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MANAGEMENT OF THE CAPITAL ACCOUNT: A STUDY OF INDIA AND MALAYSIA

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I. INTRODUCTION

A. India and Malaysia

This paper contrasts the approaches of India and Malaysia to capital account management, which, although widely different historically, have arrived at a remarkable convergence after the East Asian crisis of 1997. The paper does not compare Malaysia with its East Asian neighbours in terms of post-1997 outcomes or in terms of their relative situations at the time of the crisis, as this ground is already covered in a large body of literature (see for example, Borgini, Claessens and Ferri, 2000; Das, 1999; Furman and Stiglitz, 1998; Radelet and Sachs, 1998).

India and Malaysia are macroeconomically quite disparate. Table 1 presents a summary macroeconomic profile that highlights the vast differences between the two. Beyond the more obvious differences in economic size in terms of total and per capita GDP, there is the historical growth differential. India took birth in 1991 as an open economy after 30 years of slow autarkic growth at 3.5 per cent, and some speeding up to

Table 1

MACROECONOMIC PROFILE FOR MALAYSIA AND INDIA, 1997–1999

	Malaysia			*India*		
	1997	*1998*	*1999*	*1997*	*1998*	*1999*
GNP_{mp} *($ billion)*	94.8	68.6	73.5	417.2	426.5	441.8
Population *(million)*	21.7	22.2	22.7	962.4	979.7	997.0
Per capita GNP *(current $)*	4 369	3 090	3 237	434	435	443
PPP *(current $)*	8 555	7 699	7 640	2 019	2 060	2 230
Foreign reserves *($ billion)*	15.6	26.2	30.9	29.4	32.5	38.0
Import cover *(months)*	3.4	5.7	5.9	6.9	8.2	8.2
Growth rate of GDP *(real)*	7.3	-7.4	5.6	5.0	6.8	6.4
Share of GDP *(per cent)*						
Gross domestic investment	43.0	26.6	22.3	26.2	23.4	23.3
Gross domestic saving	43.9	48.5	47.3	24.7	22.3	22.3
Exports *(goods & non-factor services)*	93.3	115.2	121.7	11.2	11.5	12.1
External debt /GDP *(per cent)*	60.6	56.7	57.8	24.4	23.5	22.0
Short-term/total external	25.3	19.9	15.0	5.4	4.5	4.1
Debt-service ratio	5.5	6.7	5.8	19.0	18.0	16.0
Fiscal *(per cent)*						
Current balance/GDP	7.5	4.3	4.0	-3.1	-3.9	-3.8
Inflation rate (CPI) *(per cent)*	2.7	5.3	2.8	7.2	13.2	5.0

Source: Data on GNP in current and PPP $ from World Bank, *World Development Indicators 2000*; all other data from country sources. For Malaysia from Bank Negara Malaysia (BNM), *Annual Report 1999*, and *Monthly Statistical Bulletin* (June 2000); for India from Reserve Bank of India (RBI), *Annual Report 2000*, and *Bulletin* (August 2000) (except inflation; see notes to table 2).

Note: Indian figures pertain to the Indian fiscal year, which runs from 1 April to 31 March. The debt stock figures (short-term share) correspondingly pertain to the end of the fiscal year (i.e. end-March 2000) for the year 1999. The fiscal balance for India covers the central Government alone. CPI= consumer price index.

an average growth rate of 5.6 per cent in the period 1980–1990, the decade just prior to the big-ticket reforms of the 1990s. By contrast in Malaysia, a member of the second-rank quadruplet of Asian tigers, no decade prior to the1990s saw average growth under 5.2 per cent and no year in the 1990s had growth below 8.9 per cent until 1997, when the rate fell to 7.3 per cent. Supporting this historical growth disparity are vast differences in savings as a per cent of GDP, at the 25 per cent mark in India, and at nearly the 50 per cent mark in Malaysia. The investment rate, historically high in Malaysia but below the savings rate (the obverse of a historically positive balance on trade in goods and non-factor services) has come down in the post-crisis years to 22 per cent in 1999, with a corresponding widening of the favourable balance of trade. In India, the investment rate lies typically at about 1.5 percentage points above the savings rate, the obverse of a historically negative balance of trade. The Malaysian Government contributed to domestic savings with positive current fiscal balances, which continued throughout the crisis and post-crisis years; in India on the other hand, the Government dissaves, with negative current fiscal balances on the central Government account alone amounting to between 3 and 4 per cent of GDP.

Clearly the most startling difference between the two economies lies in their degree of openness. Exports in Malaysia have traditionally been roughly equivalent to GDP, and have actually exceeded GDP in the post-crisis years; India on the other hand had an export/GDP ratio at the 11–12 per cent level during the period 1997–1999, a notch up from ratios usually well below 10 per cent prior to that period.

The Malaysian tradition of openness goes back a long way. Malaysia accepted Article VIII status under the IMF (current account convertibility) as far back as November 1968. The Malaysian ringgit was floated at the same time as the major world currencies, in 1973 (see appendices A and B, which list external policy milestones in India and Malaysia respectively). India, on the other hand, accepted Article VIII status only in August 1994, following a unified floating rate for the rupee in March 1993.

Progress towards capital account convertibility in Malaysia began with the ringgit float in 1973, with a second major thrust in 1987. By 1990,

there was even an offshore over-the-counter (OTC) market for Malaysian shares in Singapore which reinforced a pre-existing offshore ringgit market, perhaps the only case of an offshore market for a developing country currency. In India, by contrast, capital account convertibility has never existed for residents, although non-resident capital inflows are fully convertible. The 1997 Reserve Bank of India (Tarapore) Committee recommendation of a phased move to full capital account convertibility by 2000 (Reserve Bank of India (RBI), 1997) was not adhered to on account of failure to meet its recommended prudential markers on the fiscal and inflation fronts.

The Malaysian response to the currency crisis of 1997 backtracked on what had been perhaps the longest tradition of openness on current and capital accounts in the developing world. As the capital outflow crisis in East Asia hit Malaysia with full force (although Malaysia was inexplicably excluded by Summers (2000) from the list of Asian countries affected by the crises), the country famously imposed capital exit barriers and a policy of lower interest rates that ran directly orthogonal to the policy in other East Asian countries similarly afflicted.

By contrast, the Indian external liquidity crisis in mid-1991, when foreign reserves fell to an all-time low of $1 billion, led to the opening up of the Indian capital account. Following the opening up of the Indian economy in 1991, there was a period, mid-decade, when the principal problem of capital account management arose from too large an inflow rather than too little. This was a problem in Malaysia as well at around the same period, handled through temporary entry barriers that were soon dismantled as the situation turned.

The East Asian crisis of 1997 reaffirmed the possibility of multiple equilibria in currency markets. The issue of whether hedge funds played a role in the crisis is empirically unproven, and is less important than the strenuous attempts made to investigate the matter might initially suggest. The finding by Brown, Goetzmann and Park (1998), of an absence of any correlation between hedge fund short positions in Asian currencies and movements in exchange rates, had methodological flaws, which yielded implausible overestimates of hedge fund short positions. What these

attempts have served to highlight is the severe paucity of information on hedge funds. Reported figures suggest that hedge funds may be less geared than commercial and investment banks, but it is well-known that hedge funds rely principally on off-balance-sheet techniques to obtain leverage.

Even if market manipulation in its many forms – whether action-based (insider trading), information-based (rumour spreading), or trade-based (cornering markets) – is ruled out as a contributory factor, it is clear that herd behaviour with positive feedback can precipitate a crash, with selling low inducing further herd selling and therefore becoming profitable. This can then be transmitted across markets through pure contagion, where good macro-policy and capital markets, characterized by high secondary liquidity, are no guarantee against infection. On the contrary, high liquidity may accentuate amenability to infection, as indeed was the case in Malaysia.

B. The issues

This study examines what has been done in both India and Malaysia in terms of controlling the quantum and the composition of capital flows. There are two main relevant issues in composition: debt/equity composition, and the maturity structure of external debt.

In terms of a hierarchy of desired forms of capital inflows, equity investment is thought superior to debt inflows because of the sharing of risk (for countries as for corporates); and within equity flows, direct investment is superior to portfolio investment because of the greater stake in the host country. But between portfolio and debt, the relative hierarchy is less clear. The short-term component of external debt is by no means a complete measure of the scope for short-term capital outflows. Defendants of portfolio capital tend to dismiss its potential volatility as low, on the grounds that downward revisions in expectations regarding stocks impinge equally on domestic and foreign investors, so that changes in expectations would be fully reflected in downward stock market valuations, and not at all (or very little) in foreign investor sale and exit. The East Asian crisis has dramatically shown the falsity of that position. Such a position in one

market leads to pressure on foreign investors to liquidate in third countries, even when stock expectations remain high, resulting in outward capital flows from these third countries by contagion.

When potential outward capital flows by residents are added on to potential foreign investor outflows, it is clear that the proportion of short-term debt in total external debt is not so much a precipitator of capital outflows, as an indicator of how sharp the spike can be, whether precipitated by contagion or real factors.

In 1999, external debt as a per cent of GDP was higher in Malaysia, at 58 per cent (down from 61 per cent at the end of 1997), than in India at 22 per cent (table 1). Also, although the Malaysian short-term debt as a percentage of total external debt declined from 25 per cent in 1997 to 15 per cent in 1999, it was nevertheless much higher than the Indian short-term debt of 4 per cent. However, external debt taken as a percentage of exports alters somewhat the overall picture of greater conservatism in India than in Malaysia in respect of external borrowing (table 2). India until 1999 was above the prudent thumbrule of 200 per cent. Malaysia on the other hand had an external debt/exports ratio of 44 per cent. The figures for short-term external debt as a percentage of exports are even more startling: Malaysia's at 5 per cent was far lower than India's at 37 per cent at the start of the decade, and, despite a rise thereafter, exceeded India's only in 1997.

Thus, normalized by exported tradeables rather than by the size of the economy aggregating across tradables and non-tradables, Malaysia displays greater external prudence than India over the 1990s. The debt service ratio in Malaysia is correspondingly far lower, despite a much lower concessional proportion in total external debt in Malaysia (6 per cent) as compared to India (41 per cent), a result of the far greater proportion of exports in GDP (table 1).

Table 2 shows that in the 1990s Malaysia sustained stable annual flows of FDI in the $2–4 billion range, whereas India saw a very slow climb to levels of about $2 billion annually. Both countries saw a sharp increase in portfolio inflows mid-decade, which remained subsequently at the $3–4 billion level in India, but turned into net outflows of $10 billion in

Table 2

EXTERNAL INDICATORS FOR MALAYSIA AND INDIA IN THE 1990s

	1990	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*
Foreign direct investment *($ billion, gross)*										
Malaysia	..	..	..	1.8	3.5	3.8	3.7	2.4	1.9	1.8
India	0.2	0.1	0.3	0.6	1.0	2.1	2.4	3.6	2.6	2.2
Foreign portfolio investment *($ billion, net)*										
Malaysia	-1.0	-0.7	3.0	9.9	5.4	2.1	4.4	-10.1	-0.3	0.3
India	0.3	1.4	0.0	2.3	4.7	1.8	4.2	4.0	4.5	3.0
External debt/exports of goods and non-factor services *(per cent)*										
Malaysia	51.8	48.5	48.9	50.9	42.3	40.6	42.1	65.0	49.2	44.0
India	363.5	366.8	382.7	337.6	310.7	238.0	224.7	209.1	207.2	181.8
Short-term debt/exports of goods and non-factor services *(per cent)*										
Malaysia	5.0	6.8	11.5	12.8	8.2	7.7	10.8	16.5	9.8	6.7
India	37.1	30.4	26.9	13.0	12.9	12.7	16.2	11.2	9.1	7.5
Exchange rate *(period average LCU/$)*										
Malaysia	2.7	2.8	2.6	2.6	2.6	2.5	2.5	2.8	3.9	3.8
India	17.5	22.7	25.9	30.5	31.4	32.4	35.4	36.3	41.3	43.0

Source: World Bank, *World Development Indicators*, 2000, for India alone, for processed calendar year estimates from Indian fiscal year (April-March) data, comparable to those for Malaysia, which reports by calendar year.

Note: Malaysian country sources (see sources for table 1) conflicted seriously with the World Bank data and were therefore chosen in all cases. Data on FDI in the first three years were not available.
LCU= local currency unit.

1997 in Malaysia. Given the footloose character of portfolio flows, and given also the negative real impact of an interest rate hike, which is the standard macroeconomic market corrective for capital outflows, it is not surprising that exit barriers to capital outflows have become, and will remain, a component of the menu of policy options to stabilize currency markets. The case of Malaysia has incontrovertibly established the real economy benefits of temporary suspensions of capital convertibility (see also Athukorala,1998; and James, 1999).

C. Outline of the paper

In what follows, the approach to capital account management in India is examined in section II, and in Malaysia in section III. Section IV presents conclusions. Appendices A and B list major external policy milestones in India and Malaysia respectively.

II. INDIA

A. Introduction

The opening of the Indian economy began in July 1991, in immediate response to an external liquidity crisis, with foreign reserves falling to a low of $1 billion and a longer-term dissatisfaction with 40 years of slow, autarkic, growth. Prior to reform, the Indian rupee was not convertible on current account, and was officially set at an undisclosed moving peg to a basket of currencies (see Rajaraman, 1991). Import tariff rates were among the most punitive in the world, and capital inflows were largely official borrowings on concessional terms. Even today concessional debt accounts for 40 per cent of total external debt. Foreign portfolio investment was not permissible, and even FDI was regarded with suspicion and permissible only through case-by-case approval.

Since 1991, the external price of the rupee has become market-determined, albeit with periods of intensive intervention by the Reserve Bank of India (RBI). There is current account convertibility, with caps on invisible outflows that vary by category, and there has been increasing facilitation of foreign direct and portfolio investment. Capital outflows from residents are still prohibited, although some liberalization of outward FDI by corporates is now possible without prior approval, through share swaps up to specified limits, and in excess of these limits with special approval. All outflows of capital from non-corporate residents remain banned. Foreign capital inflows, on the other hand, are granted full freedom of repatriation, barring a few channels of inflows for non-resident Indians that are non-repatriable. Thus there is capital account convertibility for non-residents but not for residents.

Since 1 June 2000, the legal regime governing both current and capital account transactions is defined by the Foreign Exchange Management Act (FEMA) of 1999, which replaced the Foreign Exchange Regulation Act (FERA) of 1973. FERA restrictions were not on volume of capital inflows so much as the denial of parity of treatment in terms of freedom of functioning between "FERA" companies (those with more than 40 per cent foreign equity) and other companies, and there were criminal penalties for contravention of the ban on foreign exchange outflows from residents.

FEMA is a civil law, a major departure from FERA, and it does not apply to Indian citizens resident outside India, unlike FERA, which applied to all Indian citizens regardless of the location of their residence. Thus, the passage of FEMA marks a major legal milestone in the opening up of the Indian economy. FEMA has a few residual restrictions on current account transactions (7 banned categories; 16 requiring permission only if a ceiling amount is crossed; and 11 needing permission irrespective of amount). On the capital account, the FERA amendment of 1993 had already legally enabled liberalization in respect of FDI and portfolio inflows that was very gradually introduced over the 1990s. FEMA introduced first-time liberalization of rules in respect of cross-border inheritance of property, and first-time automatic approval for outward FDI by corporates through stock swap options, subject to sectoral caps, and with possible approval beyond those caps.

