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**Division of Economics**

*Research School of Pacific and Asian Studies  
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# The Malaysian Capital Controls: A Success Story?

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**Abstract:** This paper aims to contribute to the debate on the use of temporary controls on capital outflows as a crisis resolution measure by examining the outcome of Malaysia's radical response to the 1997-98 financial crisis. The analysis suggests that carefully designed temporary capital controls were successful in providing Malaysian policy makers a viable setting for aiding the recovery process through the standard Keynesian therapy. Capital controls also assisted banking and corporate restructuring by facilitating the mobilization of domestic resources, and more importantly, by providing a cushion against possible adverse impact on market sentiment of 'national' initiatives. Of course other countries should be cautious in deriving policy lessons from Malaysia because a number of factors specific to Malaysia seem to have significantly conditioned the outcome of the capital-control based recovery package.

*Key words:* Asian financial crisis, Capital controls, Malaysia

*JEL classification:* F32, F41, O53

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# The Malaysian Capital Controls: A Success Story\*?

## 1. Introduction

Malaysia made headlines in the context of the Asian financial crisis by taking an unorthodox (and risky) policy posture whose key elements were capital controls and expansionary macroeconomic policy. Following this policy choice, which marked a significant departure from the IMF-centered approach adopted by the other crisis-hit countries in the region, the Malaysia economy recovered smoothly, defying widespread pessimism prevailed in economic circles at the time. There is, however, an intense debate on whether this episode holds lessons for using capital controls as a tool of crisis resolution. One can distinguish three alternative views. The first view is that this was a case of 'looking the stable door after the horse was bolted'. At the time Malaysia made the policy u-turn, capital had already left the country and speculative pressure for capital outflow from the Asian region was coming to an end. The second view holds that capital controls did play a pivotal role in the recovery by insulating the domestic capital market from the world capital market (with respect to short-term flows) and thus allowing the Malaysian government to engage in fiscal and monetary expansion, and restructuring troubled banks and companies. The third view is that the capital controls, assuming that they did succeed in engineering recovery, would have seriously damaged long-term growth prospects of the economy, in particular by discouraging new investment and impeding capital market access.

This paper aims to contribute to this debate by systematically evaluating these views, paying due attention to economic and sociopolitical circumstance behind Malaysia's radical policy posture and the role played by capital controls in the recovery process. To gain perspectives, the Malaysian experience is compared and

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contrasted with the experiences of Thailand and South Korea (henceforth referred to as Korea) under IMF-supported reform programs, while giving due attention to potentially important inter-country differences relating to the economic structure and the policy context.<sup>1</sup> The Malaysia's radical policy choice is the first case in the post-war economic history of an emerging market economy temporarily reversing the cause of capital account opening in a crisis context. It deserves attention given the new-found interest, following the spate of financial crises in emerging market economies in the 1990s, in temporary controls on capital outflows as a crisis resolution measure (Krugman 1999, King 1999, Corden 2003, Cooper 1999).

The paper is structured as follows. Following this introduction, the second section provides an overview of capital account liberalization during the pre-crisis era, and examines patterns of capital flows in the run-up to the crisis, focusing on the interplay of international capital mobility with the domestic macroeconomic policy and regulatory regime in determining the country's vulnerability to a crisis. Section 3 examines Malaysia's initial policy response to the crisis and the economic collapse. Section 4 discusses the radical policy shift, highlighting the political and institutional underpinnings and the nature of the policy package built around capital controls. Section 5 looks at the recovery process under the new policy orientation, Section 6 probes the role of capital controls in the recovery process. The final section draws inferences and policy lessons. To assist the reader in following the unfolding events, a comprehensive chronology of financial, economic and political events surrounding the crisis is provided in the Appendix.

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<sup>1</sup> Among the six East Asian countries which were directly affected by the 1997-98 crisis, Indonesia is not an appropriate comparator because political instability and social upheaval had interrupted crisis management in that country during most of the period under study. There is also little to gain from a comparison with the Philippines because the economic disruption caused by the mid-1997 speculative attack was relatively small and the economy had already returned to the pre-crisis growth path by mid-1998.

## 2 Capital Account Liberalization, Capital Inflows and Signs of Vulnerability

### 2.1 Policy Trends

Malaysia is unique among developing countries for its long-standing commitment to an open foreign trade regime. Malaysia achieved Article VIII status (for current account convertibility) under the International Monetary Fund (IMF) Articles of Agreement on 11 November 1968, becoming the fourth Asian economy to do so after Hong Kong, China (15 February 1961); Japan (1 April 1964); and Singapore (9 November 1968).<sup>2</sup> A natural companion to its outward-oriented trade policy was a firm commitment to the promotion of foreign direct investment (FDI). FDI approval procedures and restrictions on foreign equity ownership were very liberal in the 1950s at a time when hostility toward multinationals was the order of the day in the developing world. The emphasis on FDI promotion received added impetus with a notable shift in development policy toward export-oriented industrialization in the early 1970s. In the early 1970s, legislation provided for the establishment of special export processing zones, allowing 100 percent foreign ownership and exemption from general labor legislation, including employment quotas for *bumiputras* (ethnic Malays) for export-oriented investors.

The Malaysian policy regime relating to non-FDI capital flows (that is, international flows of purely financial capital), too, in general remained much more liberal throughout the post-war period, compared to most other developing countries (Williamson and Mahar 1998, Yusof *et al* 1994). However, liberalization in this sphere was much more cautious and gradual by Malaysia's own historical record of trade and FDI liberalization. Until about the late 1970s, there were binding restrictions on short-term overseas investment by residents – placing deposits abroad, lend to non-residents, purchase immobile properties or invest in foreign equity.

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<sup>2</sup>All other (precrisis) high-performing economies in East Asia achieved Article VIII status much later: Indonesia on 7 May 1988, Republic of Korea on 1 November 1988, Philippines on 8 September 1995, and Thailand on 4 May 1990.

Promotion of Kuala Lumpur as a global financial center became a key element of Malaysia's growth euphoria in the late 1980s. As the first step to give momentum to the growth of Kuala Lumpur Stock Exchange (KLSE) as an independent entity the government announced on 27 October delisting (with effect from 2 January 1990) of Malaysian registered companies from the Stock Exchange of Singapore (SES). This split from SES intended to set the stage for developing the KLSE as an independent exchange, to attract international investors in competition with SES. The early 1990s saw a number of initiatives to further liberalisation of impediments to portfolio capital inflow, to promote the trading on the Kuala Lumpur Stock Exchange with increased participation of institutional investors. In 1992, the Securities Act was passed to enable the establishment of a new Securities Commission (SC) to take over the share market monitoring and supervision, previously undertaken by the Capital Investment Committee under the jurisdiction of Bank Negara Malaysia. This initiative gave further impetus to stock market growth under a more flexible operational framework. In the same year, the ceiling on foreign share holding of local brokerage firms was lifted from 30 percent to 49 percent. Tax rates for both foreign and local fund managers were reduced from 30 percent to 10 percent.

The Federal Territory of Labuan was inaugurated as an International Offshore Financial Centre on 1 October 1990 as part of the government's long-term plan to enhance the attractiveness of Kuala Lumpur as a regional financial center. It was envisaged that, with the Asia-Pacific Region emerging as the fastest growing region in the world, Labuan would play a key role in enhancing the attractiveness of Malaysia as a world investment center. Licensed offshore banks, offshore insurance entities and other offshore companies operating in Labuan were declared as non-residents for exchange control purposes. This initiative enabled these institutions freely operate foreign currency accounts and move funds into and out of Malaysia without being subject to any exchange control monitoring. Licensed offshore banks were also permitted to accept deposits and grant loans in foreign currency. Investment guidelines were liberalised to allow Malaysian fund management companies to form joint ventures with foreign fund management companies. Management companies of unit trust funds located in Labuan were permitted to invest in Malaysian securities.



Generous tax exemption was granted to companies incorporated in Labuan and their expatriate employees. By end of 1996, 47 offshore banks, 5 offshore insurance and re-insurance companies, 13 trust companies 3 fund management companies had been incorporated in Labuan.

The ongoing process of capital account opening was temporary halted in 1994 as the ringgit came under strong buying pressure as the booming economy created expectations about the currency's increasing strength. From late 1993 speculators brought ringgit in large amounts, increasing short-term deposits and forward transactions. In order to avoid an adverse effect on export competitiveness from a sharp exchange rate appreciation, Bank Negara Malaysia (BNM, the Central Bank of Malaysia) imposed a number of restrictions on capital inflow during January-February 1994 (World Bank 1996, pp.67-68, BNM 1999b, pp. 288-291). Once speculative pressure subsided and the exchange rate returned to the level of late 1993, BNM gradually removed the controls and freed up capital flows, completely lifting all restrictions by August 1994 (World Bank 1996, p. 67-68). In June 1995, the Finance Minister announced a package of incentives to attract foreign fund managers to Malaysia. Trading in financial derivative on KLSE was started in 1995, with two instruments, namely the KLSE Composite Index Futures and 3-month Kuala Lumpur Inter-bank Offer Rate Futures.

Notwithstanding significant capital account opening since the mid-1980s, one important long-standing instrument of prudential regulatory tool, namely restriction on foreign currency borrowing by private agents, was left intact. Bank Negara Malaysia (BNM) (the Central Bank) continued to monitor foreign currency borrowings by residents and domestic borrowing by non-residents under borrowing/lending ceilings stipulated in foreign exchange regulations. At the onset of the financial crisis in mid-1997, the ceilings on foreign currency borrowing by residents and domestic currency borrowing by non-resident controlled companies stood respectively at 1 million and 10 million Malaysian ringgit (RM).

## 2.2 Capital Flows and Signs of Vulnerability

Foreign capital inflows to Malaysia have historically been dominated by FDI.<sup>3</sup> However there was a significant compositional shift in private capital inflows from about 1993. Capital market liberalization initiatives in Malaysia in the early 1990s coincided with the growing enthusiasm of hedge funds and other institutional investors for emerging-market economies (World Bank 1996). Thus, there was a significant increase in the net inflow of portfolio investment. These capital inflows, driven primarily by the boom in the Malaysian equity market, accounted for 45 percent of total annual capital inflows in 1996, up from 13 percent in the previous year. The volume of “volatile capital”, defined to cover both short-term borrowings and portfolio capital, had increased to sizable levels by the mid-1990s, resulting in an erosion of the authorities’ ability to defend a speculative attack on the ringgit (Table 1).<sup>4</sup> The degree of reserve cover provided for mobile capital declined from over 150 percent in the early 1990s to 57 percent by mid-1997.

### Table 1 about here

Increased foreign equity investment fueled a massive stock market boom in Malaysia from the late 1980s. By the mid-1990s, with a market capitalization of around US\$200 billion, the KLSE was the third largest stock market in the Asian and Pacific region after those in Tokyo and Hong Kong, China. At this time, equity market capitalization in Malaysia was over 300 percent of GDP, by far the highest in the world. At the onset of the crisis, foreign investors accounted for only 30-40 percent of the activities in the market. However, the actual influence of foreign participation on the expansion and operation of the equity market was probably much greater than suggested by this figure because local investors always followed foreign investors as market leaders. The stock market boom has direct implications for the operation of the domestic banks; Lending for equity market activities turned out to be a major source of bank credit expansion (discussed below).

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<sup>3</sup>Unless otherwise stated, data reported in this paper come from the *Monthly Statistical Bulletin* (Bank Negara Malaysia, various years).

<sup>4</sup>For a discussion on the rationale behind this “reserve adequacy” measure see Athukorala and Warr (2003).

In sum, by the mid-1990s, Malaysia had become a depository for a substantial volume of volatile capital, in particular portfolio investment. The economy was experiencing an equity market bubble in which both foreign investors and domestic banks played crucial roles. In this context, there was a strong possibility of a reversal of capital inflows (triggered by a speculative attack on the currency, as in fact happened in the second half of 1997) to generate economic collapse through wealth contraction and banking sector instability. However, this possibility would not have translated into a financial crisis had it not been for some serious pitfalls on the domestic policy front. Two fundamental sources of vulnerability were particularly important in the Malaysian case: poor corporate governance and weakness in the financial sector (financial fragility).

In Malaysia, as in other crisis-affected countries in East Asia, the expansion of the equity market was not accompanied by initiatives to redress underlying weaknesses of corporate governance (Searle 1999). Most of the listed companies in Malaysia continued to be tightly controlled by a handful of powerful families. These families often retained majority stakes, even in public companies. Moreover, in many cases the interests of company bosses and politicians were closely interwoven. Manipulation of inter-company share transactions to augment profit in privately owned companies (at the expense of listed companies) was a common occurrence in the Malaysian corporate world. Such malpractice made share trading vulnerable to financial panic because unconnected (minority) shareholders had every reason to worry about how they would be treated during a market downturn.

Foreign investors were providing funds to Malaysian firms with high debt ratios and long-term alliance relationships, which would not have been acceptable in the West. The extent of subsequent portfolio capital outflows owed much to the realization that a large amount of capital should not have been committed in the first place. When foreign participants started pulling out to avoid currency risk following the onset of the currency crisis in mid-1997, the local players panicked. Based on past experience, the minority shareholders were naturally concerned that they might be hardest hit in troubled times (*The Economist* 1997, 111).

