Capital flows to India

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Introduction

In most of the period since the mid-1990s, external sector developments in India have been marked by strong capital flows. Capital inflows, which were earlier mainly confined to small-scale official concessional finance, gained momentum from the 1990s after the initiation of economic reforms. As well as increasing in size, capital inflows have undergone a compositional shift from predominantly official and private debt flows to non-debt-creating flows in the post-reform period. Private debt flows have begun to increase again in the more recent period. Though capital flows are generally seen to be beneficial to an economy, a large surge over a short span of time in excess of domestic absorptive capacity can be a source of stress, leading to upward pressure on the exchange rate, overheating of the economy and possible asset price bubbles. In India, capital flows in the past few years increased sharply and have been well above the current account deficit, which has largely remained modest. This has posed new challenges for monetary and exchange rate management.

This paper elaborates on various aspects of capital flows to India and their policy implications. The sections have been arranged as follows: Section I provides a historical backdrop to the evolution of capital inflows. Section II analyses their trend, magnitude and composition. Section III examines the management of capital inflows and their implications for the conduct of monetary and exchange rate policies. Section IV highlights some of the major issues and challenges for the central bank, and Section V concludes with the future outlook.

I. Historical backdrop

For the first four decades after independence in 1947, the economic policies of the Indian government were characterised by planning, control and regulation. Until the 1980s, India's development strategy was focused on self-reliance and import substitution. There were periodic attempts at market-oriented reform, usually following balance of payments pressures, which induced policy responses that combined exchange rate depreciation and an easing of restrictions on foreign capital inflows. However, these controls were relatively narrow in scope and had little impact on actual inflows, which remained small. The situation changed dramatically with the onset of reform programmes introduced in the early 1990s in the aftermath of the balance of payments crisis of 1991.

Broadly speaking, India's approach towards external capital flows can be divided into three main phases. In the first phase, starting at the time of independence and spanning up to the early 1980s, India's reliance on external flows was mainly restricted to multilateral and bilateral concessional finance. Subsequently, however, in the context of a widening current account deficit during the 1980s, India supplemented this traditional external source of financing with recourse to external commercial loans, including short-term borrowings and

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deposits from non-resident Indians (NRIs). As a result, the proportion of short-term debt in India's total external debt had increased significantly by the late 1980s. The third phase was marked by the balance of payments crisis of 1991 and the initiation of the reform process. The broad approach to reform in the external sector was based on the recommendations made in the Report of the High Level Committee on Balance of Payments (Chairman: C Rangarajan), 1991. The objectives of reform in the external sector were conditioned by the need to correct the deficiencies that had led to payment imbalances in 1991. Recognising that an inappropriate exchange rate regime, unsustainable current account deficit and a rise in short-term debt in relation to official reserves were amongst the key contributing factors to the crisis, a series of reform measures were put in place. They included a swift transition to a market-determined exchange rate regime, dismantling of trade restrictions, a move towards current account convertibility and a gradual opening-up of the capital account. While liberalising private capital inflows, the Committee recommended, inter alia: a compositional shift away from debt to non-debt-creating flows; strict regulation of external commercial borrowings, especially short-term debt; discouragement of the volatile element of flows from NRIs; and a gradual liberalisation of outflows.

Among the components, since the 1990s, the broad approach towards permitting foreign direct investment has been through a dual route, ie automatic and discretionary, with the ambit of the automatic route being progressively enlarged to almost all the sectors, coupled with higher sectoral caps stipulated for such investments. Portfolio investments are restricted to institutional investors. The approach to external commercial borrowings has been one of prudence, with self-imposed ceilings on approvals and a careful monitoring of the cost of raising funds as well as their end use. In respect of NRI deposits, some modulation of inflows is exercised through specification of interest rate ceilings and maturity requirements. In respect of capital outflows, the approach has been to facilitate direct overseas investment through joint ventures and wholly owned subsidiaries, and through the provision of financial support to exports, especially project exports from India. Ceilings on such outflows have been substantially liberalised over time. The limits on remittances by domestic individuals have also been eased. With the progressive opening-up since the early 1990s, the capital account in India today can be considered as the most liberalised it has ever been since the late 1950s.

The process of capital account liberalisation is managed by keeping in view the elasticities of supply and other responses in the economy, and vulnerabilities or potential shocks. The issue is handled with extreme caution given the potential for sudden capital reversals. The 1997 Report of the Committee on Capital Account Convertibility (Chairman: S S Tarapore) provided the initial framework for the liberalisation of capital account transactions in India. The Committee recommended a phased implementation of capital account convertibility, to be completed by the year 1999/2000. Drawing on international experience, the Committee suggested a number of preconditions needed to be met for the capital account liberalisation programme to succeed: fiscal consolidation, lower inflation and a stronger financial system were seen as crucial signposts. It is interesting to note that the Committee did not recommend unlimited opening-up of the capital account, but preferred a phased liberalisation of controls on outflows and inflows over a three-year period. Even at the end of the three-year period, the capital account was not to be fully open and some flows, especially debt flows, would continue to be managed.

The issue of capital account liberalisation was re-examined by the Committee on Fuller Capital Account Convertibility (Chairman Shri S S Tarapore) (2006), which made several recommendations on the development of financial markets in addition to addressing issues related to interaction of monetary policy and exchange rate management, regulation/supervision of banks and the timing and sequencing of capital account liberalisation measures (for details, see Section III.3). The Committee recommended that at the end of the five-year period ending in 2010/11, there should be a comprehensive review to chalk out the future course of action.