In what follows, section II.B reviews the structure of the balance of payments (BOP) as it has evolved over the 1990s. Section II.C examines in further detail current invisibles, which have kept the current account deficit at well under 1.5 per cent of GDP for all but one year in the decade, and reduced the need for capital inflows. Section II.D examines capital account inflows in respect of foreign equity investment and FDI, commercial borrowings, and special deposit schemes for non-resident Indians (NRIs) – a peculiar feature of the Indian capital account. Section II.E examines the return of flight capital during the 1990s, motivated by the progressive liberalization of the current account. Section II.F examines the market for foreign exchange in India, and the anatomy of interventions by the RBI in that market. There are no convertibility restrictions on foreign capital; thus the willingness of foreign capital to enter is a function of the fundamentals of the Indian economy, and of its political and economic governance parameters. A key feature of this, the health of the financial sector, is addressed in section II.G. Section II.H concludes.

Appendix A lists Indian external policy milestones in the 1990s. Indian policy in any sphere is characterized by incremental dribble, with punctuation at frequent intervals; the opening up in the 1990s shares this characteristic, although fortunately the moves are directionally monotonic. Instead of listing every change, which would render the Appendix tedious, we record only those which altered the essential parameters of policy, so as to make possible an understanding of the intent of the process at a glance.

B. The balance of payments: an overview

The first notable feature about the Indian current account after 1990/91, the crisis year preceding the introduction of reforms in July 1991, is that the deficit on current account has been at worst a little over 1.5 per cent of GDP, usually well under (table 3). This has been not because of a low deficit on trade account, which had grown over the period to the region of $17 billion by 1999/00, but because of an explosion of net invisible inflows starting 1994/95, to the region of $13 billion by 1999/00. Clearly the

Table 3

INDIA: OVERALL BALANCE OF PAYMENTS, 1990–2000

($ billion)

Item	*1990/91*	*1991/92*	*1992/93*	*1993/94*	*1994/95*	*1995/96*	*1996/97*	*1997/98*	*1998/99*	*1999/00*
I. Merch. trade balance (A-B)	-9.44	-2.80	-5.45	-4.06	-9.05	-11.36	-14.82	-15.51	-13.25	-17.10
A. Exports, f.o.b.	18.48	18.27	18.87	22.68	26.86	32.31	34.13	35.68	34.30	38.29
B. Imports, c.i.f.	27.91	21.06	24.32	26.74	35.90	43.67	48.95	51.19	47.54	55.38
II. Invisibles, net	-0.24	1.62	1.92	2.90	5.68	5.45	10.20	10.01	9.21	12.94
III. Current account (I+II)	-9.68	-1.18	-3.53	-1.16	-3.37	-5.91	-4.62	-5.50	-4.04	-4.16
/GDP *(per cent)*	-(3.20)	-(0.40)	-(1.80)	-(0.40)	-(1.00)	-(1.60)	-(1.20)	-(1.30)	-(1.00)	-(0.90)
IV. Capital Account (A to F), net	7.19	3.78	2.94	9.70	9.16	4.69	11.41	10.01	8.26	10.56
A. Foreign investment	0.10	0.13	0.56	4.24	4.81	4.81	6.15	5.39	2.41	5.19
B. External assistance	2.21	3.04	1.86	1.90	1.53	0.88	1.11	0.91	0.82	0.89
C. Commercial borrowings (m & lt)	2.25	1.46	-0.36	0.61	1.03	1.28	2.85	4.00	4.36	0.33
D. Rupee debt service	-1.19	-1.24	-0.88	-1.05	-0.98	-0.95	-0.73	-0.77	-0.80	-0.71
E. NRI deposits	1.54	0.29	2.00	1.21	0.17	1.10	3.35	1.13	1.74	2.14
F. 1. Short term trade credits	1.08	-0.52	-1.08	-0.77	0.39	0.05	0.84	-0.10	-0.75	0.38
2. Other capital	1.20	0.62	0.83	3.57	2.21	-2.48	-2.16	-0.54	0.48	2.42
V. Overall Balance (III+IV)	-2.49	2.60	-0.59	8.54	5.79	-1.22	6.79	4.51	4.22	6.40
VI. Reserves and related items	2.49	-2.60	0.59	-8.54	-5.79	1.22	-6.79	-4.51	-4.22	-6.40
IV(A+C+E+F)/III *(per cent)*	(64)	(168)	(55)	(764)	(256)	(81)	(239)	(179)	(204)	(251)

Source: Reserve Bank of India, *Handbook of Statistics on Indian Economy*, 1999, tables 122 and 195 and *RBI Bulletin,* assorted issues.

Note: Starting in 1990/91, defence imports are recorded in the year of import, with medium and long term financing credits included in external commercial borrowings; when defence imports are growing over time, the import bill in the importing year is larger than when recorded at the time of servicing the credit. Other changes made after 1990/91 do not impact upon the capital account (see notes to table 5). "Rupee debt service" (item IV.D) is in respect of rupee-denominated external assistance from the former COMECON, and includes interest. Short-term trade credits exclude local currency-backed credit through banking channels (see text). Other capital includes errors and omissions.

composition of invisibles is a matter of some importance for an assessment of whether this growth is sustainable (section II.C).

The low deficit on current account has meant that in most years of the period non-official capital flows have well exceeded 100 per cent of the account deficit (table 3). Thus, even though net official aid – both convertible and rupee-denominated components – has been negligible, except in the early 1990s, the decade has seen a rise in foreign reserves, to a stock of nearly $30 billion at the end of 1998/99 (table 4). This has been the single most important indicator of the success of the economic reform programme begun in July 1991. Indeed, for a period during the mid-1990s, the chief problem of capital account management arose from too large an inflow rather than too little.

Table 4

INDIA: EXTERNAL RESERVES, 1990–2000

($ billion)

				Foreign currency assets	
End-March	*Total*	*SDRs*	*Gold*	*Total*	*Change*
1990/91	5.83	0.10	3.50	2.24	-1.13
1991/92	9.22	0.09	3.50	5.63	3.40
1992/93	9.83	0.02	3.38	6.43	0.80
1993/94	19.25	0.11	4.08	15.07	8.63
1994/95	25.19	0.01	4.37	20.81	5.74
1995/96	21.69	0.08	4.56	17.04	-3.77
1996/97	26.42	0.00	4.05	22.37	5.32
1997/98	29.37	0.00	3.39	25.98	3.61
1998/99	32.49	0.01	2.96	29.52	3.55
1999/00	38.03	0.00	2.97	35.06	5.54

Source: *Ibid.*, table 136, supplemented by *RBI Bulletin*, August 2000.
Note: The figures in this table are not consistent with the figures from the same source for balance of payments flow, because of changes in parities between constituent currencies in foreign assets.

C. *Invisibles in the current account*

The major prop of the balance of payments in the 1990s has been the spurt of private transfers in the current account to annual inflows of around $12 billion, with two clearly visible discontinuous points of increase.

The first in 1993/94 was on account of the liberalization of gold imports, previously banned. The differential between the international and Indian prices of gold fuelled the infamous *hawala* channel of conversion of foreign currencies into and out of rupees. *Hawala* was an unofficial, but efficiently functioning, market whereby rupee assets were convertible into foreign currencies obtained principally from diverted remittances, but also from misinvoiced trade. With the 1992/93 decision to allow up to 5 kg of gold per non-resident Indian (NRI) returning to the country, gold imports entered into formally reported imports, with a contra entry in what are now recorded (implicit) private transfers, thus accounting for the increase in the latter starting in 1993/94. The net direct effect of each such gold import on the current balance was thus neutral, but secondary effects improved the current account balance with the narrowing gap between official and *hawala* rates on the dollar, and the consequently reduced attraction of transmitting private transfers through the *hawala* route. With the permissibility, starting October 1997, of gold imports by designated importing agents, the domestic price of gold declined still more to parity with international prices, thus eliminating altogether the market for diverted private transfers to finance gold smuggling.

The second discontinuous increase in transfers, starting in 1996/97, is the analogue of a policy change in respect of NRI deposits (see section II.E below).[1] With the start in 1992/93 of non-repatriable external deposits denominated in rupees, the first repayments of (non-repatriable) principal three years down the line in 1996/97 were contra-entered as private transfers, although other accounting arrangements might have been devised for what are not current account flows. But given this recording convention, private transfers are now in the $10–12 billion range (see table 5). Other invisibles sum to zero because of steady outflows of the order of $3 billion on account of interest on external debt. Software exports have grown at

Table 5

INDIA: INVISIBLES BY CATEGORIES OF TRANSACTIONS, 1990–2000

($ billion)

Year	*Non-factor services, net (I)*	*Factor services, net (II)*	*Private transfers, net (III)*	*Official transfers, net (IV)*	*Invisibles, net (I to IV)*
1990/91	0.98	-3.75	2.07	0.46	-0.24
1991/92	1.21	-3.83	3.78	0.46	1.62
1992/93	1.13	-3.42	3.85	0.36	1.92
1993/94	0.54	-3.27	5.27	0.37	2.90
1994/95	0.60	-3.43	8.09	0.42	5.68
1995/96	-0.20	-3.21	8.51	0.35	5.45
1996/97	0.73	-3.31	12.37	0.41	10.20
1997/98	1.32	-3.52	11.83	0.38	10.01
1998/99	2.17	-3.54	10.28	0.31	9.21
1999/00	3.86	-3.56	12.26	0.38	12.94

Source: *Ibid*., table 124, supplemented by *RBI Bulletin,* August 2000.

Note: Starting 1992/93, data on gold and silver brought in by Indian returning from abroad have been included under import payments with a corresponding entry in private transfers. Starting 1996/97, repayments of non-resident non-repatriable rupee accounts were contra-entered as private transfers in the current account (see *RBI Annual Report 1998-99,* Box VI.3). Both changes reflect policy changes, and therefore do not introduce discontinuities in the data series.

explosive rates from an initial small base to reach present annual flows of the order of $4 billion per year.

D. Capital inflows

(i) Equity

The liberalization of FDI, effective as of 24 July 1991, followed soon thereafter by the signing of the Multilateral Investment Guarantee Agency (MIGA) protocol, could be said to mark the start of the big-ticket reforms of the Indian economy. First-time automatic approval up to 51 per cent equity in 34 sectors was a major departure from the earlier regime of case-by-case consideration, with equity shares rarely permitted beyond a ceiling

of 40 per cent, and, when permitted, subject to draconian limits on freedom of functioning prescribed under the FERA of 1973. These limits were done away with in January 1993 through amendment of the FERA.

Regulation of capital markets without government control was legally enabled through statutory empowerment of the Securities Exchange Board of India (SEBI) in January 1992. This made possible, for the first time, portfolio inflows from foreign institutional investors without case-by-case government approval, subject to registration with SEBI, and an aggregate ceiling of 24 per cent of issued share capital. Portfolio investment is restricted to foreign institutional investors and high-net-worth individuals. Aggregate percentage ceilings have been steadily liberalized to the present level of 40 per cent. Issue of convertible bonds and shares by Indian companies on foreign bourses through American Deposit Receipts (ADRs) and Global Deposit Receipts (GDRs) became permissible for the first time in April 1992, subject to government approval. This was an important development, supplementing the opening up to foreign institutional investors, because it enabled companies to reach investors unwilling to get embroiled in the settlements mess on Indian stock markets.

A landmark development was the incorporation in June 1996 of the National Stock Depository, enabling paperless trading for the first time in India. Dematerialization remained optional, but with recognition of the National Stock Depository by the American Securities Exchange Commission in August 1997 as an eligible foreign custodian, it became an option almost universally exercised by end-December 1999. Retail investors, other than foreign institutional investors, may still opt for the ADR/GDR route, but the premium has declined markedly.

Net equity/investment inflows responded to the lifting of these constraints and touched a peak of $6 billion in 1996/97 (table 6), largely fuelled by portfolio flows. Portfolio inflows have fluctuated thereafter. Cumulative investment by foreign institutional investors in India from 1993 to mid-2000 stood at approximately $12 billion. A phased move, starting in June 1998, towards permission for forward exchange cover for foreign institutional investors has progressed to permission for essentially full cover of exposure (in stages; see appendix A).

Table 6

INDIA: FOREIGN INVESTMENT/EQUITY INFLOWS, 1990–2000

($ billion)

	1990/91	*1991/92*	*1992/93*	*1993/94*	*1994/95*	*1995/96*	*1996/97*	*1997/98*	*1998/99*	*1999/00*
A. Direct Investment	0.10	0.13	0.32	0.59	1.31	2.14	2.82	3.56	2.46	2.16
a. With approval (SIA/FIPB)	-	0.07	0.22	0.28	0.70	1.25	1.92	2.75	1.82	1.41
b. Without approval										
RBI	-	-	0.04	0.09	0.17	0.17	0.14	0.20	0.18	0.17
NRI[a]	-	0.06	0.05	0.22	0.44	0.73	0.76	0.60	0.46	0.57
B. Portfolio Investment	0.01	0.00	0.24	3.57	3.82	2.75	3.31	1.83	-0.06	3.03
a. GDRs[b]	-	-	0.24	1.52	2.08	0.68	1.37	0.65	0.27	0.77
b. FIIs[c]	0.01	0.00	0.00	2.05	1.74	2.07	1.95	1.18	-0.33	2.26
Total (A+B)	0.10	0.13	0.56	4.16	5.13	4.89	6.13	5.39	2.40	5.18

Source: *Reserve Bank of India Bulletin,* August 2000, table 46. There are discrepancies between the figures here and those in the BOP statement.

Note: SIA = Secretariat for Industrial Approvals; FIPB = Foreign Investment Promotion Board; FII = Foreign institutional investment.

a Includes acquisition of shares of Indian companies by non-residents under section 29 of FERA.

b Indian Corporate issues of Global Depository Receipts (GDRs) and American Depository Receipts (ADRs).

c Includes offshore funds.

FDI, on the other hand, has stagnated at around the $2 billion mark, despite the steady expansion of admissible sectors and relaxation of procedural requirements. India remains an insignificant destination for global FDI flows. Despite automatic FDI entry, possible for the first time in the 1990s, it is entry with approval, for investments crossing sectoral caps or in sectors requiring licensing, that has remained the dominant component. This may change with the placement in February 2000 of FDI in all sectors, but for a small negative list, in the automatic route.

(ii) Debt

External commercial borrowing is generally understood in India as pertaining to non-trade credit, even though such borrowings may carry sizeable import-earmarked components. There are three main parameters governing controls over external commercial borrowing: an aggregate cap on such borrowing in any year, with preferences within the cap for infrastructure and export; restrictions on use for rupee expenditure (i.e. other than foreign currency expenditure on imports), and a ban on investment in stock markets and real estate; and minimum maturity limits.