The Malaysian banking system has historically been sturdier than its counterparts in most countries in the region. The average capital adequacy ratio (CAR) of Malaysian banks (10 percent) was the highest in Southeast Asia other than Singapore. A large number of Malaysian banks recorded CARs of above 14 percent, as against 8 percent recommended by the Bank for International Settlements (BIS). There was also a requirement that all banks set aside 1 percent of total outstanding loans as a general provision, in addition to specific provisions made for problem loans (1.5 percent). Nonperforming loans (NPLs) in the banking system fell from 5.5 percent in 1995 to 3.9 percent in 1996. Foreign currency exposure of the banking system remained low thanks to BNM's policy of specifying stringent net open positions on foreign borrowing. By mid-1997, the aggregate net open position (bank liabilities denominated in foreign currency net of equivalent assets) of the banking system was less than 5 percent of total bank liabilities (BIS 1998).

Despite this apparent soundness, in the lead-up to the crisis there was a heavy accumulation of outstanding domestic credits in the banking system, with a heavy exposure to the property sector (broadly defined to include share trading and the real estate sector) (Soros 1998). The rate of growth of bank credit to the private sector rose from 12 percent per annum during 1990-1994 to over 26 percent during 1994-1996. Outstanding credit as a ratio of GDP increased from an average level of 85 percent during 1985-1989 to 120 percent in 1994 and then to over 160 percent when the financial crisis broke in mid-1997. This was the highest credit buildup (increase in "private sector leverage") among the economies of East Asia (Athukorala and Warr 2003).

By the end of 1996, total credit to the property sector accounted for around 40 percent of total outstanding bank credit. It is believed that this share could have been much higher (around 55 percent) if unclassified loans to conglomerates that are normally used to finance property are appropriately taken into account. The increased exposure to the property sector further weakened the financial position of the banks as this lending led to a property glut in the country. By the end of 1997, more than 5.8 million square feet of new office space was under construction in the Kuala

Lumpur metropolis, on top of 5.6 million square feet of space available at the time (BNM 1999a).

The equity market bubble and the credit boom were underpinned by rapid erosion in the quality of macroeconomic management in the economy. Over many years (except during 1981-1986 when Malaysia experienced a major macroeconomic crisis triggered by a public investment boom), the government had maintained a reputation for sound fiscal policies. However, the years following Prime Minister Mahathir's Vision 2020 Statement of 1990 saw fiscal excesses of increasing intensity. As a result of the "big growth push" to propel Malaysia to developed-country status by 2020, public investment expenditure surged, pushing the ratio of total investment to GDP to 46 percent in 1997, the highest in the region at the time. Much of this expenditure went into huge infrastructure development projects contracted out to private companies in the "patronage network" that provided the political support base for the regime. These companies soon became the dominant players in the equity market. The construction boom also contributed to the credit boom because the supply of "easy" credit from politically connected banks and other "captive" financial institutions was an implicit condition built into the contractual arrangements with construction companies.

Rapid growth of government-sponsored bank lending invariably contributed to a weakening of the policy autonomy of BNM. Historically, BNM has maintained a reputation among the central banks in newly independent countries in the British Commonwealth for strict pursuance of the colonial mould of conservative monetary policy and banking regulation (Bruton 1993). However, in a context of a credit boom that had government backing at the highest political level, BNM had only a limited degree of freedom to take precautionary action against an impending crisis. BNM repeatedly pointed to the risk of rapid credit buildup with a heavy concentration in property and share trading loans in the banking system in 1994, 1995, and 1996. However, it failed to take any action to redress the problem other than to impose some limits on lending to the property sector and for equity market dealings in March 1997.

### **3 Onset of the Crisis, Policy Muddling Through and Economic Collapse**

For over five years prior to the onset of the crisis, the exchange rate of the ringgit varied in the narrow range of 2.36 to 2.51 ringgit per US dollar. When the Thai baht came under heavy speculative attack in mid-May, the ringgit also experienced heavy selling pressure. BNM held the ringgit firmly through continued market intervention for another week and then gave way to market forces in July 14 by floating the currency. Between the first week of July 1997 and 7 January 1998 when the currency slide hit bottom (MR 4.88/\$), the ringgit depreciated against the dollar by almost 50 percent. After showing some signs of stability during February and March, the exchange rate continued to deteriorate with wider swings in the following months (until it was fixed at the rate of MR 3.80/\$). This contrasted with the experience of Thailand and Korea where exchange rates began to stabilize from March 1998.

As noted, Malaysia succumbed to the crisis with low foreign debt exposure compared to other crisis-hit countries in East Asia. Thus, unlike in these countries, in Malaysia it was portfolio capital that accounted for virtually all the massive capital exodus. Net quarterly flow of portfolio capital turned negative in the second quarter of 1997 for the first time after 1991 and total net outflow in the first three quarters of the year amounted to over US\$11 billion. By contrast, interestingly net short-term bank borrowing *increased* by about US\$3 billion during this period. Reflecting the massive reversal of portfolio capital flows, the share market tumbled in tandem with the exchange rate collapse. Malaysia experienced the biggest stock market plunge among the five 'crisis' countries in East Asia. By the end of 1997, the all ordinary index of the Kuala Lumpur Stock Exchange (KLSE) had fallen by over 50 percent from its pre-crisis level (Figure 5.3), whipping off almost \$225 billion of share values. The P/E ratio of KLSE declined from 22.9 to 11.3 between these time points (Athukorala 1998).

Given the low foreign debt exposure, for a while the Malaysian policy makers were able to ‘muddle through’ without an IMF-sponsored rescue package.<sup>5</sup> The immediate policy reaction to the currency collapse was to directly intervene in share market operation with a view to punishing speculators. On 27 August, the KLSE banned the short-selling of 100 blue-chip stocks and rules were introduced to discourage the sale of stocks: sellers were required to deliver physical share certificates to their brokers before selling and the settlement period was reduced from five to two days. On 3 September, the Prime Minister unveiled a plan to use funds from the Employees Provident Fund (EPF) to prop up share prices by buying stocks from Malaysian shareholders – but not foreigners – at a premium above prevailing prices. These moves backfired, triggering a massive sell-off of stocks in KLSE and undermining sentiment on other regional bourses. Ironically, the share purchases sponsored by the government were seen by market participants, both local and foreign, as an opportunity to get rid of Malaysian shares, rather than a reason for holding onto them. The ban on short selling was lifted in early September.

After a period of policy indifference of over five months, a major policy package involving significant fiscal and monetary contractionary measures was announced by the then Finance Minister Anwar Ibrahim on 5 December 1997. This policy package, which was welcomed by the international finance community and labelled by the news media as ‘IMF policy without IMF’, was however quickly abandoned, compounding policy uncertainty. BNM began resort to expansionary policies to prevent ‘a recession-deflation spiral’ (BNM 1999a, p. 4). Proposed cuts in government expenditure were restored and a number of large projects that had been put on halt were reactivated. By mid-1998 fiscal policy turned out to be more expansionary to compensate for the slack in private sector demand.

A National Economic Recovery Plan (NEAP) was launched on 23 July 1998 (NEAC 1998). It came up with a comprehensive reform package encompassing significant fiscal and monetary expansion, in a clear departure from the IMF-centered reforms programs being implemented in the other crisis-hit countries in the region at

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<sup>5</sup> Appendix 1 provides a chronology of Malaysia’s policy response to the crisis.

the time. It also proposed setting up of an institutional framework for recapitalising the troubled banks and to resolve mounting corporate distress. Based on these proposals, an asset management company (*Pengurusan Danaharta Nasional Berhad*, henceforth referred to as *Danaharta*) was set up to acquire and manage NPLs from banks. This was followed by the establishment in July of a banking and corporate recapitalisation company (*Danamodal Nasional Berhad*, henceforth referred to as *Danamodal*) as a special agency with the purpose of recapitalising those financial institutions whose capital adequacy ratio had fallen below 9 percent. Finally to complement the roles of *Danaharta* and *Danamodal*, a Corporate Debt Restructuring Committee (CDRC, a joint public and private sector steering committee) was established in August to facilitate the restructuring of corporate debts through out-of-court settlement between debtors and creditors.<sup>6</sup> The three institutions taken together provided systematic institutional framework (apparently designed with the involvement of reputable international consultancy firms) for addressing the bad debt problem of the financial system and related corporate distress, which had already begun to emerge as major constraints on the recovery process.

The proposed banking and corporate restructuring programs were widely hailed by the financial press as an important step in the right direction. But difficulties in obtaining the required funds precluded concrete policy action by these newly created institutions. A planned attempt to issue sovereign bonds in the USA and Europe to raise US\$2 billion for implementing the banking-sector restructuring program had to be shelved in late August 1998. Thus, BNM had to continue to cushion the banking sector and debt-ridden companies against the liquidity squeeze caused by the share market crash and capital outflow by keeping a lid on interest rates and injecting liquidity into the system by printing money.

By August 1998, the economy was in recession and there were no signs of achieving currency and share price stability. National account released in the last week of August revealed a contraction of output by 2.8 percent and 6.8 percent

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<sup>6</sup> For details on the structure, modalities and the underlying legal framework of these institutions see BNM 1999b, pp. 220-225 and Mahani (2003), Chapter 5.



respectively in the first two quarters. The number of retrenchments in domestic manufacturing jumped from 19 thousand in 1997 to over 83 thousand in 1998. The unemployment rate increased from 2.6 percent in 1996 to 3.9 percent in 1998. The inflation rate (measured by the consumer price index (CPI)) peaked at 6.2 percent in June, surpassing the previous peak of 5.3 percent recorded in 1991.

The combined outcome of economic collapse and the property market crash was a massive increase in non-performing loans in the banking system. This situation was further aggravated by a 'flight to quality' of deposits from smaller banks to large, well managed banks from the fourth quarter of 1997. The competition for funds by the affected institutions resulted in a sharp increase in lending rates (exceeding 20 percent in the early 1998) in the banking sector as a whole. These higher lending rates in turn weakened banks' balance sheets by increasing the level of non-performing loans (BNM 1999b, p175). According to BNM data, the proportion of non-performing loans in total bank assets increased from about 2 percent in July to 3.6 percent in December 1997 and then to 11.8 percent in July 1998. Market analysts believed, however, that the problem was much more severe than the official figures suggested. This was because many companies had begun to roll over debt as part of their survival strategy. Independent estimates of the non-performing loan ratio ranged from 25 percent to 30 percent by mid-1998 (Heibert 1998, *Financial Times*, 22 August 1998, Soros 1998, p.144). Banks, because of the deterioration of balance sheets and/or because of over cautiousness in an uncertain financial environment, tended to focus on loan recovery rather than issuing new loans. Consequently credit contraction began to impact domestic consumption and investment. Falling asset prices created pressure on debtors, forcing them to distress sales of assets, which in turn led to further decline in asset prices.

Rapidly deteriorating investor confidence reflected in continued liquidation of shares by foreigners and capital flight. A striking feature of capital flights from Malaysia from about early 1998 was that they largely took the form of ringgit flowing (rather than foreign currency) into Singapore. As much as 25 to 35 billion ringgit (\$ 6.3 – 8.8 billion), amounting to 40 to 60 percent of the total domestic money supply

(M1), had ended up in Singapore at the height of the crisis in mid-1998 (IMF 1999b). These flows were triggered by very attractive money market rates of between 20-40 percent in Singapore, which provided a hefty premium over a domestic rate of about 11 percent coupled with a weakening exchange rate for the ringgit. Arbitrage between the two rates by money market dealers in both Singapore and Malaysia began putting pressure on the domestic interest rates in Malaysia. Thus policy makers became increasingly concerned about the 'internationalisation' of the national currency, which had carried a potential new threat to economic stability and monetary policy autonomy. The strong demand for offshore ringgit and the consequent build-up of offshore ringgit deposits increased the vulnerability of the ringgit, undermining the effectiveness of monetary policy (Hood 2001, BNM 1999b, Chapter 14).

#### **4 Capital-control Based Crisis Resolution Strategy**

In this volatile economic climate, the Malaysian government had to choose between two alternatives. The first was to obtain a 'good housekeeping seal' on its policies from the IMF. This would, like in Korea and Thailand, have stabilized the exchange rate, setting the stage for applying the Keynesian therapy to speed up the recovery. The second option was to resort to capital controls in order to combine fixed exchange rate with Keynesian policies, while ignoring vagaries of market sentiments.

By this time the IMF had significantly changed its original strategy of 'confidence building through macroeconomic contraction' in favour of expansionary macroeconomic policy (Fisher 2003). The four IMF program countries in the region - Indonesia, Korea, Thailand and the Philippines had already reformulated their policies along these lines with the blessing of the IMF. Thus if Malaysia's reluctance to seek IMF support was purely based on differences of opinion relating to macroeconomic policy, that constraint had become less binding by this time.