II. Trend, magnitude and composition of capital flows to India

II.1 Trend

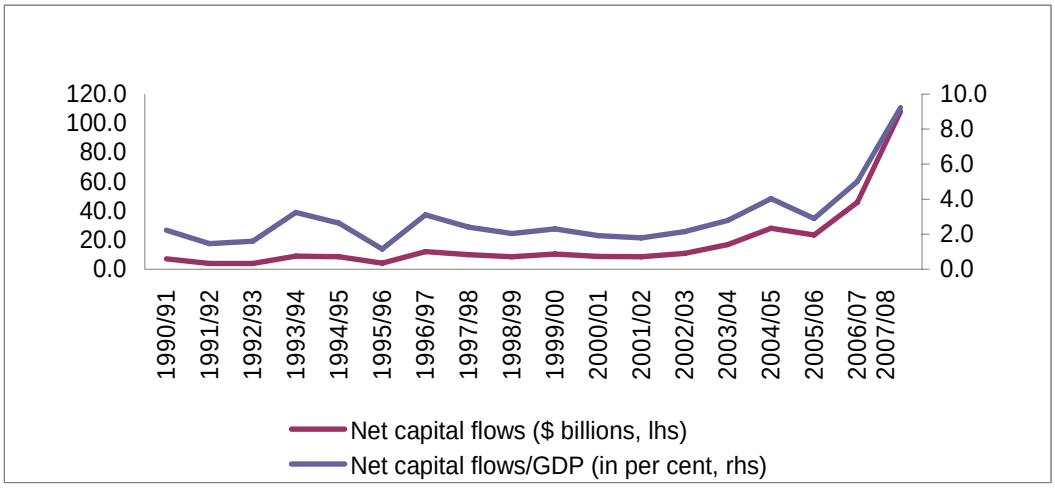
Since the introduction of the reform process in the early 1990s, India has witnessed a significant increase in cross-border capital flows, a trend that represents a clear break from the previous two decades. Net capital inflows increased from $7.1 billion[2] in 1990/91 to $45.8 billion in 2006/07, and further to $108.0 billion during 2007/08 (Graph 1). India has one of the highest net capital flows among the emerging market economies (EMEs) of Asia.

II.2 Magnitude

Net capital inflows, which increased from 2.2% of GDP in 1990/91 to around 9% in 2007/08, do not, however, reflect the true magnitude of capital flows to India. Gross capital inflows, as a percentage of GDP, have undergone a more than fivefold increase from 7.2% in 1990/91 to 36.6% in 2007/08. Much of this increase has been offset by corresponding capital outflows, largely on account of foreign institutional investors' (FIIs) portfolio investment transactions, Indian investment abroad and repayment of external borrowings. Capital outflows increased from 5.0% of GDP in 1990/91 to 27.4% of GDP in 2007/08. The gross volume of capital inflows amounted to $428.7 billion in 2007/08 as against an outflow of $320.7 billion.

Graph 1

Net capital flows to India



Source: Reserve Bank of India.

Strong capital flows to India in the recent period reflect the sustained momentum in domestic economic activity, better corporate performance, the positive investment climate, the long-term view of India as an investment destination, and favourable liquidity conditions and interest rates in the global market. Apart from this, the prevailing higher domestic interest rate along with a higher and stable growth rate have created a lower risk perception, which has attracted higher capital inflows.

The large excess of capital flows over and above those required to finance the current account deficit (which is currently around 1.5% of GDP) resulted in reserve accretion of $110.5 billion during 2007/08. India's total foreign exchange reserves were $308.4 billion as of 4 July 2008.

[2] Dollar amounts are US dollars.

II.3 Composition

As regards the composition of capital flows, the thrust of the policy reform in India in the aftermath of the balance of payments crisis was to encourage non-debt-creating flows and discourage short-term debt flows. Accordingly, the composition of capital inflows to India clearly reflects a shift towards non-debt-creating flows. The substantial contribution of external aid towards the capital account in the 1950s, 1960s, 1970s and 1980s has dwindled steadily since the 1990s (excluding IMF loans in 1991 and 1992) as the official flows started to be replaced by private equity flows and external commercial borrowing (Table 1). Although non-debt flows, particularly private foreign investments, have gained in importance, there has also been a significant rise in debt-creating flows in last two years, mainly on account of a rise in external commercial borrowings by Indian corporates (Table 2).

Table 1

External financing in India

In millions of US dollars

	1990/91	2000/01	2003/04	2005/06 PR	2006/07 P	2007/08 P
Current account balance	–9,680	–2,666	14,083	–9,902	–9,766	–17,407
As a percentage of GDP	–3.1	–0.6	2.3	–1.2	–1.1	–1.5
Net capital flows	7,056	8,840	16,736	25,470	45,779	108,031
of which						
1. Foreign direct investment						
Inflows	107	4,101	4,464	9,178	22,959	34,924
Outflows	10	829	2,076	6,144	14,480	19,379
Net	*97*	*3,272*	*2,388*	*3,034*	*8,479*	*15,545*
2. Foreign portfolio investment						
Inflows	6	13,619	28,218	68,120	109,622	235,630
Outflows	0	11,029	16,862	55,626	102,560	206,369
Net	*6*	*2,590*	*11,356*	*12,494*	*7,062*	*29,261*
3. External assistance						
Inflows	3,397	2,941	3,350	3,607	3,747	4,241
Outflows	1,193	2,531	6,208	1,841	1,960	2,127
Net	*2,204*	*410*	*–2,858*	*1,766*	*1,787*	*2,114*
4. External commercial borrowings						
Inflows	4,282	9,621	5,228	14,343	20,973	29,851
Outflows	2,028	5,318	8,153	11,835	4,818	7,686
Net	*2,254*	*4,303*	*–2,925*	*2,508*	*16,155*	*22,165*
5. NRI deposits						
Inflows	7,348	8,988	14,281	17,835	19,914	29,321
Outflows	5,811	6,672	10,639	15,046	15,593	29,142
Net	*1,537*	*2,316*	*3,642*	*2,789*	*4,321*	*179*

PR = partially revised; P = preliminary. Figures for foreign direct investment and foreign portfolio investment include gross inflows and gross outflows on account of foreign investments in India as well as Indian investment abroad. Similarly, figures for external assistance and external commercial borrowings include gross inflows and gross outflows on account of foreign borrowings as well as overseas lending by Indian entities. Large outflows under external commercial borrowings during 2005/06 reflect the one-off effect of the principal repayment of $5.2 billion on account of redemption of India Millennium Deposit bonds.

Source: Reserve Bank of India.

Table 2

Composition of capital inflows to India

	1990/91	2000/01	2003/04	2005/06	2006/07 P	2007/08P
Net capital flows (US$ millions)	7,056	8,840	16,736	25,470	45,779	108,031
of which (in per cent)						
1. Non-debt-creating flows	1.5	66.3	82.1	73.6	34.5	41.5
a) Foreign direct investment	1.4	37.0	14.3	20.2	18.8	14.4
b) Foreign portfolio investment	0.1	29.3	67.9	53.4	15.7	27.1
2. Debt-creating flows	71.1	30.3	7.7	29.6	51.2	49.6
a) External assistance	31.2	4.6	–17.1	7.2	3.9	1.9
b) External commercial borrowings[1]	31.9	48.7	–17.5	11.6	35.8	20.5
c) Short-term credits	15.2	6.2	8.5	7.3	7.3	16.4
d) Banking capital	9.7	–22.2	36.0	5.9	4.6	10.9
of which						
NRI deposits	21.8	26.2	21.8	11.9	8.7	0.2
e) Rupee debt service	–16.9	–7.0	–2.2	–2.4	–0.4	–0.1
3. Other capital[2]	27.4	3.3	10.2	–3.2	14.2	8.9
Total (1 + 2 + 3)	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

P = provisional.