During the mid-1990s surge in capital inflows, the use of external commercial borrowing was confined to expenditure as foreign currency on imports. With the passing of the surge, these rules were gradually eased over time, except at the short-maturity end of the spectrum. Shorter maturities have been discouraged through a lifting of end-use conditions and approval procedures for longer maturities, subject to caps on the amounts so admissible, which vary directly with the length of the minimum maturity period. Today, end-use restrictions have been lifted altogether, and with that there is a floor maturity of three years. This rules out short-term, non-trade credit altogether.

A peculiar feature of the Indian capital account has been the special deposit schemes for non-resident Indians (see box 1), which are accorded a separate row in the balance of payments, distinct from external commercial borrowings. Foreign currency deposits carried no exchange risk for depositors. During the long period until 1997, when deposit rates were

Box 1

DEPOSIT SCHEMES FOR NON-RESIDENT INDIANS

A special deposit schemes for non-resident Indians, NR(E)RA, was started in 1970, during the Bretton Woods era. With the start of a managed float, a new FCNR(A) scheme was introduced in 1975 with all exchange risk assumed by the RBI. This was replaced in 1993–94 by the FCNR(B) scheme, where exchange risk was transferred to commercial banks. Details on the various schemes and their interest rate structure, are listed below.

Without exchange risk for depositors/banks.

FCNR(A) Foreign Currency Non-Resident (Accounts), started November 1975, closed 15 August 1994.

Without exchange risk for depositors only.

FCNR(B) Foreign Currency Non-Resident (Banks), started May 1993.

With exchange risk for depositors.

NR(E)RA Non-Resident (External) Rupee Accounts, started February 1970.

NR(NR)RD Non-Resident (Non-Repatriable) Rupee Deposits (exchange risk only for repatriable interest), started June 1992.

NR(S)RA) Non-resident special rupee account with facilities similar to those for resident accounts, introduced in mid-April 1999, but yet to attract inflows.

Interest rates were administratively set until

FCNR(B) 16 April 1997: ceiling rates
22 Oct. 1997: ceiling rate set at LIBOR
29 April 1998 : ceiling rate set at
50 basis points > LIBOR for maturity > 1 year; and
25 basis points < LIBOR for maturity < 1 year.

Rupee deposits

22 April 1992: ceiling rates, usually 100 bp above domestic rates.
16 April 1997: rates freed for all but short-term (< 1 yr); corresponding domestic rates freed in stages between October 1995 and July 1996.
13 Sept. 1997: rates freed for all (all domestic fixed-term rates > 1 month freed 21 Oct. 1997).

not linked to world rates, they offered clear arbitrage opportunities varying from year to year as a function of the interest rate margin between the administratively set deposit rate and world deposit rates, with the additional factor of currency risk only in the case of rupee-denominated deposits. The aggregate net inflows varied accordingly from year to year in terms of both total and composition.

The interest rate structure on foreign currency deposits marked the first time that short-term deposits were formally discouraged, although the earlier administered-rate regime is thought to have incorporated a similar tilt in the rate structure. In October 1999, the minimum maturity of foreign currency, non-resident Indian deposits (FCNRB) was lengthened to one year, from a floor maturity which had all along been set at six months, thus doing away with short-term deposits altogether. What is important to note is that these policy nudges away from short-term deposits are recent, a clear effect of the 1997 East Asian crisis. The RBI has set up a Steering Committee and a Technical Group to work on a risk management model for sovereign external liability management in India.

The total stock of external debt has been well under $100 billion in the 1990s (table 7). Differencing these stock data does not yield annual flows comparable to those in the balance of payments table, however, because of the valuation effect. Additionally, non-resident Indians' non-repatriable rupee deposits are excluded from external debt stock figures, quite justifiably, perhaps, but this does pose problems of comparability with the balance-of-payments flow data.

Short-term trade credits, and short-term deposits by non-resident Indians (until the October 1999 decision imposing a minimum maturity of one year) together constitute aggregate external short-term liabilities. Short-term debt in Indian official figures is classified by original, not residual, maturity.

In stock terms, short-term liabilities, aggregating across (suppliers') trade credits and non-resident Indian deposits, fell from $7.5 billion at end-March 1991 to $4.1 billion at end-March 2000, and in percentage terms, from around 10 per cent to around 4 per cent of total external liabilities.

Table 7

INDIA: EXTERNAL DEBT STOCK, 1991–2000

($ billion)

End-March	Total	Long-term commercial borrowing		Trade credits[a]			NRI deposits[b]			Short-term	
		Loans	Bonds[c]	Aggregate	Short-term	Short-term (Per cent)	Aggregate	Short-term	Short-term (Per cent)	Aggregate	Total (Per cent)
1991	83.80	6.83	3.20	9.10	4.80	52.75	12.95	2.74	21.16	7.54	9.00
1992	85.28	6.72	4.87	8.22	4.23	51.46	12.92	2.84	21.98	7.07	8.29
1993	90.02	6.49	5.15	7.28	2.96	40.66	14.52	3.38	23.28	6.34	7.04
1994	92.69	6.31	6.05	6.99	1.79	25.61	14.49	1.83	12.63	3.62	3.91
1995	99.00	6.66	6.33	8.62	1.99	23.09	15.76	3.38	21.45	5.37	5.42
1996	93.73	7.23	6.64	7.53	2.15	28.55	14.89	3.88	26.06	6.03	6.43
1997	93.47	8.53	5.81	8.81	2.95	33.48	14.78	3.77	25.51	6.72	7.19
1998	93.53	9.98	7.01	9.38	2.85	30.40	14.10	2.19	15.53	5.05	5.40
1999	97.67	10.34	10.75	8.98	2.19	24.39	14.54	2.20	15.13	4.39	4.49
2000	98.44	9.95	9.42	9.21	2.56	27.80	16.06	1.48	9.22	4.04	4.10

Source: *Ibid.*, table 137, corrected with reference to RBI, *Annual Report 2000*, appendix table VI.9.

a Unlike the BOP table 122, external debt stocks list (m<lt) trade credits separately from commercial borrowing.

b Non-resident Indian deposits here exclude non-repatriable rupee denominated deposits. Thus, the flows obtained by differencing the stock figures here will not correspond to balance of payments flows, quite aside from the currency valuation effect.

c Bonds are all securitized borrowings including net investment by 100 per cent debt funds of foreign institutional investors, and including the Resurgent India Bonds issue of 1998.

The decline was sharpest and most steady in trade credits. Short-term non-resident Indian deposits rose to touch a peak of nearly $ 4 billion before falling after 1997, in a clear response to the formal linking of deposit rates to the London Inter-Bank Offered Rate (LIBOR) established after that (this shows that whatever attempts were made to curb short maturities before that were not very successful). There are no balance-of-payments flow data on short-term non-resident Indian deposits (table 3). There are only the stock data which show a sharp decline after 1997, inclusive of the valuation effect.

Short-term trade credit inflows as recorded in the balance of payments (table 3) were never exceptionally large, of the order of $1 billion even in the pre-crisis year, 1990/91. In subsequent years these declined to negative flows, again only of the order of $1 billion at most in any year. However, these flows are complete only in respect of suppliers' credits. Short-term credits of less than six months' maturity through banking channels, backed by letters of credit, do not appear even in the residual "other capital" row, because commercial banks are not required to report trade credits of less than six months' original maturity, for which no foreign exchange approval is required.

The Bank for International Settlements (BIS) publishes external debt stock figures which do include short-term credits through banking channels. Despite this, total trade credits reported for India by the BIS are below the Indian figure. There are other areas of incomplete coverage in the BIS data.[2] This is unfortunate, since the BIS is the only source on short-term debt based on residual maturities. Thus the Indian official figures offer the only series available with full coverage of all debt, and, within the parameters of their limitations, they show a halving in the proportion of short-term debt by original maturity over the decade.

E. Returning flight capital

It is clear that there has been return of flight capital in the 1990s on a major scale, motivated by the progressive liberalization of the current account (including the legalization of gold imports already referred to), leading up to the August 1994 acceptance of IMF Article VIII status. By making possible legitimate purchases of foreign currency and thereby reducing the need for external holdings of foreign currency, current account liberalization has thus largely financed itself.

The fact of returning flight capital is acknowledged, but there are differences of opinion on the particular avenues used. One popular body of opinion holds that returning flight capital in India has been largely through export overinvoicing (export income throughout the 1990s was non-taxable; a first move towards phased taxation of export income was begun in April 2000). Somewhat confusingly, the impact of export overinvoicing is thought to be statistically evident, not so much in the current account itself, where export figures are entered as declared at customs, but in the capital account in the "other capital" row, where foreign currency receipts in excess of customs declarations are accommodated. The argument against that holds that the errors and omissions component of "other capital" is not large enough to suggest export overinvoicing on a massive scale. Another possible channel is through gold imports, although it is possible that transfers financing these have only moved to the formal from the informal channel, but continue to originate from earnings of non-residents rather than from flight capital of resident Indians.

Non-resident Indian deposits are among the capital account channels available for returning flight capital. The inflows into the non-repatriable rupee schemes in particular are thought to be evidence of flight capital return. The equity issues abroad (ADRs and GDRs) by Indian corporates and bond issues, most recently Resurgent India Bonds in late 1998, which raised about $4 billion, offer other avenues for flight capital return.

No official estimates are available of the stock of flight capital (Reddy, 2000, denied the existence of it) nor, needless to say, of inflows of returning

capital since 1991. A popular estimate is $9–10 billion a year, but this is not rigorously underpinned.

F. The foreign exchange market

The Indian foreign exchange market remains thin, as acknowledged in the *RBI Annual Report, 2000*. The price of the rupee has been market-determined ever since March 1993, with no official control over trends, as distinct from episodes of volatility during which the RBI does actively intervene. The rupee depreciated nominally, by around 7 per cent annually over the period 1995–2000 (see table 8). Although India escaped unscathed during the Asian crisis of 1997, insulated from contagion effects by the low exposure of foreign portfolio investors to the country, there have in recent years been many episodes of volatility – periods of sharp downward pressure on the rupee – which the RBI has actively intervened to correct. During the period 1999–2000, there were three such episodes: in end-May 1999, end-August 1999, and again in end-May 2000.

In correcting these, the RBI's intervention strategy relied essentially on aligning domestic short-term rates, in particular in the call-money market, with interest rates implicit in forward premiums, by using its levers of control over the liquidity in the system so as to remove incentives to arbitrage. The standard levers of control used by central banks anywhere, the bank rate and the cash reserve ratio to be maintained by banks with the central bank, have been augmented with a liquidity adjustment facility (LAF), implemented starting June 2000 in a phased manner, whereby liquidity is injected/removed from the system through reverse repo/repo auctions. The recommendations of the two Narasimham Committees have served as templates for financial sector reform in India, and the LAF was introduced on the recommendation of the second Narasimham Committee (Government of India, 1998; 1991).

The LAF will eventually completely replace the present set of mechanisms involving collateralized short-term lending facilities and a fixed rate repo provision. LAF auctions are conducted daily, and in August 2000 the

Table 8

INDIA: EXCHANGE RATES AND FINANCIAL SECTOR INDICATORS, 1990–2000

	1990/91	*1991/92*	*1992/93*	*1993/94*	*1994/95*	*1995/96*	*1996/97*	*1997/98*	*1998/99*	*1999/00*
Exchange rate *(Rs/$)*										
End period	19.64	31.23	31.24	31.37	31.5	34.35	35.92	39.5	42.44	43.62
Average	17.94	24.47	30.65	31.37	31.4	33.45	35.50	37.16	42.07	42.65
Commercial bank interest rates *(end-period) (per cent)*										
Deposit rate *(1 yr.)*	9.0	12.0	11.0	10.0	11.0	12.0	11.0	10.5	9.0	7.5
LIBOR *(1 yr.)*	8.5	6.3	4.2	3.6	5.6	6.2	5.8	6.1	5.5	5.7
(Dep. rate – LIBOR)	0.5	5.7	6.8	6.4	5.4	5.8	5.2	4.4	3.5	1.8
Inflation rate	13.4	13.6	6.8	8.3	9.9	8.2	10.2	7.2	9.0	5.0
Real deposit rate	-4.4	-1.6	4.2	1.7	1.1	3.8	0.8	3.3	0.0	2.5
Lending rates: Min.	16.0	19.0	17.0	14.0	..	..	..	..	..	..
PLR	..	..	..	..	15.0	16.5	14.8	14.0	12.5	12.3

Source: RBI, *Handbook of Statistics on Indian Economy, 1999*, tables 127, 156; supplemented by RBI, *Annual Report 2000*, appendix table I.2 and RBI, *Monthly Bulletin*; Government of India, *Economic Survey, 1999–2000*, table 5.3; and IMF, *International Financial Statistics for LIBOR*; average Jan./May for 2000.

Note: Deposit rates starting from 1995/96, and lending rates starting from 1994/95 were freed; the PLR came into being effective October 1994, with the rates here the officially reported averages across the five biggest public sector banks. Effective 29 October 1999, banks were freed from benchmarking to the PLR for certain categories of advances. Banks are required to prescribe a maximum spread over PLR since 1996/97, which they are free to determine. Inflation rates are from year/end values of the CPI for urban non/manual workers. LIBOR rates pertain to calendar year averages as reported in the source, overlapping with the Indian fiscal year for three of the four quarters.

tenor of the repos auctioned was extended from one day up to a maximum of seven days. At the same time, the players authorized to participate in repo auctions (i.e. to borrow from the RBI, and thus to get access to short-term liquid funds) have been steadily expanded to include non-bank entities, after a ban for some years on repos as a consequence of a scam in 1992 involving the misuse of funds obtained through repos. The set of approved market makers in both the primary and secondary markets in government securities, termed primary dealers, now numbers 15. An attempt is being made to impose internal control systems and capital adequacy requirements on non-bank primary dealers so as to place them on par with bank primary dealers.

Even with all the widening in levers of control over liquidity in the system, the RBI has had to resort to ad hoc direct tampering with interest rates on exports (export credit rates are still controlled by the RBI), and surcharges on import finance (which are not controlled, hence the use of surcharges) in order to achieve targeted outcomes in the foreign exchange market.

The abrupt alteration in these during a volatility episode in mid-2000 was seen as a hark back to an earlier era of instability in policy parameters. There was particular resentment over the halving in August 2000 of both balances in, and permissible accretions to, the exchange earners' foreign currency (EEFC) accounts that exporters could maintain abroad. The EEFC Scheme introduced in 1992 allowed exporters for the first time to retain a prescribed percentage of their receipts in foreign exchange with an authorized dealer in India. The August 2000 ruling was reversed in October, with, however, retention of the new constraint introduced with that ruling, confining EEFC holdings to non-interest-bearing current accounts.

A forward market for foreign exchange now functions. The development of the forward market was given a major impetus with first-time permission in April 1997 for forward contracts without documentary evidence of underlying exposure, and beyond six months, subject, however, to a declaration of exposure and fairly stringent documentation. At the same time, the case-by-case approval of currency swaps was replaced by permission for authorized dealers to operate "swap books" within their

open position limits. Forward cover for portfolio investments has been permitted starting in June 1998, extending in April 1999 to essentially the full extent of exposure (appendix A).

