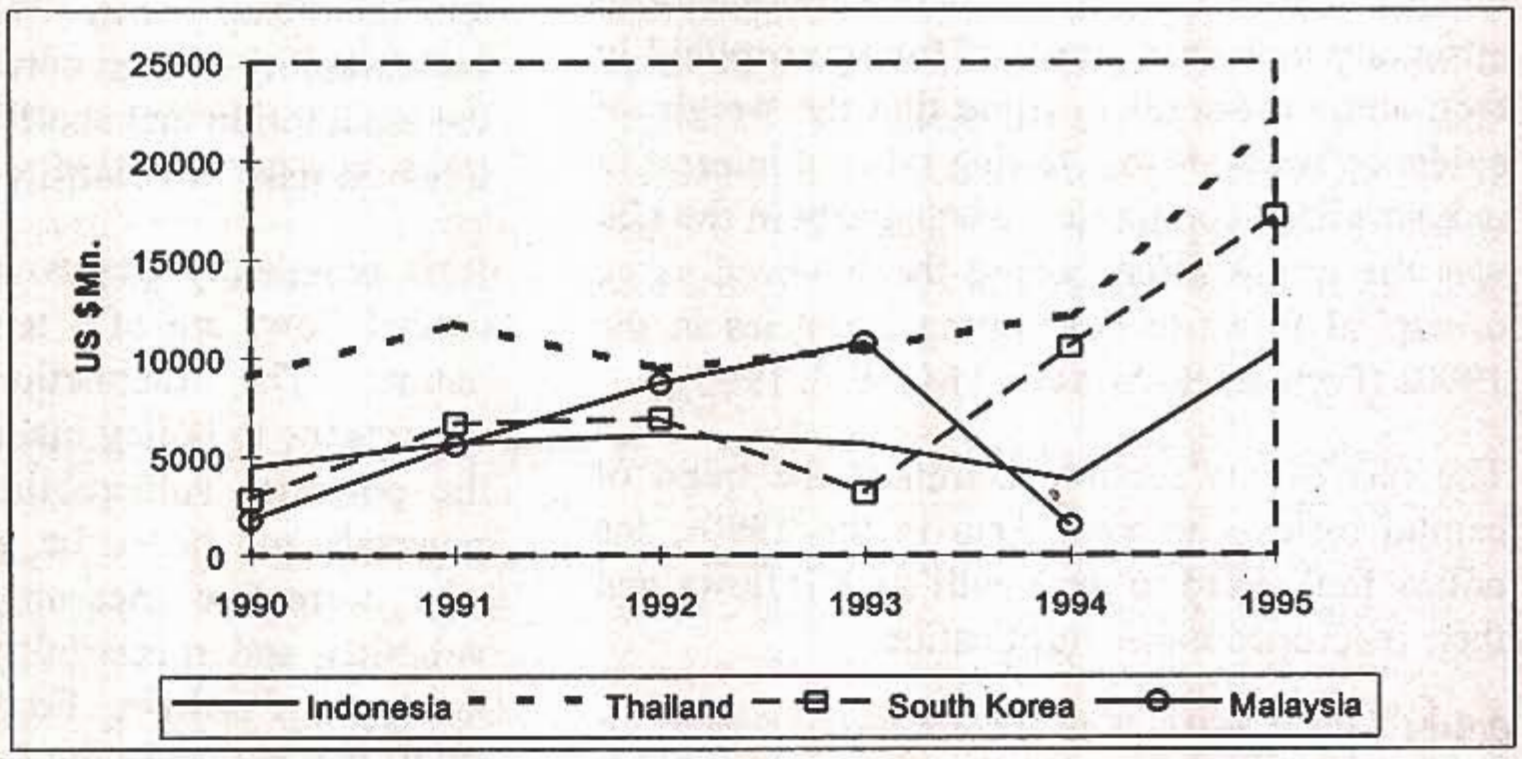
It is practically impossible to gauge whether capital flows are of a temporary or permanent nature. The distinction is, however, of importance to policy makers in order to identify the potential vulnerability of an economy to reversals and hence be in a better position to take corrective measures. The possibility of volatility and reversibility seem to depend on the type of inflows. Foreign direct investment (FDI) that comes in the form of finance flows is no different from portfolio investment. However, if it comes in the form of import surplus -- that is, in terms of machinery and capital -- it is likely to be of a much more stable nature and there is increasing empirical evidence in support of this argument (Griffith-Jones et al., 1997). The determinants of short-term flows (such as portfolio investments and private borrowings) include business cycle pressures and other short term motives which make them more volatile and temporary in nature, and hence easily reversible in the face of a sudden change in the investment climate (short-term bank loans and portfolio investments have the least transaction costs). Sudden changes that can lead to a reversal of capital flows include adverse effects on speculator sentiments, negative external shocks such as a balance of payments crisis in a prominent trade partner, or a dip in global interest rates (Reisen, 1996). Portfolio investment reversal involves merely the selling of stacks of paper certificates, unlike FDI reversal which is pegged down by more stringent contractual arrangements and non-tradable physical investment assets.

[2] With the exception of Indonesia which liberalized its capital account prior to the current account, in all other countries of East Asia capital account liberalization has followed current account liberalization.

Concurrent with the increase in foreign capital inflows in the 1990s, the average current account deficits in Indonesia, Malaysia, Thailand and South Korea, increased by nearly 50 per cent over the period 1990-94. During 1996-97, the deficit surged to a range of 4-8 per cent of GDP for most of these economies. South Korea and Malaysia switched from being current account surplus economies in the late 1980s to record significant deficits by the mid 1990s. Correspondingly, the capital inflows to these countries too surged nearly fourfold during this period, six times as much as the previous peak of capital inflows in the mid 1980s. The increase was particularly steep after the aftermath of the Mexican financial crisis of 1994-95, which is contended to have resulted in a shift in investor preferences towards assets in Asian emerging markets (IMF, 1997:5).

Of the four East Asian countries considered, South Korea saw the sharpest rise in absolute inflows since 1993 (Figure 1). In 1990, inflows to South Korea were roughly US$ 2866 million, whereas by 1996 it was eight times that amount. Similarly, inflows to Thailand and Indonesia, too, rose rapidly, particularly after 1994. The fortunes of Malaysia however, were slightly different. Malaysia experienced rapid growth in inflows until 1993, when in 1994 it plummeted to the late-1980s level. However, inflows to Malaysia picked up again in 1995, following the rest of the region.

Figure 1
Foreign Capital Inflows



Source: IMF (1996), International Financial Statistics Year Book 1996,
IMF (1997), International Financial Statistics Year Book 1997.

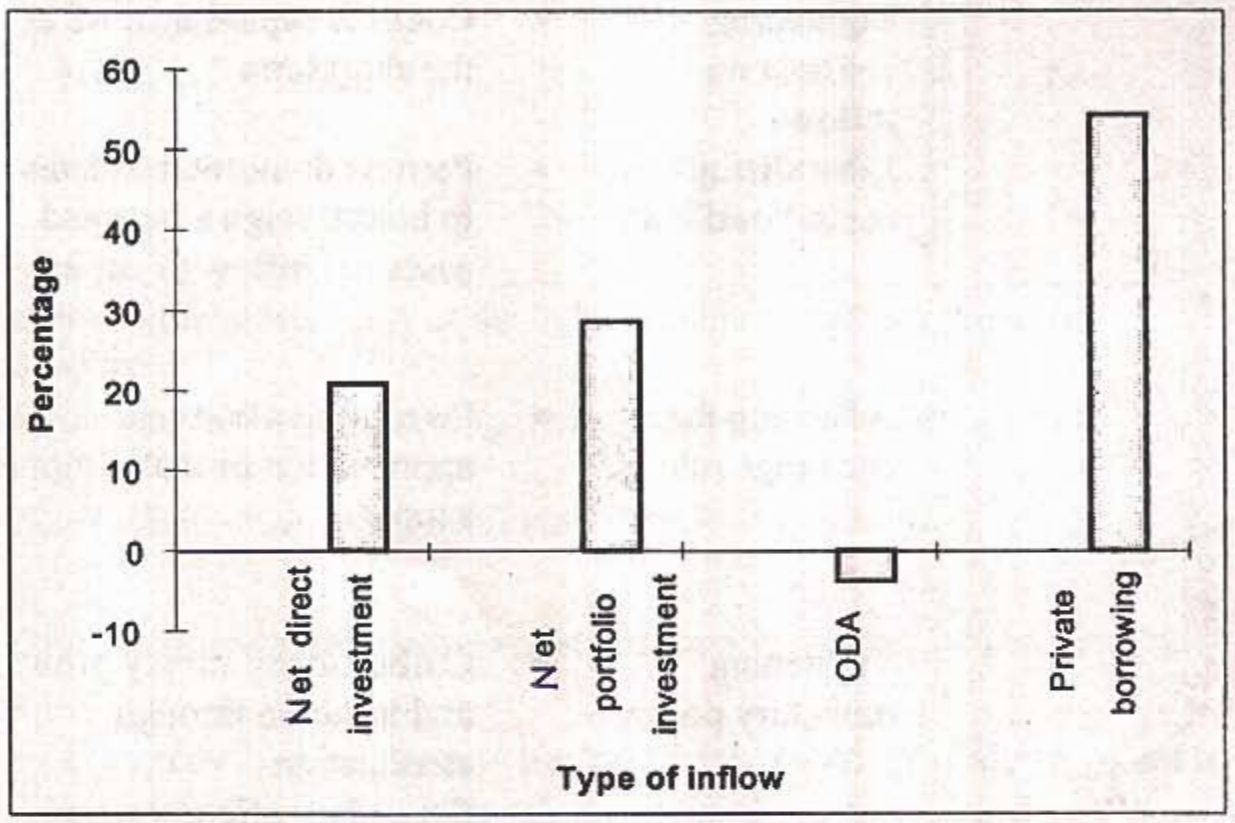
Together with the rise in the absolute levels, the composition of the inflows has also been changing over the years, moving increasingly towards short term flows (private borrowing and portfolio investment), rather than less volatile inflows in the form of FDI or long-term bank loans. As Figure 2 shows, inflows especially during the 1994-1997 period, were largely in the form of private borrowings and net equity portfolio investments, amounting to nearly 80 per cent of total capital inflows. While the prospect of high returns attracted portfolio investment, the liberalization of domestic capital markets allowed public and private sector borrowers with high credit ratings to access funds abroad at lower interest rates.[3]

What impact on the economy does a sudden and large capital outflow (or reversal) have? The impact can manifest itself via real and monetary effects. The impact on the monetary sector lead to changes in inflation rates, interest rates, and

[3] This of course assumes the existence of market imperfections which prevent interest rates reaching equilibrium.

money supply. If the exchange rate is not fixed, sudden movements in capital flows put pressure on the currency as well. Along with such changes in monetary variables are adverse impacts on the real economy. Corbo and Hernandez (1996) argue that significant real adjustment costs arise from "resource reallocation, bankruptcies, hysteresis (asymmetrical problems resulting from the fact that it is easier to exit a business than to enter it), or other market imperfections such as unemployment" (Corbo and Hernandez, 1996:3). The focus of attention in this paper will be centred on the monetary effects of capital flows.

Figure 2
Composition of Capital Inflows to Selected East Asian Economies: 1990-96



Source: IMF (1996), International Financial Statistics Year Book 1996, IMF (1997), International Financial Statistics Year Book 1997.

2.2 Managing Capital Inflows and Macro Consequences

With the increase in private capital flows, a common feature of the external sectors of the East Asian economies was that almost all experienced an improvement in the overall balance of payments and registered significant surpluses. Surpluses in the overall balance indicate net additions to foreign reserves. They pose a problem for monetary authorities in devising policy measures to deal effectively with the consequences of the increased exposure of exchange rates and domestic price levels to instability arising from the accumulation of reserves. In theory, in an open economy with a flexible rate of exchange, increased inflows of capital would lead to an appreciation of the nominal and real exchange rate, which in turn would lead to a deterioration of the current account and thereby correct the imbalance. However, if policy is geared primarily to exchange rate stabilization in the pursuit of maintaining export competitiveness, then capital inflows lead to an expansion of the monetary base as the central bank increases its holdings of foreign exchange reserves through active intervention in the foreign exchange market. Rising net foreign assets thus become a major source of money supply growth. In order to prevent consequent overheating of the economy and the real exchange rate appreciation taking place through higher domestic inflation, governments may be forced to resort to sterilization of the domestic monetary expansion. However, such a policy mix ignores the fundamental rule that while monetary authorities can attempt to influence

Table 1
Policy Responses: managing risks from volatile inflows

Macro Tool	Effect	Likely success
Tightening fiscal policy	• Reduces domestic aggregate demand and inflationary pressures. • Fiscal surpluses deposited at central bank 'sterilizes' expansive monetary effects.	• Limited. Fiscal policy in general is associated with the adjustment process in the medium term. Initiating changes and obtaining desired effects may prove difficult.
Tightening controls on inflows	• Controls capital inflows in the short term.	• Limited in long term as market players find ways to circumvent controls.
Liberalizing capital outflows	• Permits domestic residents to hold foreign assets and eases net inflow of capital.	• Doubtful. As long as there is a significant gap between domestic and foreign financial returns, foreign capital will flow in.
Adjusting the exchange rate	• Permitting a nominal appreciation insulates money supply.	• Can induce volatile movements in real exchange rate, imposing a substantial adjustment burden on the economy.
Tightening monetary policy	• Curbs money supply growth and inflation through sterilization. • Secondary effect- raises domestic interest rates (may be a further incentive to capital inflows).	• More successful in countries that maintain restricted capital accounts. • Limited success under open capital account regimes if sterilization results in high domestic interest rates that encourage further capital inflows.
Speeding up trade liberalization	• Switches spending from domestic to foreign goods and widens trade deficit. • Reduces inflation (or at least reduces price level increases).	• Limited if trade regimes are already fairly liberal.

the exchange rates or inflation rates, policy measures aimed at controlling both simultaneously would result in detrimental consequences for the economy in the longer-term.

