

## **CHAPTER 5**

### **MONETARY AND FISCAL POLICIES**

Monetary Policy during the crisis faced a difficult task of balancing two objectives. On the one side was the desire to avoid a depreciation-inflation spiral by reducing money growth as to increase interest rates to attract and reverse capital outflow. This was expected to prevent currency depreciation from leading into a spiral of inflation and continuing depreciation. On the other side was that, excessive monetary tightening to stabilise exchange rates by keeping interest rates high for too long could result in a credit crunch ultimately causing a decline in output<sup>7</sup>. There were two issue related to exchange rates, First was the insistence by IMF that the three countries i.e. Indonesia, Korea and Thailand, adopt the floating exchange rate regime and the other was whether the tightening of money growth to influence interest rates was an appropriate policy measure to halt the depreciation of the currencies. We will evaluate each one of these issues separately.

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<sup>7</sup> See Boorman et al. (2000) and Lane et. al. (1999a) for general discussions of monetary policy response to the Asian Crisis.

## Exchange Rate Policies

The exchange rate policy that was adopted by IMF raised considerable debate among economist and policy makers. The issue in question was whether the fixed or the floating exchange regime was more appropriate in combating the pressures that had emerged. The exchange rate regimes adopted before and after the crisis are given in Table 10.

**Table 10 - Official Exchange Regimes in Crisis Countries**

Indonesia	November 1978 - June 1997 July 1997 - December 2000	Managed Floating Independently Floating
Korea	March 1980 - October 1997 November 1997 - December 2000	Managed Floating Independently Floating
Malaysia	December 1992 - September 1998 September 1998 - December 2000	Managed Floating Pegged arrangement
Thailand	January 1970 - June 1997 July 1997 - December 2000	Fixed Independently Floating

Source: IMF, Exchange Arrangements and Exchange Restrictions, several issues

Prior to the financial crisis the economies observed here had (to varying degrees) pegged their currencies to the dollar. The immediate switch to a flexible exchange-rate regime in response to the perceptible currency crisis

led to a substantial devaluation of the freely floating Asian currencies, though of a different order of magnitude in each country (Schrooten, 1999). Floating however could have introduced an additional element of instability into the mix. Given that countries in the region traded heavily with one another and compete in many of the same export markets, any depreciation of one currency would put downward pressure on the others. Arguably the resulting spiral of depreciations might have been avoided or at least slowed down by pegging the currencies. Given the high exposure of these countries' residents to exchange rate movements, depreciation had side effects that were destabilising such as-

- (i) it swelled domestic money stocks (especially in Indonesia where foreign currency deposits were particularly large);
- (ii) it weakened fiscal positions (by raising debt-serving cost and costs of food subsidies and lowering corporate tax receipts from foreign-currency-indebted companies); and
- (iii) it deepened the problem of insolvency in banking sectors and non-bank corporations.

However pegging these currencies in the midst of the crisis would have been difficult if not impossible for several reasons (Lane, 1999b)-

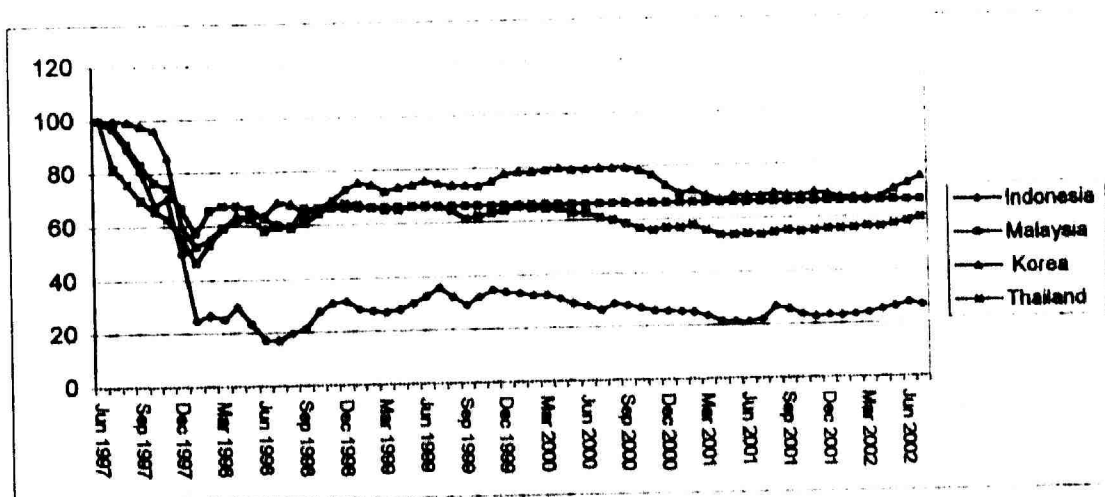
- (i) it would have required a commitment of the authorities to use monetary policy unstintingly to defend their currencies-even if that required raising interest rates to ruinous levels;
- (ii) the reserves needed to defend the currencies were depleted (in Thailand in net terms; in Korea in usable terms); replenishing them to a level adequate to defend a new peg could have required financing on a scale that would not have been available;
- (iii) pegging would also have carried the risk of losing more credibility by having to abandon a new peg under market pressure-as it happened with the Mexican devaluation of December 1994; and
- (iv) pegging at a certain rate could have been defended against in the short run but could have been much too depreciated to lock in for the medium term.

All the countries suffered huge currency depreciations in late 1997 and early 1998 (Figure 5). The Rupiah fell dramatically from Rp/\$2,500 before the crisis to Rp/\$15,000 in late January 1998. Between February and May it oscillated between Rp/\$8,000 and Rp/\$11,000 as the political situation deteriorated and jumped to Rp/\$17,000 in the aftermath of the May 1998 riots and Suharto's resignation. The Korean won appreciated from its peak



of W/\$1,960 in December 1997 to W/\$1390 in April, 1998, and continued to appreciate gradually in the months that followed. The key factor was the rollover of Korean commercial bank debt, which stopped the panic in Korea's financial markets and took enormous pressure off the won (Radelet and Sach, 1999b). The Thai baht appreciated shortly after the won, moving from its peak of B/\$56 in January 12 to B/\$40 in April 1998. The ringgit which like the Thai baht was subjected to severe speculative attack whereby between June 1997 and end December 1998 it depreciated by 33.6 per cent against the US dollar. The ringgit depreciated to a historic low of RM/\$4.88 on 7 January 1998 but strengthened thereafter. From June to August 1998, the downward pressure on the ringgit intensified following the depreciation of the Japanese yen and the contraction of domestic economy.