A widely expressed view in pro-government news commentaries in Malaysia at the time was that Malaysia was not eligible for IMF support even if it wanted to seek such support because of its relatively strong balance of payments position and its relatively lower foreign debt (BNM 1999b, p. 5; NEAC 1999, p. 1). However, this view is not consistent with the general IMF practice in assisting member countries in the event of an economic crisis and Malaysia's own economic conditions at the time. The Philippines, for example, was receiving financing support from the IMF at the time, despite relatively sound balance of payments position and much lower external debt burden compared to Thailand and Korea. In 1998, following a speculative attack on its currency (real) Brazil was able to obtain a backup credit line from the IMF (primarily as a means of regaining market confidence), notwithstanding its sizable foreign exchange reserves (over \$40 billion) (Krugman 1999, p. 111). Balance of payments need is only one of the eligibility criteria used by the IMF. In any case Malaysia's foreign exchange reserves were not extraordinarily high at the time (about \$15, down from a pre-crisis level of \$25 billion). Therefore, if wanted, presumably Malaysia could have entered an IMF program.

The real issue was that this option was not politically acceptable to the Malaysian leadership. For over nearly three decades New Economic Policy (NEP) (renamed National Development Policy (NDP) in 2000) – perhaps the most comprehensive affirmative action policy package ever implemented in any country in the world - has been central to the Malaysian economic policy (Snodgrass 1980). Given the intimate links developed between business and government under this program, naturally the positive stabilizing impact of any policy move had to be weighed against its potential negative effect on socio-political stability of the country (Crouch 1998). In his presidential address to the UMNO General Assembly on 19 June 1998, Prime Minister Mahathir summed up his position on this issue as follows:

[I]f we have to resort to the International Monetary Fund assistance ..., the conditions imposed by the IMF will require us to open up our economy to foreigners. There will not be any *Bumiputera* quota as the New Economic

Policy (NEP) is an injustice, and unacceptable to their liberal democracy' (Mahathir 1998, p. 60-61).<sup>7</sup>

Political scientists will of course continue to debate on the relative importance of pure political motives compared to genuine economic policy considerations behind this policy shift (eg. Haggard 2000, Jomo 2001). But the fact remains that Malaysia's social equilibrium is more fragile than that of the socially homogeneous countries like Thailand and Korea. There is little argument among informed Malaysia observers that the affirmative action policy enshrined in NEP had played a crucial role in the country's impressive economic success as against generally dismal economic records of other heterogeneous, multiethnic nations in the developing world. In this context, there was a strong case for the Malaysian policy makers to act on its own judgment of which approach to crisis management was in their best interest.

Confronted with this policy dilemma, the Malaysian leadership opted for the second alternative, ending the policy uncertainty that had pervaded the policy scene for almost a year. The lynchpin of new policy was insulating the domestic financial markets from short-term financial flows through capital controls. This was expected to set the stage for fixing the exchange rate and provide breathing space for vigorous pursuance of monetary and fiscal expansion to fight recession.

While domestic considerations seem to have played the key role in this policy turnaround, by this time the use of capital control to gain breathing space for crisis management had also begun to receive a measure of legitimacy in the international economic policy debate. In particular, Krugman's (1998) controversial piece in the *Fortune* (appeared two weeks before the announcement of Malaysia's new policy package), which specifically argued for using capital controls as a crisis management tool, received wide publicity in Malaysia.<sup>8</sup> There was also growing attention paid to

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<sup>7</sup> It is pertinent to note here that Malaysia managed its mid-1980s crisis on its own, while eschewing IMF support. Like in the context of the 1997-98 crisis, political imperatives on which the NEP is based were the prime consideration behind this policy choice (Narayanan 1996).

<sup>8</sup> It is however not correct to name (as some authors like Miller 1999, Hale 1998 have done) Krugman as the intellectual architect of the Malaysia policy turnaround. Apparently the decision to introduce capital control was made by the National Economic Action Council on 6 August

the newly emerging view that China and Taiwan, the two economies in the East Asian growth league with controls on short-term capital movements, fared much better than the rest of the region during the crisis. The recent experiences of countries like Chile and Slovenia in using capital controls to manage shorter-term capital inflows were also often cited in the media and government reports.<sup>9</sup>

As a first step, on 31 August offshore trading of shares of Malaysian companies was banned with immediate effect in a move to freeze over-the-counter share trading in the Central Limit Order Book (CLOB) market in Singapore.<sup>10</sup> This was followed by the imposition of comprehensive controls over short-term capital flows (1 September) and fixed the exchange rate at RM 3.80 per \$ (2 September). As BNM clearly stated in its policy announcement, the fixing of the exchange rate was done while retaining the option of changing it when the underlying economic fundamentals change. While the new fixed rate implied a mild appreciation of the ringgit from the average level for the previous three months (around RM 4.18), it represented 35 percent depreciation against the pre-crisis levels of about RM 2.5.

The new capital controls banned trading in ringgit instruments among offshore banks operating in Malaysia and stopped Malaysian financial institutions offering domestic credit facilities to non-resident banks and stockbrokers. With a view to

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(Mahathir 1999), before the Krugman article appeared. Krugman subsequently stated in Singapore that, 'It was a shock that while I was speculating idly about that [capital control], Dr. Mahathir was about to do it' (*New Straits Time*, 26 August 1999). See also Krugman (1999b).

<sup>9</sup> In a special briefing to the press following the introduction of capital controls, the Special Function Minister, Zainuddin stated that before introducing currency controls the Malaysian authorities studied systems operating in Chile, Slovenia and China, and decided to use the Chinese system as a model in designing the Malaysian controls (*Star*, 5 September 1998).

<sup>10</sup> CLOB market was an informal market for shares of Malaysian companies, which operates side by side with the formal share market (Singapore Stock Exchange) in Singapore. At the time, total value of Malaysian shares traded in CLOB amounted to US\$4.2 billion (*Far Eastern Economic Review*, 9 March, p. 56). Short-selling of shares continued on this market after such share dealings were made illegal in Malaysia following the onset of the crisis and this was perceived by policy makers in Malaysia as a major factor behind exchange rate and share price instability. CLOB trading was also thought to contribute to ringgit outflow to Singapore. Following the Malaysian move to ban offshore trading of Malaysian company shares, the CLOB market was closed on 15 September.

stopping speculative trading in ringgit in overseas markets (predominantly in Singapore), the use of ringgit as an invoicing currency in foreign trade was banned with immediate effect and legal tender on all ringgit deposits held outside the country was abolished with effect from 30 September. A 12-month withholding period was imposed on repatriation of proceeds (principal and profit) from foreign portfolio investment.<sup>11</sup> The other measures included restrictions on overseas investment by residents exceeding RM 10,000 and a limit of RM 1,000 on Malaysian overseas travelers and . stringent limits on the approval of foreign exchange for overseas travel and investment. A detailed listing of the new exchange control measures is provided in the Appendix 2.

The controls were strong, but narrowly focused on specifically on short term capital flows. The aim was to make it harder for short-term portfolio investors, both foreign and local, to sell their shares and repatriate proceeds, and for offshore hedge funds to drive down the currency. With the exception of limits on foreign exchange for foreign travel by Malaysian citizens, there was no retreat from the country's long-standing commitment to an open trade and investment policy. No new direct controls were imposed on import and export trade. The controls were carefully designed to make it clear that the economy was not hostile to long-term foreign investment. Profit remittance and repatriation of capital by foreign investors continued to remain free of control. Immediately following the imposition of capital controls, BNM did experiment with new regulatory procedures in this area. But these were swiftly removed in response to protest by these firms. Moreover, some new measures were introduced to further encourage FDI participation in the economy. These included allowing 100 percent foreign ownership of new investment made before 31 December 2000 in domestic manufacturing regardless of the degree of export orientation; increasing the foreign ownership share in the telecommunication project from 30 percent to 69 percent (under the condition that the ownership share is brought down to 49 percent after five years), and in stock-broking companies and insurance sector

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<sup>11</sup> This restriction reportedly blocked in \$10 billion of foreign investment in domestic securities.

from a previous uniform level of 30 percent to 49 percent and 51 percent respectively; and relaxing restrictions on foreign investment in real estate.

In early February 1999, the original 12-month holding restriction on portfolio investment) was covered into a graduated exit levy.<sup>12</sup> Under this system, there were two sets of repatriation levy, depending on whether the funds entered the country before or after February 15, 1999. For investments made before February 15, a three-tier levy was applied to the principal (the capital value) on how long the funds were retained in the country. For funds entered after February 15, there was a two-tier levy on the repatriation of profits (but not on the principal): 30 percent on profit made and repatriated within one year, and 10 percent on profit repatriated after one year. In August 1999, the two-tier levy on profit repatriation was replaced by a unified 10 percent levy. An agreement between the KLSE and the Singapore Stock exchange reached on 26 February 2000 provided for the transfer of the shares trapped in the CLOB market to the Malaysian stock exchange and allow trading to resume. The 10 percent exit levy was lifted on 1 May 2001. Most of the newly introduced capital controls were relaxed and subsequently removed at successive stages during the next two years. The Malaysian authorities have however opted to retain some newly-introduced restrictions on investment by offshore banks in ringgit denominated assets and lending by financial institutions to non-residents, albeit in a much more liberal fashion compared to those in the September 1998 package (Appendix 1). On 21 July 2005, the ringgit peg to the US\$ was abolished in favour of a managed floating exchange rate system.

With the policy autonomy gained through the fixed exchange rate and capital controls, the government swiftly embarked on a recovery package consisting of two key elements: - macroeconomic stimulants, and banking and corporate restructuring. The 1999 Budget Speech presented (in October 1998) predicted an increase in the budget deficit from 1.8 percent of GNP in to 3.2 percent in 1999. The 2000 budget saw a further increase in the deficit further to 4.4 percent of GNP. On the

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<sup>12</sup> According to Stiglitz (2002, p. 124) the World Bank economists worked closely with the Malaysian authorities in designing the new exit levy system.

expenditure side there were no major new proposals in both budgets beyond some moderate increase in funds embarked for road and rail projects. On the revenue side there were significant tax cuts and new tax incentives. Among them, the key element was a total waiver of income tax in 1999 and an across-the-board one percentage point reduction in income tax rates proposed for 2000. There were also tax breaks for industries of 'national and strategic importance and import duty reduction on machinery and equipment imports. The budget deficits were financed mostly through issuing Malaysian Government Securities (MGS) which were absorbed largely by provident, pension and insurance funds. Only about a third of the financial needs have been raised externally, mainly from confessional bilateral and multilateral sources.

To complement expansionary budgetary policy, BNM set on a course of monetary expansion. The statutory reserve requirement (SRR) ratio for banking institutions was cut at successive stages in order to inject liquidity into the debt-ridden banking system. By late 1998 the ratio had come down to 4 percent against a pre-crisis level of 13.5 percent. BNM also revised the formula used in computing the base-lending rate (BLR)<sup>13</sup> so that reductions in the intervention rate are better reflected in cost of bank credit. The margin that banks could charge their customers above the BLR was reduced from 4 percent to 2.5 percent. The 3-month inter-bank rate (BNM's policy rate on which other short terms interest rates are based), which was raised from 10 percent to 11 percent in February 1998 to defend the exchange rate, was reduced in a number of stages to 4 percent by early 1999. The default period for reclassification of bank loans (which was reduced to 3 months from 6 months in January 1998) was changed back to 6 months, with a view to reducing the pressure on the bank to set aside capital against non-performing loans. The other measures introduced to boost credit expansion included an announcement on 9 September of an indicative annual loan growth target of 8 percent for commercial banks, relaxation of credit limits on lending by commercial banks and financial companies for purchase of property and shares, a scheme for providing soft loans for

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<sup>13</sup> The benchmark interest rate prescribed by BNM for lending institution with a view to avoiding unhealthy competition in credit markets.



purchase of cars, a special loan schemes for assisting smaller industries and low-income groups, and relaxing credit limits on credit cards (BNM 1999a).

The new policy package placed greater emphasis on the speedy implementation of the banking and corporate restructuring programs initiated in the first half of 1998. The program involved carving out of bad debt from the banking system by Danaharta (the National Asset Management Company), injection of fresh capital through Danamodal (Bank Recapitalization Company) and The Corporate Debt Restructuring Committee (CDRC). This well-thought out program remained virtually inactive until then, because of difficulties involved in raising required funds. The new policy framework provided a conducive setting for raising required funds from domestic sources. In addition to the bad debt carving out and recapitalisation schemes, BNM embarked on an ambitious merger programs for domestic finance companies and banks, with a view to improving their competitiveness. The merger program for finance companies, which aimed at reducing the number of finance companies from 39 to less than half of the number through merger and/or amalgamation with banks, has already been completed. The banking merger program aims to consolidate the nation's 58 financial institutions into six (subsequently increased to 10) banking groups.

## **5. The Recovery**

The Malaysian economy experienced a 7.5 percent contraction in GDP in 1998, after 11 years of uninterrupted expansion averaging 8.0 percent per year. This was by far the worst downturn after the Second World War; GDP contracted by a mere 1.0 percent during the mid-1980s crisis. The degree of output contraction moderated to 1.3 percent (on an annual basis) in the first quarter of 1999 followed by a positive growth rate of 4.1 percent in the second quarter. Recovery accelerated in the next two quarters, culminating in a growth rate of 5.4 percent for the whole year. The economy

had regained the pre-crisis (1996) level of GDP by mid-2000, leaving behind almost three ‘lost’ years of economic expansion (Table 2, Figure 1).