The effects of private capital inflows on a recipient country depend on many factors, notably; i) on the size and composition of the inflows, ii) the foreign exchange rate regime, iii) developments in the domestic financial market and on the flexibility and availability of economic policy measures. Some of the policy responses to managing risks from volatile flows are listed in Table 1.

The policy mix adopted by various countries in response to capital flows are set out in Table 2. Typically, the response in most East Asian economies to the surge in foreign capital inflows has been to adopt a spectrum of policies (Reinhart and Dunaway, 1997). However, the most popular of these appears to have been the adoption of a tight monetary stance through sterilized intervention in order to avoid the required exchange rate appreciation. The main instruments of sterilization have been open

Table 2
Policy Mix in Response to Capital Flows

Country	Fiscal restraint	Revaluation	Increased exchange rate variability	Sterilized Intervention	Controls on capital inflows	Liberalization of capital outflows	Trade liberalization accelerated
Indonesia	No	No	No 2)	Yes	Yes	No	No
Malaysia	Yes	No	Yes	Yes	Yes	Yes	Yes
Korea	No	No	Yes 3)	Yes	No	Yes	No
Sri Lanka	No 1)	No	No 3)	Yes	No	No	Yes
Thailand	Yes	No	No	Yes	No	Yes	Yes

1) Fiscal consolidation (including privatization efforts) were part of the inflation stabilization programs and not a response to the rise in capital inflows *per se*.
2) Despite announcements of broader intervention bands, exchange rate variability does not change appreciably.
3) Sri Lanka already had a relatively flexible exchange rate system at the start of the inflow episode.

Source: Reinhart and Dunaway, 1997.

market operations, changes in the statutory reserve requirements and management of government deposits.

Malaysia, for example, relied heavily on monetary sterilization -- the reserve requirement was raised from 6.5 per cent in 1991 to 11.5 per cent by 1994 and was extended to cover foreign currency deposits, foreign currency borrowing from foreign banking institutions, and inter-bank borrowing. Additional measures included the transfer of public funds from private banks to the central bank, including deposits of the Employees Provident Fund. However, as higher interest rates resulting from sterilization attracted additional foreign capital, monetary authorities were compelled to introduce central bank securities and bonds (Malaysian Savings Bonds). Monetary authorities in Indonesia relied primarily on sales of short-term central bank securities and the sale of money-market securities to commercial banks. Additional methods employed to control excess liquidity included raising the discount rate on export drafts, and the imposition of direct controls on banks to contain credit expansion. The latter measure included transferring a share of state-enterprise deposits to the central bank.

The East Asian experience with sterilization has had only limited success. It can be observed that broad money expanded in tandem with the monetary base in these economies indicating that sterilization efforts were only partially successful in mopping up excess liquidity (Appendix A). Except for the early years of the 1990s when heavy sterilization efforts in Indonesia, Malaysia and South Korea were undertaken, a positive correlation is seen to exist between money supply and the BOP surplus. In consequence, average inflation rates in these economies have also tended to increase or have remained high.

Sterilization can also lead to a widening of the spread between domestic and international interest rates sufficiently to induce further short-term capital flows. In most of the East Asian economies there was a rise in the short-term interest rates as sterilization efforts got under way (Appendix B). Reinhart and Dunaway (1997) argue that the rise in interest rates led to attracting more capital inflows to

these countries. Increases in short term interest rates can also discourage investment demand as the cost of capital rises, while returns on less risky assets such as government paper become more attractive. Sterilization, therefore, may have the unintended effect of changing the composition of capital inflows away from long term to short term flows as investment in financial assets proves more attractive relative to fixed investment. In fact, Reinhart and Dunaway (1997) argue that country experience in East Asia and Latin America suggests that short-term flows as a share of total capital inflows rose at least initially in response to sterilization.

Sterilization can be expected to be more successful in countries that maintain restricted capital accounts. Given a less liberal capital account regime, even if open market operations result in higher interest rates, domestic borrowers are constrained from accessing funds from abroad. Moreover, with limited access to international capital markets, the scope for circumventing the domestic banking system as a consequence of higher reserve requirements is also made more difficult. Nevertheless, even where sterilization is partly successful, there are significant fiscal or quasi-fiscal costs involved. Sterilization can entail sizable quasi-fiscal costs to the central bank as high yielding domestic financial assets are exchanged for lower yield foreign assets, and add to the fiscal burden as high interest government bonds are repaid (Calvo, 1991). In addition, huge interest payments on sterilization bonds can also add to domestic inflationary pressure.[4]

There is also a limit to sterilization efforts when the financial sector is weak. If the banking sector is burdened with a high percentage of non-performing loans for example, high interest rates consequent to sterilization can exacerbate systemic risks in the financial sector and heighten the threat of a financial crisis. Sterilization can be used to provide useful short-term relief in the case of sudden surges in capital inflows, but over the long-term it can prove costly and becomes ineffective in the case of outflows when foreign exchange reserves start to decline.

Alongside efforts at sterilization, other forms of policy measures to deal with capital inflows were also being used by East Asian economies. Indonesia, for example, resorted to re-imposing controls to restrict the inflow of foreign capital. Limits were imposed on offshore borrowing by state enterprises and commercial banks, and on state-related overseas commercial borrowing. Bank Indonesia also reduced swap operations by lowering limits on individual banks and raising the swap premium. Similarly, in Malaysia controls were strengthened in 1994 with the prohibition of short term money market instrument sales to non-residents, a ban on commercial bank swaps, and tight restrictions on forward transactions with foreigners.

The desirability or otherwise of re-imposing capital controls is debatable. It can be argued that in certain circumstances reversal of capital account liberalization is a second best option to avert a larger macroeconomic crisis. For example, i) when other policies have lost credibility; ii) when exchange rate adjustments and monetary and fiscal policy changes are not implemented; iii) if there is an external shock to the economy (rising international interest rates or disturbances in the financial market); iv) where the composition of capital flows is perceived not to be amenable to other policies; v) to regain some independence in monetary policy where there appears a conflict between achieving internal and external balance. In such circumstances capital controls may be optimal in the short run. Implementing control of capital flows is acknowledged to be the hardest part (Dornbusch, 1998).

In the exchange rate regime, most of the East Asian economies chose to safeguard their export competitiveness by implementing a tightly managed exchange rate, allowing virtually no significant nominal appreciation in domestic currency (Appendix C). With rising inflation and tightly managed exchange rate

[4] For example, interest payments on monetary sterilization bonds in South Korea was estimated to account for about 78 per cent of the increase in the monetary base between 1990 and 1995 (Park and Song, 1996).

depreciation, the currencies tended to undershoot their long run equilibrium level as predicted by the purchasing power parity argument. In simple terms, the purchasing power parity concept states that currency equilibrium will be maintained if the rate of depreciation to the world currency is roughly equal to the inflation differentials.[5] As shown in Appendix C, the depreciation of the nominal exchange rates of these economies was significantly less than their inflation differential with the US in the 1990s. Such a trend becomes unsustainable in the long-term and most East Asian economies faced sharp corrections in mid-1997 in the midst of the financial crisis overtaking them. Thus, the tendency for currencies to be overvalued has been a major disequilibrium factor in the macroeconomic management of most East Asian economies. Rapid growth and the impressive record in maintaining fiscal balances concealed this underlying problem even when their current account deficits increased or remained persistently high.

The option of adjusting the exchange rate may be in the form of permitting the rate to fluctuate more freely in the presence of large capital inflows. This has certain advantages. It can deter some of the purely speculative inflows by introducing an element of uncertainty in foreign exchange transactions. In the event of capital outflows, a flexible exchange rate policy has also the advantage of taking some pressure off foreign reserves. Moreover, it allows monetary authorities greater autonomy in exercising control over monetary aggregates. The main drawback in allowing the exchange rate to fluctuate more freely, is that it may induce volatile movements in the real exchange rate, imposing a substantial adjustment burden on the economy. Large swings in real exchange rates can have adverse consequences on machinery and equipment investment and thus on growth performance in the longer run. In addition, for most emerging markets, the thinness of their exchange and other financial markets makes a fluctuating exchange rate regime an unattractive alternative. Faced with a surge in capital inflows, it may, however, be desirable for governments to adopt some flexibility in their exchange rate regime in order to allow central banks the autonomy to adjust monetary policy to meet domestic needs.

Most of the major policy responses to capital inflows interact with each other to influence the final outcome. For example, a combination of a fairly fixed exchange rate regime, sterilized intervention (which may result in higher domestic interest rates) and maintenance of a liberal policy on capital inflows, is likely to maximize the volume of short-term inflows. For the long-term investor, there is always exchange rate risk. Similarly, a mix of sterilized intervention and controls on capital inflows may undermine the intended individual effectiveness of these instruments. Higher interest rates as a result of sterilization may, in fact, act as an inducement to circumvent capital controls (for example, through resorting to offshore borrowing) and negate some of the contractionary effects of sterilization.

Thus, there is no single policy itself to deal effectively with capital inflows. Fiscal policy adjustments and trade liberalization are typically linked to a wider medium-term macro adjustment in most developing countries, with time lags and difficulties in initiating policy changes. If a country makes a commitment towards an open capital account regime, then the imposition of controls on capital flows can at best be only a temporary measure. If high capital inflows are sustained over a long period, as was the case in most East Asian economies, then the maintenance of controls becomes difficult. Liberalizing outflows will not have the desired effect if high domestic interest rates continue to attract net inflows. Allowing the exchange rate to freely reflect capital movements is also a policy option that may be undesirable for an economy intent on maintaining some measure of export stability. Thus, it is not surprising that countries experiencing high capital inflows have resorted to sterilization as the most convenient method

[5] In Appendix C, the US dollar is used as a proxy for the world currency whereas the differences between a respective country's consumer price index with that of the US is used as a measure of the 'required' depreciation /appreciation.

of dealing with the problem. But, as already discussed, sterilization carries with it its own limitations and costs, and there appears little room for sterilization on a sustained basis.

3. Financial Crises in East Asia

High savings-investment imbalances reflected in high current account deficits have been a feature of most of these East Asian economies long before the crisis. It can also be argued that a fixed exchange rate regime did not make the crisis inevitable. Similar crises have occurred under both fixed and flexible exchange rate regimes. Financial systems in these countries were relatively weak in comparison to the more developed economies, but this was not a new or sudden phenomenon. What then was the trigger that set off the crisis?

3.1 The Contagion Effect

Export growth was, for long, the elixir of the East Asian economies and the trigger to setting off the financial crisis can be traced to slackening export growth. The precursor to the slowdown in export growth can be traced to external factors, notably to international currency realignments that took place in the mid 1990s -- the significant devaluation of the Chinese yuan against the US dollar and the appreciation of the Japanese yen against the US dollar around the same time.[6] Most of the East Asian currencies were linked to the dollar in some way and this has proven to be a costly exercise. Not only did it encourage foreign currency borrowing, but the pegged exchange rate also prevented central banks from raising interest rates to curb an expansion in domestic credit. Second, due to the virtual pegging of their currencies to the US dollar, the strengthening of the dollar by almost 50 per cent against the Japanese yen between 1995 and 1997 meant that their currencies became overvalued, thus weakening export revenue while at the same time making imports that much cheaper. A widening current account deficit was a problem that was most acute in Thailand, but the expectation of a similar slowdown in export growth spread to encompass the rest of East Asia.

Export growth was also affected by low productivity and the sustainability of East Asian growth has been increasingly questioned (Krugman, 1994). Krugman argued that East Asian growth had been based exclusively on the accumulation of capital per worker, rather than on any increases in the productivity with which it was used. Studies on total factor productivity (TFP) indicate that TFP growth accounts for a relatively modest share of overall economic growth in East Asia, with much larger shares attributed to the accumulation of human and physical capital. With rising competition from countries like China, India and Vietnam, and the related adverse impact on their labour intensive export industries, most of the East and Southeast Asian economies were unable to compete given their low level of labour productivity.

The first country to be affected was Thailand and declining investor confidence in that country was not unrelated to its export performance, the rate of growth of which flattened in 1996. It had a current account deficit of 8 per cent of GDP in 1996, financed largely by short-term capital inflows. Banks and businesses, convinced that the baht's exchange rate against the dollar would remain pegged (as it had in effect since 1985), borrowed heavily in dollars at much lower interest rates than they could have got at home.[7] Given that Thailand had incurred massive short-term external liabilities, the government was constrained in its

[6] While Chinese export expansion and devaluation of the Chinese yuan in 1994 may have contributed to lessen East Asian export competitiveness to a certain extent, its impact may be overestimated. It is generally argued that unification of the yuan's official and market exchange rates appeared to imply a 50 per cent devaluation in the official rate. However, at the time more than four-fifth's of China's trade is estimated to have been conducted at the market rate, hence the devaluation in effect would be something more like 10 per cent (*The Economist*, March 7, 1998). However, the huge expansion of production capacity in China (due largely to the increase in FDI) would undoubtedly have raised concerns about the expected impact on future exports.