**Figure 5 - Exchange Rate Index, Monthly Average**  
(June 1997=100, \$/local currency)



Source: ARIC Indicators, Asian Development Bank

The exchange rates fluctuations shown above were not completely independent among countries but to some extent correlated through the contagion effect, which arose because of trade and financial linkages. In other words events in one country change perceptions about prospects in others. Ghosh and Phillips (1999) measured contagion by looking at the correlation of exchange rate movements across countries. These correlations rose significantly in the later half of 1997 and while falling in the middle of 1998 remain positive and significant. Using a sample consisting of Indonesia, Korea, Malaysia, the Philippines and Thailand, as in Table 11 below, reports a panel regression of daily exchange rates movement in one

country on the average exchange rate movement in the four other countries (denoted the "contagion" variable).

**Table 11 - Contagion in Exchange Markets**

	Exchange Rate $\Delta \log(e)$	
	Daily	Monthly
<b>Contemporaneous Contagion, Jan.-Dec 1996</b>		
<i>Coefficient</i>	-0.016	-0.308
<i>t-statistic</i>	-0.22	-1.12
<i>R<sup>2</sup></i>	0.02	0.20
<b>Contemporaneous Contagion, July 1997- June 1998</b>		
<i>Coefficient</i>	0.380	0.604
<i>t-statistic</i>	5.64	3.80
<i>R<sup>2</sup></i>	0.10	0.23
<b>Lagged Contagion (Granger causality), July 1997- June 1998</b>		
<i>Coefficient</i>	0.314	-0.007
<i>t-statistic</i>	3.53	-0.02
<i>R<sup>2</sup></i>	0.07	0.08
<b>Contemporaneous Contagion, Jan.-May 1998</b>		
<i>Coefficient</i>	0.359	0.503
<i>t-statistic</i>	4.34	2.61
<i>R<sup>2</sup></i>	0.12	0.24
<b>Lagged Contagion (Granger causality), Jan.-May 1998</b>		
<i>Coefficient</i>	0.349	0.067
<i>t-statistic</i>	2.74	0.18
<i>R<sup>2</sup></i>	0.08	0.16

Source: Gosh and Phillips (1999), pg 45

According to the estimates, a 1% average depreciation in the four other countries is associated with a 0.38% depreciation in the country's own exchange rate. There is a Granger causality from the contagion variable to

changes in the country's own exchange rate, i.e. the contagion variable helps predict movements in that country's exchange rate are taken into account. A 1% contagion depreciation is associated with a 0.31 depreciation on the following day, controlling for lagged changes in the country's own exchange rate. This was one of the factors that complicated stabilising efforts during the crisis.

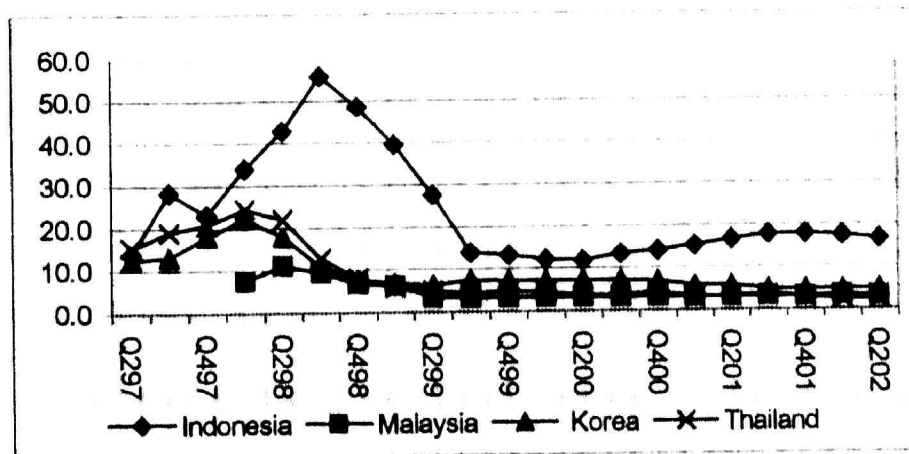
### **Interest Rates and Exchange Rates**

The issue of appropriate monetary policy and interest rates has been much more hotly debated, and posed a difficult issue. Higher interest rates were designed to attract foreign capital and halt the depreciation of the Asian currencies. But they come at a potentially high cost, since higher interest rates make it more difficult for firms to service domestic currency loans, reduce the expansion of bank loans, and, as a result of the increase in non-performing loans, weakened bank balance sheets. Indeed, concern over these ill effects can actually reduce foreign capital inflows, rather than spur them.

The issue, properly framed, is whether the benefits from higher interest rates are likely to be larger than the costs in the midst of a financial panic. Critics of IMF's policy say that IMF's pronouncements in the early stages of the crisis simply took it as an unchallenged matter of faith that the gains would outweigh the costs. However, a study on this issue by Furman and

Stiglitz (1998), showed that the magnitude of both the benefits and the costs are likely to differ by country and will depend on the composition of both the foreign creditors and the debtors, and the structure of the domestic banking system. Different outcomes are possible, depending on the extent of both foreign and domestic currency debt, the maturity structure of the debt, the financial condition of the banking system, and the extent of segmentation of local credit markets. Higher interest rates are not a one-size-fits-all remedy. Furman and Stiglitz argue, convincingly, that the structure of the Asian economies made it far less likely that high interest rates were the appropriate course of action in Asia. Their empirical evidence shows that there was a weak link, at best, between higher interest rates and the exchange rate in the early months of the Asian crisis, and that the costs of the policy to domestic firms and banks were high. To some extent the relationship can be seen in Figure 5 above and Figure 6 below whereby it shows that even though interest rates were rising beginning the third quarter of 1997 to the first quarter of 1998, currency was still depreciating.

**Figure 6 - Three-month Interbank Lending Rate (%)**



Source: ARIC Indicators, Asian Development Bank

Supporters of the high interest rates have counter-argued that while the effects were not immediate, once the Asian countries held firmly on monetary policy for an extended period of time, the economies eventually stabilized. They point to the appreciation of the won and baht in early 1998, and of the rupiah in mid-1998 as evidence, and the lower interest rates that followed in each case. According to Radelet and Sach (1999a) this argument is unconvincing. Once all the short-term foreign capital had left (or had been rescheduled or defaulted upon) and the panic subsided, exchange rates were bound to stabilise and even rebound, since exchange rates initially overshot any sensible level as a result of the first stage of the panic. Moreover, several other factors helped stabilise the Asian currencies,

including the appreciation of the Japanese yen, disbursements in official foreign financial support (which were originally very slow in Thailand and Indonesia) and the redesign of IMF programs. Finally, while sustained high interest rates may have contributed to the eventual strengthening of these currencies, that by itself does not justify the policy, since the costs to banks and firms were very high, and the interest rate policy may have helped to trigger the panic in the first place.