**Table 2 about here**

**Figure 1 about here**

In line with strong recovery in domestic production, employment situation improved. The unemployment rate in the economy by the end of 1999 stood at 3.4 percent, only 0.9 percentage points higher than the pre-crisis level (Table 3). The recovery was underpinned by remarkably low inflation, despite the heavy emphasis on fiscal and monetary expansion as part of the recovery strategy. The annual rate of consumer price inflation increased from 2.7 percent to 5.3 percent between 1997 and 1998. The rate of inflation measured in terms of the producer price index increased from 2.7 percent to 10.7 percent between 1997 and 1998 and then declined to 3.2 percent in 1999.

**Table 3 about here**

Growing business confidence in the recovery process began to reflect in an impressive rebound in trading on the Kuala Lumpur Stock Exchange (KLSE) from mid 1999. The benchmark Kuala Lumpur Composite Index (KLCI) had almost regained its pre-crisis (end-June 1997) level by end of February 2000. Market capitalization of the KLSE increased from the historical low of RM200 billion in August 1998 to over RM700 billion in February 2000, which was only 5 percentage point short of the pre-crisis (June 1997) level. The consumer sentiment and business confidence index of the Malaysian Institute of Economic Research regained the pre-crisis level by late 1999.

Public expenditure led the way to recovery. Following a 7.8 percent contraction in 1998, public consumption recorded double digit growth from the first quarter of 1999, contributing to over 70 percent of total consumption growth of 6.7 percent in that year. Public fixed investment contracted by only 10 percent in 1998

compared to 58 percent contraction in private fixed investment. In 1999 the public fixed investment expanded by 14 percent in a context of continued contraction in private investment (though at a lower rate), slowing contraction in total annual investment to 6 percent compared to 45 percent contraction in the previous year.

Private consumption was seen stabilizing in the first quarter of half of 1999 and grew strongly in the second half of the year. In the first quarter of 2000 private consumption grew by 14 percent, yielding a 12 percent expansion in total consumption despite a slowing down of public consumption to a mere one percent (compared to over 10 percent growth in the four previous quarters). Private investment continued to contract in 1999, albeit at a much slower rate (12 percent) compared to a massive contraction (57 percent) in the previous year, and began to recover from mid-2000.

On the production side, signs of recovery emerged first in the services sectors (particularly in financial services) and domestic-market oriented manufacturing. By the second quarter of 1999 recovery had become more broad-based, with export-oriented manufacturing playing a leading role. In 1999 and 2000 growth of export-oriented manufacturing was almost twice faster than domestic-oriented manufacturing. Of the total increment of manufacturing production during this period, 68 percent originated in export-oriented manufacturing. Of the total increment in GDP during this period 70 percent came from the manufacturing sector, with almost 47 percent coming from export-oriented manufacturing alone. Thus, the Malaysian experience through the crisis is consistent with the conventional wisdom that greater export-orientation is an important facilitator of economic rebound following a crisis. However, in line with recovery in domestic demand, domestic-oriented manufacturing also regained pre-crisis levels by 2000.

Agricultural sector (including forestry and fishing) recorded negative growth in 1997 and 1998, reflecting world market conditions for the major primary export products, (in particular rubber and palm oil), adding to the crisis-driven growth collapse. This sector began to record positive growth from the second quarter of

1999, underpinned by a sharp rebound in palm oil output from a decline of 8.3 percent in 1998 to an estimated increase of 19.4 percent in 1999. The mining sector, however, recorded a marginal decline of 1.2 percent in 1999, reflecting a decline in domestic demand for gas in the depressed economy and some curtailment of crude oil production under the Government's National Depletion Policy.

The services sector grew by 6 percent in 1999, with all sub-sectors showing strong growth, reflecting across the board improvements in final demand, in particular robust trade performance and strong recovery in consumer demand. The construction sector was the hardest hit by the crisis. In 1998 value added in this sector contracted by a staggering 23.5 percent, accounting for over a one-thirds of total GDP contraction (of 7.5 percent) in the year. Reflecting the severity of asset market collapse, the construction sector contracted by 23 percent in 1998 and the process of contraction continued well into the third quarter of 1999.

While the initial impetus for recovery came from fiscal pump priming, over time the recovery has become increasingly private-sector led, with private consumption and net exports providing much of the stimulant for output growth. Thus, Malaysia has been able to ride the crisis without building up a massive debt overhang. The end-of-year stock public debt as a share of GDP increased from 32 percent in 1996 to 36 percent in 1998 and remained at around the same level in 1999 and 2000 (Table 3). Almost 85 percent of the addition to total debt stock in 1998 and 1999 came from domestic borrowing. The share of foreign debt in the total stock did increase from 12 percent to 16.6 percent between 1996 and 1999. But, much of foreign borrowing (over 80 percent) was long-term concessionary loans obtained from multilateral financial organisations and foreign governments.

The turnaround in the economy was accompanied by a notable strengthening of the balance of payments position, driven by a more favourable external trade balance and significant inflow of long-term capital. By the end of 1999 Malaysia's foreign exchange reserves stood at US\$31 billion, and they provided 300 percent cover for total outstanding short-term debts and 200 percent cover for the stock of

volatile capital (outstanding short-term debt + cumulating port-folio investment, as defined above) of the country.

## **6. Have Capital Controls Worked?**

We have observed in the previous section that the Malaysian economy recovered nicely following the introduction of the capital-control based reform package. But, *precedence* does not necessarily imply *causation*; the recovery could well have been the outcome of the working of natural market forces. Moreover, even if the controls were instrumental in engineering a rapid recovery this could have been at the expense long terms growth. In particular, capital controls could have had a long term damaging effect on capital inflows, both FDI and portfolio capital, in particular the former, which have been a pivotal element of the country's pre-crisis economic dynamism. Inept practices (helping cronies) as part of the banking and corporate restructuring operations undertaken under the cover of capital controls could have resulted in costly resource misallocation.

### **6.1 Capital controls and economic recovery**

A number of observers have attempted to understand the role capital controls in Malaysia's recovery from the crisis through simple comparisons of sources of vulnerability and recovery experiences of crisis-hit countries using readily available performance indicators (Hiebert 1999, IMF 1999b, Miller 1999, Lim 1999, Dornbusch 2002, Johnson *et al.* 2006). These comparisons have led to two common inferences. The first is that Malaysia did not have a crisis in the first place, it was an innocent victim of speculative capital exodus and the economy would have recovered swiftly with the help of the standard market-friendly policies. The inference is that capital controls did not make a 'distinct' contribution to the recovery process in Malaysia. At the time Malaysia made the policy u-turn, capital had already left the country and speculative pressure for capital outflow from the Asian region was coming to an end. So the imposition of capital controls was simply *a ritualistic locking of the barn door after the horse was stolen*. Relating to the latter point, it is emphasized that not only Malaysia but also the other crisis-hit Asian countries, which

maintained open capital accounts throughout under IMF-centered reform packages, began to recover about the same time

But these views ignore the important fact that the economies under consideration are vastly different in terms of the sources of vulnerability to the crisis, and the nature of the economic structure, which determine flexibility of adjustment to a crisis. Put simply, details differ in important ways from one country to another, and readily available performance indicators do not capture these differences (Cooper 1998; Corden 2003, Chapter 11; Eichengreen 2003, Chapter 9). The view that Malaysia did not have a crisis to warrant a drastic policy u-turn is primarily based on Malaysia's relatively low levels of foreign debts and non-performing loans in the banking system at the onset of the crisis. It ignores the explosive mix of share market bubble and domestic credit boom that had developed in Malaysia in the lead-up to the crisis (Athukorala 2002).<sup>14</sup> Be that as it may, there is no logic behind the argument that the severity of a speculative attack on the currency of a country is proportional to the degree of vulnerability. If foreign lenders suspect about an impending crisis, they do not expect to be told how serious the problem may become. They will simply withdraw their funds as rapidly as possible, thus turning a suspected financial problem into a financial rout (Cooper 1998). Given these considerations, an inter-country comparison can yield meaningful inferences only if economic adjustment under alternative policies is carefully studied while placing emphasis on fundamental differences in economic structures and original sources of vulnerability to the crisis.

The 'barn door' analogy misses the point that the purpose of capital control was to set the stage for monetary and fiscal expansion by preventing outflow of funds, both local and foreign-owned, in response to lowering of the domestic interest rate relative to world market rates under the new expansionary macroeconomic policy stance. In any case, the available performance indicators are not consistent with the

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<sup>14</sup> Interestingly, on these grounds, the international financier George Soros (1998, Chapter 7) treated the economic situation in Malaysia in the lead-up to the crisis as untenable as (if not more untenable than) that in Korea, Thailand and Indonesia. (Soros wrote this book before the Thai contagion hit Malaysia!)

view that Malaysia has lagged behind the recovery process compared to the IMF-program countries. While all these countries started to show signs of recovery from about late 1998, among the three countries under consideration only Korea has so far recorded a faster recovery rate than Malaysia. But Korea is a mature industrial nation with a diversified manufacturing base. Moreover, the dominant role played by a few national companies (chaebols) in manufacturing production and trade seems to have played Korea in a uniquely advantageous position in the recovery process (Booth 1999). In terms of the stage of development and the nature of the economic structures, undoubtedly the better comparator for Malaysia is Thailand.

Malaysia's recovery rate has so far been much faster and steadier compared to Thailand (Table 2). The difference between the recovery experiences of the two countries become even more significant when one goes beyond the aggregate GDP growth figure and looks at other performance indicators. For instance, even by mid-2000 recovery in the Thai economy continued to rely on massive public sector demand, with private consumption remaining well below pre-crisis levels. By contrast in Malaysia the recovery process had become broad based by late 1999, with rapid recovery in private sector consumption and investment. Unlike in Malaysia problems in the financial sector still remained a major source of uncertainty in Thailand. Even by early 2000, NPL ratio of the Thai financial system continued to remain stubbornly high (nearly 40 percent), and the volume of real outstanding credit was still falling. Reflecting mostly continuing financial sector weaknesses, recovery of the share market in Thailand began to falter from about early 2000, compared to an impressive continuing recovery of the Malaysian share market. As a result of share-market related capital outflows, Thailand's foreign reserve levels had begun to deplete by this time, causing policy concerns about the sustainability of recovery (Siamwalla 2000).

Klapan and Rodrik (2002) examine whether the choice of the capital-control based crisis management route as against the conventional IMF recipe made a made a difference to the recovery process in Malaysia by comparing economic performance in Malaysia during 12 months following the radical policy shift with performances in

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Korea, Thailand and Indonesia during the 12 months following each country began to implement IMF-assisted crisis management package. Their results, derived by applying the time-shifted difference-in-difference regression methodology to monthly data on a number of key variables including industrial production, manufacturing employment, real wages, stock market indices foreign reserves, are consistent with the view that the Malaysian recovery experience under capital controls was superior to that of the three ‘IMF-program’ countries. This finding is, however, dictated by the choice of the particular counterfactual (that is, performance of the other three countries during the first year immediately after choosing the IMF route) for the econometric test. When the test is recast to examine how Malaysia performed relative to the other three countries during the same period after the imposition of capital controls in Malaysia, ‘capital controls look bad’ (Kalpan and Rodrik, 2002, p. 429). The authors maintain that the counterfactual used in the former comparison is the valid one because by September 1998 Malaysian policies had become unsustainable and the realistic alternative to capital controls was an IMF program of the type that other countries has already undertaken. However, one can argue that the choice of this counterfactual would have stacked the deck in favour of Malaysian capital controls; various developments in the international economic environment (such as the sharp cut in the U.S. Federal Reserve interest rates and improved world demand conditions faced by some key export products (in particular electronics) from countries in the region) had begun to aid the recovery process in all crisis-hit East Asian economies from about mid-1998 (Rojas-Suarez 2002).

Economists will continue to debate whether the Malaysia recovery record under capital controls was *superior* to that of the IMF-program countries. But there is little justification for using the ‘superiority’ yardstick in examining the outcome of the Malaysian experiment and making inferences about the suitability of capital controls as a crisis resolution strategy — failing an early and gracious arrival of the IMF and/or socio-political resistance to going along the IMF path. As we have already noted, the September policy U-turn in Malaysia was basically a policy choice made in desperation. There is no evidence to suggest that Malaysian policy makers anticipated this move to generate a *superior* outcome. Moreover, the almost



unanimous view of the critics at the time was that Malaysia's non-conventional approach was doomed to fail. The appropriate question is therefore whether this unorthodox policy shift was a viable alternative strategy for Malaysia to recover from the crisis. In the remainder of this section we attempt to broaden our understanding of this issue by probing how capital controls were instrumental in achieving this recovery. Our approach is to examine whether the original expectations (mostly negative) about the fate of the reform program was in fact consistent with the actual experience.