G. Financial sector reform

Starting from a pre-reform scenario in which all deposit and lending rates were prescribed, the interest rate deregulation introduced in October 1994 has left only a single vestigial deposit rate still set by the RBI on savings (non-term) deposits. Banks are now free even to offer floating rates on term deposits. However, there remain many more controls on lending rates, on small loans (up to Rs 200,000) and subsidized, differential rate of interest (DRI) loans to deprived sections, and on export credit, which are prescribed at flat rates or capped. Lending rates on other loans are capped at a maximum spread over the prime lending rate (PLR), with each bank free to set both the benchmark PLR and the spread. Since October 1997 banks have been free to set term-linked PLRs, and since October 1999 they have also been freed from PLR benchmarking for certain categories of advances.

Interest rate deregulation found banks in India with poor in-house risk-assessment abilities. Indeed, the requirement of a maximum spread (as set by each bank) over PLR was introduced because banks' inability to assess risk for sub-prime borrowers led initially to very large margins over the PLR, far in excess of the underlying credit risk. The only formal liquidity requirements in place (table 9) are the cash reserve ratio (CRR) and the statutory liquidity ratio (SLR). During the pre-crisis period, the former was set at 15 per cent, while the latter, which provides a captive market for government securities to finance fiscal deficits, was set at 38.5 per cent. Both the CRR and SLR have been brought down in tandem with interest rate deregulation, although banks continue to subscribe to risk-free government securities well in excess of the present SLR of 25 per cent because of continued in-house lacunae in credit and market risk assessment capabilities. The scrapping of CRR and SLR on inter-bank borrowings has reduced friction in the call-money market and has led to the Mumbai Inter-

Table 9

INDIA: MONETARY CONTROL LEVERS, 1990–2000

(Per cent end period)

	Bank rate	*Cash reserve ratio (CRR)*	*Statutory liquidity ratio*
1990/91	10.0	15.0	38.5
1991/92	12.0	15.0	38.5[a]
1992/93	12.0	15.0	37.3[a]
1993/94	12.0	14.0	34.8[a]
1994/95	12.0	15.0	31.5[a]
1995/96	12.0	14.0	31.5[a]
1996/97	12.0	10.0	31.5[a]
1997/98	10.5	10.3	25.0
1998/99	8.0	10.5	25.0
1999/2000	8.0	9.0	25.0

Source: RBI, *Handbook of Statistics on Indian Economy, 1999*, table 36, supplemented by RBI, *Annual Report 2000*.

Note: For change after 1 April 2000, see box in text.

a These were on the stock of net liabilities on specified dates, with a reduced rate on incremental liabilities beyond that date.

Bank Offered Rate (MIBOR), which could develop into an effective benchmark (see also Williamson and Mahar, 1998).

The RBI issued a detailed set of guidelines for putting in place an asset-liability management (ALM) system for commercial banks in February 1999, and for other financial institutions in January 2000. The guidelines are equipped with periodic reporting requirements to the RBI, albeit without statutory conformity requirements or penal clauses. Meanwhile, latitude in respect of fund deployment continues to widen. Since the latest liberalization in early September 2000, banks have been permitted 5 per cent of total outstanding advances in equity and equity-linked instruments in the form of shares, convertible debentures, and units of mutual funds. This is expected to deepen equity markets, reduce the dominance of external portfolio investors and lead to a revival of slow-growth stocks.

A large number of initiatives have been undertaken to reduce friction in the banking system, in payments settlements for both domestic and cross-border settlement. This will, among other beneficial effects, have a lowering effect over time on rates at the short end of the market for liquidity. A major advancement towards enabling hedging of interest rate risks was made with the issue of guidelines in July 1999 for two rupee derivative instruments, forward rate agreements (FRAs) and interest rate swaps (IRS), permitting even market making participation without underlying exposure, but they are confined to plain vanilla contracts without explicit or implicit option features such as caps/floors/collars.

Permission to hedge commodity price exposures through participation in futures or options contracts in international exchanges is now granted by the RBI on a case-by-case basis. The recognition of the loss suffered in 2000 on account of unhedged imports of oil at a time of rising international oil prices is likely to speed up the pace of deregulation on this front. Major obstacles, however, are the large public sector presence in international commodity imports and internal constraints on their functioning on account of audit and vigilance regulations.

The traditional division in India between banks, as providers of working capital, and three term-lending financial institutions, as providers of project finance, was removed some years ago. The financial institutions are gradually being brought under the regulatory mantle of the RBI. At the smaller end of the size spectrum, non-bank financial institutions, have been brought under prudential control for the first time through the Reserve Bank Amendment Act of 1997, with a minimum capital requirement for registration and a higher requirement for the entitlement to accept fresh public deposits.

The share of non-performing assets (NPAs) in total bank loans has been a cause of worry for some years. Long time series on NPAs are not possible because there has been a phased alteration of the definition of NPAs completed only in 1994/95 (see Rajaraman, Bhaumik and Bhatia,1999). The most recent figures available relate to end-March 2000, and show a gross NPA percentage of 12.8 per cent, and a corresponding net figure of 6.8 per cent (see RBI, 2000). Although lower than the figures recorded at

end-March 1997 of 15.7 per cent (gross) and 8.1 per cent (net), these are high figures by any standards, and clearly far removed from the target of 5 per cent gross set by the Tarapore Committee for end-March 2000 as a prior requirement for full capital account convertibility (see RBI, 1997). A particularly interesting feature of NPAs in India is the enormous cross-sectional variation between banks as a function of vintage, ownership and region of operation (for regression results explanatory of cross-sectional NPA variations for 1996/97, see Rajaraman, Bhaumik and Bhatia, 1999).

A menu of options for the NPA problem has been offered to the banking system through Debt Recovery Tribunals and Settlement Advisory Committees. But these are hampered by an inadequate legal infrastructure (see RBI, *Report on Currency and Finance, 1999–2000*). The Government of India Budget for 2000/01 in February 2000 announced plans to establish a Financial Restructuring Authority to oversee recapitalization of weak banks in the system.

The minimum capital to risk assets ratio has been raised from 8 to 9 per cent effective as of 31 March 2000. The Government has announced its intention to dilute its shareholding in public sector banks, which dominate the banking sector, to 33 per cent, and banks are being encouraged to raise the requisite capital through the market rather than through strategic tie-ups.

The Insurance Regulatory and Development Authority Act was passed in 1999, whereby banks and non-bank financial companies are permitted to enter the insurance market, breaking a government monopoly in place for many decades in both life and non-life segments.

H. Conclusions

It is difficult to disentangle the essence of India's approach to capital account management through the thicket of liberalization notifications that have been issued in a steady stream since the onset of the opening up of the economy in July 1991, bearing the Indian policy hallmark of gradual

incrementalism. What is clearly in evidence, however, is the monotonicity of the direction of movement towards liberalization of cross-border capital flows.

The capital account today in India carries convertibility for non-residents but not for residents. Capital inflows, whether in the form of FDI or portfolio investment, are granted full freedom of repatriation. There does exist a non-repatriable rupee deposit scheme for non-resident Indians, but it is an option exercised by the depositor, co-existing with repatriable schemes, and is clearly an invitation to returning flight capital. Residents, on the other hand, are not permitted to hold foreign currency accounts, except for exporters and other exchange earners in EEFC accounts. Outward portfolio investment flows from non-corporate residents are prohibited. Outward investments by corporates through share swaps are permitted under the new Foreign Exchange Management Act, effective from 1 June 2000, without approval subject to sectoral caps, and with approval otherwise. Under the new Act, contraventions of the ban on outward capital flows are treated as a civil, rather than criminal, misdemeanour, a major alteration in the legal regime governing the capital account.

Capital account liberalization in India has been slow and cautious. The 1997 Report of the RBI (Tarapore) Committee recommended a three-year phased move to full convertibility by 2000 subject to achievement of macro targets (see appendix A) for the (overall) fiscal deficit, inflation, and the debt-service ratio, apart from targets for financial sector indicators. Of these, the fiscal deficit target of 3.5 per cent of GDP in 1999/2000 is nowhere near actuals for the year, which were 5.6 per cent for the central Government alone, and 9.9 per cent combining central and state governments.

The institutional changes needed to improve regulation of the stock market without strangulating government control were introduced at the outset, but arrangements to dematerialize transactions in the share market were slow to follow. It is only as recently as April 1999 that the stock transactions included in the major indices were fully dematerialized. This reduction of friction in trading sets the stage for the development of stock market derivatives.

The reform of the economy was motivated by an external liquidity crisis, with reserves at a low of $1 billion. At end-March 2000, reserves stood at $38 billion, a first attestation of the success of the reform process.

The introduction of current account convertibility in 1994 indisputably brought flight capital back into the country, but there is some dispute as to whether the avenue of return was the current account (through the financing of newly- permissible gold imports and through export overinvoicing), or the capital account (through the special deposit schemes and periodic external bond issues open to non-resident Indians). Whether fuelled by returning flight capital or not, the non-governmental flows on capital account amounted in the mid-1990s to well in excess of 100 per cent of the current account balance, so that until as recently as 1997 the capital account management problem was one of too much rather than too little.

FDI was not among the channels that contributed to the mid-decade surge. Notwithstanding steady liberalization in terms of required approvals and export obligations attached to dividend repatriation, FDI has been slow to respond, hampered, not as earlier by national entry obstacles, but by the continuing structural rigidities of the Indian economy, and by an absence of coherence between policy at the national level and procedural obstacles at the local level (Rajaraman, 1997). It was portfolio inflows, from both foreign institutional investors and external ADR/GDR share capital issues, that contributed to the mid-decade surge, responding to full repatriability with no lock-in periods.

The problem of excess capital inflows in the mid-1990s was tackled by restricting the end-use of equity capital raised through ADR/GDR issues and external commercial borrowings to foreign currency expenditure on imports, and by prohibiting use for rupee expenditure within the country (these stalled inflows were recorded as net outflows in the "other capital" row). As a technique of capital account management it was far superior to a more market-based approach of free entry with sterilization, and demonstrates the effectiveness of capital barriers in handling imbalances on the capital account. As the capital inflow surge ceased, the end-use restrictions were lifted. Today there are no such restrictions on ADR/GDR

equity capital or on debt inflows above prescribed floor maturities. These floor maturities on non-trade external commercial borrowings have been effectively used to contain non-trade short-term debt.

A peculiar feature of external debt inflows into India is the menu of deposit schemes offered to non-resident Indians, which during the 1990s have seen a decisive shift towards rupee-denominated, and, within rupee-denominated, non-repatriable deposits (introduced in 1992). With non-repatriable rupee deposits, only the interest is repatriable (with currency risk). The foreign currency non-resident Indian deposit schemes lost their arbitrage advantage when the ceiling on deposit rates in 1997 was set at LIBOR. The first formal discrimination against short-term inflows within the non-resident Indian scheme in April 1998 was clearly motivated by the Asian currency crisis of late 1997. The impact on the short-term share of non-resident Indian deposits is clearly visible. With the raising of the minimum maturity on such deposits to one year in October 1999, short-term non-resident Indian deposits have been done away with altogether.

On non-repatriable, non-resident Indian rupee deposits, the principal payable at maturity is contra-entered in the current account as private transfers. This accounting artefact has been one of the two major causes of the extraordinary increase in private transfers to annual inflows of around $15 billion today. The second is of course the legalization of gold imports, which has resulted in the restoration of private transfers to the formal channel from informal channels, not only as contra-entries in the first instance to legal gold imports, but also as secondary effects of the reduced attractiveness of exchange rates through the informal *hawala* channel.

The only long-term series available at the time of writing is the official Indian series from which it seems possible to conclude that there has been an indisputable fall in short-term trade credit since the early 1990s. The issue of what has happened in the last few years to short-term trade credits remains unresolved. BIS figures of short-term debt by residual maturity are uncomfortably inconsistent with the Indian figure by original maturity in terms of both level and direction of movement, but since the BIS figures exhibit evidence of incompleteness in respect of both the total debt stock and total trade credits, they are not immediately acceptable as the correct

source on the direction of movement in recent years in respect of short-term trade credit.

Not surprisingly, the market for foreign exchange remains thin, with periods of volatility that have seen RBI intervention through not merely the use of monetary levers of control over liquidity in the system, but also ad hoc tampering with rates charged on export credit, which remain under administrative control, along with surcharges on import finance, and a halving (albeit short-lived) of balances in, and permissible accretions to, external (EEFC) accounts, as recently as August 2000. While none of these can even remotely be characterized as reversing the direction of the movement towards capital account liberalization, the sudden reversal of policy parameters, for example on EEFC accounts, is seen as a throwback to the pre-reform era of policy unpredictability.

If there should be another and more pronounced surge in foreign capital inflows, the process of liberalizing capital outflows may be carried further forward, beginning with corporate investment, and proceeding eventually to non-corporate portfolio outflows. In the interim, while the reduction in financial market friction is in itself an encouragement to capital inflows, it is the underlying real economy, and the continued fiscal, infrastructure and labour market bottlenecks that are in need of urgent reform.

III. MALAYSIA

A. Introduction

Malaysia prior to the Asian crisis of 1997 had had a long history of openness on both current and capital accounts, unique in the developing world, and ahead even of some developed countries. Current account convertibility under Article VIII of the IMF was accepted as far back as November 1968, and the Malaysian ringgit was among the first currencies to go into a float in May 1973, after the collapse of the Bretton Woods system (see appendix B). With the resulting need for hedging instruments,

the greater availability of these in more sophisticated offshore financial markets led to the development of an offshore ringgit market, located principally in Singapore. Malaysian exports and imports were ringgit-denominated, and the burden of hedging was transferred to non-resident counterparties in the offshore market.

Capital flows were liberalized in three major moves: in 1973, along with the ringgit float; in 1987, as part of a policy package to pull out of the mid-1980s recession; and in 1994, as part of a package of measures designed to handle excessive capital inflows. The Malaysian response to downward pressures on the exchange value of the ringgit during the Asian crisis of 1997 reversed this traditional openness. The long history of a floating exchange rate was abruptly terminated by a ringgit peg at 3.8 ringgit to the dollar on 2 September 1998, a day after the announcement of a package of financial policy measures. These measures were designed to kill the offshore ringgit market and to prevent all access by non-residents to ringgit, as well as to obstruct outward speculative flows of capital from residents. They also aimed to drive a further wedge between the foreign exchange market and the domestic imperative to lower interest rates which had been driven up during the crisis by the imposition of a 12-month stay on portfolio outflows, though only in respect of the principal. Meanwhile, interest and dividends remained freely repatriable and the current account remained free, apart from checks on porosity by requiring repatriation of export proceeds within six months from the date of export. There was also a limit on exports of foreign currency by residents, which functioned as a cap on invisible outflows.

As a package, the Malaysian retreat from capital account convertibility has to be among the major milestones in recent economic history. It challenged the prevailing economic orthodoxy, and was orthogonal to the recovery packages imposed by the multilateral financial institutions on other East Asian countries similarly afflicted. By not curtailing capital account convertibility, and therefore not severing the link between monetary policy and exchange markets, the recovery measures meant tight money and high interest rates, with devastating consequences for the domestic real economy in these neighbouring countries.

In what follows, capital account management in Malaysia prior to 1997 is dealt with in section III.B, and the crisis itself in section III.C. The capital controls of 1998/99 are dealt with in section III.D, and the post-crisis financial sector reform measures in section III.E. Section III.F concludes.