To the issue whether the credit crunch caused by the tightening of monetary policy as one of the factors that brought about a contraction of growth is difficult to ascertain. There are numerous studies that attempt to address the issue of whether the decline in bank credit in 1998 represented a credit crunch and was caused by tight monetary policies. Several papers have examined developments at an aggregate level and obtain results with different conclusions or that are open to alternative interpretations<sup>8</sup>. For example, it remains an open question as to whether the contraction in credit was due more to reduce supply or reduced demand. Further, even if data suggested the former, it will still be unclear if this was due to appropriately tighter bank lending policies or to monetary policy being too tight and not attempting to offset the reduction in bank lending that occurred.

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<sup>8</sup> see Kim (1999), Ghosh and Ghosh (1999), Ding, Domac and Ferri (1998)

### ***Capital and Exchange Rate Controls***

It is interesting to note that Malaysia embarked on an individual economic policy path in September 1998 by introducing capital-transaction controls and implementing a fixed-rate system with respect to the US dollar to curb speculative attacks and further depreciation of the ringgit.

These controls primarily concern profits made by foreigners on transactions on the Malaysian financial market. Such profits must now be lodged in an internal account for one year and may not be exchanged for a foreign currency during this period. Moreover, there are restrictions on borrowing by foreign actors on the Malaysian financial market. The restrictive regulations regarding repatriation of profits concern portfolio investments, while foreign direct investments are exempted. In addition, in order to prevent capital flight on the part of domestic investors, the maximum volume of investment abroad that does not require official approval was set at 10,000 ringgit. At the same time, the ringgit was pegged to the dollar, the exchange rate being fixed at 3.8 ringgit as of 2 September 1998.

The capital transaction controls introduced in Malaysia are, in a broad sense, a variety of the so-called 'Tobins Tax', which is intended to increase the price of short-term financial exchanges in comparison to longer-term transactions. The aim of the controls is to limit the inherent risks associated



with financial transactions and thus the volatility of the financial market in order ultimately to also promote a stable exchange-rate trend.

The Malaysian central bank implemented this policy in explicit deviation from the IMF's stabilisation strategy. The aims of introducing a fixed exchange rate were to limit the costs of stabilisation in the real economic sector and to reduce the duration of the recession; ultimately, this step was intended to increase the room to manoeuvre with respect to interest-rate reductions (Schrooten, 1999).

The capital controls imposed by Malaysia had several immediate effects. First, the prohibition on transactions between external accounts put an immediate and virtually complete stop to offshore ringgit trading. Second, the 12-month holding period was instrumental in curtailing speculative outflows. The Bank Negara Malaysia (BNM) identified and close off virtually all other channels for speculative capital outflows including the freezing of CLOB shares<sup>9</sup>, amendment of the Companies Act to prevent dividend distribution and withdrawal of large denomination notes from circulation. (Hood, 2001).

The interest rates were closely co-ordinated with the introduction of the controls. The 3-month interbank rate which is BNM's policy rate had been

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<sup>9</sup> Singapore investors were unable to dispose of an estimated 4.9 billion dollars worth of CLOB shares and this remain a source of irritation until it was resolved in February 2000 when the Singapore and Kuala Lumpur exchanges came to an agreement on the registration and phased release of the shares through the Malaysian Central depository.

hiked in stages from 7.6% in September in 1997 to 11.0% in February 1998 as part of the initial monetary tightening strategy. It stayed in this range until August 1998. As the controls were introduced and it became clear that the offshore market have been effectively shut down, BNM gained confidence that they had successfully reversed the globalisation of the ringgit and began to relax interest rates. The 3-month interbank rate fell to 7.75% in September. Further cuts were made in April 1999, and by end 1999 the rate was 3.15%. Inflation that was 5.6% in August remained on a steady downward trend to 2.5% by end 1999. The banks' base lending rate is linked to the interbank rate and banks were required to reduce the maximum margin over the base-lending rate from 4 to 2.5 percentage points in mid-September.

The current account continued to strengthened and with the controls on outflows, international reserves which had been equal to 3.3 months of imports in the first quarter of 1998 jumped sharply to 4.3 and then 5.7 months of imports in the third quarter and fourth quarters respectively. The stock market also steadily rose from its low of 262 points after the controls were imposed to 600 points after six months.

Despite its sharply different policy on capital controls, the pattern of recovery in Malaysia was very similar to that of the other three countries. Substantial import contractions starting in the last quarter of 1997 lead to a

build up of reserves and greater confidence in the regional currencies. As shown in Figure 5 (page 63) exchange rates of these countries all bottomed out near the beginning of 1998 and stabilised by the third quarter allowing monetary loosening and relaxation of interest rates. The similarity of these developments and the close timing of the changes in the different countries makes it very difficult to attribute a significant and distinct role to Malaysian exchange controls policy in bringing about recovery, despite the fact that the imposition coincided roughly with the turnaround in Malaysia economic performance in the third quarter of 1998.

Thailand also imposed capital controls beginning in May 1997, 17 months before Malaysia and removed them again after only eight months. They were introduced at the height of the speculative attack on the baht when there was heavy demand for baht credit. Borrowed baht were converted into foreign exchange in anticipation of devaluation, putting downward pressure on the exchange rate and draining reserves. The controls were effective in shutting down the swap market domestic banking system sources of baht credit and creating losses for speculators. The capital controls were not as tightly enforced as in Malaysia, however, and alternative channels for baht outflows were exploited to arbitrage the gap between onshore and offshore borrowing rates which widened to 12.9% in

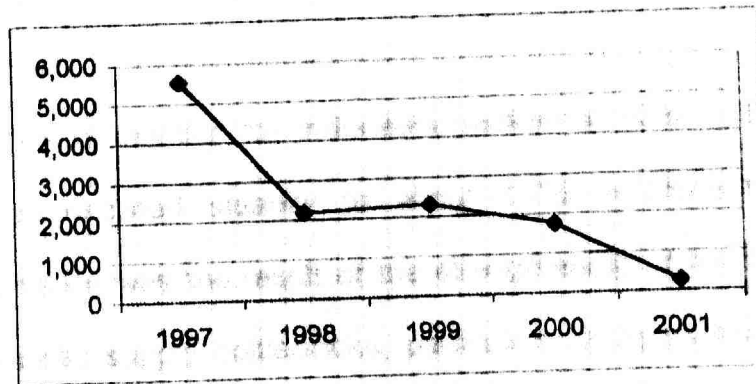
early June 1997. These outflows continue to drain reserves and the central bank eventually had to let the baht float on July 2, 1997.

In Korea there was a progressive loosening capital account restrictions from 1987 on but the regime was less liberal than either Thailand or Malaysia. Offshore trading was limited and with flexible exchange rates and high interest rates policy, speculative activity against the won was minimal during the crisis. Korea made no adjustments to the capital control system focussing instead on corporate and financial reforms.