[1] Medium- and long-term borrowings. [2] Includes leads and lags in exports (difference between the custom and the banking channel data), Indian investment abroad and India's subscription to international institutions and quotas.

Source: *Annual Report*, Reserve Bank of India, 2006/07.

Non-debt flows

Equity flows under foreign direct investment (FDI) and foreign portfolio investments constitute the major forms of non-debt-creating capital flows to India. There has been a marked increase in the magnitude of FDI inflows to India since the early 1990s, reflecting the liberal policy regime and growing investor confidence. India's share in global FDI flows increased from 2.3% in 2005 to 4.5% in 2006. Inflows under FDI were particularly high during the last two years, though a large part was offset by significant outflows on account of overseas investment by Indian corporates.

In a major break from the past, the spurt in FDI flows to India in the recent period has been accompanied by a jump in outward equity investment as Indian firms establish production, marketing and distribution networks overseas to achieve global scale along with access to new technology and natural resources. Investment in joint ventures (JV) and wholly owned subsidiaries (WOS) abroad has emerged as an important vehicle for facilitating global expansion by Indian companies. Overseas direct equity investment from India jumped from $3.8 billion in 2005/06 to $11.3 billion in 2006/07, and rose further to $12.5 billion during 2007/08. Overseas investment, which started with the acquisition of foreign companies in the IT and related services sector, has now spread to other areas such as non-financial services.

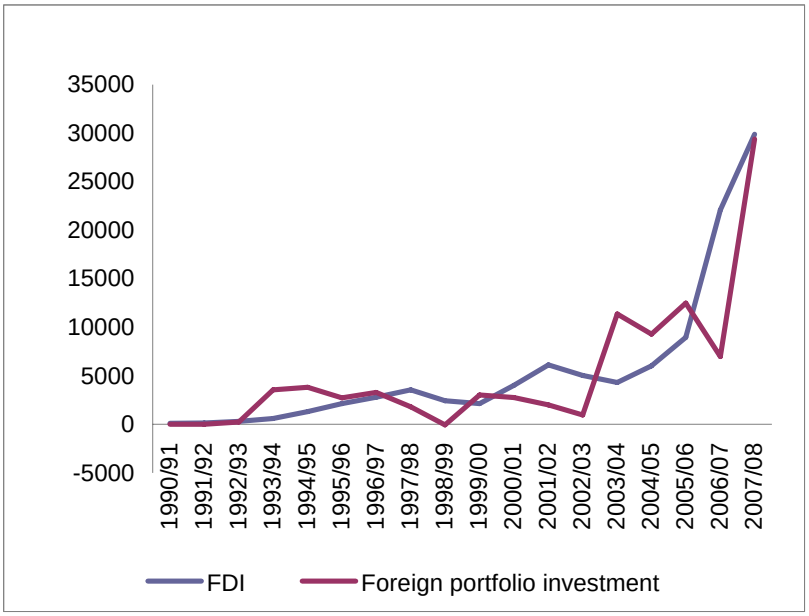
A marked feature of FDI flows to India is that they have been concentrated in the services sector, in contrast to the dominance of manufacturing in the East Asian economies. This reflects the service-led growth of the economy and its comparative advantage in international trade in services. It may be mentioned that IT has enabled greater tradability of a number of business and professional services. With greater potential for growth in such services, FDI has also emerged as a vehicle to delivery of services to the international markets. Moreover, within the services sector, financing, insurance, real estate and business services witnessed a large increase in their share in FDI flows to India between 2002/03 and 2007/08. Computer services also remains a key sector for FDI as captive BPO/subsidiaries have been principal instruments for facilitating offshore delivery of computer services and IT enabled services.

Like FDI, India's share in net portfolio flows to emerging market and developing countries has expanded. India has witnessed a dominance of portfolio flows over FDI flows during various periods of time, which is in contrast to developing and emerging market economies in most parts of the world, where FDI constituted the main source of equity flows (Graph 2). However, unlike FDI flows, which have exhibited a more or less steady upward trend over the years, portfolio flows are more volatile, moving in tandem with domestic and international market sentiments. Accordingly, a sharp rise in portfolio investment into India in the recent period reflects both global and domestic factors. The search for yield in view of very low real long-term rates in advanced economies has been an important factor driving portfolio flows to EMEs as a group, and India also has attracted such flows. Domestic factors, such as strong macroeconomic fundamentals, a resilient financial sector, a deep and liquid capital market, the improved financial performance of the corporate sector and attractive valuations also attracted large portfolio flows. Consistent with the principle of the hierarchy of capital flows, India has been making efforts towards encouraging more inflows through FDI and enhancing the quality of portfolio flows by strict adherence to the "know your investor" principle (Reddy (2005)).

Graph 2

Foreign investment inflows to India

In millions of US dollars



Source: Reserve Bank of India.

Debt-creating flows

External assistance, external commercial borrowings (ECBs), trade credits and the non-repatriable component of NRI deposits constitute the major portion of the external debt in India.

External assistance, which consists of external aid flows from bilateral and multilateral sources, constituted the major source of external financing for India in the 1950s and 1960s. Its importance has declined steadily during the last three decades as it gave way to private capital flows, with the share in India's total capital flows falling from 31.2% in 1990/91 to 1.9% in 2007/08. Conversely, India has started extending assistance to other countries, mainly grants and loans for technical cooperation and training. The grant component dominates external aid with a share of over 90%; the major beneficiaries during 2006/07 were Bhutan, Nepal and Sri Lanka.

