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**Working Paper**

## Managing capital flows: The case of Malaysia

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**Managing Capital Flows:  
The Case of Malaysia**

**K. K. Foong**

**March 2008**

**ADB Institute Discussion Paper No. 93**

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**ABSTRACT**

This paper reviews policies taken to address capital flows in Malaysia from 1999 to 2007. In the face of increasingly volatile capital flows and their repercussions on the domestic economy, the monetary authority needs to pursue active monitoring and intervention. Moreover, having a resilient financial sector with prudential regulations may help overcome the negative effects of capital reversal. Other conditions include sound macroeconomic policies, a strong domestic sector, and large international reserves.

JEL Classification: E58, F21

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## I. INTRODUCTION

The Malaysian economy has recovered solidly since the 1997–98 financial crisis; the recovery was made possible by numerous reforms as well as favorable external conditions. Ongoing reforms in the financial sector have made the economy more resilient. Operation of the securities markets is more efficient and the level of corporate governance enhanced. The banking system's delinquencies and exposure to double mismatches have been reduced. Smaller banks were merged with larger and more capitalized ones. Better risk management and prudential regulations were also implemented.<sup>1</sup> Distressed firms were either shut down or merged with stronger ones. Moreover, the exchange rate is increasingly flexible (McCauley, 2002).

From 1999 to 2007, Malaysia has generated a current account surplus, attracted a fair amount of foreign capital, and accumulated large international reserves. The last factor may act as a precautionary motive to prevent speculative attacks on Malaysia's currency, given its highly opened economy. While the running of a positive current account may tend to replace depleted foreign exchange reserves after the crisis, a recurrent current account surplus of more than 10% of GDP may indicate excess savings over investment. This is also evident by the downward trending loan-deposit ratio of the banking system. A persistent current account surplus also shows that the economy is driven by exports, with the domestic sector being anemic. A more dynamic domestic sector would lead to a smaller current account surplus through higher domestic consumption and investment.

While strong economic growth, and healthy corporate and household sectors, as well as continued global search for yields have led to massive inflows of capital into Asia, these inflows have posed both benefits and risks.<sup>2</sup> These inflows contributed to Malaysia's resilience by entering productive activities in the real economy, and by confronting external shocks through the build-up of reserves. Nevertheless, the regulator needs to pursue active monitoring and intervention to prevent excessive domestic liquidity, credit growth, a volatile or misaligned exchange rate, inflation, and possible overheating of the economy.

In addition, prolonged global imbalances could jeopardize the Malaysian economy. Large capital inflow combined with current account surplus can exert upward pressure on the ringgit exchange rate, which tend to erode the level of competitiveness. To moderate currency appreciation pressure, the monetary authority has intervened in the foreign exchange market as well as through bond issuance to absorb excess liquidity generated by large foreign inflows.<sup>3</sup> This trend is expected to continue at least in the medium term, given ample global liquidity and a greater degree of risk-taking by investors. Global liquidity remains high due to structural weakening of the US economy and its financial assets, and the rising trend in carry trades encourages capital to flow into high-yielding emerging Asian economies.

Thus, it is timely to discuss how the monetary authority would manage surges in capital flows, while maintaining prudent macroeconomic and financial stability. Failing

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<sup>1</sup> For further discussion on financial sector reforms, see Bank Negara Malaysia (2007).

<sup>2</sup> Note that some of these pull factors may not hold, given the ongoing global credit crunch and subprime issues. Some of the economies in Asia are facing economic slowdown, while others are more successful in weathering the financial turmoil. Nevertheless, Asia as a whole still receives a considerable amount of capital inflows, notably in high interest rate economies.

<sup>3</sup> For a review of other sterilization measures on capital flows, see Obstfeld (1982), Kumhof (2004), and Takagi (2007) in this volume.

this, is there any scope for regional cooperation initiatives? The paper is organized as follows. Section II discusses issues pertaining to capital flows under a fixed exchange rate regime. Policy measures are also evaluated. The study of capital flows and policies under a managed float exchange rate regime is the subject of Section III. Section IV examines alternative policy measures to manage capital flows. The paper concludes in Section V. Appendix I lists key external policy milestones in Malaysia since 1999. Appendix II presents the old format of the balance of payments figures used by the authority.

## II. CAPITAL FLOWS DURING 1999–2005

### A. Overview

This section highlights issues regarding capital flows and corresponding policy action between 1999 and 2005, where the ringgit is pegged to the US dollar (USD) at 3.80.<sup>4</sup>

### B. Trends

Throughout this period, Malaysia experienced consecutive years of current account surplus, on average around 11.8% of GDP (Table 1 and Figure 1).<sup>5</sup> Current transfers deteriorated over the same period, in particular over 2004–05 (Figure 2). Higher overseas remittances by foreign workers and expatriates, and education payments were the main reasons. It also attracted a reasonable amount of net direct investment and accumulated international reserves.

**Table 1: Balance of Payments (USD billion)**

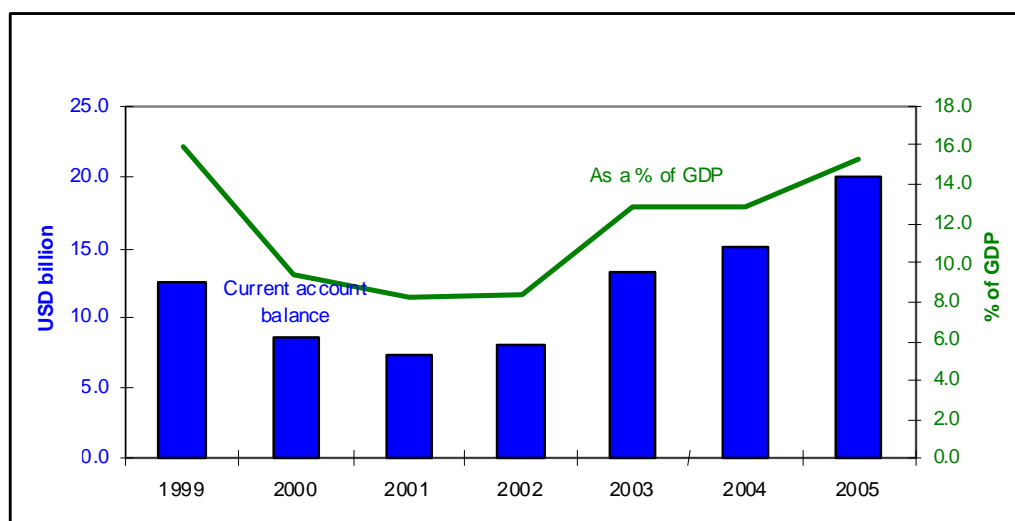
	1999	2000	2001	2002	2003	2004	2005
<b>Current account balance</b>	<b>12.6</b>	<b>8.5</b>	<b>7.3</b>	<b>8.0</b>	<b>13.3</b>	<b>15.1</b>	<b>20.0</b>
<i>As a % of GDP</i>	<i>15.9</i>	<i>9.4</i>	<i>8.3</i>	<i>8.4</i>	<i>12.8</i>	<i>12.8</i>	<i>15.3</i>
Of which: Current transfers	-1.7	-1.9	-2.2	-2.8	-2.4	-3.9	-4.5
<i>Credit</i>	<i>0.8</i>	<i>0.8</i>	<i>0.5</i>	<i>0.7</i>	<i>0.5</i>	<i>0.4</i>	<i>0.3</i>
<i>Debit</i>	<i>2.5</i>	<i>2.7</i>	<i>2.7</i>	<i>3.4</i>	<i>3.0</i>	<i>4.3</i>	<i>4.8</i>
<b>Financial account balance</b>	<b>-6.6</b>	<b>-6.3</b>	<b>-3.9</b>	<b>-3.1</b>	<b>-3.2</b>	<b>4.9</b>	<b>-9.8</b>
Direct investment	2.5	1.8	0.3	1.3	1.1	2.6	1.0
<i>Outward</i>	<i>-1.4</i>	<i>-2.0</i>	<i>-0.3</i>	<i>-1.9</i>	<i>-1.4</i>	<i>-2.1</i>	<i>-3.0</i>
<i>Inward</i>	<i>3.9</i>	<i>3.8</i>	<i>0.6</i>	<i>3.2</i>	<i>2.5</i>	<i>4.6</i>	<i>4.0</i>
Portfolio investment, net	-1.2	-2.5	-0.6	-1.7	1.1	8.5	-3.7
Other investment, net	-7.9	-5.6	-3.5	-2.7	-5.4	-6.2	-7.0
<i>Official sector</i>	<i>1.8</i>	<i>1.0</i>	<i>1.9</i>	<i>1.2</i>	<i>-2.9</i>	<i>0.6</i>	<i>-0.8</i>
<i>Private sector</i>	<i>-9.7</i>	<i>-6.6</i>	<i>-5.4</i>	<i>-4.0</i>	<i>-2.4</i>	<i>-6.8</i>	<i>-6.2</i>
<b>International reserves, net</b>	<b>30.9</b>	<b>28.7</b>	<b>29.9</b>	<b>33.7</b>	<b>44.2</b>	<b>66.2</b>	<b>70.2</b>

Sources: Department of Statistics, Malaysia; Author's calculation

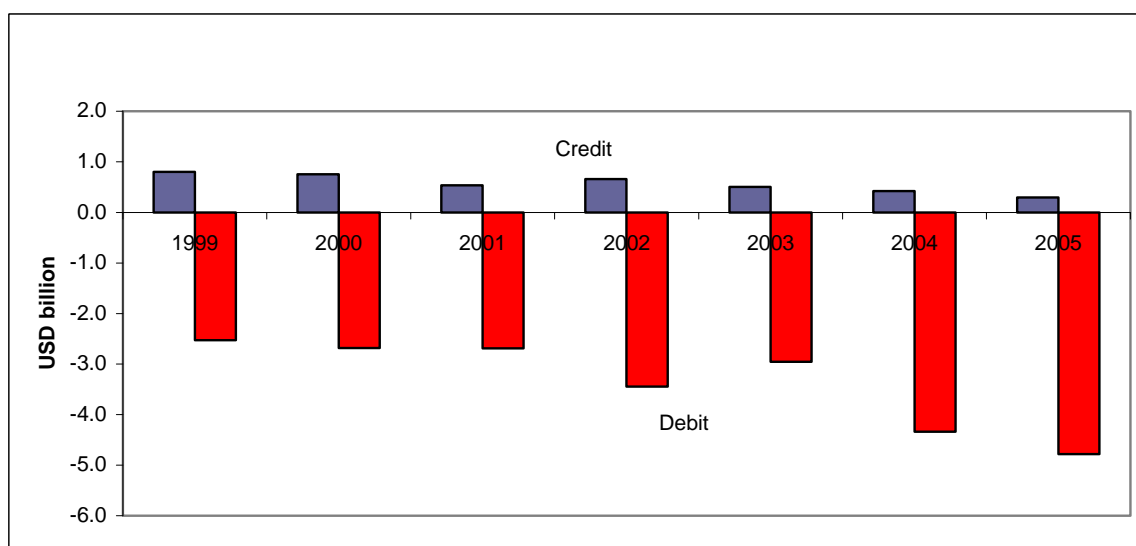
<sup>4</sup> The ringgit exchange rate was fixed at 3.80 per USD on September 2, 1998 and remained until July 21, 2005. Selective exchange controls were introduced on September 1, 1998 to protect the financial system from external influences, and effectively shutting down the offshore ringgit market. For further discussion, see Bank Negara Malaysia (1999) and Ariff (2007).

<sup>5</sup> Note that Malaysia adopted the Fifth Edition of the Balance of Payment Manual of the IMF in 1999. Hence, figures prior to 1999 are not comparable to those from 1999 onwards. For completeness, figures prior to 1999 are presented in Appendix II.