[7] As a result, Thailand's debt to foreign banks jumped from $29 billion in 1993 to $69 billion by mid-1997, and more alarmingly 70 per cent of which had a maturity of less than a year.

macroeconomic management. As the US dollar appreciated, devaluation of the Thai baht would have had adverse effects on the health of the domestic corporate and banking sector.

The accompanying property slump served to shift the focus of attention to the banking system. The slowdown in export revenue and the real estate glut both combined to threaten the banking system due to resultant increases in its already high non-performing loans. This situation was exacerbated by the downgrading of two of Thailand's banks by a risk-rating agency (Moody's) in mid 1996. As investor confidence began to decline rapidly, the Thai baht came increasingly under pressure and despite initial efforts by the Bank of Thailand to defend the currency, the government was forced to concede defeat and float the currency in July 1997.

Sudden capital outflows can also spread rapidly to the trade partners of the stricken economy. This is known as the "contagion" effect. For example, if a BOP crisis and capital reversal effect is felt by one country, the domino effect easily catches up with other trade partners of the affected country through 'negative shocks'. With ensuing devaluation, the prices of the main exports of the affected country decrease, import prices increase, interest rates rise, foreign investment is discouraged and capital reversal is exacerbated. While the East Asian countries shared many economic interlinks, the key factor in the contagion effect in East Asia, however, was the similarity of their economies. Thailand's weaknesses -- a (virtually) fixed exchange rate, vulnerable banking system with too much exposure to property, massive unhedged short term foreign debt and a general lack of transparency in business and financial dealings -- appeared to be shared by many of its neighbours. Investors were quick to react, and the crisis spread quickly to most East Asian economies.

The vulnerability of these economies to a sudden outflow of short-term capital can be gauged from the behaviour of their stock market indices (Appendix D). For example, stock market indices are seen to fluctuate in correspondence with the amount of net foreign equity inflows, suggesting that foreign investors indeed play a dominant role in stock exchange transactions. In other words, foreign equity inflows can be held to explain financial asset price inflation to a significant degree in these economies. If such foreign investors begin to sell out on a large scale, it can lead to high volatility in domestic financial assets or to a decline in the stock market. Indeed, the decline in the Thailand stock exchange for example, was a reflection of the outflow of foreign investors. This in turn led to an increase in demand for foreign currencies in exchange for domestic currency and it was partly through this route that pressure for depreciation of the Thai baht began to mount in 1996.

Although hedge funds did launch the initial attack, the heaviest sellers of currencies thereafter were local firms and individuals (particularly in Indonesia) who were either being forced to repay dollar loans that foreign banks were no longer willing to roll over, or attempting to hedge their foreign exchange liabilities for fear that currencies might fall further. As currencies and stock markets collapsed, the worst hit economies -- Thailand, Indonesia and South Korea -- were forced to approach the International Monetary Fund for bailout packages.

These countries were forced to seek IMF assistance because they were faced with a liquidity crisis. Some commentators are therefore of the view that accompanying IMF conditionalities (fiscal adjustment, finance sector restructuring) served to prolong and exacerbate the liquidity crunch faced by these economies, fuelling a further run on their currencies (Khatkhate, 1998). However, it can be argued that even though it was a liquidity crisis, once speculators started attacking the currencies and looked at other factors in the economy (such as the slowdown in export growth and excessive short term external debt liabilities), providing liquidity alone would not have been sufficient to stem the crisis of confidence. The accompanying IMF conditionalities, particularly with respect to restructuring financial sectors, are intended to

rectify longer-term structural issues in these economies.

Financial systemic risks were always high in the East Asian region, but the structural weaknesses in the financial sector were ignored so long as these countries enjoyed impressive growth. While a fatal combination of pegged exchange rates and an over-hasty opening of economies to short run foreign capital caused a surge in debt to foreign banks, the resulting financial bubbles were inflated further by inadequate bank regulations and the close, and sometimes corrupt, relationship between banks, firms and governments. This relationship encouraged borrowers and lenders to believe that governments would bail them out if need be. The weaknesses in the financial sector therefore served to amplify the impending market corrections and create a crisis that engulfed the whole region.

3.2 Financial Sector Condition: what are the lessons?

It has become increasingly clear that a sound financial sector -- that is, a competitive sector which is effectively regulated and supervised -- is an essential pre-requisite for an efficient management of the external sector of an economy. When the banking system is sound and there is effective regulatory and supervisory control, then capital inflows will not pose serious additional risks to the financial system. When domestic financial markets are characterized by distortions, a large volume of capital inflows can magnify the underlying weaknesses to create a financial crisis. The changing nature of foreign capital flows -- the increasing share of short-term flows -- also means that financial sectors have to be increasingly robust to cope with sudden reversals of financial flows and volatile asset prices. If bank balance sheets are badly structured, large and volatile capital flows can cause sharp swings in bank liquidity that result in alternative periods of credit expansion and contraction. Thus, banks have to be competent in managing risk, and the adequacy of the supervisory and regulatory mechanisms in place come to play an increasingly critical role.

Box 2
Financial Sector Reforms in East Asia

Most East Asian economies undertook domestic financial sector reforms from the latter half of the 1980s. Malaysia set out guidelines for the closer supervision of the financial sector in 1989 and introduced a risk-weighted capital adequacy ratio of 7.25 for its commercial banks and finance companies. In 1991, the central bank freed the base lending rates from its administrative controls. However, pervasive intervention in the area of priority sector loans remained, with banks expected to extend 20 per cent of their loan portfolios to priority sectors (mainly comprised of small enterprises and housing). South Korea initiated a plan to gradually deregulate interest rates in 1991. In 1993, interest rates on lending other than on policy loans and government funding, as well as those on long-term bank deposits were liberalized. The deregulation of interest rates was extended to cover time deposits with a maturity of at least six months, while banks were permitted to determine interest rates on certain loans. Thailand abolished interest rate ceilings on all time deposits in 1990 and removed ceilings on savings deposits in 1992. In the same year, commercial bank lending rates as well as ceilings on finance companies' borrowing and lending rates were abolished.

While East Asian economies placed increasing emphasis on developing more efficient and competitive financial systems, particularly in the early 1990s, there is considerable debate as to how effectively reforms were implemented (IMF, 1997). "Inadequacies in the regulation and supervision of financial institutions as well as limited experience among financial institutions in the pricing and managing of risk, lack of commercial orientation, poor corporate governance, and lax internal controls -- all in the face of movements toward liberalization and increased competitive pressure, had contributed to imprudent lending, including lending associated with relationship banking and corrupt practices" (IMF, 1997:11-12).

Some of the causes for the fragility of banking sectors in East Asia reflect adjustment to a liberal and open environment. Widespread government involvement in banking adds to the vulnerability. The fact that the public sector banks tend to be the major players in the banking sector allows monetary authorities to exert undue influence over the financial market inspite of moves towards liberalization. While government ownership *per se* is not necessarily synonymous with bad management, the interlocking of ownership can lead to special interest lending practices without proper assessment of efficiency. In South Korea, for example, more than a decade after the banking sector was privatized, policy related loans were still estimated to account for up to half of all commercial banks' outstanding loans.[8] Banks have thus continued to function under a legacy of bad debts accumulated during earlier periods of directed lending which weakens credit discipline and is a major cause of banking sector fragility.[9]

The implementation of financial liberalization policies which benefit banks in the long-term have, however, caused problems in emerging markets. Liberalization exposes banks to new risks, new competitors can put pressure on existing banks' earnings, while lifting of restrictions can also release pent-up demand for credit. Lack of sufficient experience in evaluating credit risks in a rapidly changing environment of financial and capital account liberalization can contribute to the instability of the financial sector. Excessive expansion of bank credit, as witnessed in most East Asian economies, fund asset price cycles as new opportunities for profit open up. A common development has been an expansion of bank loans towards equities and real estate. An excessive degree of bank lending to real estate development can fuel a property boom, with major consequences for the economy when the bubble bursts. If assets are pledged as collateral for bank loans or are financed by bank borrowing, asset price increases can have an adverse impact on the entire financial system. While some East Asian economies (Malaysia, Thailand, Indonesia) employ moral suasion to tighten the extension of credit in times of excessive speculative pressure, there appears a need for stricter prudential measures to be enforced. Moreover, despite heightened competition among domestic institutions, the banking sectors in most of these economies continued to be highly fragmented -- Indonesia, for example, had a staggering total of 239 banks in operation at the end of 1997.

At the same time, capital account liberalization magnifies the vulnerability of the banking sector by complicating the task of monetary policy and restricting the use of interest rates. An exchange rate target makes it that much harder for central banks to use interest rates to moderate credit cycles. The combination of a 'fixed' exchange rate and high domestic interest rates can serve to encourage foreign borrowing by residents to finance local currency assets. The fragility of the banking system is heightened as a result if large current account deficits eventually cause a sizable devaluation to take effect.

Prudential regulations aimed at controlling banks' capital level or the investments they make, can strengthen the soundness of the banking sector in the long run. Financial sector reforms were strengthened in some East Asian economies such as Malaysia and Indonesia following banking crises in the 1980s. Most have in fact, adopted the Basle Accord which requires banks to maintain capital equal to at least 8 per cent of their risk-adjusted assets. However, in many emerging markets subject to volatility in financial markets, an 8 per cent capital adequacy ratio may be insufficient to guarantee the banking system's stability.

The lack of enforcement of existing regulations was also a source of problems in financial sectors across the region. Capital measurements remain ineffective unless disclosure requirements on bad loans and the way banks

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[8] The Economist, "A Survey of Banking in Emerging Markets", April 12, 1997.

[9] Bad loans were estimated at 14 per cent of outstanding credit in Thailand and 11 per cent in Indonesia in early 1997 (The Economist, "A Survey of Banking in Emerging Markets", April 12, 1997).

set aside reserves to cover them are made clear. Poor accounting standards and limited information disclosure requirements continued to make the assessment of the riskiness of creditors very difficult. In Indonesia, for example, there were no standards to ensure consistent financial reporting across banks. And in most instances, there was no effective follow-up to ascertain that checks against abuses such as lending in excess of loan approval or credit exposure limits were being adhered to. Existing supervisory and regulatory bodies were ill equipped to assess risks, given that poor accounting standards meant that banks had inadequate information. Regulations governing the reporting of asset quality were also poor. Malaysia, for example, had only an elementary loan classification system, and loans had to be six months in arrears before they were categorized as nonperforming. In the absence of requirements for banks to report on the condition of their asset portfolio, existing risk-based capital requirements have no effect. While most East Asian countries have imposed limits on bank lending in a variety of forms, such controls are easily circumvented where regulations and accounting practices are weak.

Poor supervision was not solely limited to the banking sector. The problem was perhaps even more endemic in relation to non-bank financial institutions such as finance companies that have proliferated following liberalization. In Thailand, as the capital and bond markets developed following liberalization, the dominant role of commercial banks as financial intermediaries declined rapidly. The share of savings mobilized by commercial banks in Thailand for example, declined from 79 per cent in 1991 to 45 per cent in 1994.[10] Similarly, the share of commercial bank credit in total incremental credit also recorded a decline from 75 per cent to 40 per cent over the same period. In the financial crisis that followed, 58 finance companies in Thailand faced closure as a result of gross mismanagement.

[10] ESCAP, 1997, "Macroeconomic Policies and Thailand's Institutional Mechanisms", UN/ESCAP, Bangkok.

The weaknesses of the financial systems in the region are heightened by thin and shallow financial markets relative to those in industrialized economies. With financial liberalization, there has been movement toward deepening of financial sectors, with the introduction of new financial instruments as the capital and bond markets have developed. Equity markets in many emerging economies are now comparable to those in the larger European countries in terms of the ratio of capitalization to GDP. Nevertheless, they can be more vulnerable to volatility in equity prices than their counterparts in the developed countries -- they are yet to develop adequate trading mechanisms and exchanges, and clearing and settlement systems. Unlike in developed country stock markets, most emerging markets operate on an auction/order-driven trading system without specialists or without securities dealers who will use their inventory to provide liquidity and smooth price fluctuations. Thus, liquidity effects in emerging markets are likely to be more volatile. The introduction of new financial instruments can also contribute to greater volatility. For example, most emerging markets have recently established derivatives markets. However, given that derivatives are highly leveraged instruments, they can facilitate speculation and result in higher stock market volatility and extreme price movements. Alternative practices such as margin trading, which is another means of obtaining greater leverage, can have the same effect.

4. The Sri Lankan Experience in Managing Capital Inflows

Given a historically low rate of domestic savings, Sri Lanka is forced to rely on foreign savings to generate additional resources for much needed investment. Liberalization of the capital account is mooted as a desirable policy objective in order to enhance foreign investor confidence in the country and attract more foreign capital. However, the question arises whether full liberalization of the capital account is a necessary or even a desirable policy option for Sri Lanka in the light of the experience of

the East Asian economies. The rest of the section will examine Sri Lanka's past experience in managing a surge in capital flows in the mid 1990s and assess whether the country's macroeconomic management and financial sector conditions are sound enough to be exposed to added risks arising from capital flows without damaging consequences for economic growth in the long-term.

economies are deemed to be private sector driven in that they do not reflect a public sector savings and investment gap, this is clearly not the case in Sri Lanka.

In contrast to the East Asian countries, Overseas Development Assistance (ODA) plays a significant role in the composition of foreign capital in Sri Lanka. In spite of the fall of ODA to Sri Lanka by nearly 50 per cent in the early 1990s, it still accounted for over 50 per cent of overall inflows during 1990-1996. In the East Asian countries, ODA contribution to total inflows was mostly negative.