B. Capital account management prior to 1997

Table 10 shows the Malaysian balance of payments in the 1990s. The two most striking features of the Malaysian current account were: (i) the consistently positive, though small (except in 1998, a recession year), balances on merchandise trade, with large export earnings at $70–80 billion towards the end of the decade matched by an equivalently large import bill; and (ii) steady outflows on invisibles, now close to $10 billion annually. The current account has thus always been in deficit (except in 1998). In fact, the current account deficit averaged around 7 per cent of GDP in the three years preceding the crisis.

Buoyant capital inflows more than compensated for the deficit on current account. Indeed, in the first half of the 1990s, non-official capital inflows exceeded the current account deficit by a factor of 4.5, and foreign reserves jumped from $11 billion at end-1991 to $28 billion at end-1993 (table 11), as the central bank, Bank Negara Malaysia (BNM), sought to contain the appreciation of the ringgit. The short-term component of inflows was especially large, at around $5 billion in both 1992 and 1993. Inward capital controls were introduced in 1994 but withdrawn within the year (appendix B). These restrictions, which covered external borrowing, portfolio investment in Malaysian securities, and forward and swap transactions by banks, succeeded in reducing non-official capital inflows, and changed the direction of short-term flows from inflows of $5.4 billion in 1993 to outflows of $3.2 billion in 1994 (table 10). The temporary capital controls of 1993/94 were a minor blip, however, in what was, until September 1998, an unfettered regime for external capital inflows and relatively few constraints on capital outflows. Indeed, the response to the excess inflows of 1994 included a further relaxation on outward portfolio investment in February 1994.

Table 10

MALAYSIA'S OVERALL BALANCE OF PAYMENTS, 1990–1998

($ billion)

	Item	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*
I.	**Merch. trade balance (A-B)**	2.62	0.53	3.38	3.20	1.70	0.04	4.01	3.65	17.59
	A. Exports, f.o.b.	28.64	33.54	39.62	45.99	56.61	71.56	76.86	77.39	71.87
	B. Imports, c.i.f.	26.02	33.01	36.24	42.79	54.91	71.53	72.85	73.74	54.28
II.	**Invisibles, net**	-3.54	-4.76	-5.59	-6.28	-7.33	-8.67	-8.47	-9.28	-8.21
III.	**Current Account (I+II)**	-0.92	-4.23	-2.21	-3.08	-5.63	-8.63	-4.46	-5.62	9.38
	/GDP *(per cent)*	-(2.09)	-(8.62)	-(3.73)	-(4.60)	-(7.56)	-(9.73)	-(4.42)	-(5.61)	(12.93)
IV.	**Capital account (A to D), net**	2.90	5.48	8.78	14.44	2.48	6.88	6.94	1.75	0.89
	A. Private long-term capital	2.33	4.00	5.18	5.01	4.12	4.17	5.08	5.14	2.16
	B. Official long-term capital	-1.05	-0.24	-1.13	0.38	0.33	2.45	0.30	1.65	0.54
	C. Private short-term capital	0.50	1.87	4.69	5.41	-3.23	1.01	4.10	-4.59	-5.26
	D. Errors and omissions	1.12	-0.14	0.03	3.64	1.27	-0.76	-2.53	-0.45	3.44
V.	**Overall Balance (III+IV)**	1.98	1.25	6.57	11.36	-3.15	-1.76	2.48	-3.87	10.27
VI.	**Reserves and related items**	-1.98	-1.25	-6.57	-11.36	3.15	1.76	-2.48	3.87	-10.27
	IV [A+C+D]/III *(per cent)*	(430)	(135)	(448)	(456)	(38)	(51)	(148)	(2)	..

Source: Bank Negara Malaysia (BNM), *Monthly Statistical Bulletin*, June 2000, tables V.6, VI.3 and VIII.1. Figures for 1999 were available only upto Q3.

Note: Figures in ringgit converted to US dollars using period average exchange rates (see table 12). The balance of payments figures for private long-term capital include external borrowings and accrued earnings on FDI; and are net of FDI outflows. There need therefore be no absolute nor directional correspondence between these figures and the sum of gross FDI inflows and net portfolio inflows in table 2. Figures in parentheses in the last row present the ratio of total private capital inflows to the current account deficit in percentage terms; there is therefore no figure for 1998 which had a current account surplus.

Table 11

MALAYSIA: EXTERNAL RESERVES, 1990–2000

($ billion)

End of period	International reserves			
	Special drawing rights	IMF drawing rights	Gold and foreign exchange	Gross international reserves
1990	0.20	0.23	9.59	10.02
1991	0.21	0.26	10.72	11.19
1992	0.11	0.33	17.68	18.12
1993	0.12	0.31	27.88	28.31
1994	0.14	0.40	26.13	26.66
1995	0.15	0.68	24.28	25.11
1996	0.17	0.69	26.85	27.70
1997	0.12	0.42	14.67	15.21
1998	0.21	0.63	25.33	26.17
1999	0.09	0.83	29.94	30.86
2000 (June)	0.09	0.89	33.01	34.00

Source: BNM (1999), tables II.6 and II.7, updated with BNM, *Monthly Statistical Bulletin*, June 2000.
Note: IMF drawing rights refer to Malaysia's quota in the International Monetary Fund, less IMF holdings of Malaysian currency.

The following constituted the configuration of capital account management prior to the East Asian crisis of 1997:

- *Portfolio capital inflows* by non-residents were freely permissible into all types of Malaysian financial instruments (bonds, equities, bank deposits, and all money market and derivative instruments).

- *Primary issue of securities*, whether abroad by residents or in Malaysia by non-residents, required prior approval.

- *Portfolio capital outflows* were unrestricted for individual residents and for corporates with no domestic borrowing; for those with domestic borrowing, prior approval was needed for remittances in excess of 10 million ringgit per corporate group per year.

- *FDI inflows* were not merely freely permissible, although with prior approval in a few sectors, but were welcomed with tax incentives and other kinds of incentives.

- *FDI outflows* were freely permissible.

- *External borrowing* was unrestricted for authorized dealers, including investment banks, with no restrictions on on-lending to residents or non-residents, subject to prudential limits on net open positions. Direct external borrowing by residents was subject to approval above sanctioned limits.

Overall, the package added up to a well-structured liberalization of capital flows, with limits and checks at critically necessary points, such as at the point of primary issue of securities, both inward and outward; on domestically leveraged large outward portfolio flows; and on direct external borrowing by non-institutional residents (see also Cole, Scott and Wellans,1995).

The second major push in 1987 towards liberalizing the external capital flows regime was followed by financial sector reform and strengthening of prudential controls during the period 1989–1995. New legislation in 1989 strengthened regulatory and prudential provisions relating to loan classification, provisioning and disclosure, capital adequacy, and exposure risk, and extended the regulatory mantle of Bank Negara beyond commercial banks to include finance companies and merchant banks. Credit rating agencies were established, and measures were taken to deepen financial markets – principally the inter-bank money market, the foreign exchange market, and in particular the stock market – with the establishment of a Securities Commission in 1993, which led to improvements in trading and settlement systems. The only financial market which remained relatively underdeveloped was the bond market, because of the surprising retention of high minimum liquid asset requirements for banks (similar to the Indian statutory liquidity ratio).

Rate deregulation accompanied prudential control. By February 1991, banking institutions were free to set deposit rates and a base lending rate

(BLR), subject to a standardized formula benchmarked on deposit rates. The lack of incentive in such a system for banks to improve their internal efficiency was corrected in November 1995, when banks became free to set a BLR subject to a ceiling, benchmarked on the three-month inter-bank rate. A cap of 4 per cent above BLR remained on the maximum lending rate.

The sound configuration of capital account convertibility in Malaysia is especially important to keep in mind against the background of the capital controls introduced after the external account crisis. These controls were introduced in a country that had a background of prudently liberal, rather than reckless, capital account openness.

The strength of Malaysian macro fundamentals has already been commented on in section I. Malaysia was a country with high growth rates, of not less than 9 per cent in any year after 1988; the crisis of 1997 was the first year in a whole decade which saw growth dipping well below 9 per cent, to 7.3 per cent. This growth record was accompanied by remarkably low rates of inflation, at well under 5 per cent, a high savings rate in excess of 40 per cent, fiscal surpluses on current account, and remarkably low levels of external debt – both total and short-term – as a percentage of exports.

C. *The crisis of 1997*

Table 12 shows the stability in the value of the ringgit against the US dollar in the 1990s. There were some upward pressures on the ringgit mid-decade, with a rise in its value from 2.7 ringgit to the dollar in 1990 to a steady 2.5 ringgit to the dollar in 1994–1996 – three years immediately preceding the crisis – despite high current account/GDP ratios.

For a country as open as Malaysia, with exports equal to or greater than GDP, the exchange rate is the most important price. For that price to be plunged by forces beyond its control was a critical vulnerability that the country could not afford to ignore. Yet another vulnerability is the

Table 12

MALAYSIA: EXCHANGE RATES AND EXPORTS, 1990–2000

	1990	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*2000*
Exchange rate *(RM/$)*											
End period	2.7	2.7	2.6	2.7	2.6	2.5	2.5	3.9	3.8	3.8	3.8
Period average	2.7	2.8	2.6	2.6	2.6	2.5	2.5	2.8	3.9	3.8	3.8
Shares in total manufactured exports *(per cent)*											
Electronic and electrical total	56.6	58.0	58.2	61.5	63.5	65.7	65.8	66.5	68.1	71.8	72.0
(of which electronic):	32.8	31.8	32.5	34.4	35.4	38.6	40.8	45.1	48.0	53.3	53.0
Semiconductors	24.9	21.3	20.1	20.9	20.7	22.5	22.4	22.8	22.9	24.1	21.8
Electronic equipment	7.8	10.5	12.4	13.5	14.8	16.0	18.4	22.3	25.1	29.2	31.2
Total manfd. exports	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: *Ibid.*, tables V.6 and VIII.5.
Note: The figures for the year 2000 relate to the period January–May 2000.
RM = Malaysian ringgit.

excessive dependence on electronics in manufactured exports, which account for 85 per cent of the total export basket. Electronic and electrical exports accounted for more than half of total manufactured exports at the beginning of the 1990s, and by end-decade the share had risen to more than 70 per cent. Malaysia was not unique among its neighbours in this respect. The figures for the first half of 2000 show shares for electronics exports of 58 per cent (Malaysia), 56 per cent (Singapore, excluding re-exports), 45 per cent (Taiwan Province of China) and 37 per cent (Republic of Korea).

A nominal depreciation of the ringgit to some degree was clearly necessary to maintain export competitiveness at a time of steep currency depreciation in the Asian competitive neighbourhood; but it was the accompanying rise in domestic interest rates with the build-up of speculative demand for the ringgit that was the major real threat, and clearly called for containment. The challenge posed was the need to reduce interest rates without precipitating a further decline in ringgit value.

After years of positive portfolio inflows, there was a net outflow in 1997 of $10 billion (table 2), although FDI continued to hold steady, with inflows of $2.4 billion in 1997. Speculative pressure on the ringgit built up, financed by ringgit obtained offshore. This was initially sought to be contained in August 1997 through an offer-side limit on currency swaps (sale of ringgit) with non-resident banks, fairly generously set at $2 million per bank. This was a very limited response to the speculative pressures of 1997, and the swap limit did very little to contain the slide in the ringgit (which fell to a low of 4.88/$ in January 1998) or the decline in foreign exchange reserves to $15 billion by end-December 1997.

Although contagion without any aggravation from weak fundamentals could entirely have led to external crisis, there was an export deceleration in 1997, after sustained export growth since 1990 of about 18 per cent annually in US dollars (figures in table 10). There also appears to have been some structural deterioration in the quality of bank loan portfolios in Malaysia as a result of rapid credit expansion and the collapse of the asset bubble, notwithstanding the controls in the system on loan quality. Table 13 shows that after a long period of monotonic decline in the percentage of

Table 13

MALAYSIA: FINANCIAL SECTOR INDICATORS, 1990–2000

(Per cent)

	1990	1991	1992	1993	1994	1995	1996	1997		1998		1999		2000	
				Gross				Net	Adj. gross	Net	Adj. gross	Net	Adj. gross	Net	Adj. gross
Non-performing/ total loans (end-period)															
Commercial banks	20.1	15.7	14.7	12.6	6.9	4.9	3.6	3.2	10.5	5.9	15.3	5.7	16.2	5.5	14.4
Finance companies	21.3	15.8	15.6	13.0	9.9	6.6	4.7	6.5	13.9	11.9	28.8	8.6	23.9	8.9	23.2
Merchant banks	12.6	8.7	6.9	5.0	9.5	7.8	1.7	3.5	10.6	10.9	22.5	12.3	27.0	12.5	27.8
Banking system (overall)	20.0	15.4	14.5	12.3	7.8	5.5	3.7	4.1	9.7	7.5	18.9	6.6	18.4	6.5	16.9
Commercial bank interest rates (average year-end)															
Deposit rate (1 yr.)	7.2	8.2	7.8	6.3	6.2	6.9	7.3	.	9.3	.	5.7	.	4.0	.	3.9
LIBOR (1 yr.)	8.5	6.3	4.2	3.6	5.6	6.2	5.8	.	6.1	.	5.5	.	5.7	.	6.9
(Dep. rate - LIBOR)	-1.2	1.9	3.6	2.7	0.6	0.6	1.5	.	3.3	.	0.2	.	-1.7	.	-3.0
Inflation rate	3.1	4.4	4.7	3.6	3.7	3.4	3.5	.	2.7	.	5.3	.	2.8	.	1.3
(Real deposit rate)	4.1	3.8	3.1	2.7	2.5	3.5	3.8	.	6.6	.	0.4	.	1.2	.	2.6
Lending rates															
Base (BLR)	7.5	8.7	9.3	8.2	6.8	8.0	9.2	.	10.3	.	8.0	.	6.8	.	6.8
Average	9.0	9.7	10.3	9.7	8.2	9.3	10.1	.	11.5	.	9.7	.	7.8	.	7.7

Source: *Ibid.*, tables III.15-III.18, V.1 and VI.13 for Malaysia; IMF, *International Financial Statistics* for LIBOR; average January–May for 2000.

Note: • The NPL figures for 2000 relate to end-May. The interest rates for 2000 are for June 2000.

• Beginning December 1997, non-performing loans were reported net, as a percent of net loans. To regain comparability with earlier years, the adjusted gross share of gross loans is constructed from reported figures of provisioning. Further, in the first six months of 1998, the period of non-performance for the reported figures was shortened from six to three months. After mid-1998, both sets of figures are reported. The figures in this table for 1998 and subsequent years are the six-month figures, to retain comparability with earlier years.

• The inflation rate is from the Consumer Price Index (CPI).

non-performing loans (NPLs) in the banking system as a whole, from 20 per cent in 1990 to 3.7 per cent in 1996, there was a rise to 4.1 per cent in the *reported* figure for 1997. This figure, however, understates the true increase because of the switch in the official reporting system from gross to net shares starting in December 1997 (NPLs also saw other definitional volatility over the period; see notes to table 13). Using the officially reported figures for loan provisioning, the adjusted gross share at end-1997 was close to 10 per cent, and by end-1998 this had risen to 19 per cent (see also Ghani and Sood, 1999).