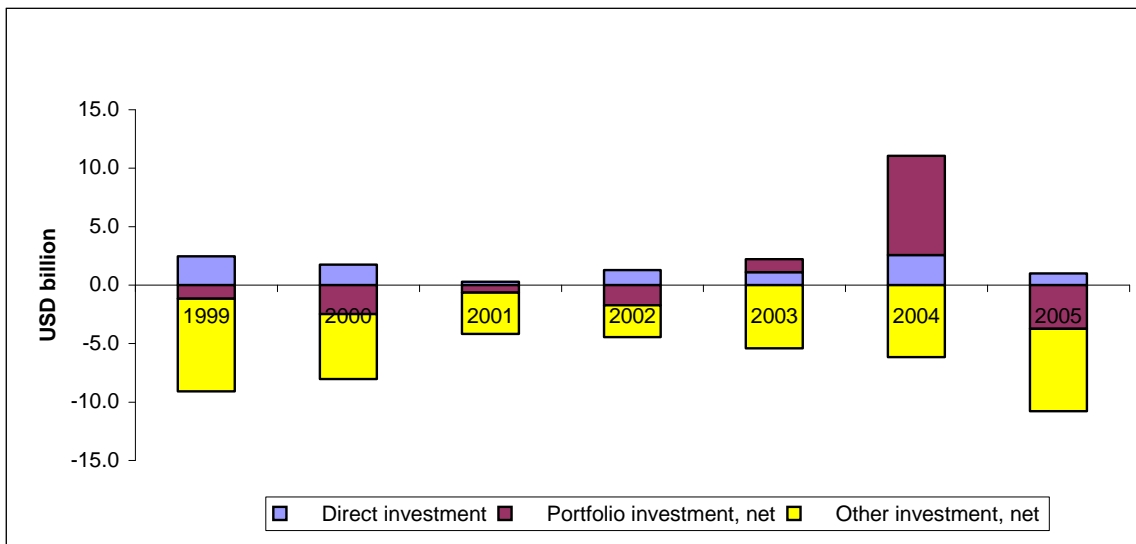
**Figure 1: Current Account Position**



**Figure 2: Current Transfers**





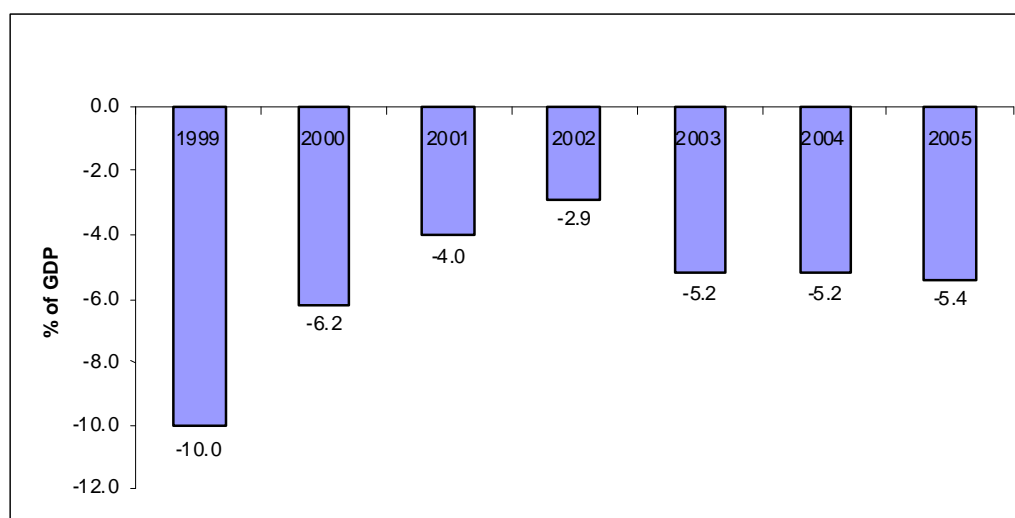
**Figure 3: Net Capital Flows**

The financial account, which measures total net capital flows, was in deficit from 1999 to 2003 (Table 1 and Figure 3). During 1999 to 2002, portfolio outflows were small due to the negative sentiment generated by the imposition of graduated exit levies on February 15, 1999.<sup>6</sup> Since the levy was applicable only at the time of repatriation, it could not be offset by double taxation agreements. The 10% levy on profits was seen as discouraging portfolio inflows. The higher levy of 30%, applicable on gains on investments of less than one year's time, attracted heavy criticism because potential investors would apply the higher levy rate of 30% to all investments, regardless of their expected maturity, owing to the "last in, first out" principle. The higher levy was eliminated on September 21, 1999, leaving in place only a single rate of 10% on capital gains regardless of duration of investment. In a further relaxation, the 10% levy on capital gains was retained, effective from February 1, 2001, only for capital in the country for a duration of less than one year. The rule was eliminated on May 2, 2001.

The graduated system was successful in managing volatile portfolio flows. The levy lowered the expected rate of return on equity to foreign investors, and hence, increased the required pre-levy yield necessary relative to other countries. This was an effort intended to discourage casual entry into Malaysia, and to ensure that capital would enter only based on economic fundamentals.

Total net capital flows improved only in 2004, supported by a surge in net portfolio funds of USD8.5 billion. In fact, portfolio investment started its upward trend in 2003 when non-residents put their funds in local equities and bonds to speculate on the ringgit's appreciation. However, the ringgit appreciated only gradually vis-à-vis the USD in late 2005, which explained the reversal in portfolio capital in 2005, and thus, the outflow of USD9.8 billion in the financial account.

<sup>6</sup> For funds already in Malaysia, there was a price on exit inversely proportional to duration of stay. Capital that had entered the country more than one year was free to leave at a zero exit price. For funds yet to come in there was a levy only on profits, which exclude dividends and interest, also graduated by length of stay. Investments in the newly established, over-the-counter equity market, MESDAQ, were exempted. See Bank Negara Malaysia (1999) for further discussion.

**Figure 4: Other Investment, Net**

It is worthwhile to analyze the position of the net other investment more closely since it accounted for most of the variation in total net capital flows (IMF, 2007). Over 1999–2005, the average other investment to GDP ratio was around minus 5.6% (Figure 4). This was due partly to the influence of carry trades, as well as the repayment of public external debt by the central government, notably from 2003 to 2005.

### C. Impact

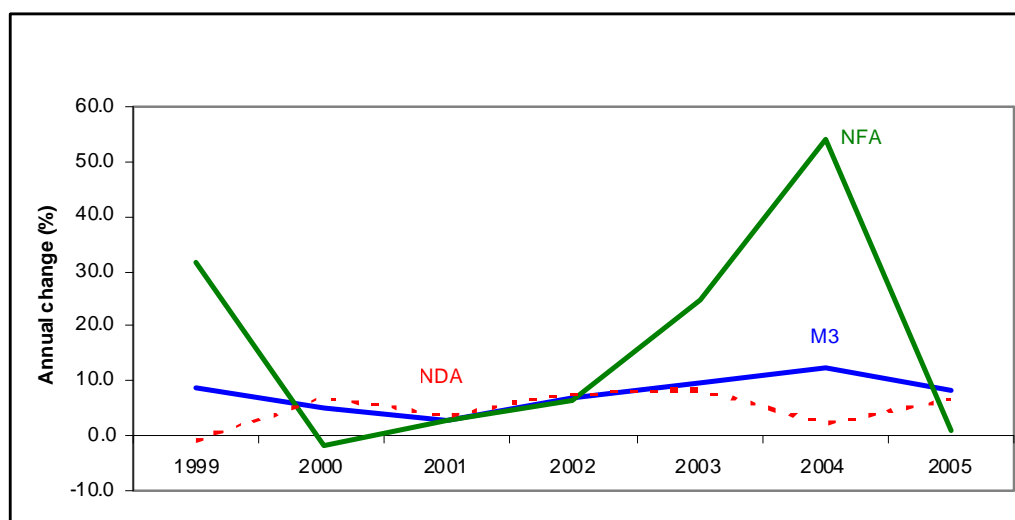
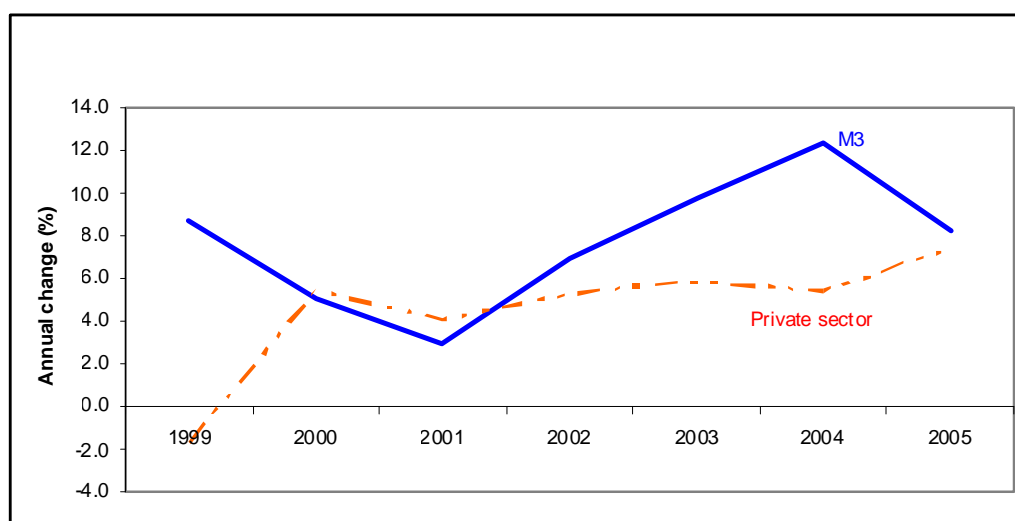
Rapid movement in capital flows and current transfers may affect the growth of domestic liquidity and credit, the exchange rate, inflation, and the performance of the real and financial sectors.

#### 1. Domestic Liquidity and Credit

**Table 2: Domestic Liquidity and Credit**

	1999	2000	2001	2002	2003	2004	2005
Level (MYR billion)							
<b>M3</b>	436.2	458.4	471.7	504.2	553.1	621.2	672.8
<b>NFA</b>	124.7	122.2	125.8	134.0	167.4	258.0	259.9
<b>NDA</b>	445.8	476.3	495.1	534.0	578.2	592.2	631.5
Public sector	-16.8	-11.8	-12.8	-1.1	11.9	-4.7	-9.9
Private sector	462.7	488.1	508.0	535.1	566.3	596.9	641.4
Annual growth rate (%)							
<b>M3</b>	8.6	5.1	2.9	6.9	9.7	12.3	8.3
<b>NFA</b>	31.7	-2.0	2.9	6.6	24.9	54.1	0.7
<b>NDA</b>	-0.9	6.8	4.0	7.8	8.3	2.4	6.6
Public sector	-20.0	-29.7	8.5	-91.7	-1,213.0	-139.7	110.4
Private sector	-1.7	5.5	4.1	5.3	5.8	5.4	7.5

Source: Bank Negara Malaysia

**Figure 5: M3, NFA, and NDA****Figure 6: M3 and Private Credit Growth**

Domestic liquidity, as measured by M3 grew by an average of 7.7% over the period 1999–05 (Table 2). Money supply started its upward trend from 2001 and peaked at 12.3% in 2004 (Figure 5). This was due to large expansion in net foreign assets (NFA) and to a lesser extent on net domestic assets (NDA). NFA started to increase from 2001 due to a steady net inflow of capital. However, a NFA slowdown in 2005 reflected outflows in portfolio investment. On the other hand, NDA expanded from 2001 to 2003 as the intermediation of capital inflows by banks led to a rise in credit growth to the private sector (Figure 6). NDA declined in 2004 possibly due to a sterilization effect by the monetary authority aimed at neutralizing the impact of large portfolio inflow speculating on the currency. NDA resumed its upward growth in 2005, which resulted in higher credit growth.

## 2. The Exchange Rate

**Table 3: Average MYR/USD Volatility**

	1999	2000	2001	2002	2003	2004	2005
Standard deviation of the monthly MYR/USD							
Volatility	0.00	0.00	0.00	0.00	0.00	0.00	0.02

Sources: Bank Negara Malaysia; Author's calculation

Volatility, as measured by the average standard deviation of the monthly bilateral exchange rate was zero from 1999 to 2004 (Table 3). This is not surprising as the currency was pegged to the USD from September 2, 1998 to July 21, 2005. As noted earlier, there were net portfolio inflows over 2003–04 speculating on the ringgit's appreciation. These inflows reversed in 2005 since the degree of appreciation was small, as reflected in the small rise in volatility to 0.02.

**Table 4: Average NEER and REER Indices of the MYR (2000=100)**

	1999	2000	2001	2002	2003	2004	2005
<b>NEER</b>							
Level	98.06	100.00	106.15	105.86	100.45	96.73	96.18
Change (%)	0.12	1.98	6.15	-0.27	-5.11	-3.70	-0.57
<b>REER</b>							
Level	98.49	100.00	105.58	105.90	99.88	95.26	95.29
Change (%)	1.17	1.53	5.58	0.31	-5.69	-4.63	0.03

Sources: BIS; Author's calculation

The nominal effective exchange rate (NEER) appreciated from 2003–04 owing to large inflows of portfolio investment. With inflation relatively benign over this period, the NEER appreciation also translated into appreciation of the real effective exchange rate (REER). However, the capital reversal in 2005 did not result in depreciation in either NEER or REER (Table 4).