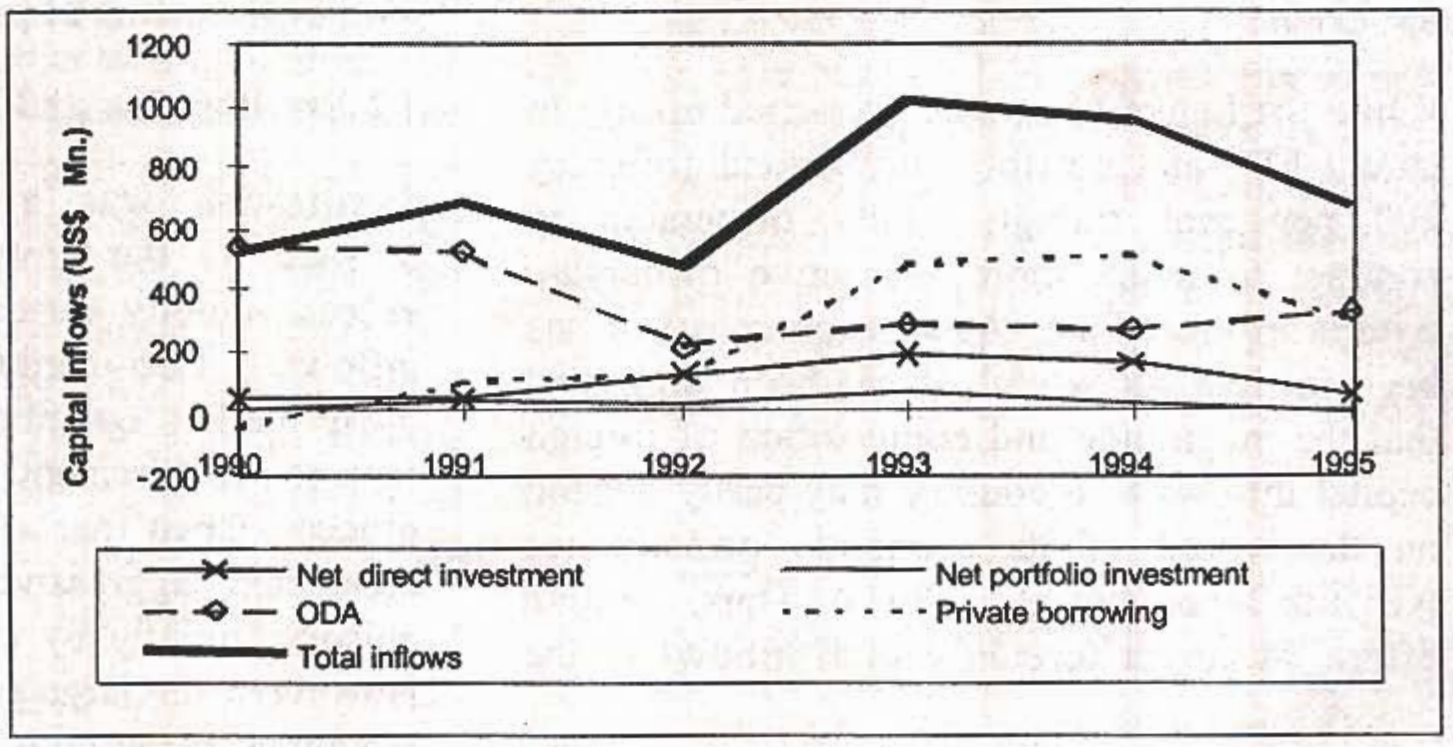
Box 3
Capital Account Liberalization in Sri Lanka

Sri Lanka has for the most part relaxed rules on foreign ownership of equity and exchange controls on remittances. Permission has been granted to approved country funds, regional funds, nonresident individuals and corporate bodies incorporated outside Sri Lanka to invest in shares in listed companies up to 100 per cent of issued share capital since 1992 (up from 40 per cent in 1990), with the exception of a few sectors including land, plantations, banking and insurance. Sri Lanka has minimal restrictions on foreign direct investment, allowing foreign investors to borrow offshore while at the same time permitting exporters with adequate foreign currency exposure to access offshore borrowing free of exchange controls since 1996. From 1996, commercial banks too were permitted to borrow up to 5 per cent of their capital funds from abroad.

4.1. Trends in Capital Inflows

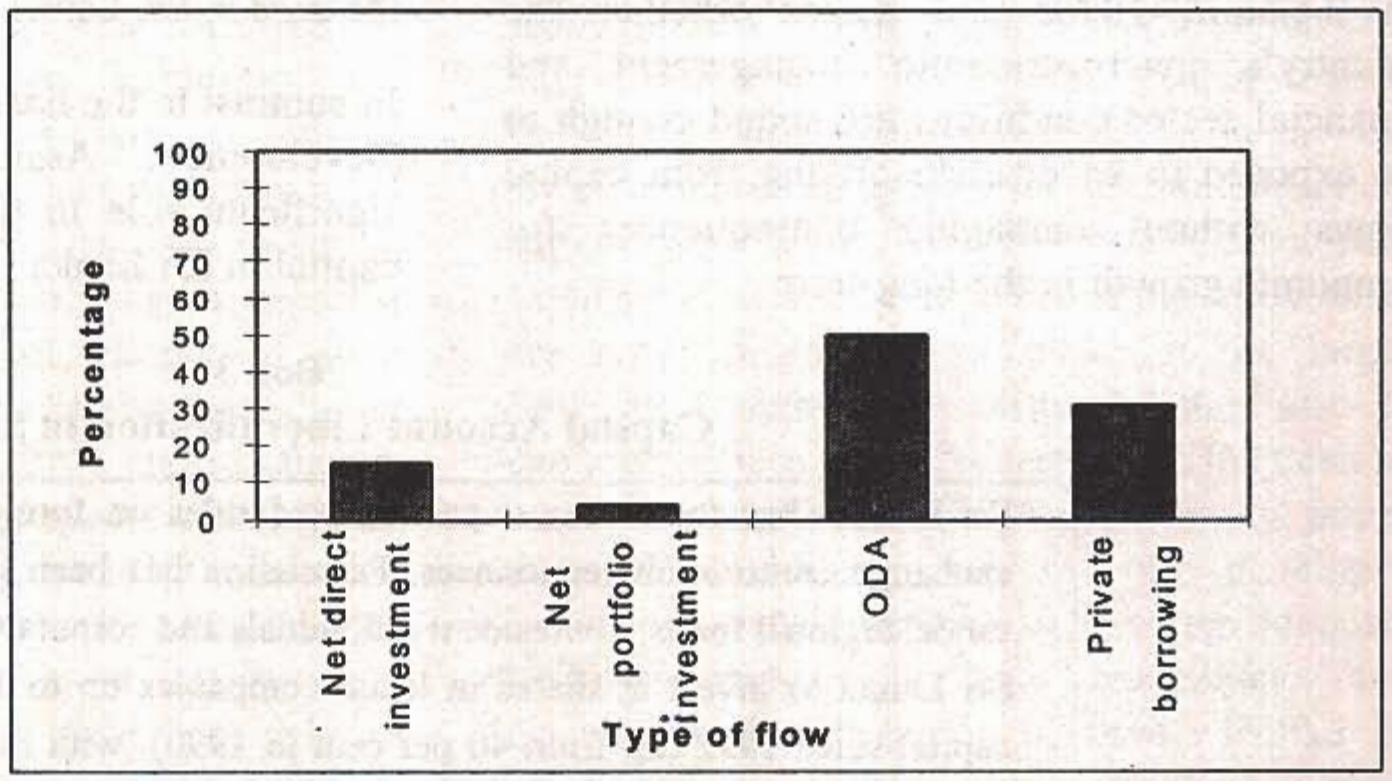
Sri Lanka too has been running persistently high current account deficits averaging 6-8 per cent of GDP in the 1990s. However, while current account deficits in most East Asian

Figure 3
Capital Inflows 1990-1996



Source: IMF (1996), International Statistics Year Book 1996;
IMF (1997), International Financial Statistics Year Book 1997.

Figure 4
Composition of Capital Inflows: 1990-1996



Source: IMF (1996), International Financial Statistics Year Book 1996,
IMF (1997), International Financial Statistics Year Book 1997.

Capital inflows to Sri Lanka increased substantially during the early 1990s, surging to an all time high of US $ 1022 million in 1993 (Figure 3). Overall, 50 per cent of the inflows during the period 1990-1996 comprised of ODA whilst private borrowings comprised over 30 per cent of the inflows (Figure 4). Net direct investment contributed to around 15 per cent of the total (comprising mostly of privatization proceeds after 1995).[11] It is noteworthy that like the East Asian economies, Sri Lanka too has been experiencing an increase in the share of short-term capital flows during the 1990s.

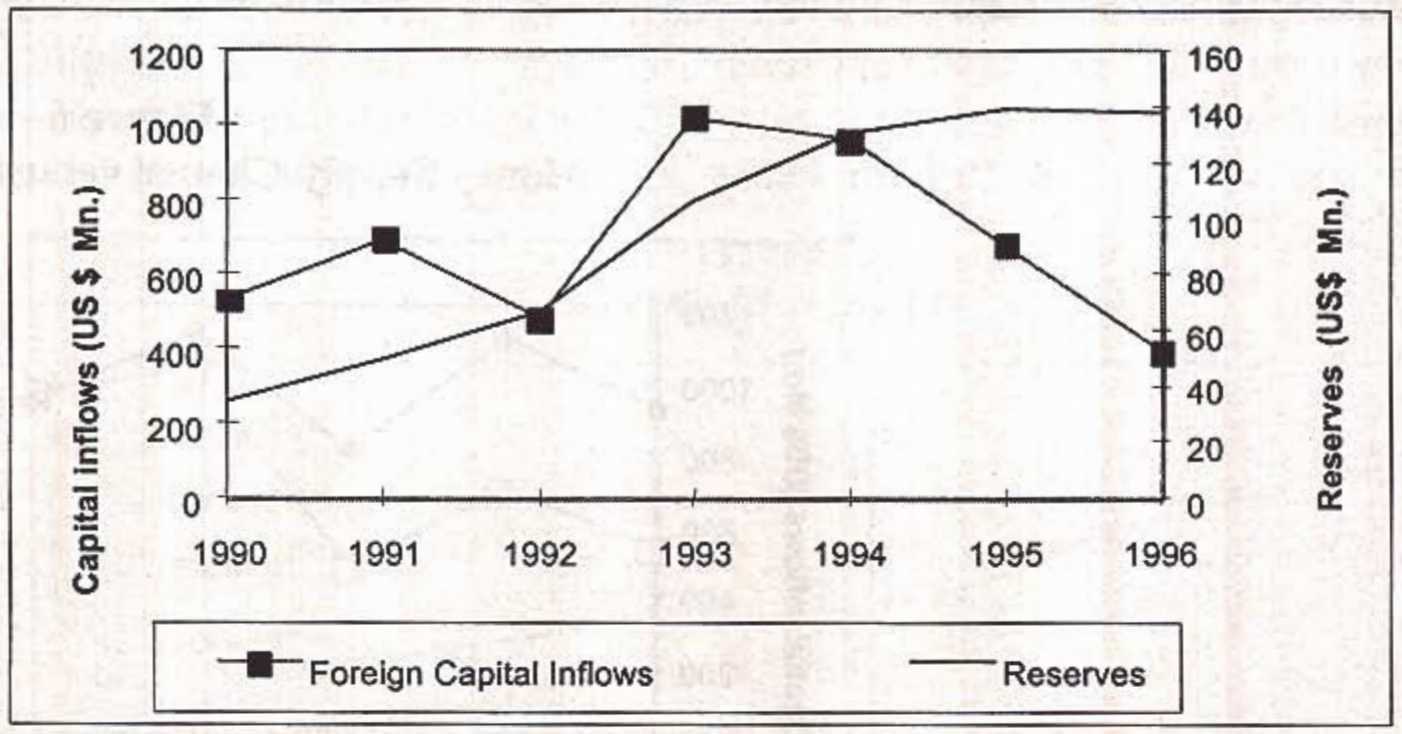
While Sri Lanka has made concerted efforts to attract FDI and portfolio investment (offering 100 per cent foreign equity ownership in contrast to much more restrictive ownership criteria in most East Asian economies), it has been far less successful. It has been suggested that the magnitude and composition of foreign capital inflows to a country may partly depend on the record of its economic performance (Griffith-Jones et al., 1997). Thus, despite efforts to attract foreign capital inflows in the face of low domestic savings and persistent trade deficits, internal policy constraints and an uncertain political environment have acted to limit the flow of foreign capital. In particular, an unfavourable macroeconomic environment brought on primarily by excessive fiscal spending has made macroeconomic management less successful than in East Asian economies which have managed to sustain fiscal surpluses. It is apparent that countries with stable macroeconomic policies and high growth rates are more likely to be looked upon favourably by long-term investors concerned with expectations of profitability.

4.2 Sterilization and Macro Consequences

Sterilization was a policy option actively pursued by the government to mop up the excess liquidity ensuing from the large capital inflows. Two methods of sterilization (i.e., open market operations and changes to the reserve requirement) were adopted in the process. Open market operations (OMO) were conducted aggressively during the 1990-93 episode initially by selling public sector debt. However, the large scale of the operations and the dwindling holdings of government securities led to the Central Bank auctioning its own debt (securities) from October 1993.