### ***Policy Autonomy***

A major doubt about the effectiveness capital controls as a crisis management tool relates to presumably ample scope for avoidance and evasion, which can simply negate the expected monetary policy autonomy (Hale 1998, Edwards 1999). The general argument here is that, the more extensive are trade and investment links, the more difficult and costly it is to control capital account transactions because of the multiplication in the number of arbitrage possibilities that arise in the course of normal business. The problem with this argument is that it is based on a misleading mixing of 'placing funds abroad retail' by manipulating current account transactions and 'exporting capital wholesale' (Williamson 1993, p. 36). There is ample evidence from both developed and developing countries that capital controls are in fact effective in substantially reducing, if not preventing, capital flows of the latter type, in particular placement abroad of institutional savings (Eichengreen 2003, De Gregorio *et al.* 1998, Radelet and Sachs 1998). The evidence from capital controls in Malaysia is consistent with this evidence.

The Malaysian experience under capital controls is consistent with this evidence. Controls seem to have helped lowering interest rates and encouraging a revival of domestic consumption and investment without precipitating capital flights. Unlike the situation before the imposition of capital controls, short-term capital flows stabilised in the first quarter of 1998. Therefore, the foreign reserve position began improve in tandem with the surplus in the current account. Total foreign exchange reserves which remained around \$20 billion from the third quarter of 1997, surpassed

the pre-crisis level of \$30 billion by the end of 1999. The ‘errors and omission’ item in the balance of payments, which is widely considered to be a convenient indicator of ‘unofficial’ capital flows, in fact shrank following the imposition of capital controls. As foreign exchange controls were carefully targeted on short-term investment flows, and trade and FDI related transactions continued to remain liberal, the policy shift did not result in the emergence of a black market for foreign exchange.

The effectiveness of capital controls in bringing in expected monetary policy autonomy is evident from the dramatic turnaround in the differential between domestic and international interest rates in Malaysia following the imposition of these controls (Figure 2). The differential remained positive and varied in the range of 0.6 percent to 2 percent during the period before the onset of the crisis. Then it increased reaching a peak of 8 percent at the height of the crisis in mid-1998. Following the imposition of capital controls in September 1998, it tended to decline, entering the negative territory by March 1999. From then the differential has remained around – 2.5 percent with little monthly fluctuations. Both the dramatic decline in the differential and its remarkable stability in recent months clearly attest to the effectiveness of controls in insulating domestic interest rate from international financial market developments. This inference based on simple visual inspection of relative movement in interest rates is strongly supported by systematic econometric analyses of Edison and Reinhart (2000), Kminsky and Schmukler (2001), and Doraisami (2004)

**Figure 2 about here**

### ***Banking and Corporate Restructuring***

The breathing space provided by capital controls, exchange rate stability and the resultant monetary policy autonomy were instrumental in speedy implementation of banking and corporate restructuring. Many feared that the under the Danaharta/Danamodal program bailing out of the well connected would come at the expense of the poor and the middle-class using the printing press backed by capital controls. This suspicion has given way to a virtual general consensus among the

Malaysia observers that the shelter has been successfully used to carry out the most-effective and far-reaching financial system clean-up among the crisis countries. The program is considered to have been more effective and fair than many of similar efforts in the region, notably those of Thailand and Indonesia but also that of Korea. (Ogus 2000). The IMF, in its 1999 Public Information Notices on recent *Article IV Consultation with Malaysia*, commended the Malaysian authorities for ‘using the breathing space [provided by the policy measures introduced in September 1998] to push ahead with a well-designed and effectively implemented strategy for financial sector restructuring’ (IMF 1999a, IMF 2000). *The Economist*, in a dramatic reversal from previous pessimistic views, recently commended the Malaysian banking and corporate restructuring in following words:

‘In Malaysia there are doubts about the governments handling of debtors; well connected ones have emerged in better shape than some analysts think they should have done. But the government’s success in holding down the level of bad debts, and in cleaning up the ones that did emerge, has been undeniable. That is one reason why Malaysia’s short-term prospects are so good (*The Economists*, 2000, p. 74).

By mid-2000 Danaharta had successfully carved out bad debts to the tune of \$12 billion or 42.2 percent of total NPLs of the entire banking system. Through operation of Danamodal capital base of the banking system had been raised much above the international (BIS) requirement. The Corporate Debt Restructuring Committee had resolved bad debt problems of 25 firms with loans totaling \$4.7 billion, and was resolving another 26 cases with debt amounting to \$4.3 billion. As a result of the support provided by low interest rates and rapid recovery in containing NPL growth, performance of the banking and corporate sectors improved at a faster rate than originally envisaged. Consequently, Danamodal required considerably less funding than originally envisaged. Danaharta had ceased purchasing non-performing loans by mid-2000 and entered the workout phase of managing the acquired assets.

Carving out of bad debts and recapitalization of weak banks was instrumental in avoiding contraction in bank lending (Figure 3). This seems to have been a factor behind the broad-based recovery. A moribund credit market essentially constrains

recovery by discouraging credit worthy businesses who would have been willing to spend more if they had access to credit. Moreover, as Kruger and Tornel (1999) have demonstrated in the context of the Mexican economy following the 1994 crisis, continuing credit crunch caused by delayed banking restructuring could act as a major constraint on firms in the nontraded-goods sectors, which are normally the most affected by the crisis) and small firms in traded-good sector, which normally do not have favoured access to limited domestic lending sources or to foreign borrowing despite improved profitability of operation. This resulted in a lop-sided recovery process involving predominantly traded-goods industries dominated by large (mostly export-oriented) firms. Malaysia seems to have avoided this 'Mexican' syndrome through early action in the sphere of banking restructuring.

**Figure 3 about here**

## **6.2 Impact on FDI and other Growth Implications**

Many commentators expressed fear that capital controls would hamper the economic recovery by adversely affecting foreign direct investment in Malaysia (Heibert 1999, Miller 1999, Hale 1998, Hill 1998). It was argued that this significant departure from Malaysia's long-standing commitment to economic openness could certainly have an adverse impact on the general investment climate of the country. Moreover, in Malaysia, the decision to impose controls appeared so sudden and arbitrary that it called into question the general credibility of the government's whole framework for foreign investment. The pessimistic view was based on a false aggregation of FDI with portfolio investment and short-term bank credits. It ignored the time-honored dictum in the balance of payments theory that, 'in terms of underlying determinants of mobility, FDI is quite different from 'hot money'' (Meade 1951, p. 298). FDI flows are determined by long-term considerations governing international production decisions of MNEs, not by financial panics and related short-term economic changes, which underpin hot money movement. Therefore, regarding external economic policy of a country, what is primarily important for attracting FDI is a firm commitment to the maintenance of an open current account (Bhagwati 1998).

Was the continuity of impressive record of Malaysia as a favoured host of FDI broken by the capital controls? Net FDI flows to Malaysia declined from \$7.9 billion in 1996 to \$3.0 billion in 1998. During the ensuing xis years the average level of net annual inflows amounted to only 55 percent of that during 1990-95. It could well be that the prolonged period of policy and political uncertainty following the onset of the crisis, and widespread market scepticism about the fate of Malaysia's unorthodox reform package introduced in September 1998, may have played a role. However, Malaysia's past-crisis record of attracting FDI has been comparable to, if not more impressive, compared to Thailand (Figure 4). Only Korean has maintained a superior record. But one should be cautious in deriving inferences from a comparison of Malaysia's post-crisis FDI experience with that of Korea (or Thailand) for a number of reasons.

### **Figure 3 about here**

First, the FDI series (derived from balance of payments accounts) depicted in Figure 4 provide only partial coverage of FDI in these countries. According to the standard definition, FDI has three components: equity capital, inter-company debt and reinvested earnings. As in many other countries, data series on FDI in these countries capture only equity capital and inter-company debt. The omission of the third component (retained earnings) can lead to as underestimation of the actual magnitude of FDI in a given host country depending on the history of MNE involvement and the source country profile of FDI.<sup>15</sup> The degree of underestimation could well be greater for Malaysia its long history as an attractive destination of FDI.

Second, in Thailand and Korea acquisition by foreign companies of assets or equity of domestic companies has been an important component of foreign capital

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<sup>15</sup> There is evidence that the component "retained earnings" in FDI is positively related with the age of operation of firms in a given country, and that US MNEs have a general tendency to rely more on retained earnings for investment expansion compared to MNEs from other countries (Lipsev 2000).

inflows during this period (Table 4). Despite the severity of the downturn, corporate distress was far less widespread in Malaysia than elsewhere, and there were simply fewer ‘bargain assets’ for mergers and takeovers. Moreover, unlike Korea and Thailand, Malaysia did not resort to promoting acquisition and takeovers by foreign companies as part of the ongoing process of corporate and banking restructuring. During 1998-2000, capital inflows relating to mergers and acquisitions amounted to US\$ 20.5 billion in Korea (203 percent of total net FDI inflows) and 7.7 billion (50 percent) in Thailand, compared to 2.7 billion (17.2 percent) in Malaysia.<sup>16</sup> It is also important to note that, accordingly to the FDI classification system adopted by Bank Negara Malaysia in its balance of payments account, ‘purchase of existing plant and equipment’ by foreigners is treated as ‘changes of ownership’ not as ‘new investment’. Because of this [sound] accounting practice, whatever takeovers that have happened are not reflected in official FDI figures, where as in Thailand and Korea value of these deals are captured in FDI data together with ‘true’ investment (Ogus 2000).

#### **Table 4 about here**

Third, compared to Korea and Thailand (particularly the former), Malaysia’s foreign investment regime had remained much more liberal for a long time, and in some sectors the presence of MNEs had already reached very high levels by the onset of the crisis. For instance during 1990-96, FDI accounted for nearly 20% of gross domestic fixed capital formation in Malaysia, compared to 4.4 percent in Thailand and a mere 0.8% in Korea (Athukorala 2007, Table 5.5). Thus the post-crisis increase in FDI in the former countries compared to Malaysia may, to a significant extent, reflect ‘catching-up’ entry by foreign firms following the new FDI liberalization initiatives. Third, in the immediate pre-crisis years, intra-regional inflows (particularly from Korea and Taiwan) accounted for over one third of total FDI inflows to Malaysia. These flows dwindled following the onset of the crisis.

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<sup>16</sup> Figures computed from UNCTAD *World Investment Report* database.

### ***Portfolio Investment***

Have portfolio investors deserted Malaysia as a punishment for its recalcitrant act? This question is important because, despite the disruptive to role they played in the crisis onset of the crisis; foreign portfolio inflows have important positive effects, when harnessed in an appropriate macroeconomic setting. They contribute to expansion in domestic investment by reducing cost of equity capital and helping firms to reduce their reliance on bank-based financial intermediation (Williamson 1999).

When the capital controls were first introduced (and even after the new levy was introduced in February 15) many observers were concerned about potential massive outflows of short-term foreign debt and port portfolio investment after 1 September 1999. However, the ending of the one-year moratorium turned out to be a non-event. Total net portfolio capital outflow in the fourth quarter of 1999 amounted to only US\$2.2 billion, compared to a total stock of about \$10 billion potentially movable foreign portfolio investment remained in the country at the time the restriction was lifted (IMF 1999a, p. 98). Net outflows turned out to be positive by mid-January 2000 and the first quarter of the year recorded a total net inflow of US\$ 2.4 billion. This investment pattern suggests that investors do not find it difficult to factor in the new profit tax on portfolio investment, as ground rules are now more transparent in a context where signs of economic recovery are already clearly visible. The resurgence of portfolio flows also may be because, new inexperienced investors replace the ones who have been buried, or because memories are generally short of all investors (DeLong, 1999).

Immediately after the imposition of capital controls, Morgan Stanley Capital International (MSCI), International Finance Corporation (IFC) (the investment arm of the World Bank) and Dow Jones removed Malaysia from their capital market indices. Lack of transparency in new measures at the time controls were imposed and uncertainty about future growth prospects of the economy were as much an issue as the nature of the controls themselves. Following the introduction of market friendly changes to capital controls in and as the economy began to show clear signs of recovery IFC and Dow Jones reinstated Malaysia in their global indices by the end of

1999. MSCI reinstated Malaysia in its global indices by June 2000. Following the sharp decline in the second half of 1997, net portfolio capital inflow to Malaysia remained virtually negligible for the next five years (Figure 5). There has, however, been a notable recovery from about mid 2003. Interestingly there is no notable difference between Thailand and Malaysia in terms of overall trends in portfolio inflows during the post-crisis years. From about mid-2003 in every quarter net inflows to Malaysia have exceeded those to Thailand.

**Figure 5 about here**

### *Hidden Costs of Capital Controls*

Crisis management behind closed doors could well impede growth through various forms of resource misallocation. If the Malaysian authorities have made use of the breathing space provided by capital controls to rescue companies and banks that were rendered illiquid by the financial panic (unable to rollover short-term credit) but were otherwise viable, then the underlying growth prospects of the economy will remain intact. Alternatively, if bailouts assisted inefficient (mostly politically linked) firms whose insolvency hastened by the high interest rates and lower aggregate demand, then growth prospects would have been impaired. Such rescue operation may also induce moral hazard by encouraging firms/banks to continue engaging in risky acts, in the hope that they will be rescued in the event of similar future crises.