### 3. Price Inflation

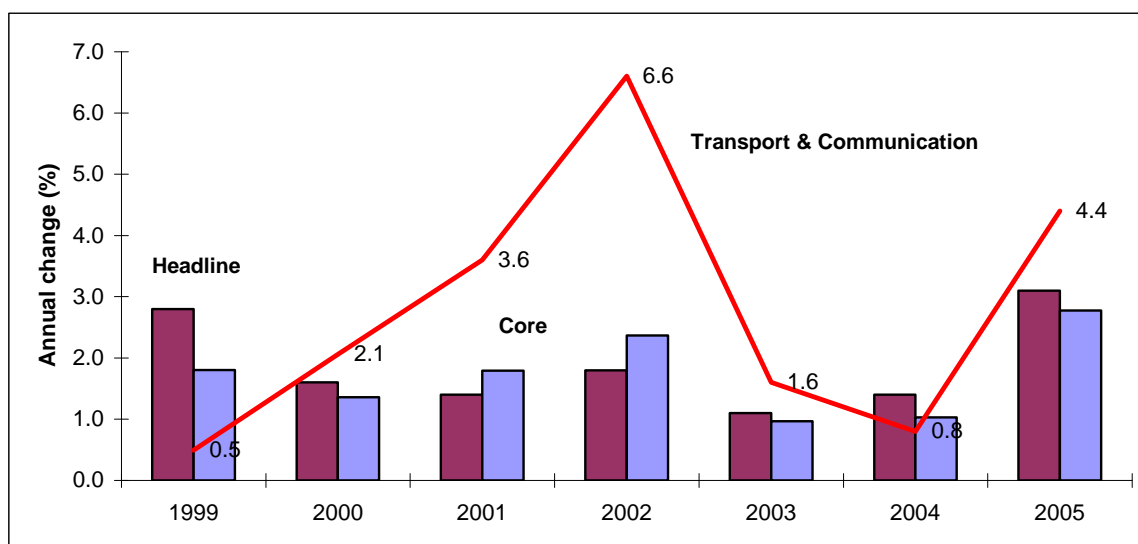
#### a. Consumer Prices

**Table 5: Consumer Price Inflation (2000=100)**

	1999	2000	2001	2002	2003	2004	2005
Annual change (%)							
<b>Headline</b>	2.8	1.6	1.4	1.8	1.1	1.4	3.1
Core	1.8	1.4	1.8	2.4	1.0	1.0	2.8
<i>Of which: Transport &amp; Communication</i>	0.5	2.1	3.6	6.6	1.6	0.8	4.4

Note: The weight used in computation of "core" inflation is 66.2, while that of the "transport & communication" is 18.8.

Source: Department of Statistics, Malaysia

**Figure 7: Consumer Price Inflation (2000=100)**

Headline inflation started to rise in 2004 after a one-year lag from the inflow of short-term portfolio funds (Table 5 and Figure 7). Both core inflation and its component, namely, transport and communication, increased only in 2005, which coincided with rising global crude oil (and other commodities) prices.<sup>7</sup>

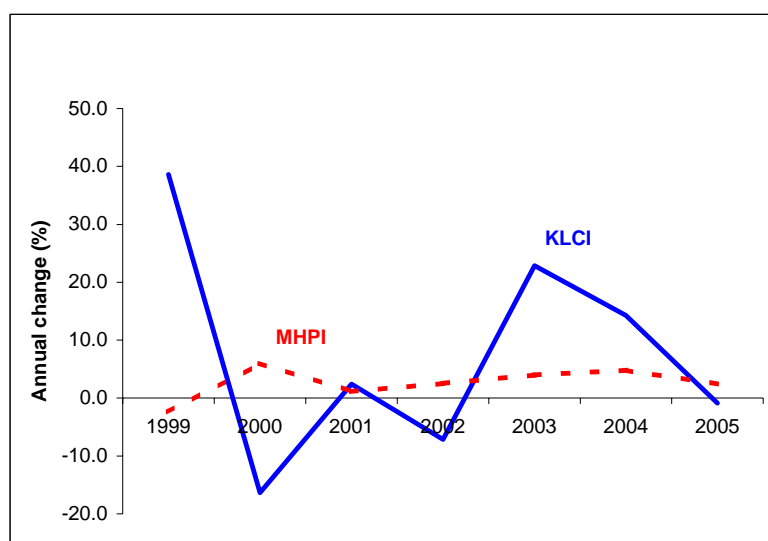
#### b. Asset Prices

**Table 6: Asset Price Inflation**

	1999	2000	2001	2002	2003	2004	2005
	Annual change (%)						
<b>KLCI (1977=100)</b>	38.6	-16.3	2.4	-7.1	22.8	14.3	-0.8
<b>MHPI (2000=100)</b>	-2.4	6.0	1.1	2.5	4.0	4.8	2.4

Sources: KLCI (Bursa Malaysia); MHPI (NAPIC, Department of Valuation and Property Services)

<sup>7</sup> Vector autoregression (VAR) or threshold VAR is useful to analyze transmission lags from capital flows to inflation and its components. The paper did not pursue this exercise, given the small sample size of the data.

**Figure 8: Asset Price Inflation**

The Kuala Lumpur Composite Index (KLCI), which measures the performance of the top 100 companies, rose in 2003 and 2004, but fell in 2005 (Table 6 and Figure 8). This was consistent with the trend of portfolio investment over the same period. Meanwhile, the Malaysia House Price Index (MHPI), which measures nationwide house prices, also followed the movement of the KLCI.<sup>8</sup>

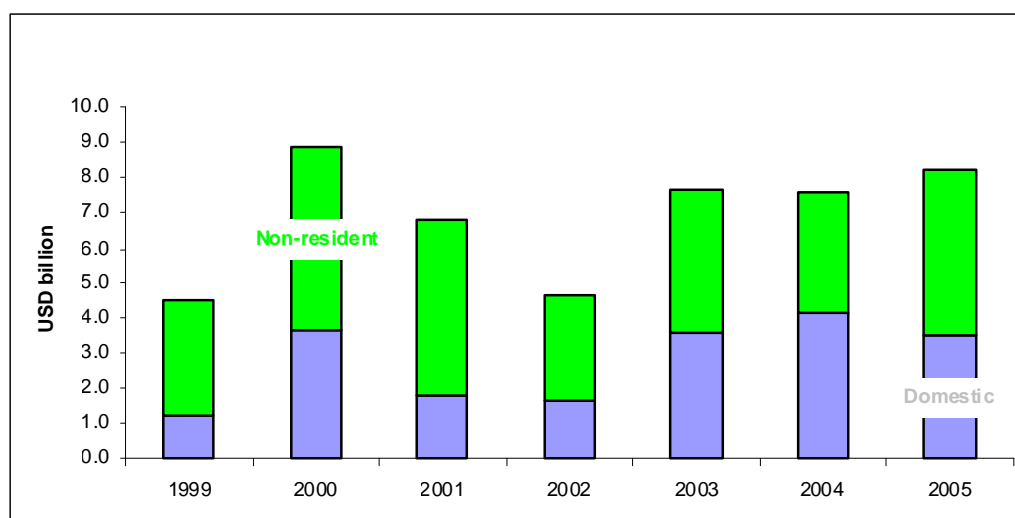
#### 4. The Real Sector

**Table 7: Manufacturing Investment Approvals**

	1999	2000	2001	2002	2003	2004	2005
<b>Domestic</b>							
Level (USD billion)	1.2	3.6	1.8	1.7	3.6	4.1	3.5
Annual change (%)	-63.5	193.6	-50.0	-8.7	114.3	15.6	-15.1
<b>a. Non-resident</b>							
Level (USD billion)	3.2	5.2	5.0	3.1	4.1	3.4	4.7
Annual change (%)	-3.0	61.0	-4.5	-38.6	34.5	-16.0	37.1

Source: Malaysian Industrial Development Authority (MIDA)

<sup>8</sup> Note that this is based only on observation. More thorough econometric exercises may be needed to confirm this. Moreover, during 1999–2005, Malaysia practiced some non-resident restrictions on the property (housing) sector. Some of these rules were progressively relaxed in late 2006 and in 2007.

**Figure 9: Manufacturing Investment Approvals**

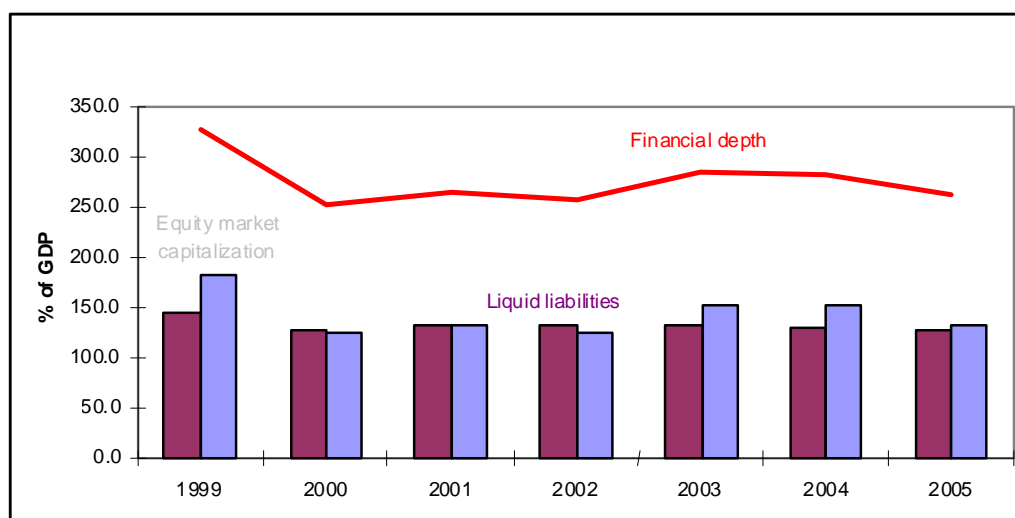
On average, non-resident capital, in the form of inward direct investment into the manufacturing sector was around USD4.1 billion over the period 1999–2005 (Table 7 and Figure 9). Moreover, foreign capital appeared to be more important than domestic capital during 1999–2002 for manufacturing growth.

## 5. The Financial Sector

**Table 8: Financial Sector Deepening**

	1999	2000	2001	2002	2003	2004	2005
	As a % of GDP						
<b>Liquid liabilities</b>	144.9	128.6	133.8	131.6	132.1	131.0	129.5
<b>Equity market capitalization</b>	183.6	124.7	131.9	125.7	152.9	152.3	133.8
<b>Financial depth</b>	328.5	253.3	265.7	257.2	285.0	283.4	263.4

Source: WDI

**Figure 10: Financial Sector Deepening**


The depth of the financial sector is measured by the sum of the ratios of liquid liabilities (M3) and equity market capitalization to GDP. From Table 8 and Figure 10, it was not obvious that capital inflows contributed to the deepening of the financial sector. The lack of evidence on financial depth could be due to the effects from the imposition of various policy controls on capital flows.

### III. CAPITAL FLOWS FROM 2006–2007

#### A. Overview

This section examines policy challenges associated with capital flows when Malaysia adopted a managed float exchange rate regime, and implemented various liberalization measures on capital outflows. On the external front, greater risk-taking by investors in the face of high global liquidity resulted in large capital flows into emerging Asian economies.