The recourse to ECBs by Indian corporates, though initiated in the early 1970s, remained modest due to the dominance of concessional, non-market-based finance in the form of external assistance from bilateral sources and multilateral agencies. Towards the end of the 1970s, the concessionality in the aid flows dwindled. Thus, with the rising external financing requirements beginning in the 1980s and the recognition that reliance on external assistance was not favourable, commercial borrowings from international capital markets were preferred. After experiencing some slowdown in the aftermath of the balance of payments crisis, ECBs rose significantly in the latter half of the 1990s, responding to the strong domestic investment demand, favourable global liquidity conditions, the upgrade of India's sovereign credit rating, lower risk premia on emerging market bonds, and an upward phase of the capital flow cycle to the EMEs. During this period, ECBs constituted about 30% of the net capital flows to India. In the late 1990s and the early 2000s, the demand for ECBs remained subdued due to a host of factors such as the global economic slowdown, the downturn in capital flows to developing countries and lower domestic investment demand. The period beginning 2003/04 marked the resumption of debt flows to developing countries, the combined outcome of the higher interest rate differential emanating from ample global liquidity and the robust growth expectations and low risk perception towards the emerging markets. Net inflows under ECBs increased from $2.5 billion in 2005/06 to $16.2 billion in 2006/07 and further to $22.2 billion during 2007/08. ECBs contributed to about 20.5% of the net capital flows to India in 2007/08. Higher ECB drawals during the past few years reflect sustained domestic investment demand, import demand, the hardening of domestic interest rates and also the greater risk appetite of global investors for emerging market bonds. The policy on ECBs is kept under constant review and changes are made as needed.

In the 1970s, the two oil shocks shifted substantial resources towards oil-exporting countries, which provided investment and employment opportunities in the oil-rich countries. The Reserve Bank devised specific deposit schemes to tap the savings of NRIs employed in these countries. Non-Resident Indians/Overseas Corporate Bodies were allowed to open and maintain bank accounts in India under special deposit schemes, both rupee- and foreign currency denominated. NRI deposits were a generally stable source of support to India's balance of payments through the 1990s, although the external payment difficulties of 1990/91 demonstrated the vulnerability that can be associated with these deposits in times of difficulty and drastic changes in perceptions. Since the 1990s, the Reserve Bank has aligned the interest rates on these deposits with international rates and fine-tuned the reserve requirements, end use specifications and other concomitant factors influencing these deposits in order to modulate these flows consistent with overall macroeconomic management.

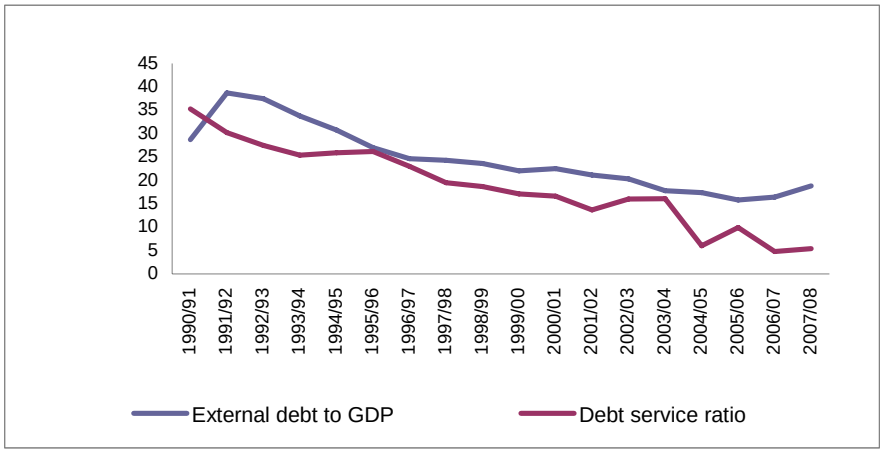
As a whole, India's external debt stock stood at $221.2 billion at the end of March 2008. Consolidation of India's external debt position is reflected the steady improvement in India's debt sustainability and liquidity indicators. While the ratio of India's external debt to GDP has declined over the years from 38.7% in 1991/92 to 18.8% in 2007/08, the debt service ratio

declined from 30.2% to 5.4% during the same period (Graph 3). At the end of March 2008, India's foreign exchange reserves, at $309.7 billion, provided a cover of 140% to total external debt, though there has been a increase in the short-term debt in recent years. As regards the composition of external debt, there has been a distinct decline in the share of government debt in total external debt, which fell from 43.4% to 26.3% of total external debt between end-March 2001 and end-December 2007, giving way to non-government private external borrowings (Graph 4).

Graph 3

External debt indicators

In per cent

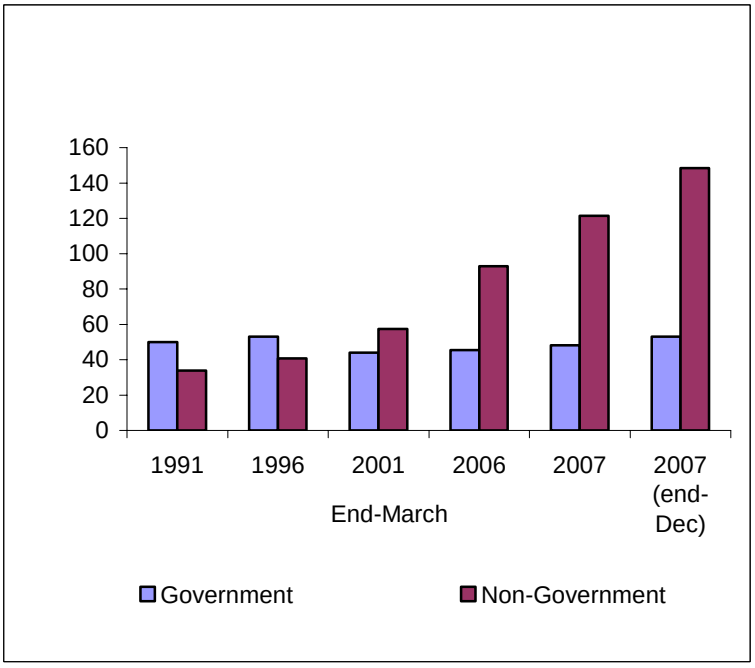


Source: Reserve Bank of India.