In retrospect one can see that Malaysia's controls and exchange rate peg came when the worst of the crisis had passed, but as of mid 1998 it was not clear that regional economic disturbances had settled. The Malaysian policies therefore did provide a safeguard against further turbulence in international capital flows and financial markets and the authorities made effective use the breathing space afforded by the controls to launch the structural reforms necessary for longer-term growth. However at the time the controls were imposed it was hotly debated whether the benefits of this policy would out weigh the potential cost. It was believed that these controls will create uncertainty for foreign investors and may raise the cost of capital. The immediate effect was the downgrading of Malaysia's sovereign risk and credit ratings by rating agencies. Spreads on Malaysian sovereign debt instruments increased to 1000 basis points from less than 50 basis points

prior to the crisis. Spreads for almost all developing countries increased sharply after the Russian default in August 1998. But the Malaysian spread jumped about 300 basis points more than the spreads for Thailand and Korea. The subsequent decline in the Malaysian spread also lagged that of the other countries by about two months (Hood, 2001).

**Figure 7 - Net Foreign Direct Investment  
For Malaysia (\$ Million)**



Source: ARIC Indicators, Asian Development Bank

Foreign direct investment flows in Malaysia dropped substantially in 1998 and 1999 (Figure 7) and is expected to remain weak in the next few years. However, the excessive rates of pre-crisis investment and the emergence and continuing presence of excess capacity throughout the region mean that it is too early to tell whether the controls have had (or will have) an independent depressing effect on FDI.

## **Inflation**

During the height of the crisis all the four countries suffered from high inflation rates in 1998 which was mainly caused by the depreciation of their currencies. Indonesia suffered the most whereby the inflation rate shot up by about 840% from 6.2% in 1997 to 58.5% in 1998 (Table 12). This was primarily due to the huge depreciation of the rupiah, the extension of large liquidity credits by the Central Bank to try to keep commercial banks afloat and a severe drought which pushed the rice prices very high (Radelet and Sachs April 1999b).

The monthly rate of inflation for Indonesia peaked at 82% in September 1998 and then declined steadily to about 1.7% in December 1999. Plummeting inflation was the result of the strengthening of the Rupiah, an easing of domestic supply bottlenecks, particularly in agriculture, and the slowing of money supply growth. The slower growth in money supply has been due to both a conscious attempt by the Central Bank (Bank of Indonesia) to regain control of money supply and the impact of capital outflows.

For the post crisis period, inflation in Indonesia was kept well under control until the first half of 2000 but started rising from the end of June, reaching nearly 9% in the fourth quarter of 2000 on a year-on-year basis. This was substantially higher than the 5-7% targeted by the Bank of Indonesia. Price



increases were partly fuelled by improved economic activity and partly by a weak rupiah. Other factors were the government price and income policies (such as fuel price subsidies and minimum wages) which were estimated to increase inflation by a third (Asian Development Bank, 2001). Subsequently inflation kept rising whereby in the second quarter of 2002 it had reached about 12.6% As for Korea, Malaysia and Thailand weakening exports and decelerating growth in 2001 kept a check on inflation where the rates are now well below their pre-crisis level.

**Table 12 - Inflation Rates (%)**

	1995	1996	1997	1998	1999	2000	2001	2002 <sup>1</sup>
<b>Indonesia</b>	9.4	8.0	6.2	58.5	20.5	3.7	11.5	12
<b>Korea</b>	4.4	4.9	4.4	7.5	0.8	2.3	4.3	2.9
<b>Malaysia</b>	4.1	3.5	2.7	5.3	2.7	1.4	1.4	2.1
<b>Thailand</b>	5.8	5.8	5.6	8.1	0.3	1.5	1.7	n.a

<sup>1</sup> Rate for first half of 2002

Source: ARIC Indicators, Asian Development Bank

### **Fiscal Policy**

The role of fiscal policy (fiscal restraint) at the beginning of the crisis was to counter initial deterioration of fiscal position with a view to contributing to current account adjustment and thus avoiding an excessive squeeze on the

private sector, as well as building room for non-inflationary financing for financial sector restructuring.

Firstly fiscal adjustment was intended to restore confidence especially investors' confidence on the prospects of repayment. Reducing fiscal deficits has positive effects on the external current account and thus reduces the need for currency depreciation; it would tend to reduce both the expectations of currency depreciation and country risk premiums. Moreover, as reducing fiscal deficits also reduce the likelihood of their monetization, this would tend to lower expectations of inflation and currency depreciation. However excessively harsh fiscal adjustment could in principle have the opposite effect, to the extent that market participants expected it to result in a contraction of economic activity that would worsen their prospects of repayment.

Secondly, fiscal adjustment for the program countries (program countries - refers to Indonesia, Korea and Thailand which were bailed out by IMF) was to make room for costs of bank and restructuring, which was to include closing nonviable banks and injecting funds to recapitalize some viable ones. Malaysia avoided the IMF prescription of closing down the problem banks as it felt the social costs involved in terms of dislocation of resources would be very high.



The target for fiscal policy in these economies was to reduce fiscal deficit by curtailing government expenditure. However with the combination of tight monetary policy (discussed earlier) and fiscal restraint adopted in an environment of weakening external demand caused aggregate demand to fall more sharply than anticipated. These measures while succeeding in containing price pressures and reversing the current account deficit in the balance of payments, exacerbated the cash flow problems of business already affected by the currency depreciation, the fall in share prices and weak external demand. As a result these policy measures aggravated the contraction in the private sector activity and contributed to a rapid contraction of the economies.

The thrust of fiscal policy adopted by IMF turned out to be substantially different from what was originally expected because the economic contraction and currency depreciation faced by these economies had major direct effects on fiscal balances. The recession had a substantial effect on fiscal balances, primarily through its negative effect on revenues. The impact of the slowdown in economic activity affected Indonesia the most, amounting to an increase in the fiscal deficit of 3 percentage points of GDP (1997/1998). In Korea (1998) and Thailand (1997/1998) the contribution to deficit was 2.5 and percentage point of GDP.

**Table 13 - Fiscal Balance (% of GDP)**

	1997	1998	1999	2000	2001	2002
<b>Indonesia</b>	-0.67	-2.8	-1.1	-0.5	-2.3	n.a
<b>Korea</b>	-1.3	-3.8	-4.6	1.3	1.3	1.0
<b>Malaysia</b>	2.4	-1.8	-3.2	-5.8	-5.5	-4.5
<b>Thailand</b>	-0.3	-2.8	3.3	-2.2	-2.4	-3.4

Source: ARIC Indicators. Asian Development Bank

Exchange rate changes also affected fiscal balance in these economies. Exchange rate depreciation had a substantial negative impact on corporate income tax receipts, as the domestic currency cost of servicing foreign currency denominated debt was revalued, lowering corporate income tax. Foreign exchange loss and gains allowed firms to treat both the interest payments and the increase in domestic currency value of principal repayments on foreign currency debt as expense. Of lesser importance was the effect on the expenditure side of the increased cost of servicing foreign-currency-denominated public debt.