#### B. Trends

**Table 9: Balance of Payments (USD billion)**

	2005	2006	1Q06	2Q06	3Q06	4Q06	1Q07	2Q07
<b>Current account balance</b>	<b>20.0</b>	<b>25.5</b>	<b>5.5</b>	<b>5.0</b>	<b>7.4</b>	<b>7.7</b>	<b>5.7</b>	<b>6.9</b>
Of which: Current transfers	-4.5	-4.6	-1.3	-1.1	-1.2	-1.1	-1.1	-1.1
<i>Credit</i>	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.1
<i>Debit</i>	4.8	4.9	1.3	1.1	1.2	1.2	1.2	1.2
<b>Financial account balance</b>	<b>-9.8</b>	<b>-11.9</b>	<b>-1.4</b>	<b>-0.1</b>	<b>-4.9</b>	<b>-5.5</b>	<b>0.8</b>	<b>2.2</b>
Direct investment	1.0	0.0	-0.3	-0.1	-0.3	0.8	0.2	0.0
<i>Outward</i>	-3.0	-6.0	-1.3	-1.6	-1.7	-1.4	-1.4	-3.3
<i>Inward</i>	4.0	6.0	1.0	1.5	1.4	2.2	1.6	3.3
Portfolio investment, net	-3.7	3.5	2.2	-0.3	0.1	1.5	7.3	4.6
Other investment, net	-7.0	-15.4	-3.3	0.2	-4.6	-7.8	-6.7	-2.4
<i>Official sector</i>	-0.8	-2.2	-0.3	-0.1	-0.7	-1.1	-0.1	-0.3
<i>Private sector</i>	-6.2	-13.2	-3.0	0.3	-3.9	-6.7	-6.7	-2.1
<b>International reserves, net</b>	<b>70.2</b>	<b>82.5</b>	<b>73.4</b>	<b>78.8</b>	<b>79.5</b>	<b>82.5</b>	<b>88.6</b>	<b>98.4</b>

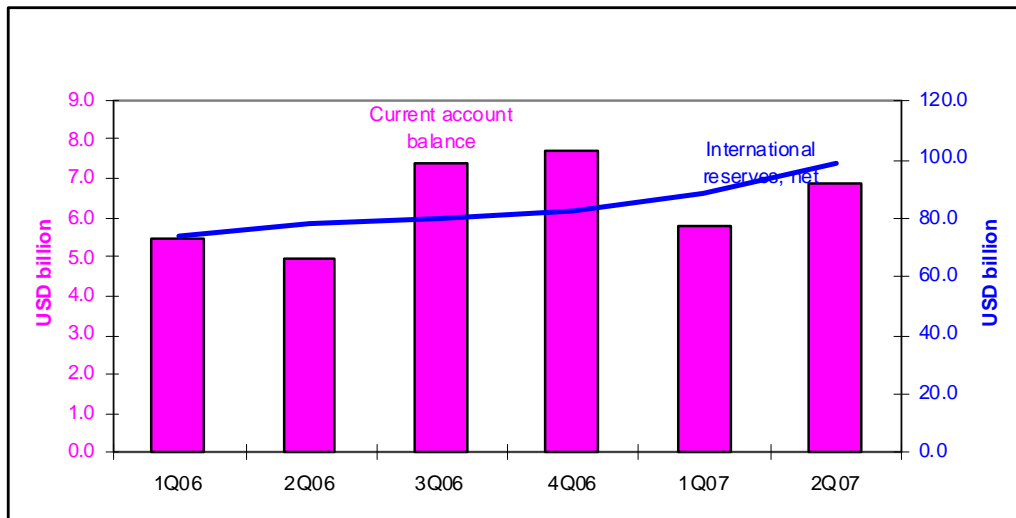
Sources: Department of Statistics, Malaysia; Author's calculation



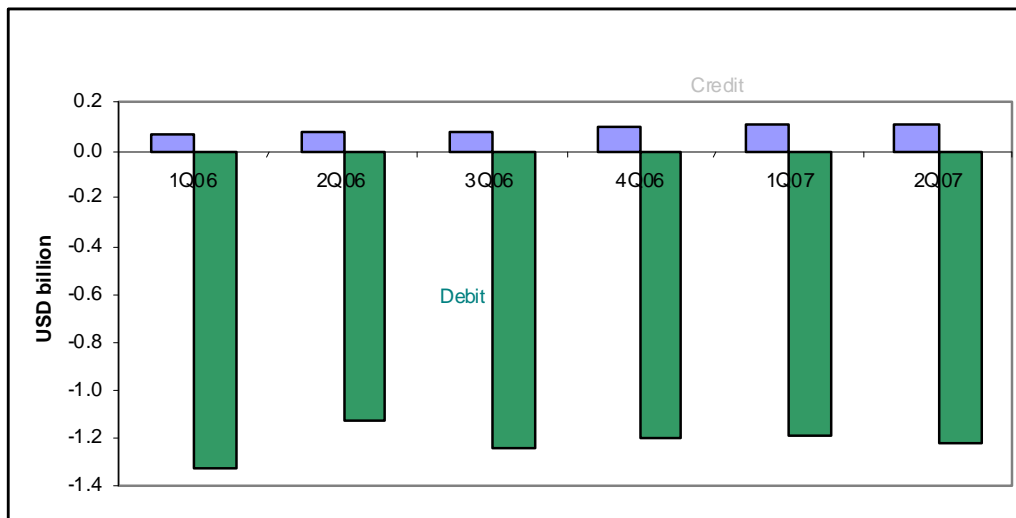
In 2006–07, Malaysia continued to run a current account surplus and accumulated foreign reserves (Figure 11). Higher remittances abroad by foreign workers and expatriates continued to depress current transfers (Figure 12).

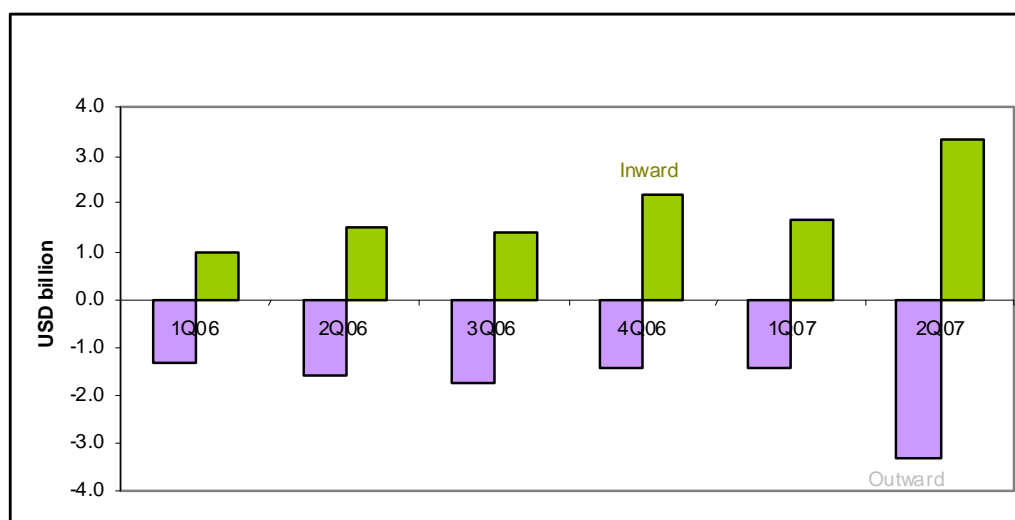
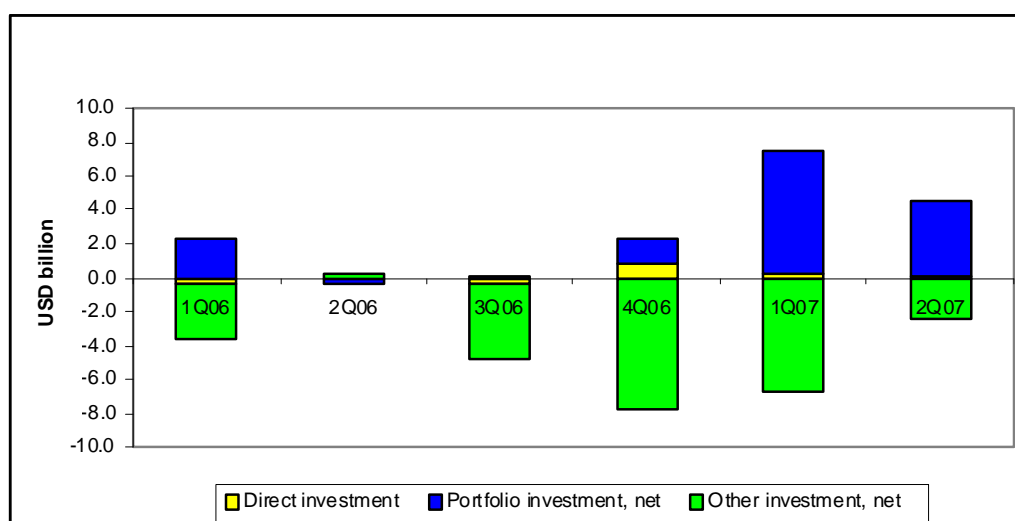
To mitigate the adverse effects of capital inflow, Malaysia encouraged local firms to invest abroad. Outward direct investment almost doubled to USD6.0 billion in 2006 from 2005, which negated the amount of inward direct investment (Figure 13).

**Figure 11: Current Account Balance and International Reserves**



**Figure 12: Current Transfers**



**Figure 13: Direct Investment Flows****Figure 14: Net Capital Flows**

Investment opportunities improved in 2007 following numerous liberalization measures in financial, plantation, and property sectors. The introduction of investment incentives covering taxation, more liberal foreign equity participation, and employment of expatriates raised the attractiveness of Malaysia as an investment destination. These factors led to higher direct capital inflows in the first half of 2007. However, the trend on outward direct investment also accelerated resulting in a small net direct inflow. By progressively relaxing controls on capital outflows, excess liquidity is drained out of the financial system and pressure on the ringgit reduced. Some caution has to be taken to ensure that outflows are of a reasonable amount that does not lead to a threatening fall in official reserves.

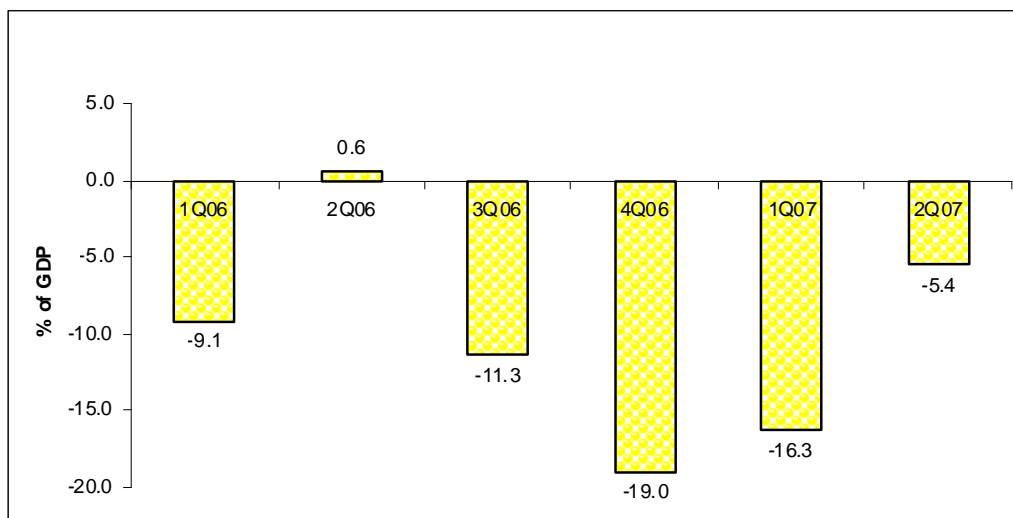
A greater appetite on the part of investors and strengthening macroeconomic fundamentals led to large inflows of portfolio funds into domestic equities and bonds during the first quarter of 2006 (Figure 14). While equity and bond prices were driven

higher by capital inflows, there were also some signs of speculative activity in the exchange rate. Repricing of risk premium attached to riskier securities investment due to a deteriorating global inflation outlook led to portfolio outflows in May to June 2006. Inflows resumed in the second half of 2006 as the risk-reward outlook improved again.

Strong economic growth and healthy corporate and household sectors led to a surge in portfolio inflow in the first half of 2007, despite several bouts of volatility. However, policies may not be effective in circumventing volatile capital flows. Sound macroeconomic conditions, financial sector sophistication, and transparent policies may lower chances of capital reversal, but external pressures and a contagion effect may lead to sudden outflows (Grenville, 2006). While there is a sizeable amount of outward direct investment, the corresponding amount is negligible in terms of portfolio investment. The main reason is domestic investors' reluctance to invest abroad, possibly due to lower returns as well as a lack of requisite investment skills by domestic financial institutions.

More recently, net inflow of direct investment amounted to USD2.0 billion in the third quarter of 2007.<sup>9</sup> The bulk of the capital was channelled into manufacturing, industrial (oil and gas), and services sectors. Outward direct investment was about USD2.0 billion. Meanwhile, portfolio funds recorded a net outflow of USD6.5 billion due to liquidation of domestic securities by non-resident investors in August, following tightened global credit conditions. Inflows resumed in September.

**Figure 15: Other Investment, Net**



Meanwhile, other investment continued to record a large net outflow in 2006–07 due to intensified carry trades (Figure 15). However, this may be subject to heightened risk aversion, repricing of credit risk, and prolonged global financial turmoil that could lead to sharp reversal (ADB, 2007). Repayment of public external debt can also contribute to the decline in net other investment. In addition, it also reflected better portfolio diversification of the domestic banking sector following liberalization of restrictions on capital outflows.

<sup>9</sup> The third quarter figures were based on the Cash BOP System, where retained earnings and investment in the form of imported machinery and equipment are excluded.

### C. Impact

In a liberalized environment, rapid capital inflows could raise domestic liquidity and credit, lead to an unstable appreciation of the currency, inflation, and possibly derail economic activity.