Graph 4

Government and private external debt outstanding

In billions of US dollars



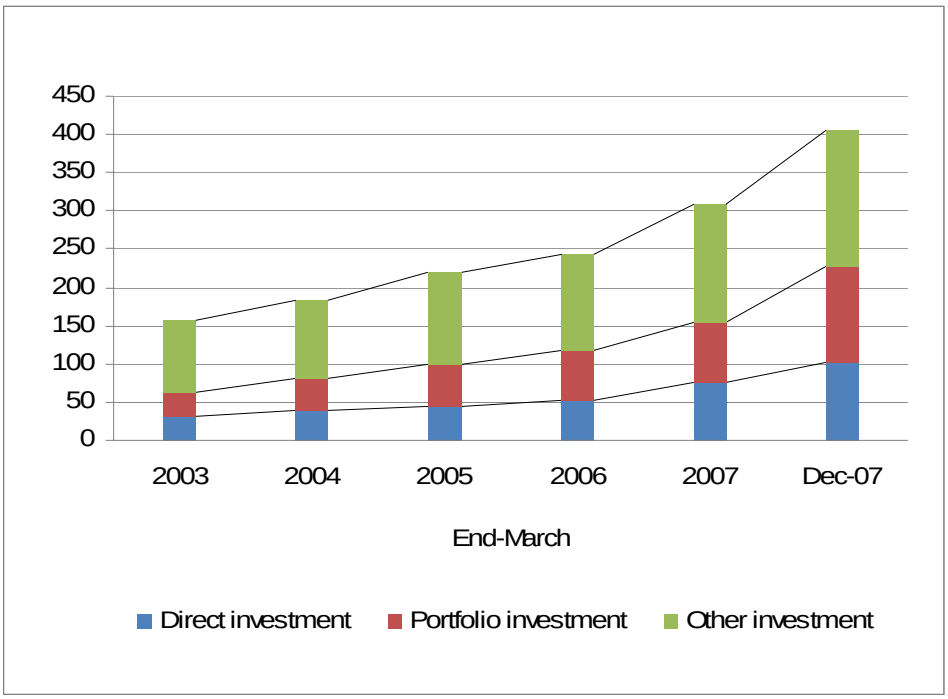
Source: Reserve Bank of India.

On account of large capital inflows, India's international investment position (IIP) has deteriorated over the years. Net international liabilities increased from $47.2 billion at end-March 2004 to $73.9 billion at end-December 2007, as the increase in international liabilities ($222.5 billion) exceeded the increase in international assets ($195.7 billion) during the period (Graph 5). While the increase in the liabilities was mainly due to large capital flows under portfolio investment, FDI and external commercial loans, the increase in international assets mainly reflected a rise in reserve assets, followed by direct investment abroad. A major part of the liabilities, such as direct and portfolio investment, reflects cumulative inflows, which are provided at historical prices. The value of the liabilities would be much higher if marked to market at current prices. The ratio of non-debt liabilities to total external financial liabilities has witnessed an increasing trend since end-June 2006, rising from 42.3% at end-June 2006 to 50.8% at end-December 2007 due to large capital inflows under direct and portfolio equity investments. On the other hand, debt liabilities, which include portfolio investment in debt securities and other investment (trade credits, loans, currency and deposits and other liabilities) declined from 57.7% to 49.2% during the same period.

Graph 5

India's external liabilities

In billions of US dollars



Source: Reserve Bank of India.

III. Management of capital flows in India

The recent episode of capital flows, which has occurred against the backdrop of current account surpluses in most of the emerging Asian economies, highlights the importance of the absorption of capital flows. A large surge in capital flows over a short span of time in excess of domestic absorptive capacity can lead to upward pressure on the exchange rate, possible overheating of the economy and asset price bubbles. It can also pose the risk of an abrupt reversal, which may have potential negative real economic effects. The absorption of capital flows is limited by the size of the current account deficit, which has traditionally been low in

India, and seldom above 2% of GDP. Given this situation, large capital inflows are a stress on the real economy through exchange rate appreciation and sterilisation. This not only affects exporters, but also affects the profitability of domestic producers through pressures on domestic prices, unless productivity goes up commensurately. Real appreciation of the exchange rate leading to a widening of the trade deficit could also result in a slowdown in economic and industrial growth. Thus, the combination of low domestic absorption and high capital inflows has posed new challenges for monetary and exchange rate management in India.

In the medium term, a continued focus on financial market development would mitigate the challenge of capital flows. However, it is important to recognise that maturation of financial markets takes time. Hence, capital flows have to be managed through other tools in the short term, while continuing work on the development of financial markets (Reddy (2008a)). In response to net capital flows remaining well in excess of the current account financing need, a multi-pronged approach has been followed in India to deal with such flows. The policy responses have included, inter alia, phased liberalisation of the policy framework in relation to current as well as capital account outflows; foreign exchange market intervention and subsequent sterilisation; lowering interest rate ceilings on NRI deposits; management of external debt through prepayment and moderation in the access of corporates and intermediaries to additional external debt; and greater flexibility in exchange rate movements.

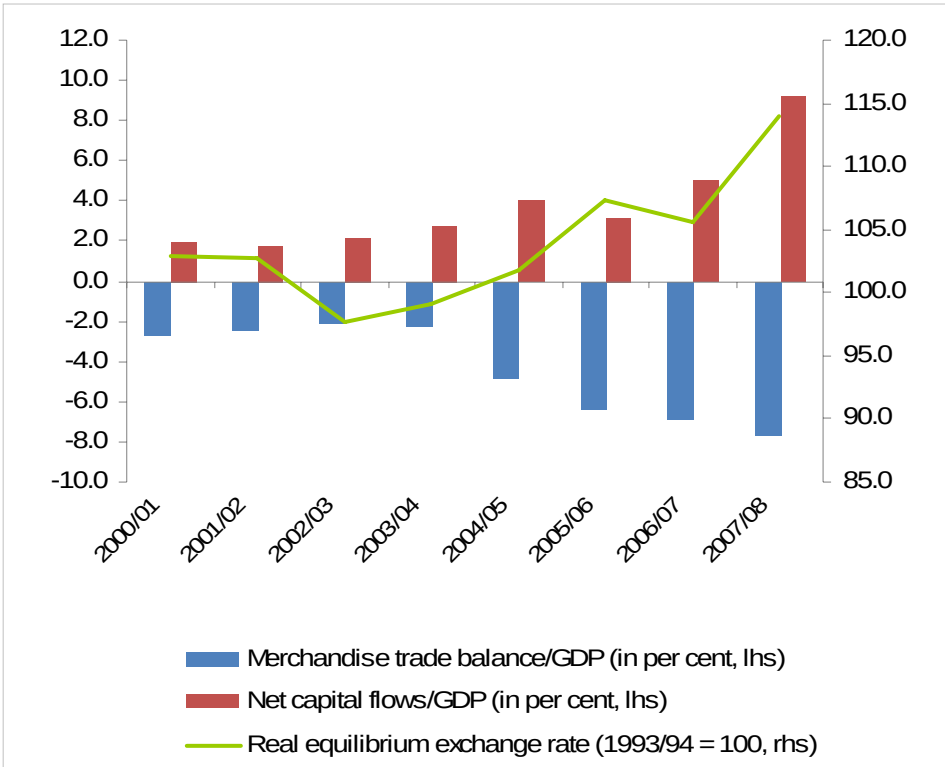
III.1 Capital flows and exchange rate management