Another important effect of exchange rate depreciation was that it led to rising outlays on price subsidies on imported goods and increases in the domestic currency cost of government imports. This effect was particularly important in Indonesia, where subsidies on basic food items (notably rice)

were increased to keep the rupiah depreciation from resulting in widespread starvation. On the other hand, depreciation boosted domestic currency revenues from taxes imposed on international trade - offsetted by any contraction in import volumes that occurred (Lane and Tsidi 1999). Taking all these effects together, currency depreciations weakened all the four economies fiscal positions substantially (Table 13).

Initially Malaysia similarly adopted the fiscal policy response, whereby, the government reduced its expenditure and deferred implementation of selected infrastructure projects. However Malaysia was quick to assess that a contractionary fiscal policy could not stop the bleeding. Malaysia unilaterally allocated additional fiscal expenditures amounting to RM3 billion in April-May 1998 even though IMF advised against Malaysia's plan to reverse fiscal policy to a deficit position.

The other difference in the Malaysian experience was that the restructuring and recovery package was financed mainly from domestic sources. In terms of domestic financing, the funds were sourced from non-inflationary sources such as employees provident, pension and insurance funds as well as the banking system. There was some financing from external sources, mainly from multilateral institutions such as World Bank, the Asian Development Bank and the Islamic Development bank. Nevertheless, financing from external sources continues to remain low as part of the

policy to reduce Malaysia's exposure and vulnerability to external developments.

### **Post Crisis Development**

In spite of suffering some initial setbacks on determining the right policy mix because of the complexity of the nature of crisis the affected economies began to show signs of progress in early 1999. By the fourth quarter of 1999, the GDP of all countries were already near the pre-crisis level. Exchange rates had appreciated and stabilized and capital flows turned positive in 2000.

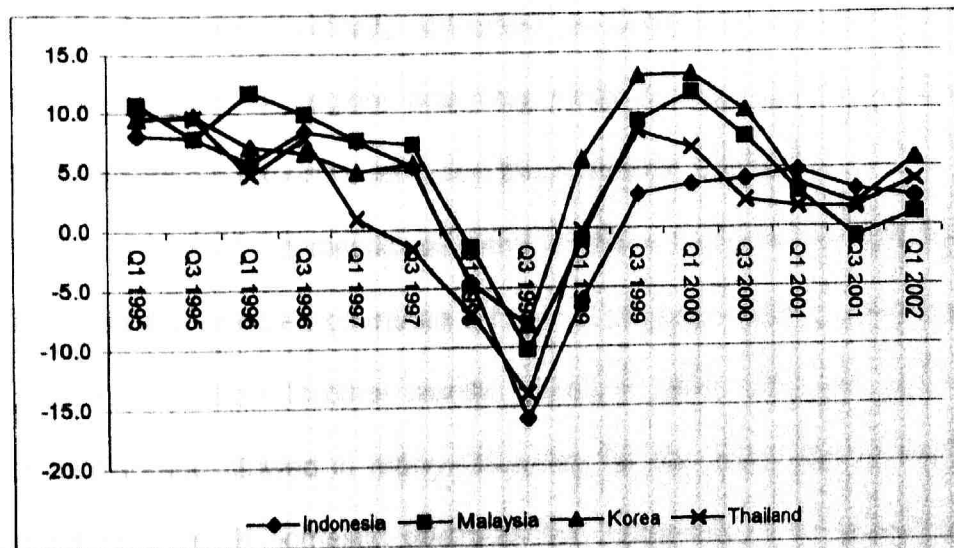
It was then anticipated that the recovery that was underway would continue to move forward raising the hope that these economies may return to pre-crisis level of performance. However this progress did not last very long because the economies experienced its second major external shock mainly because of the deterioration in the global economy. In the discussions that follow we will investigate how the global slowdown have affected the various economies after resumption in growth in 1999 and their respective policy response.

### **Impact on GDP**

Beginning from the second quarter of 2000 all these economies experienced an economic shock leading to a downturn in growth rates (until

the third quarter of 2001). All the four countries suffered the highest economic contraction in 2001 for the post crisis period (Figure 8).

**Figure 8 - GDP Growth Rate (y-o-y) at Constant Prices (%)**



Source: ARIC Indicators, Asian Development Bank

The economic shock experienced by these countries beginning from 2001 was predominantly an export demand shock which was expected to be less severe than the external shock of 1997-1998. The export shock was primarily due to the bleak global economic outlook and the slowing down of the US economy and made worse by the September 11 attacks. Unlike 1998, it did not involve a financial crisis i.e. a collapse of regional currencies and a sharp withdrawal of foreign capital from the region although there was a moderate outflow of private capital. Hence domestic demand growth



although remained subdued in these countries did not collapse as in 1998 (Asian Development Bank, April 2002)

The other difference between the downturn in 1998 and 2001 can be seen in terms of the relative contribution of net exports and domestic demand. In 1998 domestic demand virtually collapsed (because of sharp withdrawal of private capital from the region) and thus made a negative contribution to growth whereas net exports cushioned the economic contraction.

In contrast for 2001, domestic demand made a positive contribution to growth in all the affected countries while net exports made a negative or negligible contribution. In other words, unlike in 1998, although growth in domestic demand slowed in many countries for the most part of 2001, it remained positive. If domestic demand had collapsed as it happened in 1998, the regions growth slowdown would have been much sharper.

The stance of fiscal and monetary policies was also different in 2001 compared to in 1998. As mentioned earlier, at the height of the financial crisis especially in the first half-year of 1998 countries were seeking to stabilise their exchange rates and financial markets through fiscal and monetary tightening. While these policies might have helped these countries stabilise, they also led to a severe contraction in domestic demand. In contrast, in response to the 2001-export shock, these countries have reduced interest rates and implemented fiscal stimulus measures.

These policies are intended to support domestic demand. However if the current slowdown turn is going to be prolonged then these countries may find it difficult to stimulate the economy through an expansionary fiscal policy and reduction of interest rates. Since the Fed has been holding interest rates and the interest rates already at historical lows, the scope for further interest rate reductions is limited. All countries except Korea have kept policy interest rates unchanged in the second quarter of 2002. Korea in response to the build up of some inflationary pressures, raised the overnight call rate by 25 basis points in May 2002 to 4.25% after holding it unchanged since September 2001 (Figure 6, page 67).

However the fiscal response has been more varied across these countries than monetary response. Compared to 2001 Malaysia has adopted less expansionary fiscal stance in 2002 reducing its fiscal balance (% of GDP) from -5.5% in 2001 to -4.7% in 2002 (Table 13, page 79). The deficit reduction is to be achieved by a significant cut in government expenditure i.e. from 23.8% of GDP to 19.7%.