### D. Domestic Liquidity and Credit

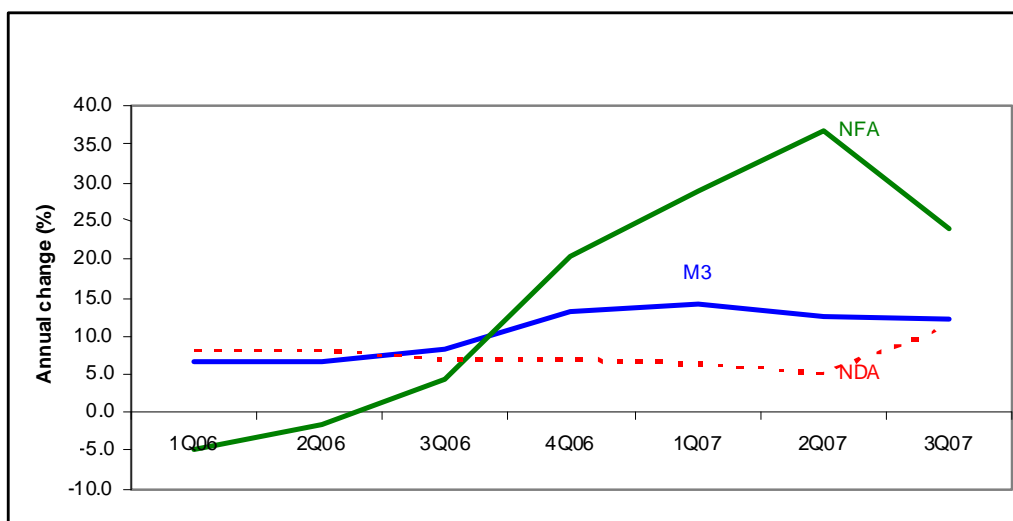
**Table 10: Domestic Liquidity and Credit**

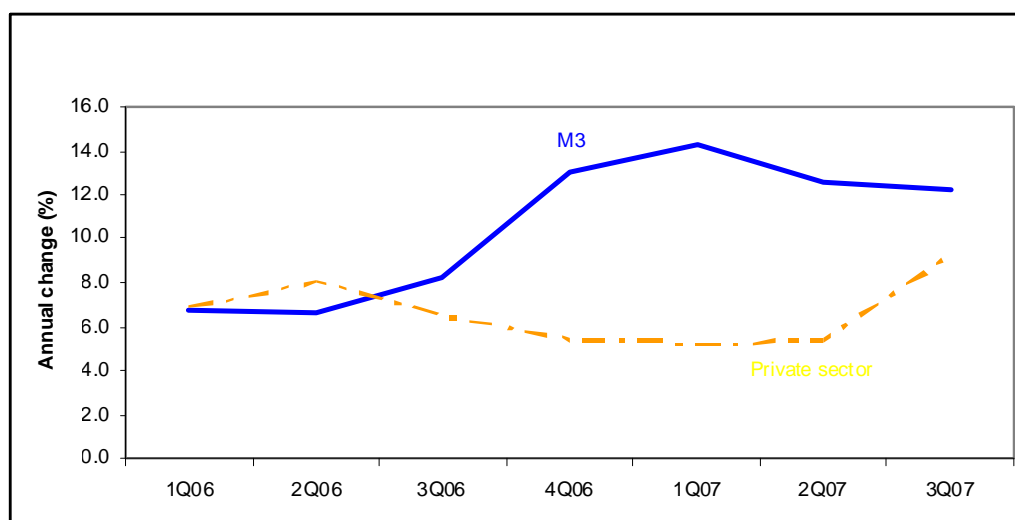
	2005	2006	1Q06	2Q06	3Q06	4Q06	1Q07	2Q07	3Q07
	Level (MYR billion)								
<b>M3</b>	672.8	760.3	690.8	700.5	716.3	760.3	789.2	788.6	804.2
<b>NFA</b>	259.9	312.6	268.3	284.1	297.9	312.6	345.6	388.1	370.2
<b>NDA</b>	631.5	674.5	639.8	642.5	646.7	674.5	680.7	676.0	719.5
<i>Public sector</i>	-9.9	-1.6	-7.2	-19.2	-21.5	-1.6	-0.6	-21.3	-10.7
<i>Private sector</i>	641.4	676.1	646.9	661.7	668.2	676.1	681.3	697.4	730.3
	Annual growth rate (%)								
<b>M3</b>	8.3	13.0	6.7	6.6	8.3	13.0	14.2	12.6	12.3
<b>NFA</b>	0.7	20.3	-5.0	-1.8	4.5	20.3	28.8	36.6	24.3
<b>NDA</b>	6.6	6.8	8.2	8.1	6.9	6.8	6.4	5.2	11.3
<i>Public sector</i>	110.4	-83.9	-49.0	7.0	-3.6	-83.9	-91.5	11.3	-49.9
<i>Private sector</i>	7.5	5.4	6.9	8.1	6.5	5.4	5.3	5.4	9.3

Source: Bank Negara Malaysia

Domestic liquidity (M3) expanded by 13.0% in 2006 supported by rapid expansion in NFA and to a lesser degree on NDA (Figure 16). To some extent, the growth in NFA also captured higher portfolio diversification as banks placed more assets abroad. Massive net inflow of portfolio funds, arising from high global liquidity and increased risk-taking by investors, generated a rise in liquidity in the financial system. To overcome inflationary pressure and to stabilize interest rates, the monetary authority conducted sterilization operations. In turn, this action together with prudential lending procedures led to a lower credit growth (Figure 17).

**Figure 16: M3, NFA, and NDA**



**Figure 17: M3 and Private Credit Growth**

Alternatively, swap arrangements can also stabilize domestic money supply and interest rates without issuing central bank securities. When foreign reserves accumulate beyond a desired level, the monetary authority can sell some of them to domestic financial institutions in exchange for domestic currency. The buyers are required to invest the acquired funds overseas for a specified period. At the end of the period, the regulator reimburses the buyers for any loss resulting from the interest rate differential between domestic and foreign markets, as well as any loss from changes in the exchange rate. In this respect, central bank swap arrangements also provide an avenue for increasing outward portfolio investment, which is lacking in Malaysia.

The money supply continued to record double-digit growth in 2007, supported by growth in NFA with NDA picking up in the third quarter due to higher credit expansion.

## **E. The Exchange Rate**

**Table 11: Average MYR/USD Volatility**

	2005	2006	1Q06	2Q06	3Q06	4Q06	1Q07	2Q07	3Q07
Standard deviation of the monthly MYR/USD rates									
<b>Volatility</b>	0.02	0.05	0.02	0.03	0.00	0.06	0.01	0.02	0.02

Sources: Bank Negara Malaysia; Author's calculation

The average standard deviation of the monthly exchange rates remained small in 2006, despite net inflow of short-term capital. These inflows emerged because of good domestic macroeconomic fundamentals as well as market expectations of further appreciation of the ringgit. However, these factors were negated by strong demand for foreign currencies for outward direct investment, repayment of external loans (other investment, net), and the repatriation of profits and dividends (current account balance). To some extent, the observed small volatility also reflected sterilization efforts by the monetary authority aimed at maintaining competitiveness.

Since Malaysia operated a large overall payment surplus due to large inflow of foreign capital, a flexible exchange rate policy would lead to an appreciation of the

ringgit. By allowing (gradual) appreciation, the regulator can mitigate the cost of sterilization. If appreciation is not ongoing, the magnitude of capital inflow may be reduced via an increase in the rate of expected depreciation. The relative success of this also depends on sequential liberalization of the external financial account, and strong domestic financial institution with good regulation and enforcement (Kawai, 2005).

In 2007, the path of the exchange rate is subjected to numerous rounds of portfolio liquidation exercises in February, March, May, August, and November. Despite this, volatility was relatively small due to foreign exchange interventions by the central bank to maintain orderly market conditions.

**Table 12: Average NEER and REER Indices of the MYR (2000=100)**

	2005	2006	1Q06	2Q06	3Q06	4Q06	1Q07	2Q07	3Q07
<b>NEER</b>									
Level	96.18	98.55	98.27	98.92	98.15	98.84	101.83	102.89	100.59
Change (%)	-0.57	2.46	4.74	4.00	0.92	0.30	3.63	4.02	2.49
<b>REER</b>									
Level	95.29	98.81	98.38	99.23	98.35	99.28	102.65	102.64	100.16
Change (%)	0.03	3.70	5.97	5.43	2.08	1.47	4.34	3.43	1.84

Sources: BIS; Author's calculation

As capital inflows continued in 2006 up to the second half of 2007, both NEER and REER appreciated (Table 12). The trend in both NEER and REER started to fall in the third quarter of 2007 when investors began liquidating portfolio positions in the face of the deepening US subprime turmoil.

## F. Inflation

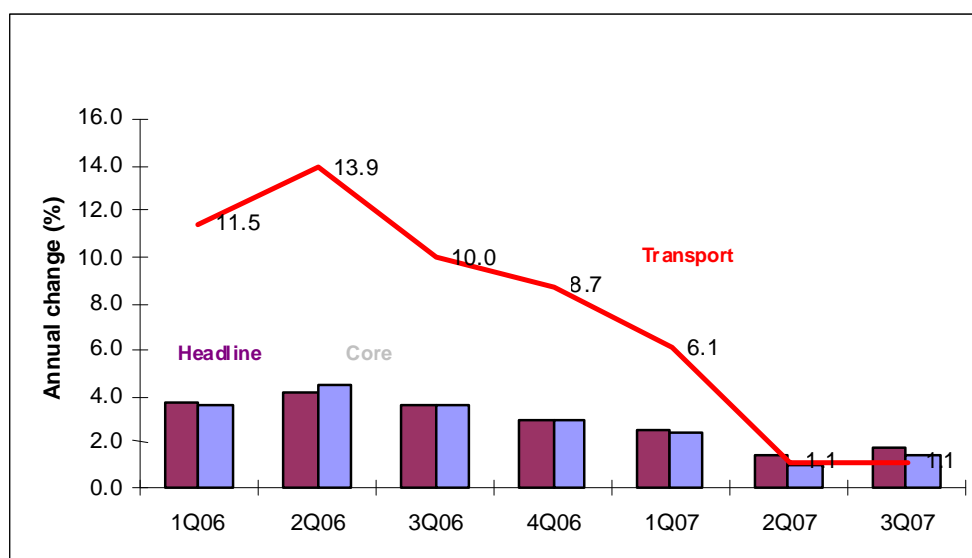
### 1. Consumer Prices

**Table 13: Consumer Price Inflation (2005=100)**

	2004	2005	2006	1Q06	2Q06	3Q06	4Q06	1Q07	2Q07	3Q07
<b>Annual change (%)</b>										
Headline		1.5	3.0	3.6	3.8	4.1	3.6	3.0	2.6	1.5
Core				3.8	3.6	4.5	3.6	3.0	2.5	1.0
Of which: Transport		0.7	6.3	11.0	11.5	13.9	10.0	8.7	6.1	1.1

Note: The weight used in the calculation of "core" inflation is 68.6, while that of "transport" is 15.9.

Source: Department of Statistics, Malaysia

**Figure 18: Consumer Price Inflation (2005=100)**

Net portfolio inflows began in the first quarter of 2006 and continued until the second quarter of 2007, with a respite in the second quarter of 2006. Inflation and its components surged in the first quarter of 2006 and peaked in the next quarter, before trending downwards until the second quarter of 2007.<sup>10</sup> Higher global oil prices and their resulting inflationary impact in the first half of 2006 prompted the central bank to raise interest rates, which led to the subsiding effect on inflation until the first half of 2007. With oil prices persistently hovering at high levels in the third quarter, the risk of higher inflation prevails. Some reduction in inflationary pressure may permeate through an increasingly flexible exchange rate and the gradual pace of appreciation.<sup>11</sup>

## 2. Asset Prices

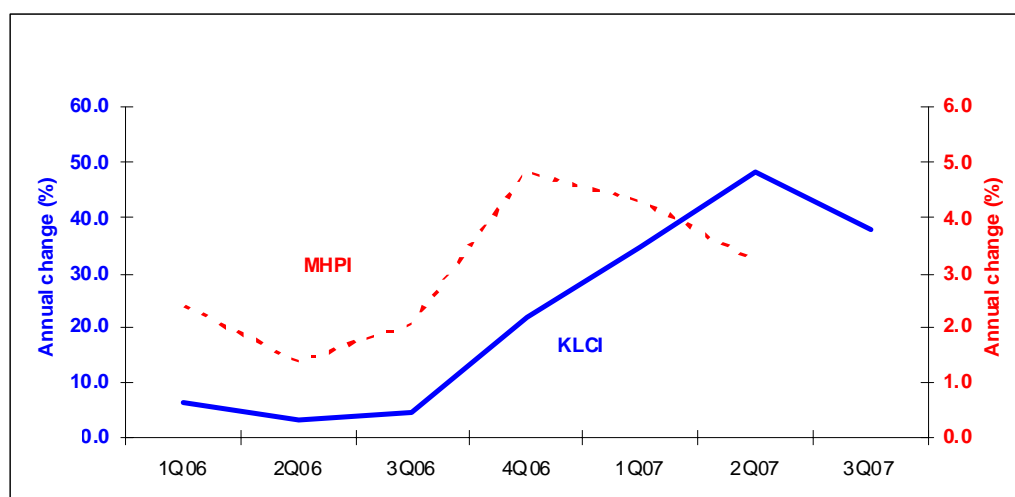
**Table 14: Asset Price Inflation**

	2005	2006	1Q06	2Q06	3Q06	4Q06	1Q07	2Q07	3Q07
	Annual change (%)								
<b>KLCI (1977=100)</b>	-0.8	21.8	6.3	3.0	4.3	21.8	34.6	48.1	38.1
<b>MHPI (2000=100)</b>	2.4	1.9	2.4	1.4	2.1	4.8	4.3	3.2	

Sources: KLCI (Bursa Malaysia); MHPI (NAPIC, Department of Valuation and Property Services)

<sup>10</sup> Note that the computation of consumer price inflation differs between Table 5 and Table 13. The former combined transport and communication using a weight of 18.8, while the core inflation was 66.2. To focus on the impact of high global crude oil prices on transportation, Table 13 used a weight of 15.9 for transport and core inflation of 68.6. Thus, these figures should be interpreted with caution.