In India, with the gradual removal of restrictions on international capital flows and greater integration of domestic with global financial markets, understanding the precise nature of the causal relationship among capital flows, the exchange rate, interest rates and reactions of monetary policy has certainly become more complex. The response lag of the exchange rate and domestic liquidity to monetary policy actions in the form of direct intervention in the exchange market as well as changes in the short-term policy rates has important implications for the stability of foreign exchange markets and external price competitiveness. The importance of capital flows in determining exchange rate movements has increased considerably, rendering some of the earlier guideposts of monetary policy formulation possibly anachronistic (Mohan (2007a)). On a day-to-day basis, it is capital flows which influence the exchange rate and interest rate arithmetic of the financial markets. Instead of the real factors underlying trade competitiveness, it is expectations and reactions to news which drive capital flows and exchange rates, often out of alignment with fundamentals. Capital flows have been observed to cause overshooting of exchange rates as market participants act in concert while pricing information. In the Indian case, notwithstanding the persistence of a large trade deficit, capital flows have led to appreciation of the exchange rate, indicating the dominance of capital inflows in determining exchange rate movements (Graph 6).

The experience with capital flows has important lessons for the choice of the exchange rate regime. The advocacy of corner solutions – a fixed peg without monetary policy independence or a freely floating exchange rate retaining discretionary conduct of monetary policy – is distinctly on the decline. The weight of experience seems to be tilting in favour of intermediate regimes with country-specific features, without targets for the level of the exchange rate and exchange market interventions to fight extreme market turbulence. In general, EMEs have accumulated massive foreign exchange reserves as a circuit breaker for situations where unidirectional expectations become self-fulfilling (Mohan (2006)).

Graph 6

Merchandise trade, capital flows and exchange rate movements



Source: Reserve Bank of India.

In India, since a market-determined exchange rate system was set in place in March 1993, the exchange rate has been largely determined by demand and supply conditions in the market. The exchange rate policy in recent years has been guided by the broad principles of careful monitoring and management of exchange rates with flexibility, without a fixed target or a preannounced target or band, while allowing the underlying demand and supply conditions to determine the exchange rate movements over a period in an orderly way. Subject to this predominant objective, the exchange rate policy is guided by the need to reduce excess volatility, prevent the emergence of destabilising speculative activities, maintain an adequate level of reserves and develop an orderly foreign exchange market. The Indian foreign exchange market, like other developing country markets, is not yet very deep and broad, and can sometimes be characterised by an uneven flow of demand and supply over different periods. In this situation, the Reserve Bank has been prepared to make sales and purchases of foreign currency in order to even out lumpy demand and supply in the relatively thin forex market and to smooth jerky movements. However, such intervention is not governed by a predetermined target or band around the exchange rate.

Over the years, transactions in the Indian foreign exchange market have experienced tremendous growth. The increase in foreign exchange market turnover in India between April 2004 and April 2007 was the highest amongst the 54 countries covered in the Triennial Central Bank Survey of Foreign Exchange and Derivatives Market Activity conducted by the BIS in 2007. According to the survey, the daily average turnover in India jumped almost fivefold from $7 billion in April 2004 to $34 billion in April 2007, whereas global turnover over the same period increased by only 69%, from $1.9 trillion to $3.2 trillion. Reflecting these trends, the share of India in global foreign exchange market turnover trebled from 0.3% in April 2004 to 0.9% in April 2007. The average daily turnover in Indian foreign exchange market almost doubled from $25.8 billion in 2006/07 to $48.0 billion in 2007/08 (Table 3).

Component-wise, the share of the spot market in total foreign exchange market turnover has declined marginally in recent years due to a pickup in turnover in the derivatives segment. The merchant segment of the spot market is generally dominated by the Government of India, select public sector units, such as Indian Oil Corporation (IOC), and the FIIs. As the foreign exchange demand from public sector units and FIIs tends to be lumpy and uneven, resultant demand-supply mismatches entail occasional pressures on the foreign exchange market, warranting market interventions by the Reserve Bank. However, as noted earlier, such intervention is not governed by a predetermined target or band around the exchange rate.

Table 3

Average daily volume of transactions in the Indian forex market

In billions of US dollars

Year	Spot	Derivatives[1]	Total
1997/98	2.6	2.4	5.0
2000/01	2.8	3.0	5.8
2003/04	4.3	4.4	8.7
2004/05	5.8	5.8	11.6
2005/06	8.9	8.7	17.6
2006/07	13.4	12.4	25.8
2007/08	23.8	24.2	48.0

[1] Includes swap and forward transactions.

Source: Reserve Bank of India.

The public sector oil companies are among the important participants in the financial markets in India. Therefore, the liquidity and other related issues currently faced by these entities arising from the unprecedented escalation in international crude prices have systemic implications for the smooth functioning of financial markets and for overall financial stability in India. Accordingly, in order to minimise the potential adverse consequences for financial markets, the Reserve Bank has since end-May 2008 put in place Special Market Operations (SMOs) under which it (i) conducts open market operations (outright or repo at the discretion of the Reserve Bank) in the secondary market through designated banks in oil bonds held by public sector oil marketing companies in their own accounts, currently subject to an overall ceiling of Rs. 15 billion on any single day; and (ii) provides equivalent foreign exchange through designated banks at market exchange rates to the oil companies. The SMOs constitute only a fraction of the total turnover in the money and foreign exchange markets in India but are designed to reduce volatility. Further, the SMOs are likely to improve the access of public sector oil companies to domestic liquidity and alleviate the lumpy demand in the foreign exchange market in the current extraordinary situation.

Despite interventions by the Reserve Bank in the face of large capital flows, the exchange rate in the recent period has been marked by significant bidirectional movement, implying greater flexibility (Table 4). The IMF has observed in its Article IV Consultation Paper: “since the start of 2007, the BRICs (Brazil, Russia, India and China) have experienced significant REER appreciation. Most of the real appreciation in 2007 for India and Brazil came from nominal appreciation, whereas China and Russia had inflation-led appreciation”. Moreover, the volatility of the rupee exchange rate has become quite similar to the volatilities of exchange rates observed in the countries with a managed float exchange rate regime over the years.