[11] Privatization of Orient Lanka Limited, Ceylon Steel Corporation in 1996, and Sri Lanka Telecom in 1997.

Figure 5
Capital Inflows and Reserves



Source: IMF (1996), International Financial Statistics Year Book 1996, IMF (1997), International Financial Statistics Year Book 1997.

In effect, from holding 95 per cent of Treasury Bills, the Central Bank went into a position where it had none by 1993 and was forced to issue its own paper.

As a result of high net capital inflows, external reserves increased considerably over the years (see Figure 5). The surge in reserves is particularly noticeable in 1993 where inflows peaked as well.

Employing the reserve requirement ratio as a means of sterilization, commercial bank reserve requirement levels were manipulated so as to reduce the money multiplier, and curtail monetary expansion. During the period 1992-93, the reserve requirements on all domestic currency deposits were increased. Together with this, in 1993, higher margin reserve requirements were imposed on foreign currency deposit reserve levels. This measure does not affect the narrow money multiplier (M1), but reduces the expansionary effect of the broad monetary aggregates (M2) via reductions in the money multiplier. Matching expectations of the money multiplier changed from 2.91 in December 1992 to 2.86 in December 1993.

How effective was sterilization?

Sterilization activity in Sri Lanka was aimed particularly at mopping up the excess liquidity in the economy and controlling credit expansion. Both were intended ultimately to control inflation. This was very much in line with the objective of the tight monetary policy stance pursued by the government during the mid 1990s. The rest of this section will analyze how far the aims of sterilization in Sri Lanka were realized, and what knock-on effects the efforts had on other variables.

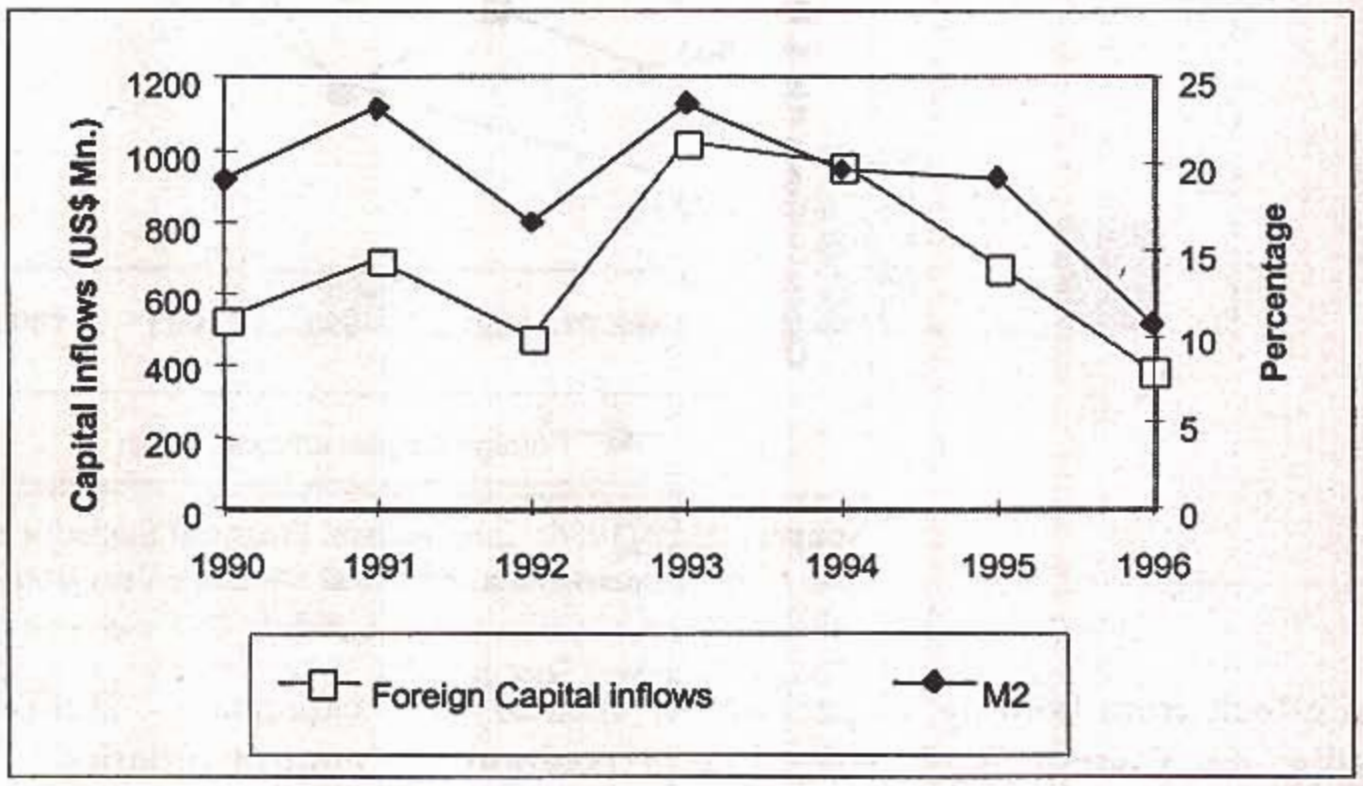
The impact of sterilization (undertaken during 1991-93) on money supply movements can be gauged by examining the correlation between capital inflows and money supply growth. As Figure 6 indicates, even with sterilization, nominal money supply growth was high at around 18 per cent during the 1991-93 period, compared to around 10 per cent in years when capital inflows were markedly less. Sterilization, therefore, seems to have been only partially successful. It can be roughly estimated that sterilization activity absorbed around 50 per cent of capital inflows in 1993, the year with the highest magnitude of inflows[12]. Even

[12] Foreign capital inflows in 1993 = Rs 24162. The decrease in net domestic assets = Rs 13067 due to open market operations. Money growth was only Rs 11609. Therefore, assuming that the total decrease in net domestic assets was due entirely to sterilization activity, the total amount of money absorbed through sterilization activity was Rs 13067/ Rs 24162.

inflation levels were high, averaging around 10 per cent during 1991-93 compared to 8-9 per cent in the post-sterilization period.[13,14]

inter-bank interest rates rise as a result of constrained liquidity. This effect too is meant to control the growth of credit.

Figure 6
Money Supply Change versus Capital Inflows



Source: IMF (1996), International Financial Statistics Year Book 1996,
IMF (1997), International Financial Statistics Year Book 1997.

Theoretically, credit expansion can be affected indirectly through OMO by squeezing money supply and causing a rise in interest rates. On the other hand, changes in the reserve requirement constrains credit expansion through increasing the amount of non-performing assets in commercial banks. Increasing the reserve requirement therefore, is akin to imposing a "tax" on the banking system. This tax is often translated into higher lending rates if the demand for credit is high. Again, there is upward pressure on interest rates, especially if

Nominal credit movements plotted against capital inflows indicate an increasing trend over the years, dipping slightly only during 1993 (Figure 7). The dip in credit during 1993 is attributable mainly to a sharp decline in credit to Government. Contrastingly, private sector credit expansion in 1993 was not curbed and remained high at 30 per cent, backed by the favourable economic climate. The net decrease in private credit taking for instance, was merely 2 per cent despite a rise of 6 per cent in the interest rates.

Thus, private sector credit activities seemed to be quite inelastic to rising interest rates. Even the dip in government sector credit was more a result of Central Bank directives (moral suasion) and other methods of credit control rather than a response to interest rates rises ensuing sterilization. The 'other methods' include; i) credit ceilings to non-priority sections (1993), and ii) 100 per cent deposit margins against Letters of Credit on non-essential imports (introduced in 1989). Such measures of credit control were all implemented to complement the tight monetary policy stance

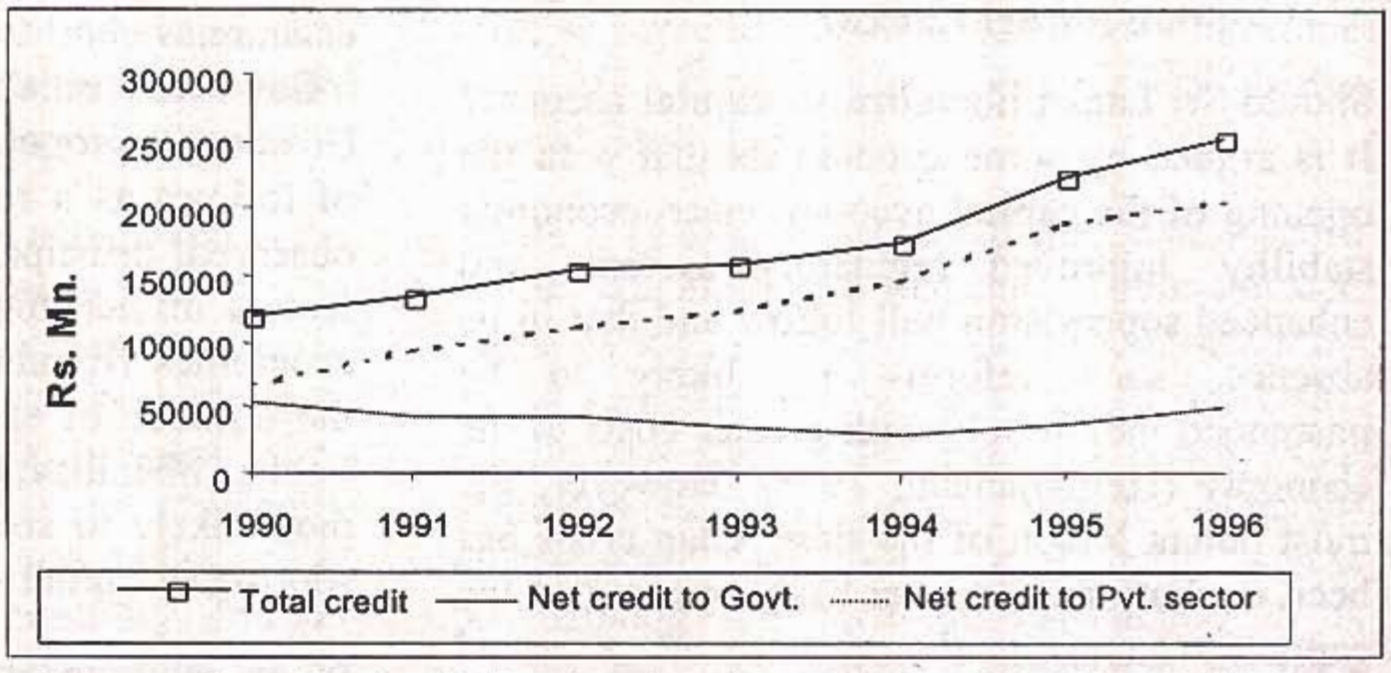
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[13] The lower inflation during the post-1994 period is also attributable to the fact that some of the key items (such as bread and wheat flour) used in calculating the Consumer Price Index were subject to administered price from 1994.

[14] It is difficult to assert however, that movements in money supply during the 1991-93 period are attributable solely to sterilization activity. Money supply growth could have well been affected by other factors such as fluctuations in the volatility of money circulation and endogenous money supply growth (see Laidler 1993). Further, efforts of sterilization were stultified by monetization of the budget deficit in some years contradicting the tight monetary policy stance.

adopted by the government during this period. Further, during the mid 1990s, credit to government declined because of fiscal consolidation and downsizing efforts of the state. Thus, overall credit movements during the 1990s seem to be affected only slightly by fluctuations in capital inflows and sterilization activity.

Figure 7
Credit Movements



Source: Central Bank of Sri Lanka, Annual Report 1993, 1994, 1995 and 1996.

OMO for sterilization activity meant that the government had to make Treasury Bills more attractive to investors than other financial assets. In consequence, the interest rates on Treasury Bill increased considerably, especially in 1993. The higher Treasury Bill rate forced commercial banks to offer higher interest rates on their deposits as well, and charge a higher rate of interest on loans. Apart from the cost it incurred to the banking system and the private sector, higher interest rates were also a cost to the Central Bank. These quasi-fiscal costs arise from the Central Bank acquiring low yield foreign exchange reserves and issuing high yield Treasury Bills to mop up the excess liquidity. Sustaining the tight monetary policy into 1995 (when capital inflows dried up significantly) resulted in very adverse consequences to the financial sector. The severe shortage of cash in the economy led to inter-bank interest rates soaring to nearly 60 per cent overnight.

Even though the rise in domestic interest rates was a further attraction to short-term capital inflows in most East Asian countries, it is doubtful that this was the case in Sri Lanka. In Sri Lanka, no clear trend is visible between rises in interest rates and portfolio investment. Typically, it is the inflows to the debt market (and not equity market) that is responsive to higher interest rates and given that in Sri Lanka the debt market -- both public and private -- was closed to foreign investors, the lack of a clear correlation is to be expected. Higher short-term inflows during the 1991-93 episode seem to be more a response to better economic performance during the period and relaxation of rules regarding foreign portfolio capital rather than to higher interest rates. In fact, the high interest rates that sustained over the years is likely to have reduced the profitability of companies and acted as a disincentive for the inflow of foreign capital given that Sri Lankan companies, unlike their counterparts in East Asia were not permitted to borrow cheaply from abroad as domestic interest rates rose.

Thus, Sri Lanka was fairly successful in managing a surge in foreign capital inflows during the period 1991-93. However, the greater part of its success emanated from the fact that it had a relatively more restricted capital account than most East Asian economies -- conditions under which sterilization is likely to be more successful. The other point to be kept in mind of course, is that unlike in the case of the East Asian economies, Sri Lanka was not subject to a sustained inflow of large foreign capital which

makes macroeconomic adjustment much more difficult. Thus, the nature of Sri Lanka's capital account regime and the fact that the higher than normal surge in foreign capital was not sustained over an extended period of time, meant that monetary authorities were able to deal with the problem adequately.