<sup>11</sup> In order to investigate the impact of capital flows on inflation and the exchange rate, the use of VAR and Granger-causality tests may be needed. This was not possible, given the small time period of the sample concerned.

**Figure 19: Asset Price Inflation**

Large inflows of short-term capital have entered into Malaysian securities markets—equities, bonds, and properties—since the first quarter of 2006. This has somewhat resulted in asset price inflation (as measured by the growth in KLCI). The movement in MHPI was weaker compared to that of the KLCI because restrictions in the property market were relaxed only in late 2006 stretching into 2007. Nevertheless, the monetary authority needs to monitor this trend, given the repercussions of asset price inflation on the economy. Persistently rising asset prices may lead to bubbles with huge economic cost. Furthermore, heightened risk aversion, as exemplified by the recent US subprime turmoil, may lead to massive capital outflow.

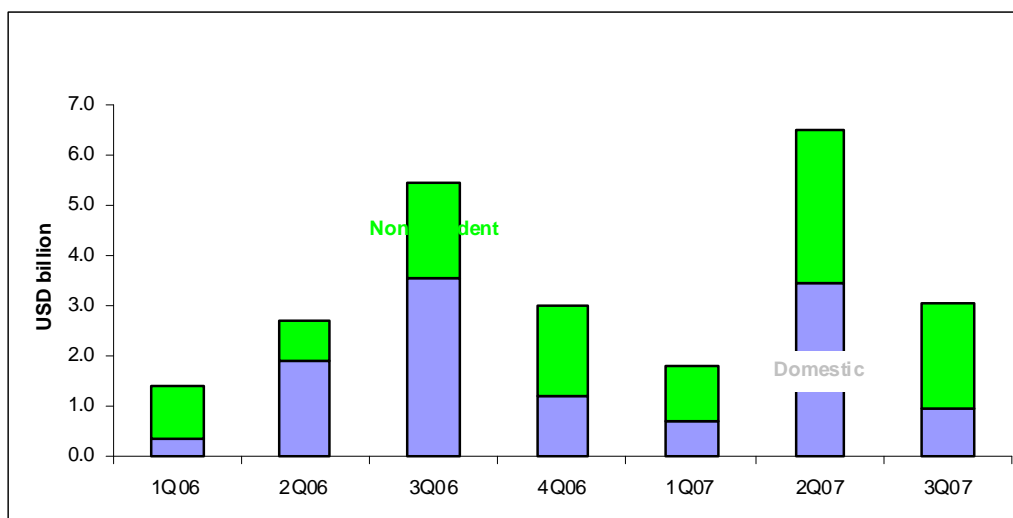
## G. The Real Sector

**Table 15: Manufacturing Investment Approvals**

	2005	2006	1Q06	2Q06	3Q06	4Q06	1Q07	2Q07	3Q07
<b>Domestic</b>									
Level(USD billion)	3.5	7.0	0.4	1.9	3.5	1.2	0.7	3.4	1.0
Annual change (%)	-15.1	101.8	-16.0	55.1	330.8	23.9	90.3	79.4	-72.3
<b>Non-Resident</b>									
Level(USD billion)	4.7	5.5	1.0	0.8	1.9	1.8	1.1	3.1	2.1
Annual change (%)	37.1	16.5	562.6	-48.8	84.4	-9.7	9.3	285.3	10.5

Source: Malaysian Industrial Development Authority (MIDA)



**Figure 20: Manufacturing Investment Approvals**

Similar to 1999–2005, investment in the manufacturing sector by non-residents was highly volatile in 2006 to the third quarter of 2007. Moreover, the domestic share of total investment approvals seemed to be higher in 2006.<sup>12</sup>

**Table 16: Foreign Manufacturing Investment Approvals (By Sector)**

	2005	2006	YTM07	1Q06	2Q06	3Q06	1Q07	2Q07	3Q07
	USD million								
Electronics & electrical products	2,986.5	2,343.7	2,924.9	908.7	803.4	1,301.8	837.8	1,394.3	728.6
Petroleum products (incl. petrochemicals)	35.1	164.8	903.1	0.0	0.0	808.4	0.0	865.8	55.5
Chemical & chemical products	229.4	826.0	550.3	270.6	138.7	110.2	144.6	118.1	292.8
Paper, printing & publishing	32.7	25.5	514.1	2.2	14.0	8.9	14.6	9.5	494.9
Non-metallic mineral products	157.3	262.2	284.4	215.0	0.0	238.5	0.0	255.5	34.5
Basic metal products	113.6	623.5	284.3	17.2	6.9	19.9	7.1	21.3	258.7
Rubber products	56.8	70.2	142.5	5.7	0.0	93.1	0.0	99.7	45.3
Plastic products	156.9	206.3	129.4	77.7	14.2	55.0	14.8	58.9	57.4
Machinery & equipment	150.4	179.0	111.4	42.1	17.6	84.4	18.4	90.4	4.6
Food manufacturing	140.3	244.0	91.3	21.6	45.0	18.5	46.8	19.9	25.3
Transport equipment	132.9	59.0	83.6	9.6	4.2	72.8	4.4	78.0	2.9
Wood & wood products	20.4	78.0	81.5	67.5	3.6	1.0	3.8	1.1	77.4
Scientific & measuring equipment	360.0	181.1	40.0	9.8	10.9	16.4	11.4	17.6	11.5
Miscellaneous	3.3	23.3	38.1	16.2	27.9	8.1	29.2	8.6	0.5
Textiles & textile products	38.6	41.5	14.4	3.9	1.5	5.4	1.6	5.7	7.2
Fabricated metal products	66.1	167.9	14.2	71.8	7.3	4.4	7.6	4.7	2.0
Furniture & fixtures	16.7	15.0	7.0	0.1	1.5	4.5	1.6	4.8	0.7
Leather & leather products	0.9	0.3	1.3	0.0	0.0	0.0	0.0	0.0	1.3
Beverages & tobacco	20.5	0.3	0.1	0.0	0.1	0.0	0.1	0.0	0.0

Source: Malaysian Industrial Development Authority (MIDA)

For the first nine months of 2007, the main recipient of inward direct capital was the electrical and electronic products subsector. This industry continued to attract sizeable capital inflows, in particular for reinvestment and expansion of existing operations in Malaysia. The investments involved the production of semiconductors, fabricated wafers, substrates for the semiconductor industry, and printed circuit boards. This is beneficial to the real economy as it results in technological diffusion and innovation necessary for sustaining long-term economic growth. On the other

<sup>12</sup> Note that, due to data limitation, detailed analysis of capital inflows into various sectors of the economy is not possible. The analysis in this subsection uses data based on a cash basis, which differs from the methodology adopted in the Fifth Edition of the Balance of Payment Manual of the IMF. Accordingly, results should be interpreted cautiously.

hand, this industry is also highly sensitive to the health of the global economy, mainly the US. Hence, any sign of global downturn may adversely affect export growth in Malaysia and may result in capital reversal. Apart from this industry, foreign capital also flowed into the energy subsector—petroleum refineries and products, and chemicals and chemical products.

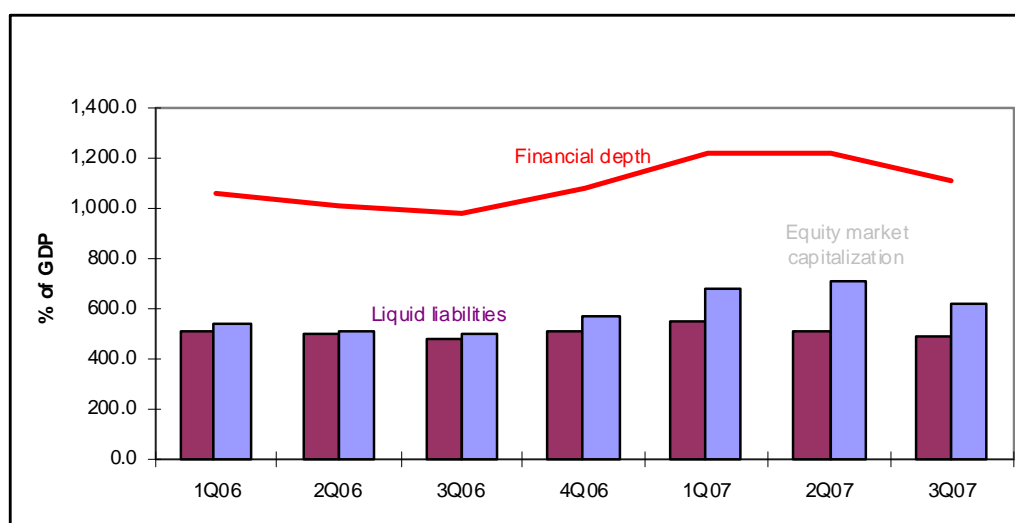
## H. The Financial Sector

**Table 17: Financial Sector Deepening**

	2005	2006	1Q06	2Q06	3Q06	4Q06	1Q07	2Q07	3Q07
	As a % of GDP								
<b>Liquid liabilities</b>	129.5	132.8	512.2	499.3	481.3	511.8	546.5	512.3	487.0
<b>Equity market capitalization</b>	133.8	148.2	543.4	514.4	500.9	571.3	682.1	707.0	624.4
<b>Financial depth</b>	263.4	281.0	1,055.6	1,013.7	982.3	1,083.1	1,228.6	1,219.3	1,111.4

Source: WDI

**Figure 21: Financial Sector Deepening**



The trend in net portfolio capital contributed to the deepening of the financial market, as measured by the equity market capitalization to GDP ratio (Table 17 and Figure 21). However, it was not apparent that capital inflows affect financial intermediaries (measured by liquid liabilities ratio) or the financial sector collectively (measured by financial depth indicator).

## IV. ALTERNATIVE POLICY MEASURES

This section discusses various policies to manage capital flows. Some may be more effective than others depending on the state of the economy and the financial sector.

First, fiscal policy may be useful in controlling capital inflows. By running a budget surplus, inflation pressure and appreciation of the real exchange rate can be lowered. A reduction in government expenditure has the same effect as a decrease in demand for loanable funds because it can lower interest rates. However, this policy has to be balanced with the development responsibility of the government. Moreover, fiscal

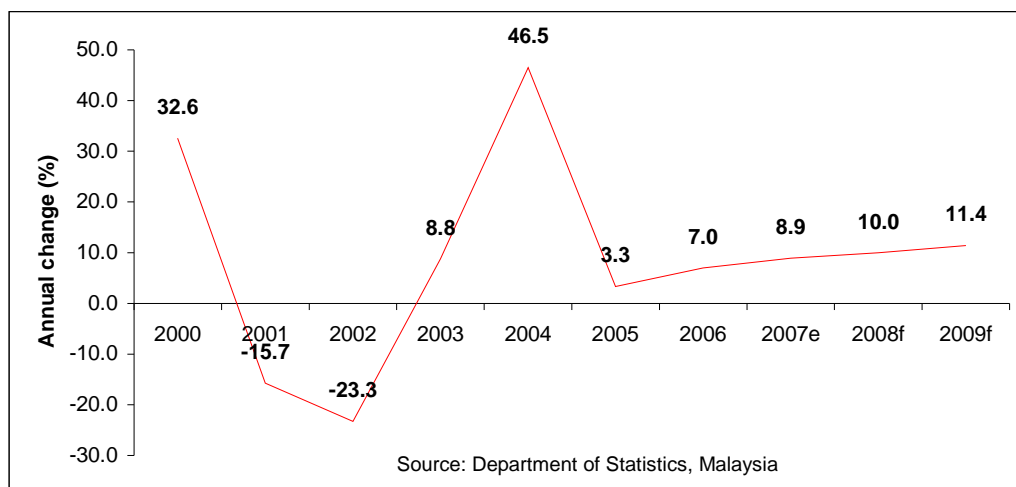
policy has long lags. Thus, it may not be effective in managing short-term speculative capital inflows.