Table 4

Exchange rate movements

In rupees per US dollar

Year	Range	Average	Standard deviation
1993/94	31.21/31.49	31.37	0.05
1994/95	31.37–31.97	31.40	0.12
1995/96	31.37–37.95	33.45	0.56
1996/97	34.14–35.96	35.50	0.21
1997/98	35.70–40.36	37.16	0.37
1998/99	39.48–43.42	42.07	0.24
1999/00	42.44–43.64	43.33	0.10
2000/01	43.61–46.89	45.68	0.15
2001/02	46.56–48.85	47.69	0.13
2002/03	47.51–49.06	48.40	0.07
2003/04	43.45–47.46	45.92	0.19
2004/05	43.36–46.46	44.95	0.31
2005/06	43.30–46.33	44.28	0.22
2006/07	43.14–46.97	45.28	0.27
2007/08	39.26–43.15	40.24	0.38

Source: Reserve Bank of India.

III.2 Capital flows and monetary management

Capital flows and liquidity management

In the recent period, in India, one of the most serious challenges to the conduct of monetary policy emerges from capital flows in view of their significantly higher volatility as well as the fact that capital flows in gross terms are much higher than those in net terms. Swings in capital flows can have a significant impact on exchange rates, domestic monetary and liquidity conditions and overall macroeconomic and financial stability (Mohan (2007a)). This has warranted appropriate monetary operations to obviate wide fluctuations in market rates and ensure reasonable stability consistent with the monetary policy stance. In fact, the Indian experience illustrates the tight link between external sector management and domestic monetary management (Mohan (2006)).

With a view to neutralising the impact of excess forex flows on account of a large capital account surplus, the Reserve Bank has intervened in the foreign exchange market at regular intervals. But unsterilised forex market intervention can result in inflation, a loss of competitiveness and attenuation of monetary control. The loss of monetary control could be steep if such flows are large. Therefore, it is essential that the monetary authorities take measures to offset the impact of such foreign exchange market intervention, partly or wholly, so as to retain the efficacy of monetary policy through such intervention. Most techniques to offset the impact of forex inflows can be classified as either market-based or non-market-based. The market-based approach involves financial transactions between the central bank and the market, which leads to withdrawal or injection of liquidity, as the case may be. The

non-market-based approach involves the use of quantitative barriers, rules or restrictions on market activity, which attempt to keep the potential injection of liquidity outside the domestic financial system. The market-based approach aimed at neutralising part or whole of the monetary impact of foreign inflows is termed sterilisation.

In India, the liquidity impact of large capital inflows was traditionally managed mainly through the repo and reverse repo auctions under the day-to-day Liquidity Adjustment Facility (LAF). The LAF operations were supplemented by outright open market operations (OMOs), ie outright sales of the government securities, to absorb liquidity on an enduring basis. In addition to the LAF and OMOs, excess liquidity from the financial system was also absorbed through the building-up of surplus balances of the government with the Reserve Bank, particularly by raising the notified amount of 91-day Treasury bill auctions, and forex swaps.

Box 1

Introduction of MSS

In view of the finite stock of government securities available with the Reserve Bank for sterilisation, particularly as the option of issuing central bank securities is not permissible under the RBI Act, the Working Group on Instruments of Sterilisation (2004) recommended that the central government issue a special variety of bills/bonds for sterilisation purposes. Unlike in the case of central bank securities, where the cost of sterilisation is borne indirectly by the fisc, the cost of issuance of such instruments by the government would be directly and transparently borne by the fisc. The Committee recommended that to operationalise such a new instrument of sterilisation and ensure fiscal transparency, the central government consider setting up a Market Stabilisation Fund (MSF) to be created in the Public Account. This Fund could issue new instruments called Market Stabilisation Bills/Bonds (MSBs) for mopping up enduring surplus liquidity from the system over and above the amount that could be absorbed under the day-to-day repo operations of the LAF.

Based on the above recommendation, a new instrument named the Market Stabilisation Scheme (MSS) has been made operational from April 2004. Under this scheme, which is meant exclusively for sterilisation purposes, the Reserve Bank has been empowered to issue government Treasury bills and medium-duration dated securities for the purpose of liquidity absorption. The scheme works by impounding the proceeds of auctions of Treasury bill and government securities in a separate identifiable MSS cash account maintained and operated by the RBI. The amounts credited into the MSS cash account are appropriated only for the purpose of redemption and/or buyback of the Treasury bills and/or dated securities issued under the MSS. MSS securities are indistinguishable from normal Treasury bills and government dated securities in the hands of the lender. The payments for interest and discount on MSS securities are not made from the MSS account, but shown in the Union budget and other related documents transparently as distinct components under separate subheads. The introduction of MSS has succeeded broadly in restoring the LAF to its intended function of daily liquidity management.

Since its introduction in April 2004, the MSS has served as a very useful instrument for medium-term monetary and liquidity management. It has been unwound at times of low capital flows and built up when excess capital flows could lead to excess domestic liquidity (Mohan (2006)).

MSS balances

In billions of rupees

	2004/05	2005/06	2006/07	2007/08
Interest payments	20.6	34.2	26.1	83.5
Outstanding amount	642.1	290.6	629.7	1,683.9

MSS outstanding balance as of 11 July 2008 was Rs. 1,714.8 billion.

Source: Union Finance Accounts; Union Budget Documents; Reserve Bank of India.

The market-based operations led to a progressive reduction in the quantum of securities with the Reserve Bank. This apart, as per those operations, the usage of the entire stock of securities for outright open market sales was constrained by the allocation of a part of the securities for day-to-day LAF operations as well as for investments of surplus balances of the central government, besides investments by the state governments in respect of earmarked funds (CSF/GRF) while some of the government securities were also in non-marketable lots. In the face of large capital flows coupled with a declining stock of government securities, the Reserve Bank introduced a new instrument of sterilisation, the Market Stabilisation Scheme (MSS) to sustain market operations (Box 1). Since its introduction in April 2004, the MSS has served as a very useful instrument for medium-term monetary and liquidity management.

In addition to various market-based instruments of sterilisation, such as the LAF, OMOs, the MSS, balances of the Government of India with the Reserve Bank, forex swaps and private placements for prepayment of external loans, the RBI has also had recourse to increasing the cash reserve ratio for banks to withdraw excess liquidity from the system. In recognition of the cumulative and lagged effects of monetary policy, pre-emptive monetary tightening measures have also been put in effect since September 2004 and continued during 2006/07, 2007/08 and 2008/09, in part to manage monetary effects of excess capital flows. Since September 2004, the repo rate and the reverse repo rate have been increased by 250 and 150 basis points, respectively, while the cash reserve ratio (CRR) has been raised by 400 basis points. In the context of large capital inflows and implications for liquidity and monetary management, the interest rate ceilings on various non-resident deposit schemes have been reduced by 75–100 basis points since January 2007 to discourage greater inflows into these accounts.