Korea and Thailand have adopted a more expansionary fiscal stance for 2002. For Thailand, at 3.4% of GDP, the planned fiscal deficit for 2002 is higher than 2001 actual deficit by 0.8 percentage points. Korea has planned for a smaller fiscal surplus of 1% of GDP in 2002 than last year's surplus of 1.3%.

Indonesia however has been constrained in formulating fiscal policy. This is partly because inflation has been high in Indonesia compared to other countries and also having the highest public debt to GDP ratio (at about 100% of GDP) in the region. Thus the government has been forced to follow a prudent fiscal policy. However, since Indonesia is still recovering from the severe slump in economic activity resulting from the 1997 crisis, it would demand a more accommodative fiscal stance. Therefore it faces a difficulty in balancing these two conflicting objectives.

With the economies expected to recover in early 2002 the growth rates in the four countries however are still below their pre-crisis trend levels (Table 14). At 1.9%, the average annual growth rate achieved (for the period 1998-2002) by these countries since the crisis is much lower than the 8.6% average annual figure they achieved during the decade before the crisis. The gap is particularly large for Indonesia and Thailand. Malaysia's average GDP growth has fallen from 9.1% during the pre-crisis decade to 2.3% since the crisis, while at 4.5%, Korea's average growth in the post crisis years is almost half the 8.1% growth achieved before the crisis.



**Table 14 - Annual GDP Growth Rates (%)**

	1995	1996	1997	1998	1999	2000	2001	2002 <sup>1</sup>	Average 1987-1996	Average 1998-2002
<b>Indonesia</b>	8.2	7.8	4.7	-13.1	0.8	4.9	3.3	3.4	7.6	-0.1
<b>Korea</b>	8.9	6.8	5.0	-6.7	10.9	9.3	3.0	6.1	8.1	4.5
<b>Malaysia</b>	9.8	10.0	7.3	-7.4	6.1	8.3	0.4	4.1	9.1	2.3
<b>Thailand</b>	9.2	5.9	-1.4	-10.5	4.4	4.6	1.8	3.7	9.5	0.8

<sup>1</sup> June 2002 Forecast, Consensus Economics Inc., Asia Pacific Consensus Forecast (June 2002)

Source: Asian Development Bank, *Asian Development Outlook 2002*

### **Impact On Exchange Rates**

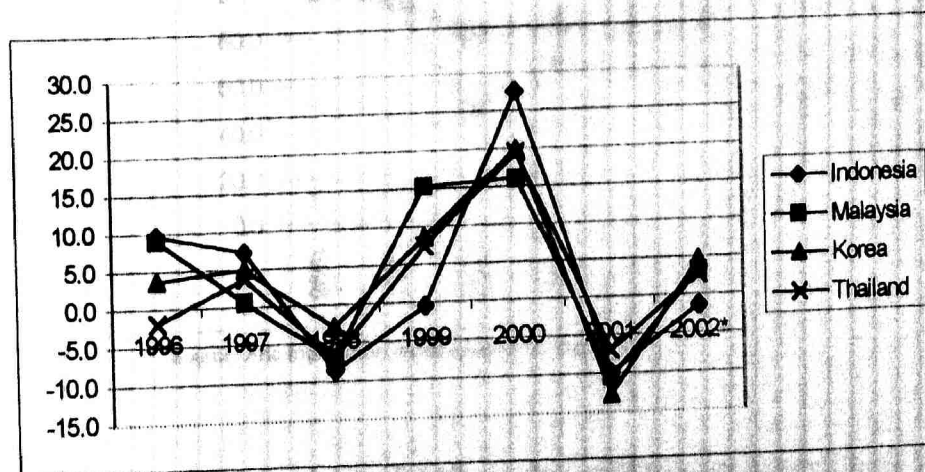
The bleak global and partly domestic environment did not spare exchange rates from suffering some amount of depreciation. Through the period of 2000 these countries went through some level of currency depreciation. Domestic currency depreciated by 27% in Indonesia; 10% in Korea; and 14% in Thailand (Figure 5, page 63). These depreciations were caused primarily by rising US dollar interest rates, which made assets denominated in regional currencies less attractive. International investors also shunned emerging markets across the globe for the safety of home-base indexed portfolios. Scheduled debt repayments in Indonesia and Thailand also underpinned a strong demand for US dollars. In Korea, exchange rate was more stable except a weakening balance of payments position towards the end of 2000 placed the Won under pressure. Meanwhile rising world oil

prices hit the currencies of net oil importing countries such as Thailand and continued ethnic unrest in Indonesia increased the selling pressure of the Rupiah.

### ***Impact on Exports***

Prior to the crisis all these countries had high growth in terms of exports although in comparison to 1995, export growth rates showed a general tendency towards decline in 1996. In 1998 the greatest impact of the crisis was felt whereby all these countries experience negative export growth rates (Figure 9).

**Figure 9 - Export Growth Rates (y-o-y)**

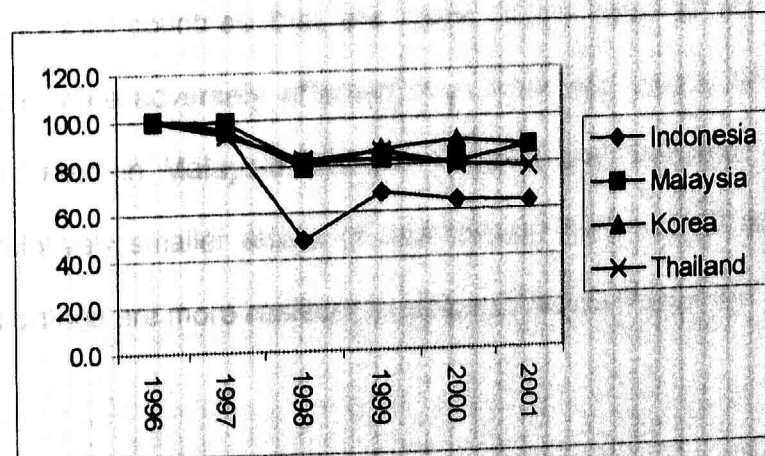


Source: ARIC Indicators, Asian Development Bank

This implied that the currency depreciation beginning 1997 did not help in stimulating exports. Accordingly, the arguments follow that although the depreciation of a country's currency is a necessary condition for the

increase in its exports, it is not a sufficient condition<sup>10</sup>. In other words one would have also have to look at the real exchange rate. In this case, the initial huge nominal depreciation in exchange rates led to large real depreciations. However the rebound in nominal rates combined with higher domestic inflation led to a reversal in the trend in the real exchange rate in each country (Figure 10) as compared to nominal exchange rates as in Figure 5 (page 63).