4.3 Capital Account Convertibility: is it an option for Sri Lanka?

Should Sri Lanka liberalize its capital account? It is argued by some economists that with the opening of the capital account, macroeconomic stability, improved regulatory systems and enhanced supervision will follow and that in its absence, such reforms are likely to be postponed indefinitely with greater costs to the economy (Hettiarachchi, 1998). However, the most potent lesson of the East Asian crisis has been to show that an over hasty opening of the capital account in the absence of a sound financial sector and an effectively 'fixed' exchange rate is likely to lead to a macroeconomic crisis down the line, rather than towards macroeconomic stability (although Sri Lanka's exchange rate policy has been rather more flexible than that of East Asian countries). Moreover, given that macroeconomic management becomes more difficult under an open capital account regime as already discussed, the first priority would appear to be to achieve a measure of macroeconomic stability before any attempt at liberalizing the capital account is contemplated.

The rationale behind calls for liberalization of the capital account in Sri Lanka is based on the idea that it will lead to an enhanced inflow of foreign savings to allow a sizeable rise in the level of investment. The desirability of attracting FDI is not in doubt. Sri Lanka already has a very liberal capital account regime with respect to attracting FDI into the country. However, the most important criteria to potential foreign investors is likely to be sound macroeconomic conditions, policy continuity, and political stability in host countries, rather than the nature of the capital account regime.

The distinction between long-term and short-term foreign capital inflows has to be kept in mind if the country is to avoid sudden shocks to the economy from capital flight as experienced in East Asia. As previously discussed, there is empirical evidence to suggest that the size and composition of flows to emerging markets is guided by their macroeconomic performance. In addition, policy tools used to respond to capital inflows in themselves can exert some influence on the nature of capital flows. In the East Asian economies short-term flows as a share of total inflows rose initially in response to sterilization. However, a pronounced shift in the composition of inflows as a result of sterilization was not observed, principally because other mitigating factors influencing FDI were present in these economies (Reinhart and Dunaway, 1997). In the absence of such mitigating factors in Sri Lanka, liberalization of the capital account is more likely to see an increase in the share of short-term capital inflows.

In an environment of high domestic interest rates, the danger of opening the capital account is that it will encourage short-term domestic borrowing from overseas as was experienced in the East Asian economies.[15] Sri Lanka can follow the example of some other countries, most particularly Chile, which instituted a tax on short term inflows while maintaining an otherwise open capital account regime. But such a tax will also discourage the inflow of foreign portfolio investment into the country. Given the dire need for foreign capital, an open capital account accompanied by a tax regime that could well discourage portfolio investment without a commensurate rise in FDI into the country is not likely to achieve very much.

Perhaps the most serious concern for Sri Lanka is that, unlike the experience of East Asian economies, liberalization of the capital account will lead to a net outflow of capital. In the current context of civil unrest in parts of the country and burgeoning fiscal expenditures as a result, the greatest danger of an open capital

[15] Sri Lanka is different from the crisis affected East Asian countries in that it has a more flexibly managed exchange rate. In the light of the East Asian experience, domestic borrowers will be aware that currency risk cannot be ignored when considering foreign borrowing in response to high domestic interest rates.

account is the potential for sharp capital outflows triggered by a crisis of confidence by economic and/or political factors. An open capital account means that no prior large inflows are needed for large outflows to occur -- all of the domestic stock of money is a potential source of outflow. What is clearly needed at this juncture is not so much an open capital account, but sound macroeconomic management to achieve some semblance of domestic and external sector stability, prior to any decision in regard to liberalization of the capital account.

Another important factor to be considered is the condition of the domestic financial market. The experience of the East Asian economies clearly indicates that there are very real dangers inherent in opening the capital account when the domestic financial sector is not efficiently geared to dealing with the added risks associated with free capital mobility. Market failures in the financial sector have to be addressed prior to liberalization of the capital account.

Sri Lanka accelerated financial sector reforms from the late 1980s, deregulating interest rates in the primary treasury bill market in 1988 and removing credit ceilings on commercial bank lending to selected non-priority sectors in 1992. In 1993, new capital adequacy standards were set for commercial banks. Nevertheless, despite nearly two decades of financial sector reforms and some considerable achievements, the domestic financial sector in Sri Lanka remains weak.

While there are currently 27 commercial banks in operation, of which two are state owned, the latter dominate the domestic financial sector, accounting for 62 per cent of banking sector assets. The state banks were recapitalized during 1993 and 1996 by the government of Sri Lanka at a cost of Rs 40 billion in order that they meet international capital adequacy standards. In spite of such efforts, the performance of the state banks are weak compared to other banks, especially because of high intermediation costs. The dominance of the state banks has acted to constrain competition and protect wide interest rate spreads in the banking sector. As a result, the disparity between lending and deposit rates in the domestic financial sector remains high at around 5 per cent. Private sector banks in turn, have been in a position to take advantage of this opportunity and enjoy high rate spreads rather than compete for market share. The percentage of non-performing loans in the state sector banks is high as well, estimated at 17 per cent, as opposed to a ratio of 10 per cent in the case of private sector commercial banks (World Bank, 1997).

While Sri Lanka has adopted the Basle Accord capital guideline of 8 per cent of risk-adjusted assets as the minimum capital requirements for banks (proposed to be raised to 10 per cent), doubts have been raised about the provisioning standards followed in this regard -- capital requirements are not meaningful unless provisioning standards are satisfactory. It is argued that the generous treatment of non-performing loans that are government guaranteed, ensures that the state owned banks are materially under-provisioned in their assessment of capital requirements (World Bank, 1997).

In terms of the existing regulatory framework, while it is deemed to be quite adequate, a key problem in the sector pertains to the enforcement and supervision of regulations. This stems mainly from a lack of qualified and trained staff, and the insufficient operating procedures. For instance, there are no examination manuals guiding examination procedures. Nor are there detailed provisioning requirements (World Bank, 1997). Such failures have resulted especially in poor off-site monitoring. The Central Bank's capacity to supervise non-bank financial institutions is also questionable. It is argued that the available supervisory capacity is overstretched attending to five finance companies under Bank receivership, with the result that monitoring and supervision of the rest of the registered finance companies tend to be neglected. Thus, while the necessary regulatory and supervisory framework appears to be in place, the capacity to implement existing rules fully is still very weak. The cost of inadequate bank supervision

can prove to be very high as witnessed by the experience of the East Asian economies, and in its absence, liberalizing the capital account is inadvisable.

5. Conclusion

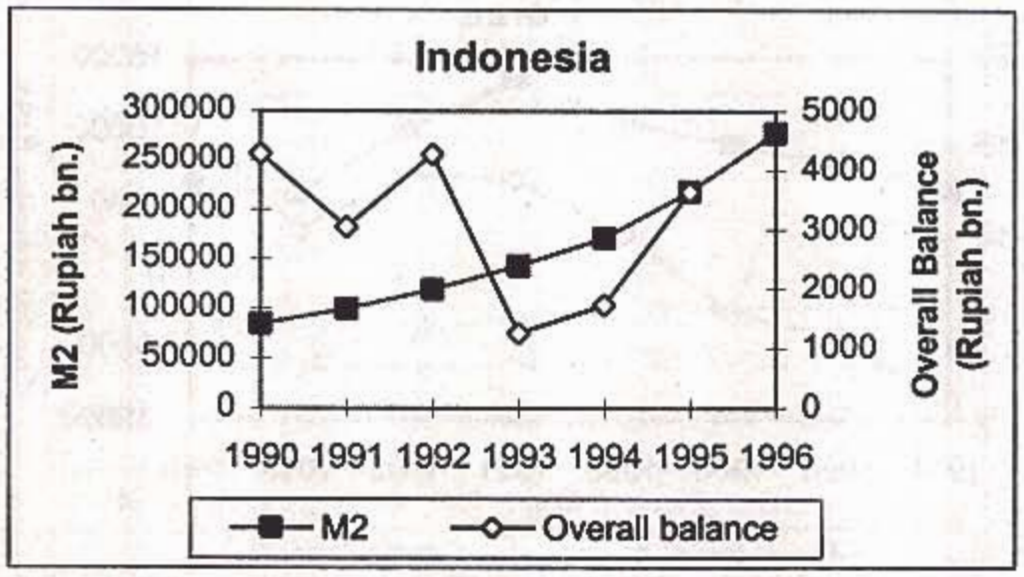
With the globalization of international capital markets, easier access to foreign private capital allows developing countries to bolster their investible resources and strive for rapid economic growth. Whilst in a world dominated by private sector activity, the magnitude and composition of flows is often beyond the control of governments, it is ultimately their responsibility to ensure that the macroeconomic policy-mix that is used to deal with a surge in capital inflows brings about a reasonable degree of stability in the domestic and external sectors of the economy.

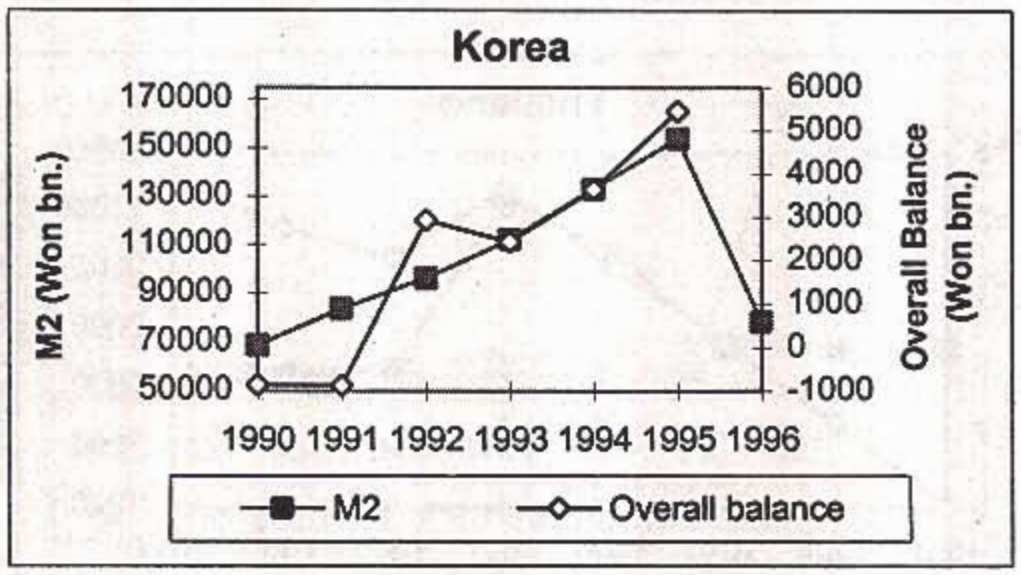
For example, liberalization of capital account transactions to finance burgeoning current account deficits poses a policy dilemma to governments. Pursuit of export-led growth requires that economies maintain a relatively competitive real exchange rate. However, liberalization or easing of restrictions on capital flows means that governments lose the independence to influence simultaneously both domestic monetary aggregates and the exchange rate, depending on the nature of the exchange rate regime in place. It is clear that attempts to combine free international capital mobility with free trade and stable exchange rates remains a policy mix that is fundamentally flawed. However, this has not prevented governments from attempting to pursue this strategy. The unpredictability of foreign capital flows increases the vulnerability of economies to shocks and with greater financial integration of economies, the margin for error in macroeconomic management is very small. If governments fail to fine tune macroeconomic policies in response to capital inflows, it can lead to damaging consequences for the economies, as witnessed by the recent experience of some East Asian countries such as Thailand, Indonesia and South Korea. The impressive growth rates achieved by these economies concealed the underlying contradictions in their macroeconomic management, and ultimately the weaknesses in the financial sector acted as a catalyst to trigger a crisis.

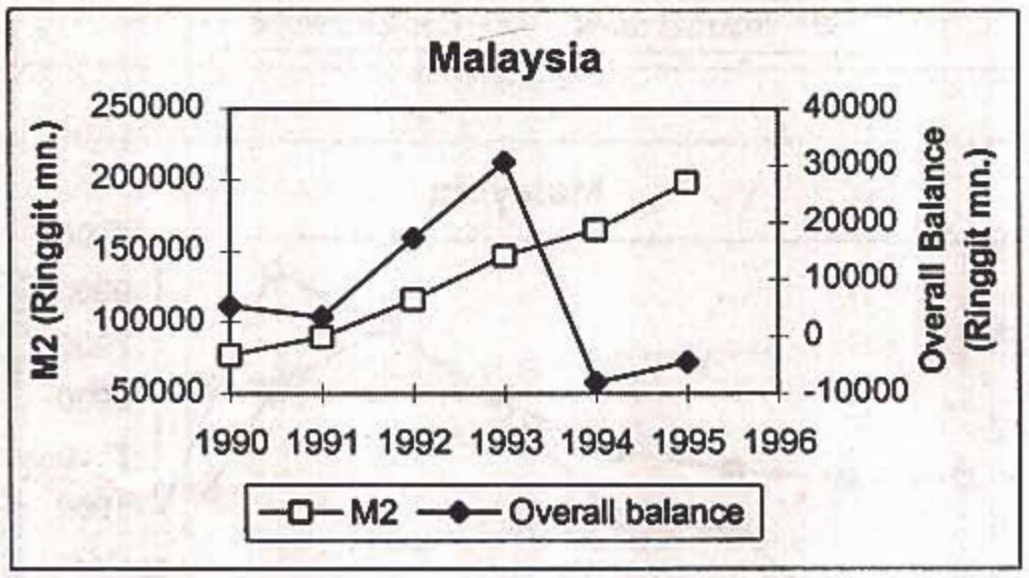
While sterilization was the favoured method for dealing with a surge in foreign private capital inflows in the 1990s, its success was fairly limited in controlling money supply growth and inflationary pressure in the medium term. Moreover, evidence suggests that higher domestic interest rates as a result of sterilization efforts in the East Asian economies acted as a stimulus to attracting more foreign capital, while encouraging domestic borrowing from abroad. Sri Lanka's own experience in managing a surge in capital inflows was found to be relatively more successful in containing money supply growth through sterilization. However, it has to be remembered that Sri Lanka was subject to high capital inflows only for a very limited period of time unlike most East Asian economies, and the very nature of its capital account regime -- that is, its relative restrictiveness -- acted to assist monetary sterilization efforts.