There is some indication that Malaysia is trying to use the above measure in conjunction with sterilization to handle surges in foreign capital (Ministry of Finance Malaysia, 2007). To mitigate lower government expenditure on infrastructure, a private financing initiative was strongly encouraged. The progress was slow, however, given current financial volatility.

Policies aimed at strengthening domestic consumption and investment may be useful in lowering dependency on the volatile external sector. The high level of national savings could be directed to productive investment activities as well as encouraging more consumption. However, prudential regulations should be employed to prevent an unsustainable boom in consumption and investment.

Private investment, which grew by 7.0% in 2006, is expected to remain on an upward trend, accelerating by 10.0% in 2008 and 11.4% in 2009 (Figure 22). To attain 6.0% in GDP growth over the Ninth Malaysia Plan (9MP) period from 2006 to 2010, higher private investment growth of 11.2% per year would be needed.

**Figure 22: Private Investment Growth**



There are three measures to encourage faster private investment growth in Malaysia. First is the reduction in the corporate tax rate from 27% in 2007 to 26% in 2008. By lowering the corporate tax rate, the level of competitiveness in Malaysia is enhanced. Corporate earnings will be higher and in turn, this may lead to higher reinvestments by local economic agents. Moreover, a lower corporate tax rate may also encourage more inflows of direct investment into strategic industries in Malaysia.

The second measure entails a revamped public delivery system to ease the cost of doing business in Malaysia. Although there were some improvements in expediting the public sector delivery procedure, more measures may be required to ensure faster implementation of public projects under the 9MP.

The first two drivers seek to address concerns raised by Guimaraes and Unteroberdoerster (2006), while the third measure centers on industry clusters to raise the rate of private investment. Recently, the government launched five regional economic corridors in Malaysia (Table 18). These economic corridors are expected

to target a combined sum of around USD 343.8 billion investment over the period 2006 to 2030.

**Table 18: Comparison of the Five Economic Corridors**

<b>Peninsula Malaysia</b>	<b>IDR (Iskandar Development Region)</b>	<b>NCER (Northern Corridor Economic Region)</b>	<b>ECER (Eastern Corridor Economic Region)</b>
Concept	Creation of new catalyst developments	Enhancing key industries as catalysts	Eradication of poverty
Member states	Southern Johor	Kedah, Perlis, Penang, Northern Perak	Kelantan, Terengganu, Pahang, East Johor
Population	3.2 million	4.3 million	3.9 million
Period	20 years	18 years	12 years
Investment	USD 119.4 billion; mainly FDI	USD 55.3 billion, purely domestic	USD 35.0 billion, all domestic
Infrastructure	USD 1.3 billion	USD 15.6 billion	USD 15.0 billion
Key drivers	Property, infrastructure, FDI	Electrical & electronics, manufacturing, agriculture, tourism	Oil & gas, agriculture, tourism
Authority	Iskandar Regional Development Authority	Northern Corridor Implementation Agency	Development Council
<b>East Malaysia</b>	<b>SDC (Sabah Development Corridor)</b>	<b>SCORE (Sarawak Corridor of Renewable Energy)</b>	
Concept	Capturing high-value economic activities	Focused development on natural resources	
Member states	Sabah	Sarawak	
Population	Not available	2.5 million	
Period	18 years	22 years	
Investment	USD 32.8 billion, mainly FDI	USD 104.4 billion, FDI and local funding	
Infrastructure	Not available	Not available	
Key drivers	Agriculture, tourism, manufacturing, logistics	Energy resources	
Authority	Sabah Economic Development Investment Authority	Regional Corridor Development Authority	

When domestic policies are not effective in dealing with massive capital flows, troubled countries may seek regional assistance from the Chiang Mai Initiative (Ariff, 2007). Although the available funding is small, it may be better than having been subject to tough IMF conditions.

Finally, with little progress in the international financial system, Asian economies have continued to amass foreign reserves. Large reserves may be useful in the face of large capital reversal. With high import covers and low exposure to foreign debts, Asian countries have been able to weather the recent financial contagion without much difficulty.

## V. CONCLUSION

The paper has reviewed policies taken to address capital flows in Malaysia from 1999 to 2007. Strong macroeconomic fundamentals and a global search for yields will continue to shift more capital into Asia. This trend is expected to prevail at least in the medium term, given structural weakness in the US. However, capital flows are sensitive to any change in risk appetite. Accordingly, the national monetary authority

may need to pursue active monitoring of capital flows. Having sound policies, financial sector resilience, large reserves, a flexible exchange rate, and a strong domestic sector may be useful in facing increasingly volatile capital flows.

## APPENDIX I

### External Policy Milestones

#### 1999

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.

#### a. 2000

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% repatriation duty.

December 15 The 10% 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 RM200 million and overnight facilities not exceeding RM10 million to foreign stockholding companies and foreign custodian banks.

## **2001**

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 RM10,000 ceiling on foreign currency loans to residents for investment overseas was removed. The requirement for using only ringgit for settlement of transactions 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 RM500,000 in aggregate to non-residents provided the credit facilities are fully covered at all times 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 RM10, 000 to RM50, 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 stock broking companies, custodian banks and correspondent banks) was raised from RM200, 000 to RM10,000,000.

### **b. 2005**

April 1 a) Investment in Malaysia by non-residents

- There is no restriction on repatriation of capital, profits, dividends, interest, fees or rental by foreign direct investors or portfolio investors
- Ringgit assets purchased by residents from non-residents may be settled in ringgit or foreign currency, other than Restricted Currency

b) Investment abroad by residents

- Licensed onshore bank and approved merchant banks may invest abroad as long as they comply with the Banking and Financial Institution Act 1989 or Islamic Banking Act 1983 and their approved foreign currency net open position limit. Remittances for investment abroad must be made in foreign currency, other than Restricted Currency
- Residents, companies and individuals with no domestic borrowing are free to invest abroad. The investment may be made through

the conversion of ringgit or from foreign currency funds retained onshore or offshore.

July 21 BNM announced abolition of the ringgit peg to the US\$ in favor of a managed floating system tied to a basket of currencies.

**c. 2007**

April 1 Foreign exchange administration rules are liberalized to:

- a) Expand the scope of licensed onshore banks' foreign currency business
  - Abolish net open position limit of licensed onshore banks which was previously capped at 20% of the banks' capital base
  - Abolish the limit imposed on licensed onshore banks for foreign currency accounts maintained by residents
  - Allow investment banks in Malaysia to undertake foreign currency business subject to a comprehensive supervisory review on the capacity of the investment banks.
- b) Facilitate investments in ringgit assets by non-residents
  - Further flexibility for non-resident stockbrokerages and custodian banks to obtain ringgit overdraft facility from licensed onshore banks to avoid settlement failure due to inadvertent delays
  - Abolish the limit of the number of residential or commercial property loans obtained by non-residents
  - Allow licensed onshore banks to appoint overseas branches of their banking group as a vehicle to facilitate the settlement of any ringgit assets of their non-resident clients
  - Remove the restriction on Labuan offshore banks to transact in ringgit financial products on behalf of non-resident clients to enhance the role and scope of business of the Labuan offshore banks
- c) Enhance business efficiency and investment opportunities
  - Increase the limit of foreign currency borrowing than can be obtained by resident corporations from licensed onshore banks and non-residents as well as through issuance of onshore foreign currency bonds, to RM100 million equivalent in aggregate and on corporate group basis from the previous RM50 million equivalent
  - Allow residents to hedge foreign currency loan repayment up to the full amount of underlying commitment
  - Enhance flexibilities for resident individuals and corporations to invest in foreign currency assets
  - Increase the limit for resident institutional investors to invest in foreign currency assets
  - Allow resident corporations to lend in foreign currency, the proceeds arising from listing of shares on foreign stock exchanges to other resident corporations within the same corporate group in Malaysia
  - Abolish restrictions on payments in foreign currency between residents for settlement of foreign currency financial products offered onshore
  - Allow resident individuals to open and maintain joint foreign currency accounts for any purpose



d) To facilitate development of the capital market to support the initiatives to expand the pool of high quality stocks and to provide diversity of offerings and promote cross-border linkages with other markets, the following foreign exchange administration rules are liberalized:

- Allow non-resident corporations to utilize abroad the proceeds arising from the listing of shares through initial Public Offering on the Main Board of Bursa Malaysia
- Allow resident corporations to utilize proceeds arising from the listing of shares through Initial Public Offering on the main Board of Bursa Malaysia for offshore investment purposes

August 1 The individual reporting threshold for transactions between residents and non-residents is increased to RM200,001 or its equivalent in foreign currency from RM50,001 per transaction.

October 1 The liberalization covers the following areas:

- a) The abolition of 5 registration requirements.
  - Forward foreign exchange contracts by residents
  - Ringgit-denominated loans to non-residents for purchase or construction of immovable properties in Malaysia
  - Investment in foreign currency assets by residents
  - Foreign currency borrowing by residents
  - Prepayment or repayment of foreign currency borrowing by residents
- b) Granting greater flexibility for Islamic funds managed onshore.
- c) Providing greater flexibility on hedging of ringgit exposure by non-residents.

November 28 Resident companies with export earnings are allowed to pay another resident company in foreign currency for the settlement of purchases of goods and services. The objective of this liberalization is to enhance Malaysia's competitiveness by reducing the cost of doing business for resident companies.

## APPENDIX II

Table A

RM million (Local currency unit, Old Format)

Item	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
<b>Merchandise f.o.b.</b>	<b>8,883</b>	<b>8,378</b>	<b>14,703</b>	<b>14,524</b>	<b>11,871</b>	<b>7,093</b>	<b>1,449</b>	<b>8,609</b>	<b>8,231</b>	<b>4,460</b>	<b>97</b>	<b>10,088</b>	<b>10,274</b>	<b>69,216</b>	<b>86,535</b>	<b>79,948</b>
Exports	37,576	34,970	44,733	54,607	66,727	77,458	92,220	100,910	118,383	148,506	179,491	193,363	217,713	281,669	318,946	373,190
Imports	28,693	26,592	30,030	40,083	54,856	70,365	90,771	92,301	110,152	144,046	179,394	183,275	207,439	212,453	232,411	293,242
Balance on services	-10,391	-8,790	-8,409	-10,180	-11,392	-9,723	-13,195	-14,568	-16,670	-17,005	-19,229	-18,371	-22,795	-22,239	-32,134	-40,569
Unrequited transfers	-14	96	348	395	219	147	102	337	513	-2,225	-2,515	-2,943	-4,176	-9,583	-6,499	-7,457
<b>Balance on current account</b>	<b>-1,522</b>	<b>-316</b>	<b>6,642</b>	<b>4,739</b>	<b>698</b>	<b>-2,483</b>	<b>-11,644</b>	<b>-5,622</b>	<b>-7,926</b>	<b>-14,770</b>	<b>-21,647</b>	<b>-11,226</b>	<b>-16,697</b>	<b>37,394</b>	<b>47,902</b>	<b>31,922</b>
Official long-term capital	2,504	2,124	-2,470	-5,100	-2,458	-2,836	-665	-2,876	979	861	6,147	748	4,645	2,137	6,697	3,936
Federal Government	1,339	1,611	-2,438	-3,094	-1,038	-787	106	-3,170	-3,134	-4,764	-1,633	-2,178	-1,683	1,819	2,922	864
Market loans	833	1,546	-2,389	-2,531	-420	-983	327	-2,859	-1,824	-4,328	-1,091	-675	-697	1,111	3,056	1,115
Project loans	446	60	54	-364	-435	364	-55	-184	-1,198	-436	-542	-1,503	-986	708	-134	-251
Suppliers' credit	60	5	-103	-199	-183	-168	-166	-127	-112	0	0	0	0	0	0	0
Non-financial Public Enterprises	962	20	7	-1,982	-1,631	-2,064	-740	389	4,277	5,761	7,768	2,844	6,367	361	3,850	3,122
Other assets and liabilities	203	493	-39	-24	211	15	-31	-95	-164	-136	12	83	-38	-43	-75	-50
<b>Private long-term capital</b>	<b>1,725</b>	<b>1,262</b>	<b>1,065</b>	<b>1,884</b>	<b>4,518</b>	<b>6,309</b>	<b>10,996</b>	<b>13,204</b>	<b>12,885</b>	<b>10,798</b>	<b>10,464</b>	<b>12,777</b>	<b>14,450</b>	<b>8,490</b>	<b>5,901</b>	<b>7,120</b>
Balance on long-term capital	4,229	3,386	-1,405	-3,216	2,060	3,473	10,331	10,328	13,864	11,659	16,611	13,525	19,095	10,627	12,598	11,056
<b>Basic balance</b>	<b>2,707</b>	<b>3,070</b>	<b>5,237</b>	<b>1,523</b>	<b>2,758</b>	<b>990</b>	<b>-1,313</b>	<b>4,706</b>	<b>5,938</b>	<b>-3,111</b>	<b>-5,036</b>	<b>2,299</b>	<b>2,398</b>	<b>48,021</b>	<b>60,500</b>	<b>42,978</b>
<b>Private short-term capital</b>	<b>870</b>	<b>-47</b>	<b>-2,491</b>	<b>-2,914</b>	<b>1,562</b>	<b>1,356</b>	<b>5,135</b>	<b>11,957</b>	<b>13,931</b>	<b>-8,484</b>	<b>2,529</b>	<b>10,317</b>	<b>-12,913</b>	<b>-20,633</b>	<b>-37,750</b>	<b>-34,904</b>
Errors and omissions	-368	1,322	147	287	-988	3,019	-395	81	9,370	3,333	-1,896	-6,371	-377	12,913	-4,931	-11,777
<b>Overall balance (surplus +/- deficit - )</b>	<b>3,209</b>	<b>4,345</b>	<b>2,893</b>	<b>-1,104</b>	<b>3,332</b>	<b>5,365</b>	<b>3,427</b>	<b>16,744</b>	<b>29,239</b>	<b>-8,262</b>	<b>-4,403</b>	<b>6,245</b>	<b>-10,892</b>	<b>40,301</b>	<b>17,819</b>	<b>-3,703</b>
Allocation of Special Drawing Rights	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IMF resources	-382	-263	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Net change in international reserves of	-2,827	-4,082	-2,893	1,104	-3,332	-5,365	-3,427	-16,744	-29,239	8,262	4,403	6,245	10,892	-40,301	-17,819	3,703
Bank Negara Malaysia (increase - / decrease+)																