Figure 10 - Real Exchange Rates (1996=100)



Source: Arie Indicators, Asian Development Bank

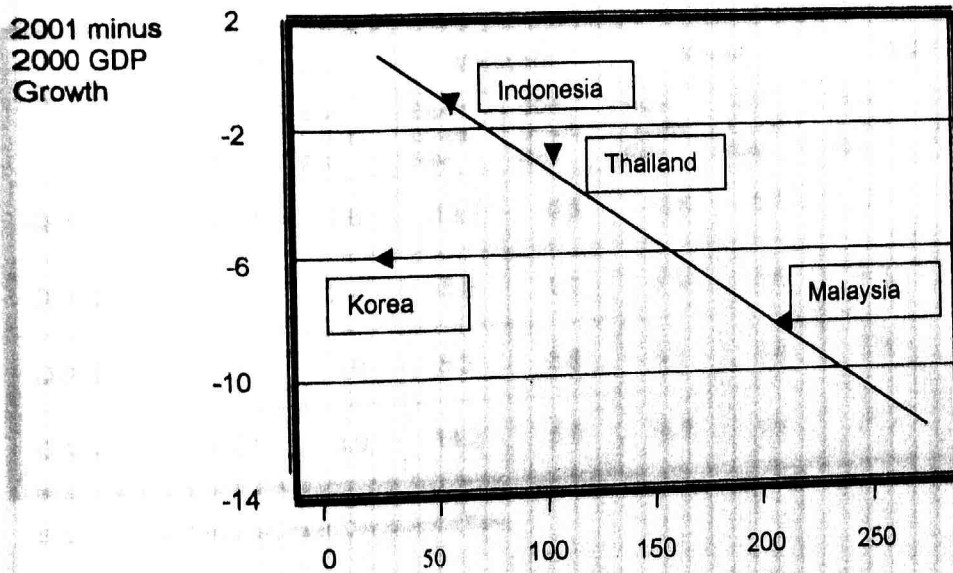
In 2001 there was a sharp falloff in the region's exports (as in Figure 9 above) even though exchange rates which had already begun to fall in mid 2000 were supposed to stimulate exports (J-curve hypothesis). However

<sup>10</sup> In the second half of 1997 due the effects of the crisis all the countries suffered severe currency depreciation. Theoretically, according to the J-curve hypothesis, this should have led to increases in exports in 1998 and yet all of them saw a corresponding decrease in their exports, whilst their growth rates became negative.

the impact on the slowdown of the world economy especially the trading partners of these countries slowed down export growth. As the global economy slowed, world trade decelerated in 2001 (according to World Bank estimates, the volume of world trade declined by about 1% in 2001 compared to growth of 13% in 2000), thus reducing the demand for the regions exports. The world-wide collapse of demand for IT products further accentuated the export shock, especially countries like Korea and Malaysia that depend heavily on the US markets and electronics exports.

It can be seen that countries that are more closely linked to the global economy were more adversely affected than those with weaker linkages. Growth plummeted in Malaysia, Korea, Thailand and Indonesia in that order. The relatively smaller share of international trade in GDP explains why some countries are more resilient to external shocks (Figure 11).

Figure 11 - Growth Slowdown and Openness



Source: ARIC Database, Asian Development Bank

Having adopted expansionary fiscal and monetary policies to stimulate growth after the slowdown in 2001 was seen to be insufficient. Because of the significance of exports, growth in the region must be export-led complemented by domestic demand. In the recent months all these countries have seen a significant turnaround in exports (Table 15) which has led to the resurgence of growth.



**Table 15 - Comparison of Export Growth Rates (y-o-y) with GDP Growth Rates (constant prices-%)**

	Indonesia		Malaysia		Korea		Thailand	
	Export Growth Rate	GDP Growth Rate	Export Growth Rate	GDP Growth Rate	Export Growth Rate	GDP Growth Rate	Export Growth Rate	GDP Growth Rate
<b>Q401</b>	-23.4	1.6	-13.2	-0.5	-19.6	3.7	-13.4	2.1
<b>Q102</b>	-9.3	2.4	-5.0	1.1	-7.9	5.8	-6.4	3.9
<b>Q202</b>	0.9	3.8	5.3	3.8	5.1	5.8	3.3	5.1
<b>Q302</b>	4.31	3.9	14.2	5.6	16.9	5.8	11.3	n.a.

Source: ARIC Database, Asian Development Bank

### ***Impact on Capital Flows***

Capital flows especially private capital flows after suffering huge reversals during the crisis staged a recovery in 2000 to the affected countries. However these flows started to decline in 2001 whereby from an inflow of \$10.25 billion in 2000 net private capital reduced to \$4.96 billion. All major components of net capital flows declined, but the sharpest falls were in net portfolio investments and net inflows from non-bank creditors (which comprise bond markets, suppliers credit, non-resident deposits in domestic banks and non-resident purchases of Treasury bills). The later was due to a sharp increase in repayments to non-bank creditors (Table 16). The large net outflow in non-bank credit in 2001 was mainly due to a sharp increase in debt repayments by Indonesia, Korea and Thailand which is partly a

reflection of cheaper domestic borrowing opportunities in the later two countries made possible by the low interest policies.

**Table 16 - Net Private Capital Flows to the Five Crisis Affected Countries<sup>1</sup>**  
(\$ billion)

	1997	1998	1999	2000	2001	2002f
<b>Net Private Flows</b>	<b>5.53</b>	<b>-38.46</b>	<b>-7.29</b>	<b>8.50</b>	<b>-8.84</b>	<b>-2.85</b>
<b>Equity Investments, Net</b>	<b>5.16</b>	<b>17.79</b>	<b>30.72</b>	<b>24.37</b>	<b>12.20</b>	<b>11.20</b>
Direct Equity, Net Investment	6.81	13.23	15.28	12.98	8.40	7.00
Portfolio Investment, Net	-1.65	4.51	15.44	11.39	3.80	4.20
<b>Private Creditors, Net</b>	<b>0.37</b>	<b>-56.25</b>	<b>-38.01</b>	<b>-15.87</b>	<b>-21.04</b>	<b>-14.05</b>
Commercial Banks, Credit Flows, net	-16.98	-49.74	-34.30	-15.14	-13.35	-8.46
Other Private Creditors, Net	17.35	-6.54	-3.72	-0.73	-7.69	-5.59

<sup>1</sup> Includes Philippines

f = forecast

Source: Institute of International Finance

The sharp drop in portfolio equity investment in 2001 mostly reflected the poor outlook for corporate earnings on the back of a sharp slowdown in economic activity across the region. Net foreign direct investment has been seen falling over the past few years. This is mainly due to slower income growth in industrialised countries, which has lowered their appetite for investing abroad. In particular investment flows from these countries to support production that was outsourced to emerging markets in the past

two decades as a result of global restructuring are likely to fall. Lower foreign direct investment to these countries is expected due to the fact that attractive opportunities to purchase local assets are becoming increasingly more difficult to find.