There is indeed anecdotal evidence of inappropriate rescue operations (Ariff 1999, Yap 1999). Significant differences in discount rates applied to various assisted banks by *Danahartha* remain unexplained. Similarly, the criteria used by *Danamodal* in its decisions as to which banks should be given priority in injecting capital remain largely unexplained. But whether these opaque practices are unique to the capital-control based crisis management in Malaysia is a debatable issue. Similar concerns have been raised relating to banking and corporate restructuring processes in Thailand, Korea and Indonesia – countries that are riding the crisis without capital controls. Moreover, one can reasonably argue (along the lines of Krueger and Tornell 1999, for instance) that economic gains associated with the speedy implementation of



banking and corporate restructuring in Malaysia might have compensated significantly, if not totally, for these alleged costs.

## **7. Concluding Remarks**

Given the Malaysian policy makers reluctance to an IMF sponsored reform process which was rooted in the country's policy history, the capital-control based crisis resolution policy package was a logical policy choice. Once the Malaysian authorities decided to deviate from the IMF route and follow the conventional Keynesian recipe for crisis management, capital controls seems to have provided a conducive setting for the effective pursuance of such policies. The new policy prevented massive capital outflow and permitted sustaining significant interest rate differential with the rest of the world. Against the popular perception that short-term capital flows cannot be controlled in an economy which is highly integrated in the global economy, the Malaysian evidence suggests that this can in fact be effectively done (at least on the margin), provided the controls are specifically targeted at short-term capital transactions and forcefully implemented. The fixed exchange rate has helped the recovery process by preventing premature exchange rate appreciation as part of improved market sentiments about the recovery prospects.

There is no evidence to suggest that controls on short-term capital flows have adversely affected Malaysia's image as a favorable location for foreign direct investment. The time-honored (and yet much neglected in the current debate on crisis management) dictum that the long-term investment is determined by quite different factors compared to 'hot money' movements is reconfirmed by the Malaysian experiment. Nor have foreign portfolio investors permanently deserted Malaysia as a punishment for the restraints imposed on them during the crisis. The lesson here is that the use of capital control is unlikely to have an adverse lingering effect on foreign portfolio investment, provided timely steps are taken to infuse greater flexibility and transparency to the regulatory mechanism and the reform process brings about speedy economic recovery and the controlled are implemented in a transparent fashion strictly in line with the original plan.

One can still dispute the argument that controls have played a 'special role' in delivering a superior recovery outcome for Malaysia (compared to the IMF-program countries) for want of counterfactuals. However, the fact remains that the new policy measures enabled Malaysia to achieve recovery while minimizing social costs and economic disruptions associated with a more market-oriented path to reform. This is a significant achievement because maintaining social harmony is an overriding concern (quite apart from economic efficiency consideration) of economic policy making in ethnically diverse Malaysia. Even if the bloody racial riots in Kuala Lumpur in 1969 are ignored as a distant event, the imminent ethnic conflict brought about by the modest economic downturn in Malaysia in the mid-1980s cannot be entirely overlooked.

There is indeed anecdotal evidence of inappropriate rescue operations. But whether these costly practices are unique to the capital-control based crisis management in Malaysia is a debatable issue. Moreover, one can reasonably argue that economic gains associated with the speedy implementation of banking and corporate restructuring in Malaysia might have compensated significantly, if not totally, for these alleged costs.

It is pertinent to end this paper with an important caveat. The inference that capital controls have helped crisis management in Malaysia by no means implies that Malaysia's radical policy shift should be treated as a ready-made alternative to the conventional IMF recipe by other developing countries. It is of course hazardous to draw general policy lessons from the study of an individual country case. With the benefit of hindsight, one can reasonably argue that a number of factors specific to Malaysia as well as to the timing of policy reforms may have significantly conditioned the actual policy outcome.

Thanks to long-standing prudential controls on foreign borrowing, Malaysia succumbed to the crisis with limited foreign debt exposure. With a vast domestic revenue base and ready access to 'captive' domestic financial sources (in particular the

Employees' Provident Fund (EPF) and the oil-rich *Petronas*), the Malaysian government was relatively well placed than perhaps any other crisis country to make a decisive departure from the conventional, IMF-centered approach to crisis management. The implementation of new controls was also greatly aided by a well-developed banking system, which was able to perform most of the new functions smoothly in the normal course of their business. The implementation of new controls was also greatly aided by a well-developed banking system, which was able to perform most of the new functions smoothly in the normal course of their business. 'In the management of the controls it also helped that Malaysia had both a disciplined banking system and a competent central bank. Not all countries are so blessed.'

The imposition of capital controls coincided with a significant upturn in manufactured exports (mostly as a result of dramatic recovery in the world electronics trade). So there was no shortage of foreign exchange. The particular exchange rate parity, presumably chosen arbitrarily by the Malaysian policy makers, eventually turned out to be a highly realistic rate, as the market panic against Asian economies began to subside and yen began to appreciate against the US\$. Given the availability of ample foreign exchanges for trade and FDI-related activities at a realistic exchange rate there was no panic buying leading to foreign exchange manipulation. Any policy inference from the particular Malaysian experience needs to be appropriately qualified for these specific circumstances.

## Appendix 1

### Malaysia: A Chronology of Crisis Management, 1997-2005

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#### 1977

- |              |  |
|--------------|--|
| May 14-15    | Bank of Thailand intervened to defend baht from attack by speculators.   |
| July 2       | Bank of Thailand abandoned the long-standing peg of the bath to the US\$. The new market determined rate (US\$/Baht = 30) reflected about 18% depreciation against the US\$.   |
| July 8       | Bank Negara Malaysia (BNM) (the Malaysian Central Bank) intervened aggressively to defend the ringgit, boosting the currency to high of 2.5100 after a low of 2.5240.  |
| July 14      | BNM gives up the defense of the ringgit after unsuccessfully defending it by jacking up interest rates to 50% and spending an estimated US\$ 3 billion. The Malaysian ringgit plunged to a 33-month low.   |
| July 24      | Ringgit hit 38-month low of 2.653 to USD, and Prime Minister Dr. Mahathir launches bitter attack on 'rogue speculators'.   |
| August 4     | Bank Negara Malaysia instructed commercial banks to observe a US\$2 million limit on non-commercial ringgit offer-side transactions with each foreign customers.   |
| August 28    | KLSE banned short selling of 1000 blue-chip stocks.  |
| September 3  | A plan was announced to use funds from the Employees Provident Fund (EPF) to pop up share prices buying stocks from Malaysian shareholders, but not from foreigners, at a premium above the prevailing prices.   |
| September 5  | Ban on short selling of KLSE linked stocks was lifted.   |
| September 15 | BNM increased the three-month intervention rate from 6% to 7.55%   |
| October 17   | Finance Minister Anwar Ibrahim unveiled the 1998 Budget cutting infrastructure spending, increase in import duties and breaks for expenditures aimed at narrowing the current account deficit. Corporate tax rate was cut from 20% to 28% to stimulate investment. |
| December 5   | Finance Minister Anwar Ibrahim announced an austerity package. It announced a reduction of the growth forecast for 1998 from 4-5% to 7% and that for 1997 1997 to 7.5-7.7% from 8.0%.  |
| December 27  | BNM increased its three-month intervention rate from 7.55% to 8.7%.  |

**1998**

- January 1 BNM reduced the period in arrears (default period) for classifying a loan as non-performing by banking institutions for six months to three months, with a view to strengthening prudential supervision.
- January 2 BNM instructed Malaysia's 39 finance companies to begin merger talks.
- January 7 The National Economic Action Council (NEAC) was established as a consultative body to the Cabinet to deal with the economic crisis. Daim Zainuddin who was finance minister during the economic crisis of the late 1980s (and a close confidant of Dr. Mahathir) was appointed as the executive director of NEAC.
- Finance Minister confirmed that BNM had moved to stem the slide in Ringgit.
- January 9 Government claimed sufficient foreign reserves and ruled out an IMF rescue.
- February 6 BNM increase its three-month intervention rate from 10% to 11%.
- February 9 Bank Negara Malaysia lowered statutory reserve requirement (SRR) from 13.5% (a rate which had prevailed from 1 January 1996) to 10% to help check extraordinary rise in bank lending rates.
- February 16 The statutory reserve requirement (SRR) for commercial banks, finance companies and merchant banks was reduced from 13.5% to 10% of their eligible liabilities.
- March 24 Bank Negara Malaysia introduced new measures for banks to shore up capital-adequacy position at the first sign of trouble. BNM also announced that three financial institutions – Bank Bumiputera, Abrar Finance and Cempaka Finance – might need to be recapitalized by a total of 782 million ringgit (\$2.08 million).
- June 1 Pengurusan Danaharta Nasional Berhad (the National Asset Management Company) was set up to acquire and manage NPLs of the banking institutions.
- July 1 SRR was reduced from 10% to 8%.
- July 23 NEAC launched the National Recovery Plan. Its recommendations, in particular an exchange rate system that reduces volatility, a shift away from high interest policy and easing of fiscal and monetary policy, did indicate significant departure from the conventional IMF lines, but there was no hint about imposition of capital control.
- July 31 A new framework for liquidity management in banking institutions was introduced.

August 1	Danamodal Nasional Berhad (Banking Recapitalisation Agency) was set up to recapitalise banking institutions. Corporate Debt Restructuring Committee, a joint public and private sector steering committee, was set up to facilitate and expedite corporate debt restructuring.
August 3	BNM's market intervention rate was reduced from 11% to 10.5.
August 10	BNM's market intervention rate was reduced from 10.5% to 10%.
August 17	BNM reduced its three-month intervention rate from 11% to 9.5%.
August 25	Tun Diam Zainuddin was appointed Minister of Special Functions to oversee the Malaysian economy. The media interpreted this as a calculated move to reduce Anwar's role in crisis management.
August 17	BNM reduced market intervention rate was reduced from 10% to 9.5% and ruled out any possibility of introducing capital controls.
August 31	Overseas trading of Malaysian securities was banned. KLSE announced that trading on Singapore's over-the-counter Central Limit Order Book (CLOB) market were no longer recognized.
September 1	A wide range of foreign exchange and capital controls were introduced, substantially insulating Malaysia's financial markets from external influences and effectively closing down the offshore ringgit market (See Appendix 2). The SRR was reduced from 8% to 6%. The base lending rate (BLR) framework was revised to ensure a more rapid transmission of changes in monetary policy on lending rates charged by banks.
September 2	The exchange rate for the ringgit was fixed at 3.80 per US dollar, a rate which was stringer than the average rate of 4.18 for the previous two months, but significantly below its pre-crisis level of about 2.49). Prime Minister Mahathir sacked his deputy and the Finance Minister Anwar Ibrahim on grounds of immorality.
September 3	Liquidity-asset ratio requirement for commercial banks was reduced from 17% to 15% with immediate effect. BNM's market intervention rate was reduced from 9.5 % to 8%.
September 4	Dr. Mahathir became the Acting Minister of Finance.
September 7	BNM relaxed ceilings on bank lending to the property sector.  Dr. Mahathir became First Finance Minister and Mustapa Mohamed (former Minister of Entrepreneur Development) was appointed Second Finance Minister.

September 9	BMN instructed the banks to aim at achieving a minimum annual loan growth of 8% by the end of the year. SRR was reduced from 6% to 5%.
September 10	Salomon Smith Barney was appointed finance advisor to the Government and Danamodal Nasional Berhad.
September 16	SRR was reduced from 5% to 4%. Liquidity asset requirement of commercial banks was reduced from 17% to 15%.
September 23	Ceiling on loans for the purchase of shares and unit trust funds was raised from 15% to 20% of total outstanding loans for commercial banks and fiancé companies while leaving the ceiling on merchant banks at 30%. Default period for classifying a loan as non-performing by banking institutions was increased from 3 months to 6 months.
October 5	BNM's market intervention rate was reduced from 8% to 7.5%. Limits on bank lending to housing and real estate were relaxed.
October 23	The 1999 Budget proposed a significant fiscal stimulant package involving an increase in the budget deficit from ..
November 9	BNM's market intervention rate was reduced from 7.5% to 7%.
November 20	The minimum monthly repayment on outstanding credit card balances was reduced from 15% to 5%. Banking institutions were instructed to establish Loan Rehabilitation Units to manage problem loans.
November 21	Hire-purchase guidelines were abolished, allowing banking institutions to determine their own hire-purchase loans
December 5	The maximum annual lending rate under the Fund for Small and Medium Industries and the Scheme for Low and Medium Cost Houses were reduced from 10% to 8.5%.
<b>1999</b>	
January 4	Banking institutions were instructed to achieve a minimum loan growth of 8% by the end of 1999.
January 10	BNM took control of MBf Finance Berhad, the biggest finance company (with assets amounting to about US\$5 billion, one-fourth of total assets of all finance companies) on grounds of weak management.
February 4	The 12-month holding rule on repatriation of foreign portfolio capital was replaced with a three-tier exit levy on the principal and profit.
February 18	Repatriation of funds relating to investment in immovable property was exempted from the exit levy.