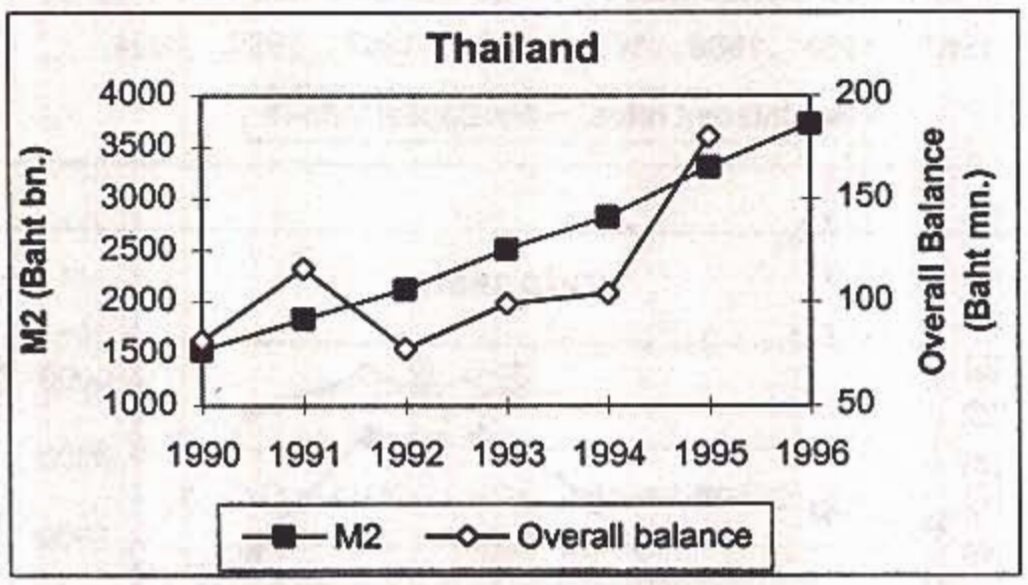
In the absence of a restricted capital account, the high interest rates prevalent in the domestic economy would have encouraged borrowing from abroad, as was the case in the East Asian economies. In balance, the net benefit to Sri Lanka from an open capital account -- higher foreign investment versus increased exposure to foreign borrowing by the private sector -- is questionable in the context of the investor climate in the country. It is more likely that Sri Lanka will in fact experience a large outflow of capital than see a significant increase in inflows. Macroeconomic stability, policy consistency and political stability are pre-requisites for long term foreign investment in the form of FDI. In the absence of the above conditions, opening the capital account is unlikely to generate significant additional benefits to the economy in the foreseeable future.