According to the FDI Confidence Index (Global Business Council, 2002), Korea is ranked fourth and Thailand ranked eight are the most attractive destination for first time investment in Asia. However for the overall ranking South Korea has slide four positions to 21<sup>st</sup> place this year. Even though it has provided opportunities for foreign investment through its privatisation policies it remains a difficult market for investors. Perceptions of hostility towards foreign investors by banks and workers, the influences of the Chaebol structures, and questions over unaccounted debts from insolvent domestic companies still discourage investment.

Like wise Malaysia has fallen out of the list of top 25 destinations from its previous 22<sup>nd</sup> position inspite of its considerable success in banking reform, corporate governance and infrastructure improvement. The report has attributed this to its uncertainty about its leadership, fears of terrorism and the complex relationship between politics and business. A shortage of high skilled labour and increasing labour cost puts Malaysia at a competitive disadvantage vis-à-vis other regional locations like Vietnam, Indonesia and Thailand.



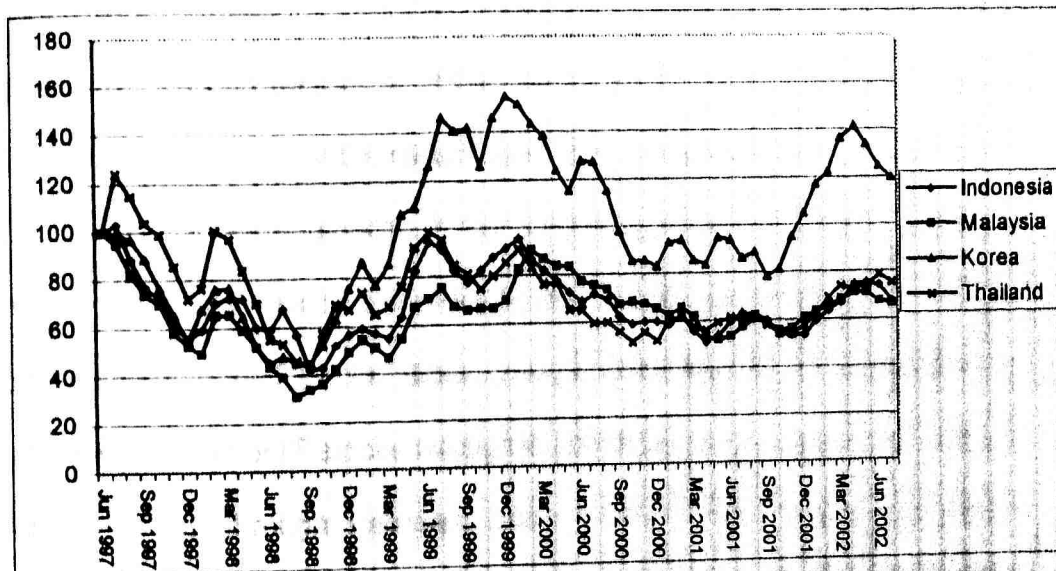
Interestingly China has now surpassed U.S.A. to be the number one on the overall index rating for to be a destination to most likely attract investment. Comparatively to other countries in the region, China's stable political environment, its robust economic growth and its entry into WTO have been the positive factors providing the attraction.

Capital flows into these countries in the short term may depend on the recovery of the US economy. A recovery in the US may boost capital flows as greater export demand increases expected profits and investment opportunities in the affected countries. On the other hand a recovery in the US may raise interest rates and with low interest rates policies been pursued in these countries may lead to contraction in capital flow. Empirical evidence, however suggests that in the 1990's, unlike in the previous decades, the correlation between growth in industrial countries and capital flows into emerging markets has been positive. This could be because of increased integration of emerging markets to the global economy that permits outsourcing of production activities to them.

### ***Impact on Stock Prices***

The sharp rebounds in the equity markets of 1999 were seriously eroded and even wiped out in some cases in 2000. In local currency terms, as by the end of the third quarter of 2000 Korean, Indonesian and Thai equities had fallen by almost 40 percent since the beginning of the year (Figure 12).

**Figure 12 - Average Stock Price Index in Local Currency, Monthly  
(June 1997= 100)**



Source: ARIC Indicators, Asian Development Bank

The retreat in equity markets was influenced by external and domestic factors. Externally, rising US interest rates during this period (third quarter of 2000) triggered downward adjustments in global equity markets, which in general had an adverse impact on regional markets. Higher global interest rates as well as uncertainty about their future path in mature markets may have encouraged substitution out of emerging markets including these crisis hit countries into liquid dollar assets. This could have been further encouraged by the lower weights assigned to emerging markets in some global indexes.

Another factor that was seen to influence regional equity markets was the world-wide corrections in prices of information technology (IT) stock prices since the second quarter of 2000. The IT sector of the affected countries has been expanding in the recent years, increasing exposure to fluctuations in IT stock prices originating in the developed world<sup>11</sup>. Prices of IT stocks tend to be more volatile and more closely related internationally than those of traditional non-IT stocks. Stock markets in the affected countries joined a world-wide rally of IT stocks led by US NASDAQ stock index in the second half of 1999 through February 2000. In the second quarter of 2000, however investors' concern over the sustainability of record high price-earning ratios of IT stocks and expectations of further interest rates hikes by the Federal Reserve (Fed) led to a series of corrections in NASDAQ. This shock wave quickly spilled over to global equity markets and similar corrections took place in the affected countries' stock markets. There was also considerable volatility in global equity markets in the third quarter. All this led to a slowdown of portfolio equity inflows.

However, beginning from the last quarter of 2001, equity prices in major stock markets have started rebounding significantly. In local currency terms these gains have ranged from 23% in Malaysia to 73% in Korea. Because of this rally, equity prices were higher in most markets than they were at the

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<sup>11</sup> *ea*, 12.1 percent in Malaysia and 14.8 percent in Thailand compared to 33.3 percent in the US and 19.4 percent in Europe as a whole).

beginning of 2001. The factors that contributed to the up turn in the regional stock prices were-

- (i) the upswing in the US stock market after falling sharply in the immediate aftermath of the September 11 attacks;
- (ii) an earlier than expected bottoming out of growth among many regional economies; and
- (iii) the lowering of interest rates in several economies especially in the second half of 2001.

This optimistic scenario that has been building up since early 2002 is now dwindling because of the rising tension in the Middle East followed by skeptical reports on terrorist activities in the region. The stock market indices are sliding and may not augur well for these countries especially Malaysia and Indonesia in the short term.