The early effects of depreciation pressures and ringgit selling were felt in the offshore ringgit market. Speculative demand for ringgit for conversion into dollars in anticipation of a crash in ringgit value led to a dramatic rise in offshore ringgit deposit rates, which by April 1998 had risen above 30 per cent. This was transmitted to the domestic market through capital outflows in response to the rise in offshore ringgit rates.

Domestic ringgit interest rates rose in response (table 13). The 12-month deposit rate towards end-1997, at 9.3 per cent, offered a real return to depositors of 6.6 per cent over what remained a low inflation rate, and the excess over the 12-month dollar LIBOR rose to 3.3 per cent. The average lending rate by the end of 1997 had risen to 11.5 per cent, in a country where the average lending rate had not risen above 10 per cent after financial restructuring, and this despite the November 1995 freeing of the BLR of banks subject to a cap (see appendix B). Real contraction followed. The real growth rate of the economy in 1998 worsened steadily to -10.1 per cent in the third quarter. This in turn led to a deterioration in bank loan portfolios. However, the differential impact of recession on the different subsectors of the banking system show that the incidence of structural weakness within the system was not uniform. The increase in NPLs was sharper among merchant banks and finance companies than among commercial banks. By the end of 1998, finance companies and merchant banks had (net reported) NPLs of nearly 12 and 11 per cent respectively, corresponding in gross terms to 29 and 22.5 per cent respectively (table 13, for the extended period up to 2000, see table 14).

Table 14

MALAYSIA: SHARE OF PROPERTY SECTOR IN NON-PERFORMING LOANS, 1998–2000

(Per cent)

	December 1998	*December 1999*	*March 2000*
Commercial banks			
Construction	14.0	14.7	14.8
Purchase of residential property	8.1	10.4	10.6
Purchase of non-resid. property	6.4	6.9	7.1
Real estate	7.0	5.9	6.3
Total property	35.5	37.9	38.8
Finance companies			
Construction	8.6	13.6	16.8
Purchase of residential property	5.5	8.3	9.2
Purchase of non-resid. property	7.2	8.4	9.3
Real estate	9.5	3.8	4.1
Total property	30.9	34.0	39.4
Merchant banks			
Construction	31.7	22.6	26.4
Purchase of residential property	0.0	0.7	0.8
Purchase of non-resid. property	1.3	2.0	2.6
Real estate	8.5	11.1	11.3
Total property	41.6	36.4	41.0

Source: *Ibid.*, tables III.19-III.21.

D. The capital controls of 1998–1999

The measures introduced on 1 September 1998 (see appendix B) were designed to:

- Kill the offshore ringgit market, by prohibiting transfer of funds into the country from externally held ringgit accounts, except for investment in Malaysia (excluding credit to residents) or purchase of goods in Malaysia. Since the offshore ringgit market, like any offshore market, could only function through externally held ringgit accounts in correspondent banks in the territory of the currency, the measure immediately rendered offshore ringgit deposits dysfunctional. Offshore

banks required access to freely usable onshore ringgit bank accounts to match their ringgit liabilities, and the new ruling eliminated free usability. Holders of these deposits were given a month within which to repatriate them to Malaysia. But it is important to note that this was not a requirement so much as a consequence of the controls on external ringgit accounts. This eliminated a major source of ringgit for speculative buying of US dollars in anticipation of a ringgit crash. A corollary measure, demonetization of large-denomination ringgit notes was announced, and later followed through, so as to curb the circulation of ringgit outside Malaysia.

- Close off access of non-residents to domestic ringgit sources by prohibiting ringgit credit facilities to them, requiring that all trade transactions be settled in foreign currencies, and mandating authorized depository institutions through which alone transactions in ringgit-denominated financial assets became permissible.

- Close the offshore market in Malaysian shares conducted through a mechanism known as the Central Limit Order Book (CLOB).

- Obstruct speculative outward capital flows by imposing the requirement of prior approval for residents to invest abroad in any form, and setting tight limits on exports of foreign currency by residents for other than valid current account purposes.

- Protect the value of the ringgit and shore up foreign exchange reserves by requiring repatriation of export proceeds within six months of the date of export.

- Drive a further wedge between the foreign exchange market and the imperative need of the hour for monetary easing, and thus regain monetary independence by imposing a 12-month stay on outflows of external portfolio capital (only the principal, interest and dividend payments were freely repatriable).

International rating agencies responded uniformly to the capital control measures by downgrading Malaysia's credit and sovereign risk ratings. As

the success of the package became undeniable, it was attributed to environmental factors, among them:

- Adequacy of foreign exchange reserves; and
- The underlying strong fundamentals of the Malaysian economy.

What is notable about the package was its thoroughness, and the clever choice of policies designed to control foreign exchange outflows and speculation against the ringgit by non-residents and residents. It was thus the absence of discrimination against foreign investors, the clear evidence of sound economic logic underlying the package, and the effectiveness of its enforcement by Bank Negara, which accounted for the success of the capital controls as much as the enabling environment and the underlying strength of the Malaysian economy.

The severing of the link between domestic interest rates and the external sector was a major motivation underlying the entire exercise. The statutory reserve ratio (SRR) was brought down sharply from 13.5 per cent – to which it had been raised in 1996/1997 to contain liquidity in the system as part of an initially orthodox response to downward pressures on the currency – to 4 per cent in 1998, where it now remains (table 15). The benchmark for setting the ceiling on the base lending rate (BLR) of banks, hitherto the three-month inter-bank rate,[3] was further shifted to the BNM intervention rate, with the same formula as before, so as to enhance BNM leverage over lending rates, with the permissible margin above the benchmark reduced from 2.5 to 2.25 percentage points. There was also a reduction in the cap on the maximum lending rate, which was reduced for the first time since financial deregulation, from a spread of 4 per cent above the BLR to 2.5 per cent. The impact of these reductions is clearly visible in table 13. The average lending rate fell from 11.5 per cent at end-1997 to 9.7 per cent by end-1998, and the real one-year deposit rate fell from 6.6 per cent at end-1997 to 0.4 per cent by end-1998. With a further fall in inflation rates in subsequent years from what for Malaysia was a high inflation rate of 5.3 per cent in 1998, the real interest rate has subsequently risen to 2.6 per cent today.

Table 15

MALAYSIA: MONETARY CONTROL LEVERS, 1990–2000

(Per cent at year end)

	1990	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*2000*
Statutory reserve ratio (SRR)	6.5	7.5	8.5	8.5	11.5	11.5	13.5	13.5	4.0	4.0	4.0
Liquidity ratio											
Commercial banks											
required	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	15.0	15.0	15.0
actual	18.4	18.0	18.0	18.0	17.9	17.5	20.3	17.8	17.9	19.6	19.5
Finance companies											
required	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
actual	12.1	12.0	12.1	12.0	12.4	12.5	13.1	10.1	14.0	18.7	16.4
Merchant banks											
required	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
actual	16.5	16.8	17.9	18.3	15.8	15.3	18.9	10.0	20.3	20.2	24.8
New liquidity framework											
Commercial banks											
< 1 week	..	..	..	..	..	..	..	..	5.0	3.0	3.0
1 week–1 month	..	..	..	..	..	..	..	..	7.0	5.0	5.0
Finance companies											
< 1 week	..	..	..	..	..	..	..	..	5.0	5.0	5.0
1 week–1 month	..	..	..	..	..	..	..	..	15.0	7.0	7.0
Merchant banks											
< 1 week	..	..	..	..	..	..	..	..	5.0	3.0	3.0
1 week–1 month	..	..	..	..	..	..	..	..	15.0	5.0	5.0

Source: *Ibid.*, tables III.26–III.28.

Note: The 2000 figures pertain to end-June. The SRR is a statutory cash reserve to be maintained with Bank Negara. Under the (old) liquidity ratio, the requirement was an overall percentage of eligible liabilities. By April 2000, 26 banking institutions had crossed over to the New Liquidity Framework. Figures of actuals under the old liquidity ratio pertain only to those banking institutions that had not crossed over.

The reaction of received orthodoxy to the Malaysian package was that the Malaysian recovery was no stronger than that of other East Asian countries. However, the incremental impact of the package can only be assessed with respect to a Malaysian counterfactual, since the other countries differed in terms of their fundamentals at the time of the crisis. A formal counterfactual exercise, which requires a quarterly computational general equilibrium (CGE) model for the Malaysian economy, is beyond the scope of this paper. What is undeniable is the speed of real correction in the economy, from -10.6 per cent in the last six months of 1998 to -1.5 per cent in the first quarter of 1999, and positive growth in all subsequent quarters. Even critics of the Malaysian capital controls had to concede that the reduction in interest rates helped contain the increase in NPLs of the banking system that would surely have been a feature of any counterfactual scenario. Standard and Poor's is reported to have estimated that the NPLs would have risen to 30 per cent if interest rates had not fallen as sharply as they did (IMF, 1999). Also, the Federation of Malaysian Manufacturers is quoted as having reported that the exchange rate peg and reduced interest rates lowered corporate uncertainty and made business planning easier (IMF, 1999).

The measures of September 1998 imposed, *inter alia*, a 12-month waiting period for repatriation of proceeds from liquidation of external portfolio investments. In order to pre-empt possible large-scale outflows at the conclusion of that period in September 1999, the waiting period was replaced as of 15 February 1999 by a system of graduated exit levies, with separate regimes for capital already in the country and for capital brought in after that date. For capital already in the country, there was a price on exit inversely proportional to duration of stay within the earlier stipulated period of 12 months. Therefore capital that had entered the country more than a year previously, before 15 February 1998, was free to leave at a zero exit price. For capital yet to come in, there was a levy only on profits, defined to exclude dividends and interest, also graduated by length of stay. In effect, profits for the purpose of the new Malaysian rules were defined to equal realized capital gains. Accompanying clarifications were issued in respect of repatriation of funds relating to investment in immovable property and FDI. Also investments in the newly-established, over-the-counter share market, MESDAQ, were exempted.

Although the replacement of the earlier controls with exit levies was internationally welcomed, there was also criticism of the new package. As a levy applicable only at the time of conversion of ringgit proceeds into foreign exchange, and therefore not a capital gains tax, it could not be offset through double taxation agreements. The 10 per cent levy on profits, even on funds invested for a period over 12 months, was seen as generally discouraging portfolio capital inflows, and equity investments in particular, since interest and dividends are exempted. The higher levy of 30 per cent, applicable on gains on investments of less than a year's duration, attracted especially heavy criticism on the grounds that potential investors would apply the higher levy rate of 30 per cent to all investments, regardless of their expected maturity, because of the "last in, first out" rule (IMF, 1999). On 21 September 1999, the higher levy was eliminated, leaving in place only a single rate of 10 per cent on capital gains regardless of duration of investment. In a further relaxation, the 10 per cent levy on capital gains was retained, effective from 1 February 2001, only for capital in the country for a duration of less than one year. This too was done away with on 2 May 2001.

The very criticism directed at the new package helped identify what was good about it and, more importantly, underlined why it could prove of enduring worth in reducing volatility in capital flows. It is true that the levy reduced the expected rate of return on equity to foreign investors, and thus raised the required pre-levy rate of return needed relative to other markets. This was an intended effort to reduce casual entry into Malaysia, and to ensure that capital would enter only when the fundamentals justified the expectation of a higher pre-levy rate of return. By December 1999, international rating agencies had begun restoring the credit rating for Malaysia. The final benediction was bestowed when the Malaysian market was included as a component of the Morgan Stanley Capital International Indices in May 2000.

The institutional origin of the capital control measures is unclear. Bank Negara believes in cooperation with the Government rather than independence, a tradition said to have been laid down by the first Malaysian Governor of Bank Negara, Tun Ismail Mohamed Ali. The facts on record, which show that, effective 1 September 1998, there was a change in the

leadership of the team charged with implementing the new package of selective exchange controls, suggest that the measures may not have originated with the central bank.

The exchange control measures of September 1998 (other than the prohibition on portfolio repatriation) remain substantially in place, except for some relaxation in respect of credit facilities in ringgit by residents to non-residents, which are now permissible as long as the credit facility is not used to purchase immovable property in Malaysia, up to a limit of 200,000 ringgit, well below the earlier pre-1998 limit of 5 million ringgit.

E. Financial sector reform

In terms of the institutional requirements of the effort to insulate the country on a long-term basis from recurrences of external volatility, it was clear that financial restructuring would have to come first, given that this was the foremost structural weakness in what was otherwise a soundly managed macroeconomic scenario at the time of the crisis. The weakness of finance companies, and merchant banks in particular as evidenced by the much sharper increase in their non-performing loans (NPLs), was already referred to in section III.C.

Bank Negara has exhibited exemplary awareness of the need for institutional strengthening in the financial sector. Listed below are the avenues along which initiatives have already begun.

(i) Bank restructuring

Begun in early 1998 and continuing under a four-pronged approach:

- *Danaharta*, an asset management company, was established for purchase of NPLs, exchanged against issue of zero-coupon, government-guaranteed bonds with five-year maturity and an additional rollover option of five years; yields are approximately the same as Malaysian Government security yields.

- *Danamodal*, a scheme for recapitalization of banks, was introduced. It was a clearly needed accompaniment to Danaharta purchases of NPLs at a discount from banks. Danamodal itself was financed through the generalized issue of zero-coupon bonds, in the first instance to banking institutions themselves, with secondary tradability among corporate houses, special status as Class-1 liquefiable assets under the new liquidity framework, and zero risk weight for capital adequacy purposes.

- *Bank consolidation*. Initiated in January 1998 for finance companies alone, this was extended to all banking institutions in July 1999. By 1 September 2000, 54 financial institutions were consolidated into 10 new entities led by hand-picked anchor banks. There was, however, a negative stock market reaction to some of these mergers on news of an element of official coercion (Straits Times, 2000).

- *Corporate Debt Restructuring Agency* (CDRC). This was set up to provide a platform for borrowers and creditors to work out debt restructuring schemes.

(ii) Banks capacities for risk management

Begun as far back as 1995, banks are being nudged towards in-house control mechanisms for management of the additional dimensions of market risk involved in cross-border transactions, and evidence of an appropriate internal control structure is a requirement for banks to use financial derivatives. Since March 1998, banks have been required to conduct monthly stress simulation tests under a variety of scenarios and to report to Bank Negara on a quarterly basis.

(iii) Prudential limits on sectoral exposure

Notwithstanding the effort to shore up banks' internal capacities for risk assessment, there was an unquestioned need for limits on exposure to property lending, given the central role this had played in structural weakening of the financial sector (for an excellent account of the genesis of bank credit flows to the property sector, see UNCTAD, 1998). In

October 1995 limits on maximum financing margins on purchase of high-end properties were introduced for the first time (see BNM, 1999), while not controlling lending for construction – the supply end. Predictably, margins on purchase had to be abolished in 1998 in a bid to clear the excess supply of high-end properties. A 20 per cent limit on total outstanding loans to the broad property sector was imposed in April 1997, just before the exchange rate crisis (the limit excluded low-end residential properties, infrastructure and industrial projects). It was only in January 1999 that lending for the construction of high-end residential properties including resorts, hotels, golf courses and commercial properties, was prohibited altogether. This response to a serious oversupply problem, if enacted five years earlier, might possibly have averted the exchange rate crisis of 1997 altogether.