May 26	BNM raised US\$ 1 billion through a global bond issue. The issue was oversubscribed by 300%.
July 29	BNM unveiled a plan to combine the country's 58 financial institutions (22 commercial banks, 11 merchant banks and 25 finance companies) into six large banking groups.
August 7	Residents were allowed to grant overdraft facilities in ringgit not exceeding RM200 million for intra-day and not exceeding RM500 for overnight to foreign stock-broking companies subject to certain conditions.
August 9	BNM's intervention rate was reduced from 7% to 5%.
September 21	The three-tier levy on repatriation of portfolio capital was replaced with a flat 10% levy on profit repatriated.
October 21	Commercial banks were allowed to enter into short-term currency swap arrangements with non-resident stockbrokers for a maturity period not exceeding five working days with no rollover option,
<b>2000</b>	
March 14	Funds arising from sales of securities purchased by non-residents on the CLOB market were permitted to be repatriated without paying exit levy.
September 30	Licensed offshore banks in the Labuan Offshore Financial Centre were allowed to invest in ringgit assets from their own account only and not on behalf of clients. The investment could not be financed by ringgit borrowing.
October 27	Profit earned from foreign portfolio investment in Malaysia for a period of more than one year was exempted from the 10 per cent repatriation duty.
December 15	The 10 percent levy on profits earned from foreign portfolio investment repatriated within one year was abolished.
December 20	Licensed commercial banks were allowed to extend intra-day overdraft facilities not exceeding RM 200 million and overnight facilities not exceeding RM10 million to foreign stockholding companies and foreign custodiam banks.
<b>2001</b>	
January 6	All controls on the trading of futures and options on the Malaysian stock exchange were abolished.
November 21	Licensed banks were allowed to extend credit facilities to non-residents up to an aggregate of RM5 million to finance projects undertaken in Malaysia.



**2002**

- March 12 RM 10,000 ceiling on foreign currency loans to residents for investment overseas was removed. The requirement for using only ringgit for settlement of transaction on ringgit-denominated assets between residents and non-residents and between non-residents was abolished.
- August 3 Banks were permitted to extend ringgit overdraft facilities not exceeding RM 500,000 in aggregate to non-residents provided the credit facilities are fully covered at all time by fixed deposits placed by the non-resident customer with the lending bank.

**2003**

- January 4 The maximum amount of repatriation of profits, dividends, rental income and interests on all bona fide investment without prior approval was increased from RM 10,000 to RM 50,000, or its equivalent in foreign currency.  
Residents who have foreign currency funds were permitted to invest freely in any foreign currency products offered by onshore licensed banks.  
The ceiling on bank loans to non-residents (excluding stockbroking companies, custodian banks and correspondent banks) was raised from RM 200,000 to RM 10,000,000.

**2005**

- July 21 BNM announced abolition of the ringgit peg to the US\$ in favour of a managed floating system.

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Source: Compiled from Bank Negara Malaysia, Annual Report (various years), and press releases and exchange notices ([www.bnm.gov.my](http://www.bnm.gov.my)), and IMF, *Annual Report on Exchange Arrangements and Exchange Restrictions* (various years)

**Appendix 2:  
Malaysia: Exchange Control Measures Prior to and After 1 September 1998**

Transaction	Prior to 1 September 1998	New
(1) Transfers based on external accounts	Transfer between external account holders freely allowed	Transfer of any amount between external accounts requires prior approval.  Source of funding external accounts are limited to: (a) proceeds from sale of ringgit instruments, securities registered in Malaysia or other assets in Malaysia; (b) salaries, wages, commissions, interests or dividends and (c) sales of foreign currency.  Use of funds in accounts is limited to purchase of ringgit assets in Malaysia.
(2) General payments	Residents were freely allowed to make payments to non-residents for any purpose. Amounts of RM100,000 and above were permitted provided the resident does not have any domestic borrowing (if the payment is for investment abroad), or the payment is made in foreign currency (for non-trade purposes)	Residents are freely allowed to make payments to non-residents for any purpose up to RM 10,000 in ringgit or foreign currency, except for imports of goods and services. Amounts exceeding RM10,000 require approval and are allowed in foreign currency only
(3) Export of goods	Payments to be received in foreign currency or ringgit from an external account	Payments are to be received from an external account in foreign currency only.
(4) Credit facilities to nonresidents	Non-resident correspondent banks and stock-brokering companies were permitted to obtain credit facilities up to RM 5 million from domestic banks to fund mismatch of receipts and payments in their external accounts.	Domestic credit facilities to non-resident corresponding banks and non-resident stock-brokering companies are no longer allowed.
(5) Investment abroad	Corporate residents with domestic borrowing were allowed to invest abroad up to the equivalent of RM 10 million per calendar year on a corporate group basis.	Residents with no domestic borrowing are allowed to make payment to non-residents for investment abroad up to an amount of RM10000 or its equivalent in foreign currency per transaction.

Table A-2 continued

Transaction	Prior to 1 September 1998	New
(6) Credit facilities from non-residents	Residents were allowed to obtain ringgit credit facilities of below RM100,000 in the aggregate from non-resident individuals.	All residents require prior approval to make payments to non-residents for investing abroad an amount exceeding RM 100 equivalent in foreign currency. Residents are not allowed to obtain ringgit credit facilities from any non-resident individual.
(7) Trading in securities	There were no restrictions on secondary trading of securities registered in Malaysia between residents and non-residents and among non-residents. For transfer of securities registered outside Malaysia from a non-resident to a resident, the resident was subject to the rules on investment abroad.	Ringgit securities held by non-residents must be transacted through an authorized depositor. All payments by non-residents for any security registered in Malaysia must be made in from an external account (in foreign currency or in ringgit) All proceeds in ringgit received by a non-resident from the sale of any Malaysian security must be retained in an external account at least for one year before converting to foreign currency. All payments to residents for any security registered outside Malaysia from non-residents must be made in foreign currency.
(8) Import and export of currency notes, bills of exchange, insurance policies etc.	A resident or non-resident traveler was free to import or export any amount of ringgit notes or foreign currency notes in person. Export of foreign currencies required approval. Authorized currency dealers were allowed to import any amount of ringgit notes, subject to reporting to Bank Negara Malaysia on a monthly basis.	A resident traveler is permitted to bring ringgit notes up to RM1,000 only and any amount of foreign currencies. A resident traveler is permitted to export ringgit notes only up to RM1,000 and foreign currencies up to the equivalent of RM 10,000. A non-resident traveler is permitted to import ringgit notes up to RM1,000 only and any amount of foreign currencies. A non-resident traveler is permitted to export Ringgit notes up to RM1,000 only and foreign currencies up to the amount brought into the country.
(9) Transaction in the Labuan Offshore Financial Centre.	Licensed offshore banks were allowed to trade in ringgit instruments up to permitted limits.	Licensed offshore banks are no longer allowed to trade in ringgit instrument.

Source: Compiled from Bank Negara Malaysia, *Quarterly Bulletin*, Second Quarter 1998, Kuala Lumpur and IMF (1997).

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**Table 1: Malaysia: End-of-year Stock of Volatile Capital and Foreign Exchange Reserves, 1990-1997**

	1990	1991	1992	1993	1994	1995	1996	1997 <sup>3</sup>
Mobile capital <sup>1</sup> , US\$ billion	6	7	12	24	28	32	38	51
Composition of mobile capital(%):	100	100	100	100	100	100	100	100
Short-term debt <sup>2</sup>	26	40	41	28	20	20	26	28
Banking sector	26	40	41	28	14	14	17	22
Non-bank private	0	0	0	0	6	6	8	6
Portfolio investment	74	60	59	72	80	80	74	72
Foreign exchange reserves, US\$ billion	10	11	19	30	26	26	28	28
Reserve-Mobile capital Ratio (R/MS), %	158	171	149	124	94	80	72	56

*Note:*

- 1 Short-term debt + portfolio investment
- 2 Debt with a tenure of one year and below.
- 3 First half of the year.

*Source:* Compiled from Bank Negara Malaysia, *Monthly Statistical Bulletin*, Kuala Lumpur (various issues). The data series on portfolio capital was constructed by accumulating net annual flows from 1980. Data on stocks of other components of mobile capital are readily available in this source.



**Table 2: GDP Growth in Malaysia, Korea and Thailand, 1993-2006  
(percentage change from one year before)**

	Malaysia	Thailand	Korea
1995	9.8	9.2	9.2
1996	10.0	5.9	7.0
1997	7.3	-1.4	4.7
1998	-7.4	-10.5	-6.9
1999	6.1	4.4	9.5
2000	8.9	4.8	8.5
2001	0.3	2.2	3.8
2002	4.4	5.3	7.0
2003	5.5	7.1	3.1
2004	7.2	6.3	4.7
2005	5.2	4.5	4.0
2006	5.9	5.0	5.0
1997Q1	7.6	1.0	4.9
1997Q2	8.4	-0.6	6.0
1997Q3	7.2	-1.6	5.1
1997Q4	6.1	-4.2	2.8
1998Q1	-1.5	-7.1	-5.3
1998Q2	-5.9	-13.9	-7.9
1998Q3	-10.2	-13.9	-8.1
1998Q4	-11.2	-7.2	-6.0
1999Q1	-1.0	-0.2	5.9
1999Q2	4.8	3.4	9.7
1999Q3	9.1	8.4	11.1
1999Q4	11.7	6.4	10.9
2000Q1	11.7	6.5	13.1
2000Q2	8.5	6.1	9.4
2000Q3	8.4	2.4	8.2
2000Q4	7.1	4.0	4.3

*Source:* IMF, International Financial Statistics Database



Merchandise exports (US\$, FOB, %)	6.0	0.3	-6.9	17.0	17.0	-10.6	6.1	12.4	20.6	12.0	18.7
Merchandise imports (US\$, FOB, %)	1.0	0.2	-25.9	13.0	26.3	-10.3	8.1	5.4	25.0	9.6	26.4
Current account balance as % of GDP	-4.8	-5.3	13	15.9	9.4	8.3	8.4	12.8	12.6	15.3	17.1
Foreign reserves (US\$ billion) <sup>5,8</sup>	27.0	20.8	25.6	30.6	28.3	29.5	33.4	43.8	65.9	69.9	82.1
Total external debt as % GDP <sup>5</sup>	38.7	43.9	42.6	42.1	46.9	51.9	51.3	47.3	44.6	39.9	33.5
Short term foreign debt as % of total debt <sup>5</sup>	25.7	25.2	19.9	14.3	10.9	13.9	17.5	17.9	21.8	23.7	22.8
Short-term foreign debt as % of foreign reserves <sup>5</sup>	36.9	53.7	33.2	19.1	16.1	21.2	25.3	20.0	17.4	17.7	14.4
External debt service ratio	6.6	5.5	6.7	5.9	5.5	6.6	6.4	5.9	4.2	5.0	4.4
Average exchange rate (ringgit per US\$)	2.5	2.8	3.9	3.8	3.8	3.8	3.8	3.8	3.8	3.6	3.5

*Notes:*

- 1 All growth rates on a year-on-year basis.
- 2 Sectoral share in GDP in 1996 are given in brackets.
- 3 Based on manufacturing production index (1993 = 100).  
The weight attached to each category in the total index is given in brackets.
- 4 Net of non-performing loans (6-month definition).
- 5 End of period.
- 6 End-of-the-year stock of outstanding loans deflated by the GDP deflator
- 7 Non-performing loans of commercial banks only. Based on a 'six month' non-performing period.
- 8 Excluding gold reserves
- Data not available.

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Source: Compiled from Bank Negara Malaysia, *Monthly Statistical Bulletin* (bnm.gov.my), IMF, *International Financial Statistics* and MIER, *Monthly Economic Monitor* (various issues)

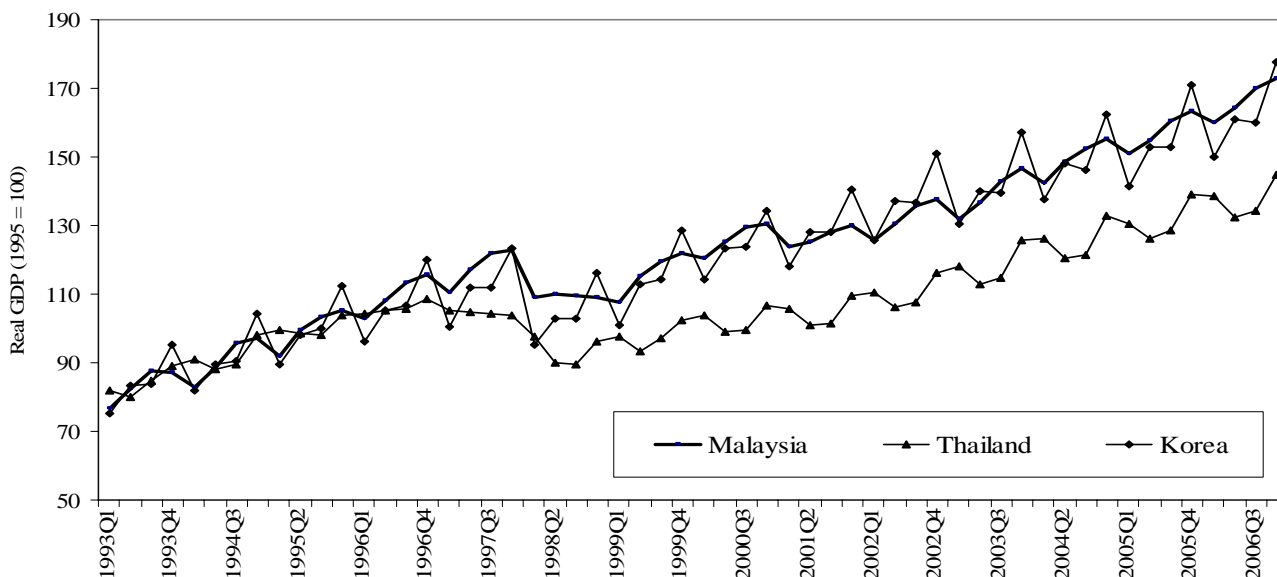
**Table 4. Mergers and Acquisitions by Foreign Firms in Asian Crisis Countries, 1990-2001, Announced Value (US\$ million)**

	1990-94 <sup>1</sup>	1995	1996	1997	1998	1999	2000	2001
Indonesia	747	809	530	332	683	1164	819	3529
Korea	676	192	564	836	3973	10062	6448	3648
Malaysia	1221	98	768	351	1096	1166	441	1449
Philippines	1446	1208	462	4157	1905	1523	366	2063
Thailand	778	161	234	633	3209	2011	2569	657
'Crisis five' total	4868	2468	2558	6309	10866	15926	10643	11346

(1) Annual average.