Appendix A: Money Supply versus Overall Balance

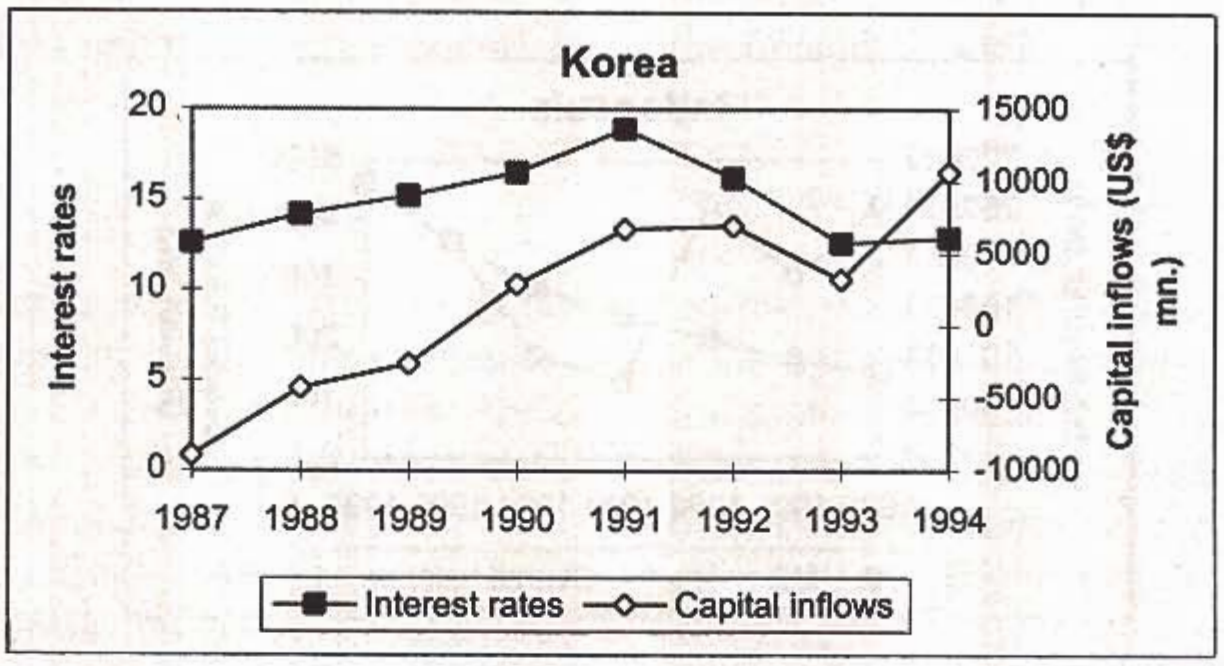


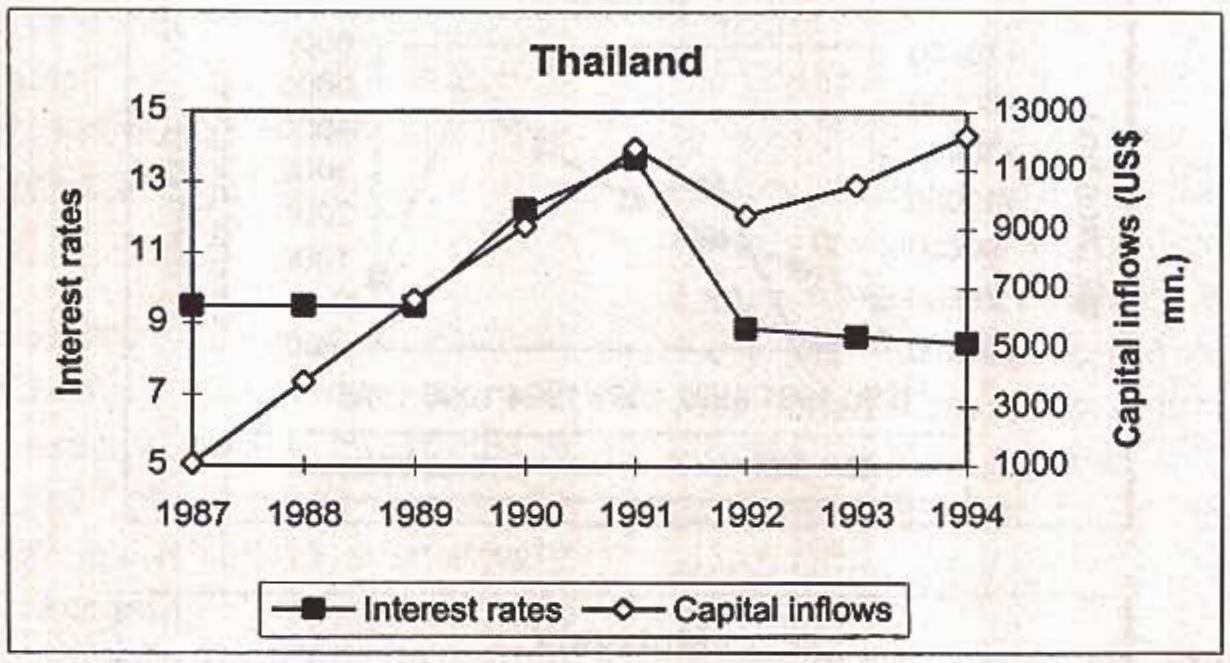


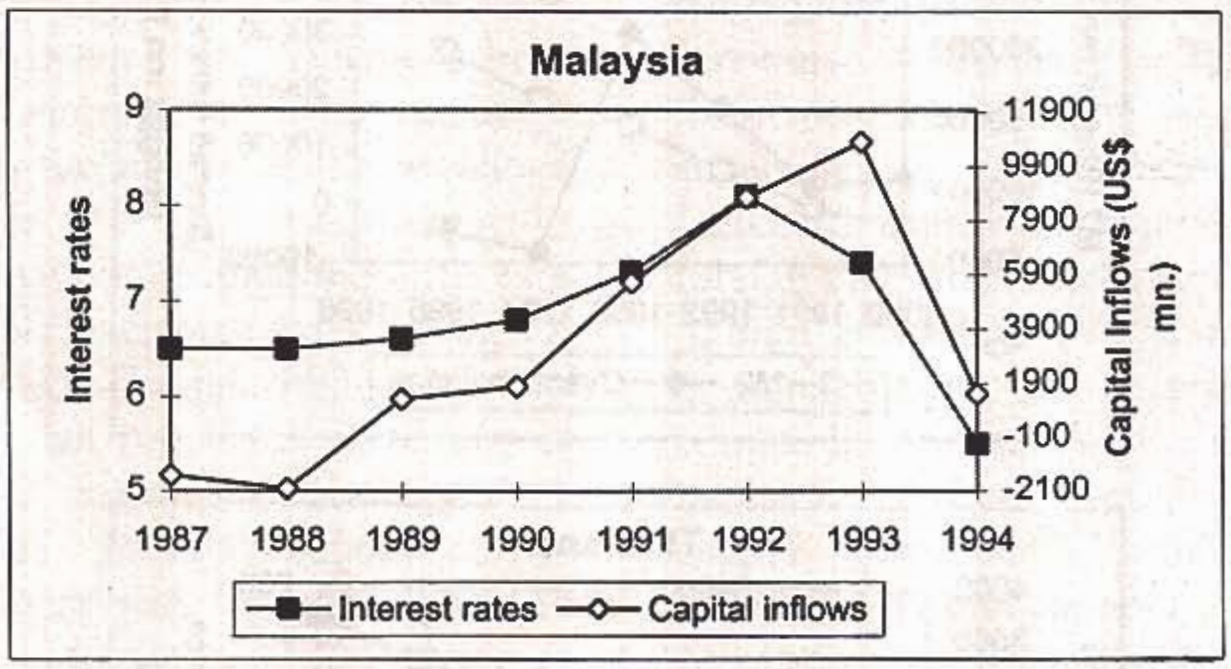


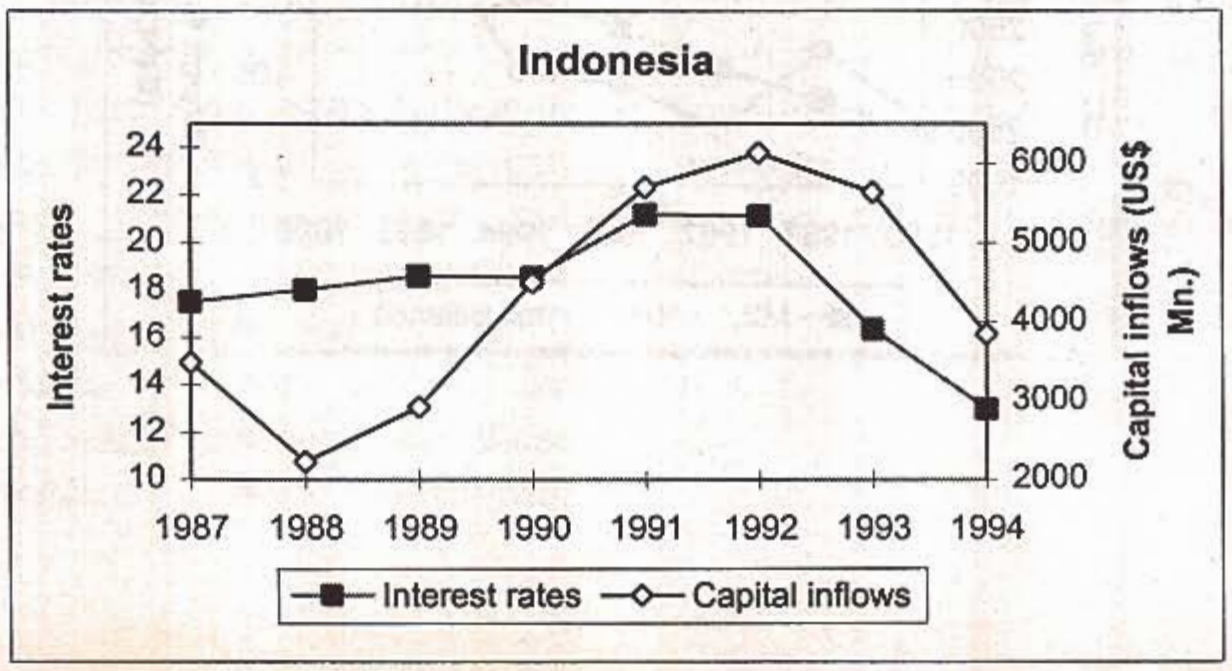


Appendix B: Interest Rates versus Capital Inflows

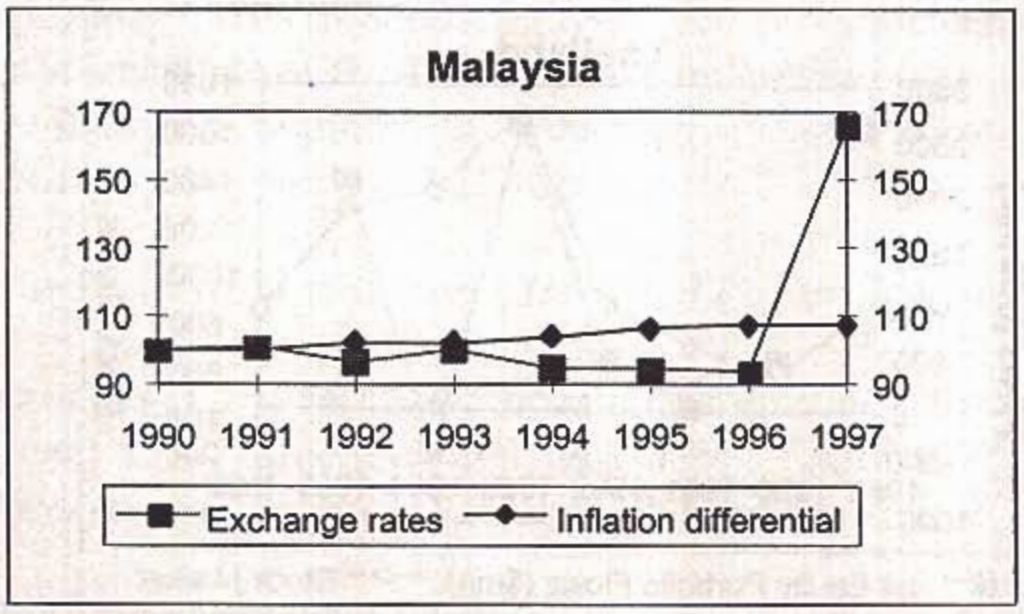


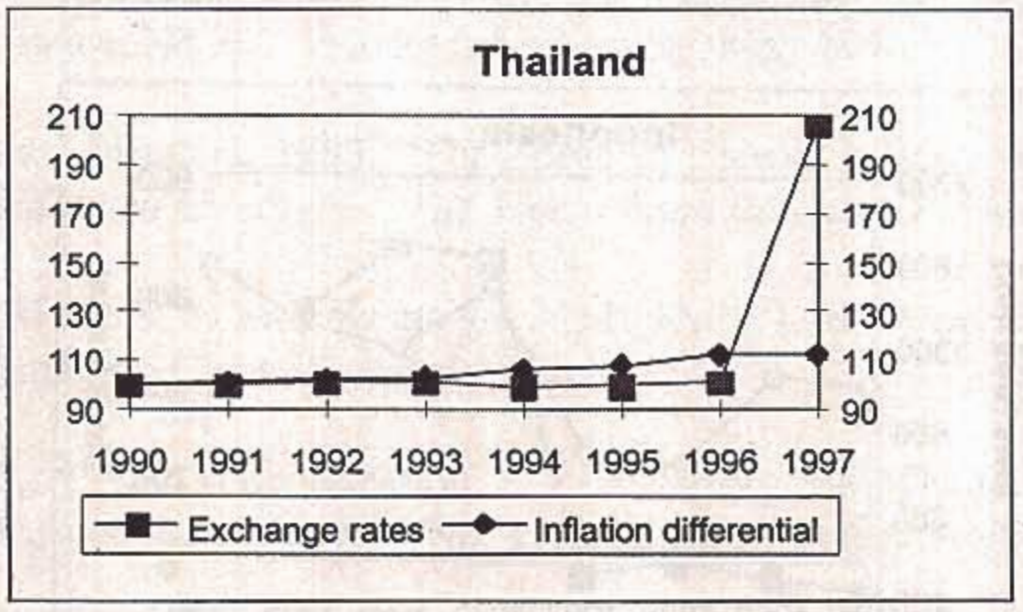




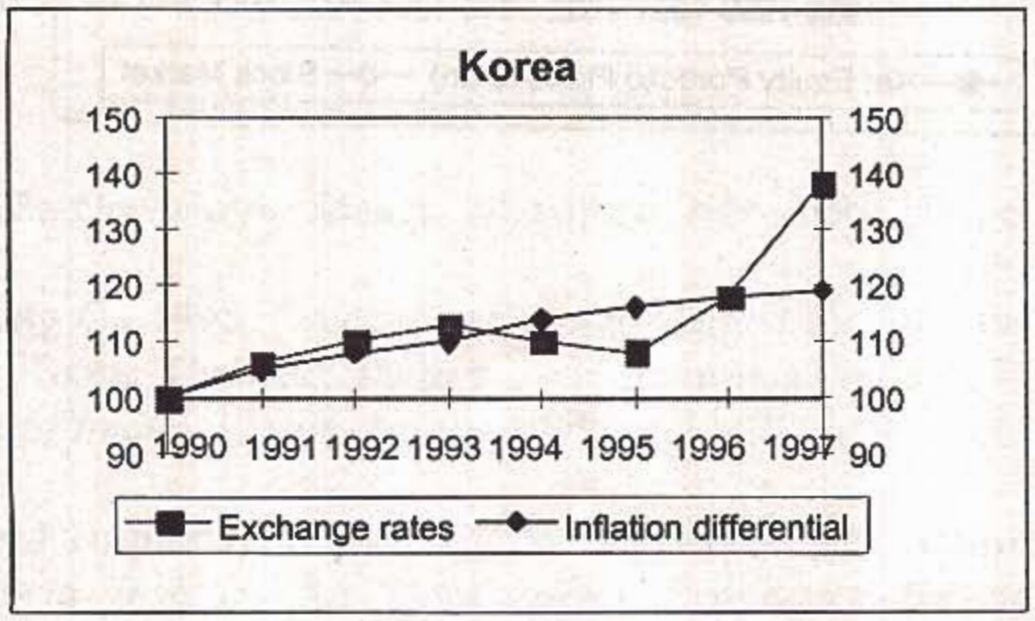


Appendix C: Exchange Rate Variation

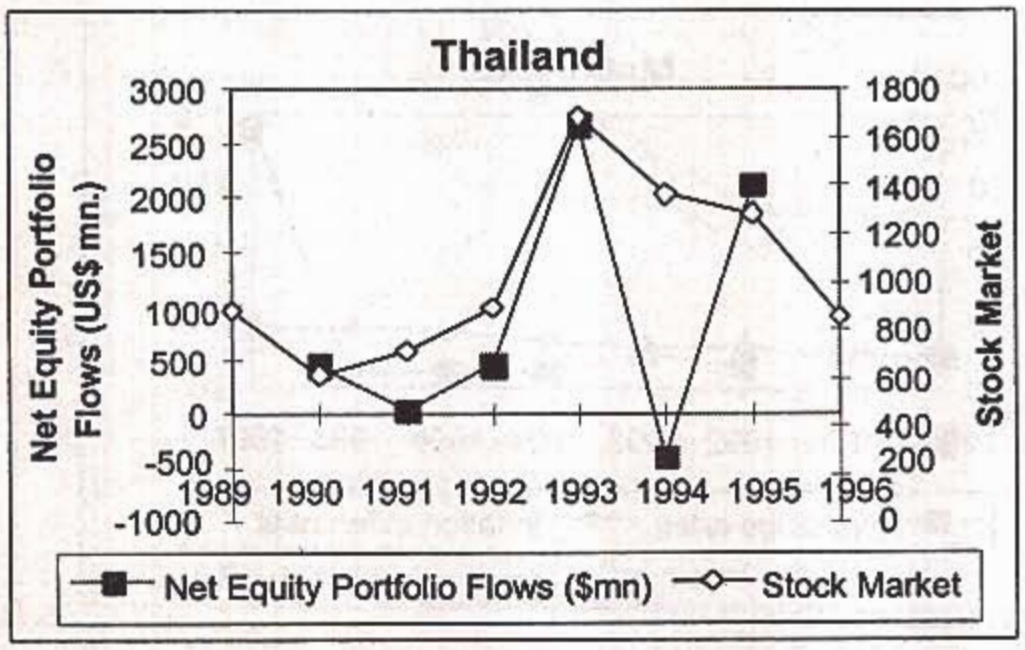


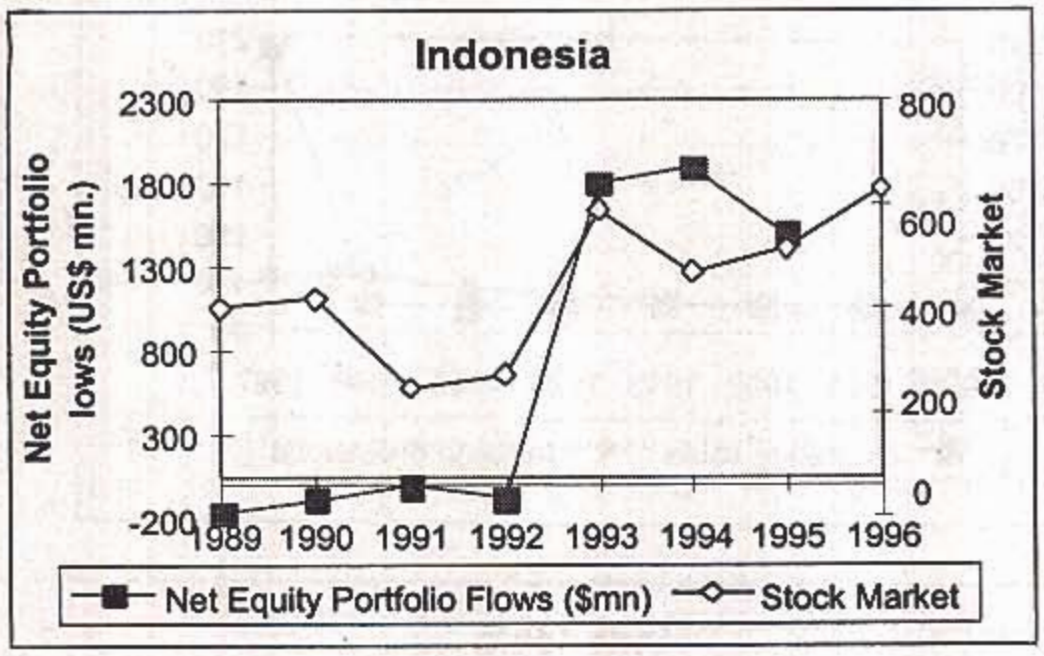


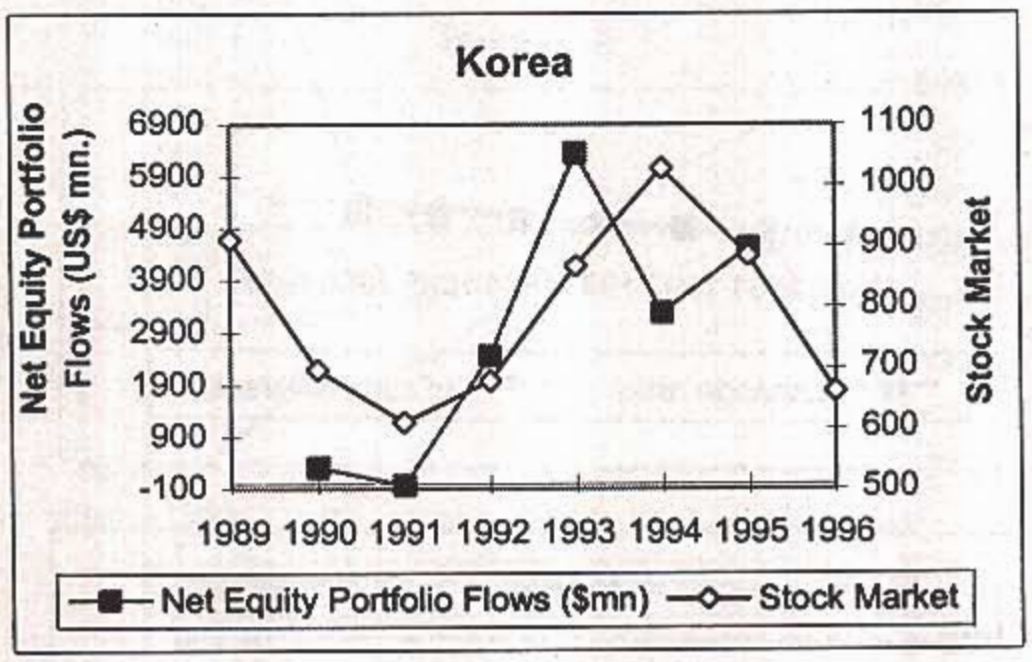




Appendix D: Portfolio Flows versus Stock Market Index







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ISBN 955-9122-69-X

Printed by Karunaratne & Sons Ltd.