(iv) Limits on connected lending

Effective 1 April 1998:

- Single customer credit is limited at 25 per cent of capital funds, down from 30 per cent.

- Country exposure limits are set on a bank-specific basis.

- Credit facilities on large loans, defined as those exceeding 10 per cent of total capital, are limited to 50 per cent in aggregate.

- There is prohibition on lending to directors, officers and employees, and to firms in which such persons have an interest of more than 5 per cent.

Effective 1 April 1999:

Lending to large shareholders with shares of 20 per cent or more in the bank making the loan is prohibited. This was the first time that lending to owners was explicitly prohibited, although it is thought that since sizeable stakeholders are likely also to be directors, the 1998 prohibition went most of the way.

(v) Prudential limits on liquidity risk

Beginning January 1999, a new liquidity framework based on a maturity ladder approach was introduced in place of the earlier overall liquidity requirement, with banking institutions given the freedom to cross over to the new system. By April 2000, 26 institutions had opted for it. In essence, the new liquidity framework breaks down liquid assets by degree of liquidity.

(vi) Prudential limits on cross-border risks

Limits to banks' exposure to foreign currency loans have been set at 50 per cent of equity capital. These are prudential limits without penalties, but are in any case so generously set that they are in no danger of being crossed, and could perhaps be tightened.

(vii) Incorporating risks in loan classification, provisioning, capital adequacy and disclosure

- Off-balance-sheet items have been incorporated in loan classification and provisioning requirements since March 1998.

- The minimum risk-weighted capital requirement is still 8 per cent. Capital adequacy requirements are expected to move towards a bank-specific configuration as a function of internal controls and sectoral exposure.

- Quarterly public disclosure requirements imposed in early 1998 were relaxed in September 1998 along with the capital controls then introduced. A return to tighter disclosure norms was considered necessary for restoration of discipline and market confidence.

F. Conclusions

Malaysia had so free a capital account regime leading up to the 1997 crisis was so free that there was even an offshore market in ringgit, perhaps the only case of an offshore market in an emerging market currency. The advantage the offshore ringgit market gave foreign investors, in terms of fine-tuning risk-management through access to the more diversified financial hedging products and instruments available offshore, paled in comparison with the exchange rate turbulence it facilitated in 1997. Eliminating the offshore market had to be an essential feature of any policy package designed to drive a wedge between the foreign exchange market and the imperative monetary policy need at the time of the crisis, which was to lower interest rates. The rise in ringgit interest rates was transmitted onshore from offshore speculative borrowing of ringgit to fund movement into dollars in anticipation of a crash in the ringgit value, and had potentially devastating consequences for the domestic real economy and for what was already a structurally weak financial sector, overexposed to property lending. The offshore ringgit market has now been wiped out, and thus the principal intent of the capital control measures introduced in September 1998 has been fully achieved. The frozen Central Limit Order Book (CLOB) offshore shares, a residual problem after closure of the offshore ringgit market, is on the way to resolution through an offer menu that accommodates shareholders at all ends of the liquidity spectrum. There remain no loose ends on the offshore front.

The exchange controls introduced in September 1998 remain largely in place with the single exception of the 12-month holding period on repatriation of portfolio principal, which after September 1999 was reduced to just a 10 per cent levy on capital gains. This was further confined, effective February 2001, to capital repatriated after a duration of less than a year in the country. On 2 May 2001, even this vestigial hurdle on financial exit from Malaysia was removed altogether.

The overwhelming need for financial sector consolidation is fully recognized and being addressed. Until that process is complete, Malaysia would be ill-advised to open up its financial borders again. The exchange controls still in place obstruct free access to ringgit for non-residents as

part of the effort to prevent resurrection of an offshore ringgit market. Free movement from ringgit into dollars for residents is still possible, but these dollars must be held in foreign exchange accounts in Malaysia. The difference from the point of view of control over the capital account, is that the foreign exchange accounts are held by banking institutions within the regulatory ambit of Bank Negara. What is not permitted is export of dollars outside the country. An officially-approved foreign currency offshore banking centre has been developed in Labuan. Outward portfolio flows, whether from corporates or resident individuals, require approval, which is rarely granted. But as in all approval-driven systems, the barriers could be relaxed over time without a formal change of regime.

The overhang of NPLs is being handled through a set of interconnected agencies. Stepping back from the complexity of the arrangements, what is being attempted is assistance to banks in loan rescheduling and management, offloading of bad loans at a discount to an asset management agency, and recapitalization of the worst-hit banks through bonds subscribed to by stronger banks in the system. Other planks in the financial restructuring programme included the mergers of what were 54 banks into 10 units by 1 September 2000, which provoked negative stock market reactions on account of there having been some measure of official coercion.

The share of gross NPLs has come down somewhat since the worst peak at end-1998 in the banking system as a whole and in all components of it except merchant banks. The property sector continues to account for 40 per cent of NPLs. The controls introduced in the system in 1999 to prohibit lending for construction of high-end properties came five years too late to avert the financial sector softening that was a contributory, if not the precipitating, factor in the 1997 crisis. Controls on connected lending, now in place, again came five years too late.

With the continued dollar peg on the ringgit, the need for developing a domestic market for hedging instruments has taken a back seat, although it is clear that such markets will have to be developed over the long term. It has to be remembered that the offshore ringgit market developed in response to the need of non-residents for hedging instruments at a time when import and export settlements were denominated in ringgit, so that

resident importers and exporters were relieved from the need to hedge. With import and export settlements now denominated in dollars, as part of the package of exchange control measures of September 1998, there will eventually be a need for hedging instruments once the peg is removed. Statements by the Malaysian Prime Minister on the occasion of the country's National Day on 31 August 2000 suggest the ringgit peg is here to stay, notwithstanding market estimates that the peg undervalues the ringgit, and that higher import prices lead to lower investment than would be the case under a ringgit float (the 1998 drop of 20 percentage points in the investment rate continued into 1999). The larger need remains for Malaysia to adopt an exchange rate policy that carries greater flexibility and adaptability to monetary policy requirements. While this is recognized, there is little evidence that the ringgit will go off the peg, or even be re-pegged, in the foreseeable future.

IV. CONCLUSIONS

India and Malaysia share a similarity of capital account regimes today that would have been unthinkable a decade earlier. The capital controls introduced in Malaysia in response to the external liquidity crisis of 1997, and the gradual capital account liberalization in India, also motivated by an external liquidity crisis in 1991, have brought about a remarkable convergence between the capital account regimes in the two countries. In both countries non-resident capital inflows enjoy full freedom of repatriation. Outward capital flows for corporate residents are permissible, but controlled within prescribed limits. All other outflows of capital from residents are banned. There is a lesson in this that carries validity beyond the specifics of the two countries studied.

The advantages of free cross-border flows of capital and of access to a global savings pool remain unquestionably valid. However, in emerging markets with institutional weaknesses in the financial sector, it is damaging to focus on the gains of free capital flows without the institutional consolidation that would prevent a recurrence of episodes of volatility.

The purpose of this paper is not to deliver a verdict on whether full capital account convertibility should be an eventual world objective, issues in any case already ably addressed in Cooper (1998) and others. Rather, the paper seeks to demonstrate that the transition to full capital convertibility need not necessarily be monotonic at all times, and that retention of rights of sovereign control over policy with respect to resident capital is essential for macroeconomic control over the real sector, especially in developing countries (see also Schneider, 2000).

India in 1990 did not have current account convertibility; the rupee was administered at a moving basket-peg; inward FDI was possible only on a case-by-case approval basis, subject to equity caps, curtailments on freedom of functioning beyond those caps, and dividend repatriation linked to export obligations; portfolio inflows were unknown; and outward FDI by corporates, although not unknown, was subject to an extended case-by-case approval basis. All other outward capital flows were banned, with criminal penalties for contravention of the ban. An informal *hawala* channel for capital outflows thrived, notwithstanding these penalties, with dollar supplies from diverted private remittances.

Malaysia in 1990 had had current account convertibility for over two decades; the ringgit had been a floating currency for 17 years, and there was a flourishing offshore ringgit market in Singapore; inward FDI and portfolio capital inflows were unfettered, with approval needed only for flotation of issues on foreign bourses; and outward capital flows were free for corporates, except those with large domestic borrowings. Outward capital flows from non-corporate residents were further freed in 1994 as part of an attempt to contain an inward capital surge.

The overall policy framework for management of the capital account, the exchange rate and macroeconomic policy

The present Malaysian capital account regime is remarkably similar to the Indian, despite their very diverse historical points of origin. Outward investment for corporate residents is permissible up to a limit, and beyond that with approval, again similar to the newly liberalized Indian regime;

although in all approval-driven systems, it is the manner in which the approval is exercised that determines the substance of the regime.

Inward capital flows into Malaysia continue to be free and unfettered, as always, for both FDI and portfolio investment. Flotation of issues on foreign bourses has always required government approval. Thus there remains full capital account convertibility for non-residents. Among the measures introduced in September 1998 was the ban on any use of externally-held ringgit accounts in domestic banks other than towards purchases of Malaysian financial or real assets. This was introduced to curb the flourishing offshore ringgit market, which fuelled speculative movements in exchange markets in 1997 and 1998. To that degree, the freedom earlier enjoyed by non-residents to operate ringgit-denominated accounts outside Malaysia has been curtailed. But non-residents remain free to hold such accounts in Malaysia, subject to the ban on direct credit to residents from such accounts.

The legal regime in India for capital account transactions has seen a major alteration, effective as of 1 June 2000, with the introduction of FEMA, under which contraventions of the ban on capital outflows from residents no longer invite criminal penalties. The Act also grants first-time automatic approval for outward FDI by corporates through stock swap options, subject to sectoral caps and with possible approval beyond those caps. All other outflows of capital from residents remain banned. Non-resident capital inflows enjoy full freedom of repatriation, and effective from March 2000, face very few sector-specific entry barriers. Flotation of shares on foreign bourses remains subject to government approval.

Policy in India towards the capital account over the 1990s has been steady in terms of both direction (liberalization of capital inflows) and pace (gradual). The slow pace of liberalization of inflows in the capital account was undoubtedly an outcome, to some degree, of buoyant inflows of current invisibles, private remittances in particular, in response to the early moves towards current account liberalization. The routing of private remittances through official channels, away from *hawala*, was an outcome, *inter alia*, of lifting the ban on gold imports. Other elements of current account liberalization, by making possible legitimate purchases of foreign

currency, brought back flight capital through the mix of current and capital account channels described in section II. However, no objective estimates of the quantum of returning flight capital are available. With the return of flight capital, current account convertibility more than paid for itself. External reserves are now in the region of $40 billion (approximately 8 months' import cover), up from $1 billion, the crisis level in June 1991, immediately preceding reform.

Malaysian policy during the 1990s, from a starting point of free capital account convertibility, has also demonstrated steadiness of purpose. Whether during the 1993 capital surge, or the 1997 capital outflows, Malaysian policy has asserted the sovereign right to impose temporary reversals of freedom of cross-border capital flows, and thus to have capital account convertibility on a reversible, rather than an irreversible, basis. During the 1993 capital inflow surge, which had a large short-term component, restrictions were imposed on external borrowing, portfolio investment in Malaysian securities, and forward and swap transactions by banks. These measures were reversed within a period of 8–12 months as pressures on the ringgit eased, with an outflow of short-term capital. Thus Malaysia rode out the inflow surge without the domestic monetary turbulence of trying to sterilize free inflows.

The measures imposed in September 1998 have had a longer duration, and continue to remain in place, except for the phased reversal over a year of the controls on portfolio repatriation. With the exception of the vestigial 10 per cent levy on profits on portfolio capital in the country for less than one year, which was removed in May 2001, and the successful killing of the offshore ringgit market through limits placed on permissible uses of non-resident accounts, these measures have curbed freedom of cross-border flows for residents rather than non-residents. Although current account transactions do not carry category-specific caps, the tight limit imposed in September 1998 on export of foreign currency by residents functions as a uniform cap on outflows on both current and capital accounts. Malaysia has decisively established its right to manage its capital account in such a way as to impose a wedge if need arises, between the external value of the ringgit and its sovereignty over domestic monetary policy.

The exchange value of the ringgit remains at the peg of $1 = 3.8 ringgit, introduced in September 1998. The paradox is that the ringgit peg was part of a package of measures designed to spur real growth through lower domestic interest rates – which had risen in response to speculative demand for ringgit – and that today the peg undervalues the ringgit, so that prices of imported capital goods are higher and investment lower than would be the case in the absence of the peg. There is clearly a longer-term need to align exchange rate policy with monetary policy. Even if this is recognized within Bank Negara, the central bank is not free to introduce a unilateral change of regime. At the same time, there is no expressed need for such independence. Macroeconomic policy is seen as an interlinked whole, to be worked out in cooperation between the central bank and the executive arm of the Government.

The Indian rupee is market-determined in respect of trends. No other policy is possible, given the inflation differential between India and its major trading partners. However, the foreign exchange market remains thin, and there are anywhere from one to three episodes of volatility in a typical year, in which the Reserve Bank of India (RBI) intervenes actively through alteration of liquidity conditions in the call-money market. With the introduction by the RBI of a Liquidity Adjustment Facility, and its continued efforts to improve depth in the call-money market, these interventions might become less jerky and ad hoc than they have been, noticeably during a major episode in mid-2000.

There is a coherent process of financial sector consolidation in place in India, and official recognition of the need for fiscal tightening, without which no lowering of domestic interest rates can take place. Financial sector reforms remain snagged in the absence of any progress for establishing a legal framework for speedy liquidation of loss-making enterprises, which in turn requires decisions that are difficult in the present political scenario of coalition government.

Financial sector consolidation in Malaysia has received very careful policy attention; it was begun in early 1998, well before the capital control measures that came in September, with a four-pronged approach encompassing asset management, bank recapitalization, loan management and

debt restructuring, and bank consolidation. There is a clear recognition of the damage done by uncontrolled lending to the property sector, which was finally halted in 1999 at the supply end after some unfruitful fumbling with demand-end controls. Controls were also introduced in 1998 and 1999 on connected lending. Impressive attempts are under way to improve banks' in-house capacities for management of credit and market risk, with banks required to conduct monthly stress simulation tests under a variety of scenarios, and to report to Bank Negara at quarterly intervals. All of these would be promising were it not for occasional evidence of coercion in policy implementation, as, for example, in the ongoing process of bank consolidation – where the mergers into 10 consolidated entities may have brought together unwilling partners – and the possibility that enforced subscription to bonds for recapitalization of the worst-hit banks might carry adverse incentives for well-managed banks in the system (for other issues that arise in connection with banking regulation in relation to a new financial architecture, see Cornford, 1999).