Table B  
US\$ million (Old Format)

Item	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
<b>Merchandise f.o.b.</b>	<b>3,578.4</b>	<b>3,246.3</b>	<b>5,836.8</b>	<b>5,547.5</b>	<b>4,384.2</b>	<b>2,622.8</b>	<b>526.9</b>	<b>3,379.8</b>	<b>3,197.6</b>	<b>1,700.3</b>	<b>38.7</b>	<b>4,009.9</b>	<b>3,652.1</b>	<b>17,644.1</b>	<b>22,772.4</b>	<b>21,038.9</b>
Exports	15,137.0	13,550.1	17,758.2	20,857.5	24,643.4	28,641.5	33,537.0	39,616.0	45,990.1	56,614.7	71,564.5	76,859.4	77,389.8	71,801.2	83,933.2	98,207.9
Imports	11,558.6	10,303.8	11,921.4	15,310.0	20,259.3	26,018.7	33,010.0	36,236.3	42,792.4	54,914.4	71,525.9	72,849.6	73,737.7	54,157.1	61,160.8	77,168.9
<b>Balance on services</b>	<b>-4,185.9</b>	<b>-3,405.9</b>	<b>-3,338.2</b>	<b>-3,888.3</b>	<b>-4,207.3</b>	<b>-3,595.3</b>	<b>-4,798.5</b>	<b>-5,719.2</b>	<b>-6,476.0</b>	<b>-6,482.8</b>	<b>-7,666.8</b>	<b>-7,302.2</b>	<b>-8,102.9</b>	<b>-5,669.0</b>	<b>-8,456.3</b>	<b>-10,676.1</b>
<b>Unrequited transfers</b>	<b>-5.6</b>	<b>37.2</b>	<b>138.2</b>	<b>150.9</b>	<b>80.9</b>	<b>54.4</b>	<b>37.1</b>	<b>132.3</b>	<b>199.3</b>	<b>-848.2</b>	<b>-1,002.8</b>	<b>-1,169.8</b>	<b>-1,484.4</b>	<b>-2,442.8</b>	<b>-1,710.3</b>	<b>-1,962.4</b>
<b>Balance on current account</b>	<b>-613.1</b>	<b>-122.4</b>	<b>2,636.8</b>	<b>1,810.1</b>	<b>257.8</b>	<b>-918.1</b>	<b>-4,234.5</b>	<b>-2,207.1</b>	<b>-3,079.1</b>	<b>-5,630.7</b>	<b>-8,630.8</b>	<b>-4,462.2</b>	<b>-5,935.2</b>	<b>9,532.2</b>	<b>12,605.8</b>	<b>8,400.5</b>
Official long-term capital	1,008.7	823.0	-980.5	-1,948.0	-907.8	-1,048.7	-241.8	-1,129.1	380.3	328.2	2,450.9	297.3	1,651.1	544.8	1,762.4	1,035.8
Federal Government	539.4	624.2	-967.8	-1,181.8	-383.4	-291.0	38.5	-1,244.5	-1,217.5	-1,816.2	-651.1	-865.7	-598.3	463.7	768.9	227.4
Market loans	335.6	599.0	-948.4	-966.7	-155.1	-363.5	118.9	-1,122.4	-708.6	-1,650.0	-435.0	-268.3	-247.8	283.2	804.2	293.4
Project loans	179.7	23.2	21.4	-139.0	-160.7	134.6	-20.0	-72.2	-465.4	-166.2	-216.1	-597.4	-350.5	180.5	-35.3	-66.1
Suppliers' credit	24.2	1.9	-40.9	-76.0	-67.6	-62.1	-60.4	-49.9	-43.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non-financial Public Enterprises	387.5	7.7	2.8	-757.0	-602.4	-763.2	-269.1	152.7	1,661.6	2,196.3	3,097.2	1,130.5	2,263.3	92.0	1,013.2	821.6
Other assets and liabilities	81.8	191.0	-15.5	-9.2	77.9	5.5	-11.3	-37.3	-63.7	-51.8	4.8	33.0	-13.5	-11.0	-19.7	-13.2
<b>Private long-term capital</b>	<b>694.9</b>	<b>489.0</b>	<b>422.8</b>	<b>719.6</b>	<b>1,668.6</b>	<b>2,332.9</b>	<b>3,998.8</b>	<b>5,183.7</b>	<b>5,005.6</b>	<b>4,116.5</b>	<b>4,172.1</b>	<b>5,078.7</b>	<b>5,136.5</b>	<b>2,164.2</b>	<b>1,552.9</b>	<b>1,873.7</b>
Balance on long-term capital	1,703.6	1,312.0	-557.8	-1,228.4	760.8	1,284.2	3,757.0	4,054.6	5,386.0	4,444.7	6,622.9	5,376.0	6,787.6	2,709.0	3,315.3	2,909.5
<b>Basic balance</b>	<b>1,090.5</b>	<b>1,189.6</b>	<b>2,079.0</b>	<b>581.7</b>	<b>1,018.6</b>	<b>366.1</b>	<b>-477.5</b>	<b>1,847.5</b>	<b>2,306.8</b>	<b>-1,186.0</b>	<b>-2,007.9</b>	<b>913.8</b>	<b>852.4</b>	<b>12,241.2</b>	<b>15,921.1</b>	<b>11,310.0</b>
<b>Private short-term capital</b>	<b>350.5</b>	<b>-18.2</b>	<b>-988.9</b>	<b>-1,113.0</b>	<b>576.9</b>	<b>501.4</b>	<b>1,867.4</b>	<b>4,694.2</b>	<b>5,412.0</b>	<b>-3,234.3</b>	<b>1,008.3</b>	<b>4,100.9</b>	<b>-4,590.1</b>	<b>-5,259.6</b>	<b>-9,934.2</b>	<b>-9,185.3</b>
Errors and omissions	-148.2	512.2	58.4	109.6	-364.9	1,116.3	-143.6	31.8	3,640.1	1,270.6	-756.0	-2,532.4	-134.0	3,291.7	-1,297.6	-3,099.2
<b>Overall balance (surplus +/- deficit -)</b>	<b>1,292.7</b>	<b>1,683.6</b>	<b>1,148.5</b>	<b>-421.7</b>	<b>1,230.6</b>	<b>1,983.8</b>	<b>1,246.3</b>	<b>6,573.5</b>	<b>11,358.9</b>	<b>-3,149.7</b>	<b>-1,755.5</b>	<b>2,482.3</b>	<b>-3,871.7</b>	<b>10,273.3</b>	<b>4,689.2</b>	<b>-974.5</b>
Allocation of Special Drawing Rights	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IMF resources	-153.9	-101.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net change in international reserves of	-1,138.8	-1,581.7	-1,148.5	421.7	-1,230.6	-1,983.8	-1,246.3	-6,573.5	-11,358.9	3,149.7	1,755.5	2,482.3	3,871.7	-10,273.3	-4,689.2	974.5
<b>Total reserves minus gold</b>	<b>4,912</b>	<b>6,027</b>	<b>7,435</b>	<b>6,527</b>	<b>7,783</b>	<b>9,754</b>	<b>10,886</b>	<b>17,228</b>	<b>27,249</b>	<b>25,423</b>	<b>23,774</b>	<b>27,009</b>	<b>20,788</b>	<b>25,559</b>	<b>30,854</b>	<b>28,702</b>

Table C  
% of GDP (Old Format)

<i>Item</i>	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
<b>Merchandise f.o.b.</b>	11.5	11.7	18.1	15.7	11.3	6.0	1.1	5.7	4.8	2.3	0.0	4.0	3.6	24.4	28.8	23.3
Exports	48.5	48.8	55.2	59.1	63.4	65.0	68.2	67.0	68.7	76.0	80.7	76.2	77.3	99.4	106.0	108.7
Imports	37.0	37.1	37.0	43.4	52.1	59.1	67.2	61.3	64.0	73.7	80.6	72.2	73.6	75.0	77.3	85.4
<b>Balance on services</b>	-13.4	-12.3	-10.4	-11.0	-10.8	-8.2	-9.8	-9.7	-9.7	-8.7	-8.6	-7.2	-8.1	-7.9	-10.7	-11.8
<b>Unrequited transfers</b>	0.0	0.1	0.4	0.4	0.2	0.1	0.1	0.2	0.3	-1.1	-1.1	-1.2	-1.5	-3.4	-2.2	-2.2
<b>Balance on current account</b>	-2.0	-0.4	8.2	5.1	0.7	-2.1	-8.6	-3.7	-4.6	-7.6	-9.7	-4.4	-5.9	13.2	15.9	9.3
Official long-term capital	3.2	3.0	-3.0	-5.5	-2.3	-2.4	-0.5	-1.9	0.6	0.4	2.8	0.3	1.6	0.8	2.2	1.1
Federal Government	1.7	2.3	-3.0	-3.3	-1.0	-0.7	0.1	-2.1	-1.8	-2.4	-0.7	-0.9	-0.6	0.6	1.0	0.3
Market loans	1.1	2.2	-2.9	-2.7	-0.4	-0.8	0.2	-1.9	-1.1	-2.2	-0.5	-0.3	-0.2	0.4	1.0	0.3
Project loans	0.6	0.1	0.1	-0.4	-0.4	0.3	0.0	-0.1	-0.7	-0.2	-0.2	-0.6	-0.3	0.2	0.0	-0.1
Suppliers' credit	0.1	0.0	-0.1	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non-financial Public Enterprises	1.2	0.0	0.0	-2.1	-1.5	-1.7	-0.5	0.3	2.5	2.9	3.5	1.1	2.3	0.1	1.3	0.9
Other assets and liabilities	0.3	0.7	0.0	0.0	0.2	0.0	0.0	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0
<b>Private long-term capital</b>	2.2	1.8	1.3	2.0	4.3	5.3	8.1	8.8	7.5	5.5	4.7	5.0	5.1	3.0	2.0	2.1
Balance on long-term capital	5.5	4.7	-1.7	-3.5	2.0	2.9	7.6	6.9	8.1	6.0	7.5	5.3	6.8	3.8	4.2	3.2
<b>Basic balance</b>	3.5	4.3	6.5	1.6	2.6	0.8	-1.0	3.1	3.4	-1.6	-2.3	0.9	0.9	17.0	20.1	12.5
<b>Private short-term capital</b>	1.1	-0.1	-3.1	-3.2	1.5	1.1	3.8	7.9	8.1	-4.3	1.1	4.1	-4.6	-7.3	-12.6	-10.2
Errors and omissions	-0.5	1.8	0.2	0.3	-0.9	2.5	-0.3	0.1	5.4	1.7	-0.9	-2.5	-0.1	4.6	-1.6	-3.4
<b>Overall balance (surplus +/- deficit - )</b>	4.1	6.1	3.6	-1.2	3.2	4.5	2.5	11.1	17.0	-4.2	-2.0	2.5	-3.9	14.2	5.9	-1.1
Allocation of Special Drawing Rights	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IMF resources	-0.5	-0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net change in international reserves of	-3.6	-5.7	-3.6	1.2	-3.2	-4.5	-2.5	-11.1	-17.0	4.2	2.0	2.5	3.9	-14.2	-5.9	1.1
Bank Negara Malaysia (increase - / decrease+)																

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