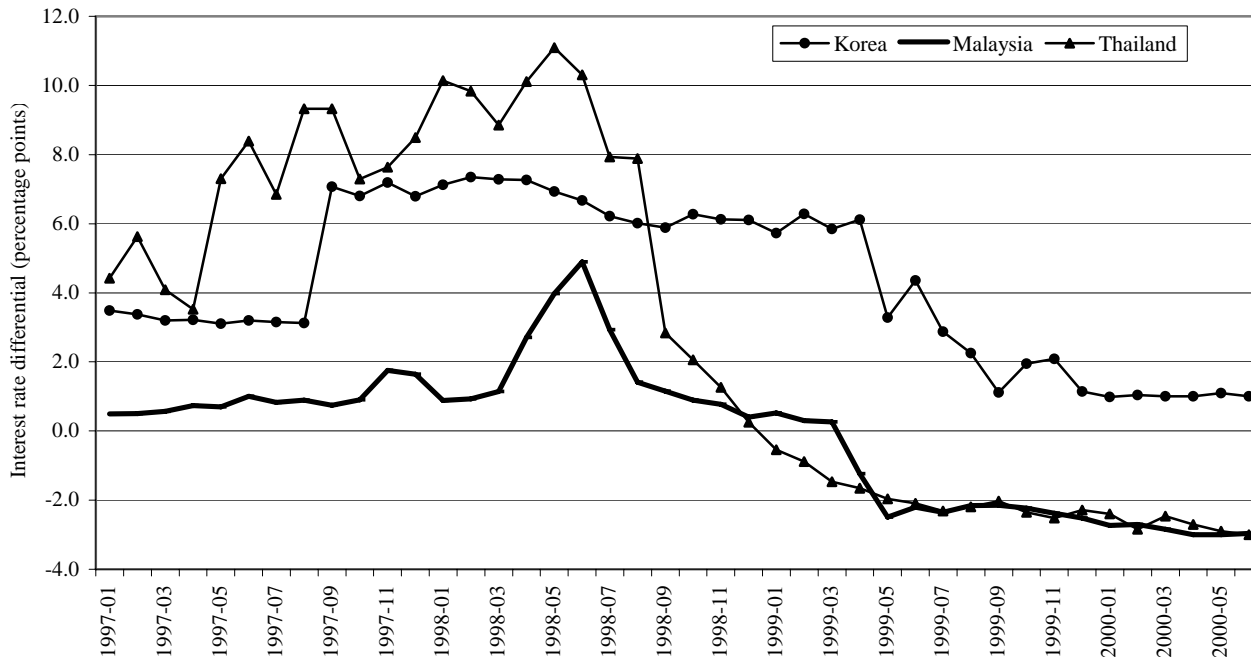
Source: UNCTAD 2002: Annex Table B.7.

**Figure 1: GDP in Malaysia, Korea and Thailand, 1993q1-2006q4  
(1995 = 100)**



Source: IMF, International Financial Statistics Database

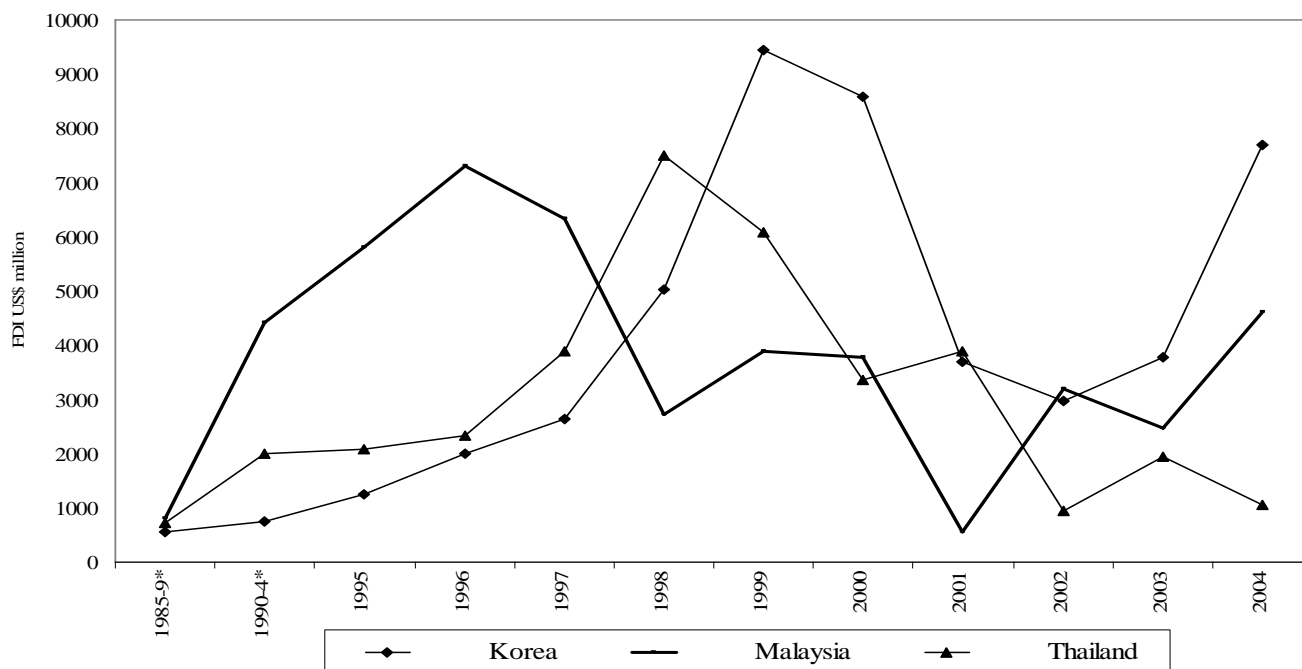
**Figure 2: Differential Between Domestic and International Money Market Interest Rates in Malaysia, Korea and Thailand (January 1996 - June 2000) (percentage points)**



**Note:** Domestic money market rate used for each of the three countries is: Malaysia: three-month Treasury bill rate; Thailand: three month repurchase rate on government bonds in the inter-bank market and Korea: 91-day beneficial certificate rate. The three-month Treasury bill rate in the USA is used as a proxy for international money market rate.

**Source:** Bank Negara Malaysia, *Monthly Statistical Bulletin* and IMF, *International Financial Statistics* (various issues).

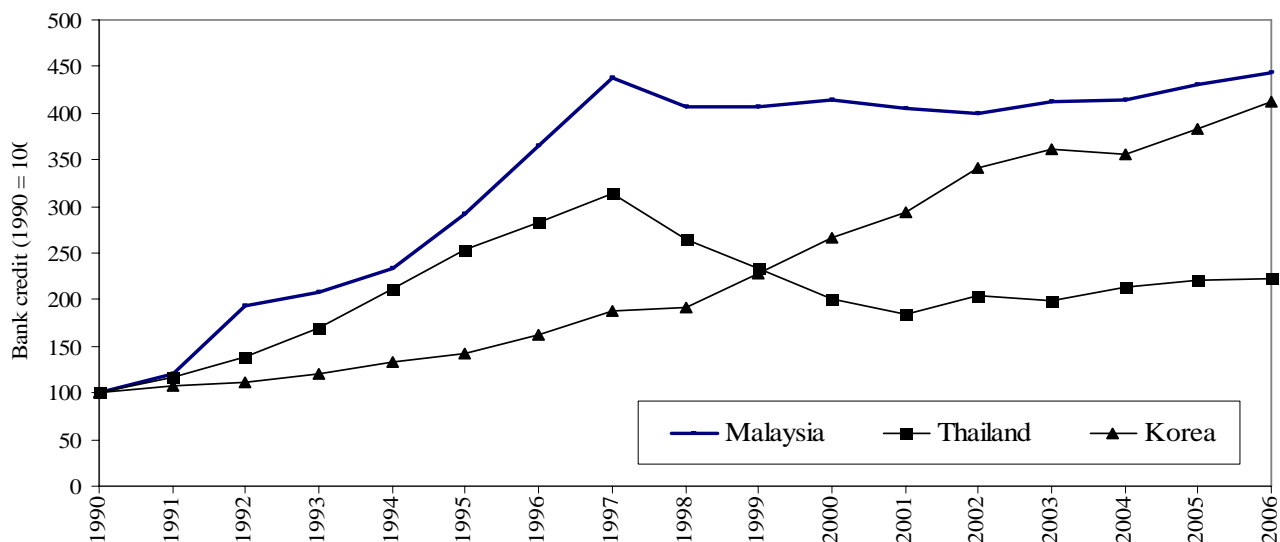
**Figure 4: Net FDI Flows to Malaysia, Korea and Thailand, 1985-2004 (US\$ million)**



Note: \* annual average

Source: UNCTAD, *World Investment Report* database.

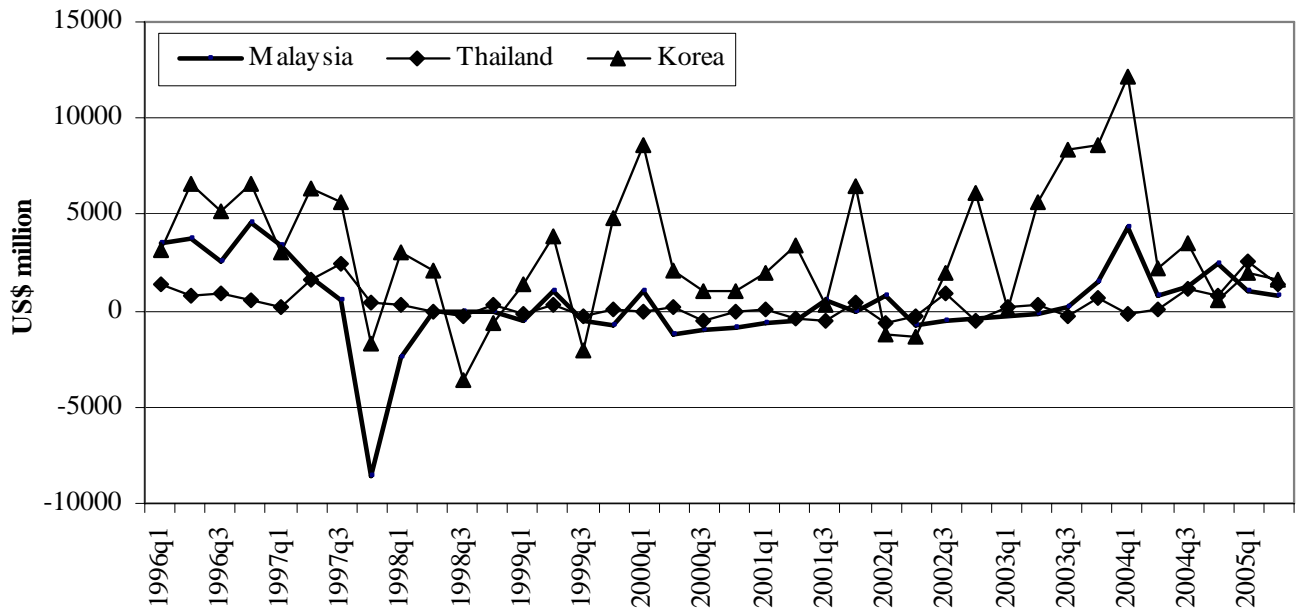
**Figure 3: Real Bank Credit to the Private Sector: Malaysia, Korea and Thailand, 1990-2006 (1990 = 100)\***



Note: Total end-of-year balances deflated by the GDP deflator.

Source: Based on data compiled from IMF, *International Financial Statistics* database.

**Figure 5: Net Portfolio Capital Flows to Malaysia, Korea and Thailand, 1996q1-2005q2 (US\$ million)**



Source: Based on data compiled from IMF, *International Financial Statistics* database.