The Extent to which the different regimes in recent years have contributed to more stable capital movements

Short-term debt as a percentage of the total debt stock has shown a marked fall over the 1990s in India, particularly after the 1997 changes discouraging short maturities in the deposit schemes offered to non-resident Indians. These deposit schemes, a peculiar feature of the Indian capital account, have now moved to a more sensible configuration of deposit rates, benchmarked to LIBOR for foreign currency deposits, in place of the previous configuration which offered arbitrage opportunities bordering on the scandalous. With the new maturity floors on non-resident Indian deposits and non-trade commercial debt, short-term debt will henceforth be purely trade-related.

To the extent that Indian liberalization of capital inflows has so far moved at a faster pace for portfolio investments than for FDI, the regime has not contributed to stable capital movements as much as if FDI had been more rapidly facilitated. Portfolio capital is inherently volatile, although this has been retarded to some degree in India by the procedural difficulties of entry and exit. However, with dematerialized trading finally

having captured the bulk of traded stocks, there has been a dramatic fall in transaction costs of both entry and exit. While this is good in general for reduction of friction in the system, it might lead to greater volatility in portfolio flows, in much the same way in which the liquidity of Malaysian capital markets, both onshore and offshore, facilitated contagion. Fortunately, there was a further liberalization of entry for FDI in March 2000, with the move to a small negative list of sectors needing approval, instead of, as previously, a listing of open sectors.

Malaysian short-term debt as a share of total debt is higher than for India, but normalized to exports it has historically been far lower. However, with the decline in Indian short-term debt, the two are now roughly at par. Malaysia unquestionably stabilized capital inflows during the mid-decade surge, with entry obstructions that reversed the heavy short-term inflows in particular, and with liberalization of portfolio outflows for residents. The regime change in 1998, however, was not directed principally at external capital, since it was introduced in September 1998 after portfolio outflows of $10 billion had already taken place in 1997. At the time, it was designed principally to stabilize the ringgit and, by imposing barriers to exit of resident capital, to sever the link between exchange markets and the monetary policy need of the hour, which was to lower interest rates. To the extent that lower interest rates succeeded in containing the recession of 1998 and facilitating real growth of 5.6 per cent in 1999, the measures succeeded in stabilizing the macroeconomic system, and, as a corollary, sustained the stability of FDI inflows within the neighbourhood of $2 billion throughout 1998 and 1999.

Thus the Malaysian regime in place since 1998 has achieved greater stabilization of capital flows than what would have obtained in the counterfactual, but a historically different configuration of policies might possibly have secured greater insulation against contagion in the first place. Thus the development of a market in foreign exchange derivatives in Malaysia would have pre-empted the development of the offshore ringgit market, which arose in response to the hedging needs of counterparties to ringgit-denominated trade with Malaysia; the offshore market was where non-residents were able to obtain ringgit-denominated credit for speculation during the currency crisis outside the reach of controls applicable on credit

to non-residents within Malaysia. Again, the controls on lending for construction of upmarket resorts and commercial properties, if enacted in 1994 rather than in 1999, would have prevented the financial sector softening that, along with export deceleration, precipitated capital outflows in 1997. But after the onset of the crisis, the Malaysian response was a well-judged, macro-stabilization package with a focus on the real sector corrective called for at the time.

Likely future direction of policy and major influences

Malaysia is politically stable, with a Prime Minister firmly in control of economic policy, and not due to face parliamentary elections until 2004. It is likely that the capital controls will remain in place until then. On the occasion of Malaysia's National Day on 31 August 2000, the Prime Minister reaffirmed his commitment to the peg, despite widespread consensus that the ringgit is undervalued at the peg. There is worry that FDI may fall off in some years, and that the continuation of inflows at around the $2 billion level seen right through 1998 and 1999 merely represented a follow-through on projects begun before the crisis. Thus, although the medium-term outlook is stable, both politically and in terms of the capital account regime, there is an underlying apprehension about the peg and the eventual need for a regime that permits mutual compatibility between exchange rate and monetary policy.

The likely economic policy direction in India is somewhat less certain than in Malaysia because of the greater political uncertainty, despite agreement across the political spectrum on the obstacles that must be addressed if economic fundamentals are to be strengthened: the fiscal overhang and the need for investment in infrastructure. There is broad-spectrum consensus that external capital must be wooed for infrastructure and other investments, so that the opening up to capital inflows of the 1990s will continue regardless of the political configuration. What remain impaled on the political scenario, however, are the ideologically-sensitive decisions on cutting fiscal subsidies, which are critically necessary for cutting interest rates and thus for facilitating the real growth without which no sustainable financial sector reform is possible. The import liberalization, which will be fully completed according to the WTO timetable by

March 2001, has left in its wake defeated domestic competitors, and the legal reform necessary to enable liquidation of loss-making enterprises is a function of the political strength of pro-reform elements in the Government. The national Government, if it lives out its full term, is due for a change only in 2004. Cutting fiscal subsidies on petroleum products, food and electricity will raise cost-push inflation even as it engenders real growth (through reduction in the fiscal deficit and thereby domestic interest rates), so that with or without fiscal reform there is no immediate prospect of achieving the macroeconomic markers necessary for full convertibility on capital account.

APPENDIX A

EXTERNAL POLICY MILESTONES: INDIA

Exchange rate regime/current account

1 March 1992:	Dual exchange rates, administered/market-determined, under the Liberalized Exchange Rate Management System (LERMS).
1 March 1993:	Unification of dual exchange rates into single-market-determined rate.
20 Aug. 1994:	Current account convertibility (IMF Article VIII), with notified, category-specific caps on outflows.
9 Jan. 1997:	Caps on trade-related outflows removed.
31 March 2000:	Quantitative restrictions removed on 714 out of 1,429 imported items; remainder slated for removal by 31 March 2001.

Capital account

Institutional/legal framework

30 Jan. 1992:	Statutory empowerment of Securities Exchange Board of India (SEBI) for regulation of stock markets.
8 Jan. 1993:	Major alterations in Foreign Exchange Regulation Act (FERA) of 1973 granting parity of status to foreign and Indian-owned companies, and liberalizing outward investments by Indian companies in joint ventures overseas.

23 July 1996: Legislation passed in Parliament for setting up of the National Stock Depository enabling first-time paperless trading on the capital market.

30 May 1997: Report of the (Tarapore) Committee on Capital Account Convertibility (CAC) recommending a three-year phased move to CAC, subject to macro targets: Gross fiscal deficit/GDP 3.5 per cent (1999–2000); inflation rates 3–5 per cent (1997–2000); debt service ratio of 20 per cent (1999–2000).

5 April 1999: All trading in India's two main stock indices, Nifty (NSE–50 stock index) and Sensex (BSE-30 stock index) dematerialized.

1 June 2000: Replacement of FERA by Foreign Exchange Management Act (FEMA); contraventions hereafter to be dealt with under civil, not criminal, law.

Foreign direct investment

24 July 1991: Under new industrial policy, first-time automatic approval (with export obligations) of FDI up to 51 per cent in 34 specified sectors, higher than 51 per cent permissible with approval; in place of earlier case-by-case approval subject to 40 per cent ceiling in all but high-technology or export-oriented projects.

13 April 1992: India signs Multilateral Investment Guarantee Agency Protocol (MIGA) for protection of foreign investments.

31 March 2000: All FDI placed under automatic route except for a small negative list for sectors still requiring licensing (for both domestic and foreign investment) or for foreign investment exceeding notified sectoral caps.

Foreign equity inflows

Foreign Institutional Investors (FIIs)

30 Jan. 1992:	FIIs allowed to invest with full repatriability of principal and income in primary/secondary markets, subject to registration with SEBI; aggregate ceiling of 24 per cent of issued share capital; and individual ceiling of 5 per cent.
22 July 1996:	Individual ceiling raised from 5 to 10 per cent.
4 April 1997:	Aggregate ceiling raised from 24 to 30 per cent.
24 April 2000:	Aggregate ceiling raised from 30 to 40 per cent.

Capital issues on foreign bourses

1 April 1992:[a]	Indian companies permitted to issue, subject to government approval, Foreign Currency Convertible Bonds and ordinary shares through Global/American Depository Receipts (GDRs and ADRs) on Overseas Stock/Over the Counter Exchanges, with full repatriation benefits and no lock-in period, but with end-use restrictions.
22 May 1998:	All end-use restrictions lifted except for ban on use of GDR/ ADR issue proceeds for investment in real estate/ stock market.

External commercial borrowing (ECB)

Subject to an overall annual ceiling with preference for infrastructure and export sector financing, and restrictions on utilization for rupee expenditure[b] relaxed for:

18 May 1995:	Manufacturing companies: Limit: $1 million Minimum maturity: 3 years
8 Jan. 1996:	Non-manufacturing companies: Same limits as for manufacturing
19 June 1996:	Limit: $3 million
31 March 1997:	Long-term limit : $100–$200 million Minimum maturity : 10–20 years.
31 March 1997:	Inward remittance of funds for imports permissible with utilization lag of up to one year.
16 June 1998:	Loans with minimum average maturity of 10 years outside aggregate cap on ECB.
22 May 1998:	No end-use restrictions. Minimum maturity between 3 years (simple) to 5 years (average) varying directly with amount borrowed; 8–16 years for long-term window.

Forex financial[c] markets

7 April 1997:	Scrapping of CRR and SLR on inter-bank borrowings leads to MIBOR.
15 April 1997:	1. First-time permission for forward foreign exchange contracts without documentary evidence of underlying exposure, and beyond six months; subject to a declaration of exposure supported by average export/import turnover of last two years. 2. Case-by-case approval of rupee/foreign currency swaps replaced by permission for authorized dealers to operate "swap book" within their open position limits.

11 June 1998:	First-time permission for forward exchange cover to FIIs to the extent of 15 per cent of outstanding investments as on that date.
24 April 1999:	Limit for forward cover: 15 per cent of investments as on 31 March 1999 (with utilization, further extension of cover possible); entire incremental investment thereafter.

Foreign currency holdings (banned in general for residents)

1 April 1993:	Exchange Earners Foreign Currency (EEFC) Scheme under which exporters permitted to retain part of their earnings in accounts held abroad.
14 Aug. 2000:	Halving of EEFC balances effective 23 August 2000.
10 Oct. 2000:	EEFC ruling reversed.

Source: RBI, *Annual Reports* (various).

a The notification was issued on 12 November 1993, but with backdated effect from 1 April 1992.

b As distinct from use for import financing; rupee expenditure on investment in stock markets/real estate is prohibited.

c Deregulation dates for domestic bank deposit rates are given in notes to table 7, along with deregulation details on NRI deposits.

APPENDIX B

EXTERNAL POLICY MILESTONES: MALAYSIA

Exchange rate regime/current account

11 Nov. 1968:	Current account convertibility (IMF Article VIII).
8 May 1973:	Currency (Malaysian ringgit) floated. Offshore ringgit market develops over time, mainly in Singapore, as a result of imports and exports denominated in ringgit, to meet hedging needs of non-resident counterparties.
2 Sep. 1998:	Ringgit pegged at $1 = 3.8 ringgit

Capital account

1973; 1987:	Capital inflows and outflows liberalized.
27 Feb. 1994:	Relaxation of restrictions on outward portfolio investment.
2 Jan. 1990:	Over-the-counter (CLOB) market in Malaysian shares opens, giving further impetus to offshore ringgit market in Singapore.
1989–1995:	Reforms of financial sector accompanying capital account liberalization:
	Banking and Financial Institutions Act (BAFIA), 1989, extending Bank Negara Malaysia (BNM) prudential regulation to finance companies and merchant banks in addition to commercial banks.
	February 1991
	1. Banking institutions free to set deposit rates.

2. Base lending rate (BLR) of each bank subject to standardized formula benchmarked on deposit rates.
3. Maximum lending rate capped at 4 per cent above BLR.

November 1995

Banks free to set BLR subject to ceiling (benchmarked on 3-month interbank rate + 2.5 per cent margin).

Inward capital controls (temporary)

17 Jan. 1994–
20 Jan. 1995: Ceiling on foreign borrowing by domestic banks (excluding trade-related and direct investment).

24 Jan.–
12 Aug. 1994: Restrictions on portfolio investment in Malaysian securities.

23 Feb.–
16 Aug. 1994: Restrictions on forward and swap transactions by banks.

Controls on outward capital/closure of non-resident access to ringgit

4 Aug. 1997: Currency swap limit of $2 million per bank group on offer side (sale of ringgit) on transactions other than current account with non-residents.

1 Sep. 1998:
1. Prohibition on transfer of funds from externally-held ringgit accounts except for:
   i. Purchase of ringgit-denominated assets including immovable property in Malaysia but excluding ringgit credit to residents.
   ii. Expenditure on administrative expenses/purchase of goods and services in Malaysia. With the consequent immobilization of offshore ringgit deposits, holders of offshore ringgit holdings were permitted

to repatriate to Malaysia freely by 1 October; with permission thereafter.

2. Prohibition on ringgit credit facilities by residents to non-residents (previously subject to a limit).

3. All transactions in ringgit-denominated financial assets permissible only through authorized depository institutions.

4. All trade transactions to be settled in foreign currency.

5. Closure, with effect from 16 September 1998 of off-shore market in Malaysian equities (CLOB), thus freezing holdings of 172,000 investors, worth 10 billion ringgit, in 112 Malaysian corporations.

6. Prior approval beyond a certain limit for all residents to invest abroad in any form (previously applicable only to domestic corporates with domestic borrowing).

7. Limits on exports of foreign currency by residents.

8. All export proceeds to be repatriated to Malaysia within six months from date of export.

9. 12-month waiting period for conversion to dollars of ringgit proceeds from sale of Malaysian securities; no limits on repatriation of interest, dividends.

15 Feb. 1999: Ban on portfolio repatriation replaced by graduated exit levies decreasing with duration of investment:

1. Investments made prior to 15 February 1999 (only on principal; no levy on dividends and interest):

Duration of investment	Levy rate (percentage)
< 7 months	30
7–9 months	20
9–12 months	10
> 12 months	0

2. Investments after 15 February 1999 (only on capital gains; no levy on principal, dividends or interest):

Duration of investment	Levy rate
< 12 months	30
> 12 months	10

21 Sep.1999: Flat 10 per cent exit levy on capital gains on portfolio investment irrespective of duration of investment.

1 Feb. 2001: 10 per cent exit levy applicable only on duration of investment < 12 months removed effective 2 May 2001.

Related changes not directly targeted at capital flows

12 Sep. 1998: Demonetization of large-denomination ringgit notes (1,000 ringgit and 500 ringgit) effective 1 July 1999.

1 Sep. 1998:
1. Maximum BLR benchmarked on BNM intervention rate in place of inter-bank rate, with 2.25 per cent margin.
2. Maximum margin above BLR of banks lowered from 4 to 2.5 percentage points.
3. Enactment of Pengurusan Danaharta Nasional Berhad Act to set up Danaharta, an asset management company.

Source: BNM (1999) and BNM, *Annual Reports* (various) supplemented by IMF (1999).

NOTES

1 A further one-off $1 billion inflow into private transfers in 1996/97 was from redemption to residents in India of the India Development Bonds floated in the late 1980s.

2 The Resurgent India Bonds (RIB) issued by India in late 1998, which raised in excess of $4 billion, have not been entered in the BIS aggregate for debt securities.

3 The benchmark was actually 0.8 (three-month inter-bank rate)/(1-SRR) as reported by BNM (1999).

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