Cost of sterilisation

In the choice of instruments for sterilisation, it is important to recognise the benefits and costs of sterilisation in general and the relative costs/benefits in the usage of a particular instrument. The various instruments differ in their impact on the balance sheets of the central bank, the government and the financial sector. For example, in the case of OMO sales, the differential between the yield on government securities and return on foreign exchange assets is the cost to the Reserve Bank. Sales of government securities under OMOs also involve a transfer of market risks to the financial intermediaries, mostly banks. The repo operations under the LAF have a direct cost to the Reserve Bank. In the context of an increase in the CRR, the cost is borne by the banking sector if CRR balances are not remunerated. However, if they are, the cost could be shared between the banking sector and the Reserve Bank. The extent of capital flows to be sterilised and the choice of instruments thus also depend upon the impact on the balance sheets of these entities.

The cost of sterilisation in India is shared by the central government (the cost of the MSS), the Reserve Bank (sterilisation under the LAF) and the banking system (in the case of an increase in the reserve requirements). Since surpluses of the Reserve Bank are transferred to the central government, on a combined balance sheet basis, the relative burdens of cost between the government and Reserve Bank are not of great relevance. However, the direct cost borne by the government is transparently shown in its budget accounts. Owing to the difference between international and Indian interest rates, there is a positive cost of sterilisation, but the cost has to be traded off against the benefits associated with market stability, export competitiveness and possible crisis avoidance in the external sector. Sterilised interventions and interest rate policy are generally consistent with the overall monetary policy stance that is primarily framed on the basis of the domestic macroeconomic outlook.

III.3 Capital account liberalisation

It is interesting to note that a number of empirical studies do not find evidence that greater openness and higher capital flows lead to higher growth (eg Prasad et al (2007)). These authors find that there is a positive correlation between current account balances and growth

among non-industrial countries, implying that a reduced reliance on foreign capital is associated with higher growth. Alternative specifications do not find any evidence of an increase in foreign capital inflows directly boosting growth. The results could be attributable to the fact that even successful developing countries have limited absorptive capacity for foreign resources, either because their financial markets are underdeveloped, or because their economies are prone to overvaluation caused by rapid capital inflows. Thus, a cautious approach to capital account liberalisation would be useful for macroeconomic and financial stability (Mohan (2008)).

Henry (2007) argues that the empirical methodology of most of the existing studies is flawed since they attempt to look for permanent effects of capital account liberalisation on growth, whereas the theory posits only a temporary impact on the growth rate. Once such a distinction is recognised, empirical evidence suggests that opening the capital account within a given country consistently generates economically large and statistically significant effects, not only on economic growth, but also on the cost of capital and investment. The beneficial impact is, however, dependent upon the approach to the opening of the capital account, in particular the policies in regard to liberalisation of debt and equity flows. Recent research demonstrates that liberalisation of debt flows – particularly short-term, dollar-denominated debt flows – may cause problems. On the other hand, the evidence indicates that countries derive substantial benefits from opening their equity markets to foreign investors.

India has cautiously opened up its capital account since the early 1990s as policymakers realised that to meet the country's huge investment needs domestic savings needed to be supplemented with foreign savings. However, in liberalising its capital account, India has adopted a discriminatory approach towards various forms of capital flows. The Ministry of Finance, in its review of the trends in receipts and expenditures at the end of the second quarter of the financial year 2007/08, mentioned that FDI is the most preferred form of foreign capital flow. Investments in Indian firms through the stock market and by venture capital firms in unlisted companies are also potentially beneficial. External commercial borrowings and other short-term flows are areas where one can introduce an element of control to moderate sudden surges. Accordingly, the thrust of policy reform in India was in favour of a compositional shift in capital flows away from debt to non-debt-creating flows, viz FDI and foreign portfolio investment; strict regulation of ECBs, especially short-term debt; discouraging the volatile element of flows from NRIs; and gradual liberalisation of outflows. The present status of the various policy measures taken in India to manage the capital account is given at Annexes 1A and 1B.

India has followed a gradualist approach to liberalisation of its capital account. The status of capital account convertibility in India for various non-residents is as follows: for foreign corporate and financial institutions, there is a substantial degree of convertibility; for (NRIs) there is an approximately equal degree of convertibility, but accompanied by some procedural and regulatory impediments. For non-resident individuals other than NRIs there is near-zero convertibility. Movement towards fuller capital account convertibility (FCAC) implies that all non-residents (corporate and individuals) should be treated equally. As mentioned earlier, recognising the merits in moving towards fuller capital account convertibility, the Reserve Bank, in consultation with the government, appointed the Committee on Fuller Capital Account Convertibility in March 2006. The Committee has set out the preconditions for moving towards FCAC. The Committee has made several recommendations on the development of financial markets in addition to addressing issues related to interaction of monetary policy and exchange rate management, regulation/supervision of banks and the timing and sequencing of capital account liberalisation measures. Measures towards FCAC as recommended by the Committee are provided at Annex 2.

Accordingly, the Reserve Bank has implemented a number of measures, eg raising the limit on remittances, liberalisation of Exchange Earners' Foreign Currency Accounts, liberalisation of procedures for project and service exports, raising the limit on banks' overseas

borrowings, increasing the access to ECBs, establishment of corporate offices abroad, allowing increased FII investment in government securities, raising the ceiling on mutual funds' overseas investment, and liberalisation of forward contract regulations, etc based on the recommendations made by the Committee.

In view of the large capital flows during the last few years, the government and the Reserve Bank have recently taken some additional capital account measures aimed at limiting the implications of forex flows for the conduct of domestic monetary policy. In February 2003, the government prepaid part of its high-cost external debt amounting to $3.03 billion to the Asian Development Bank and the World Bank by privately placing marketable securities with the Reserve Bank. This apart, relaxations were effected in regard to outflows, under both the current and capital accounts (Box 2). At the same time measures were taken to manage debt inflows, especially ECBs and NRI deposits.

Box 2

Recent measures towards liberalisation of capital outflows from India

- Investments in overseas joint ventures (JV) / wholly owned subsidiaries (WOS) by Indian companies have been permitted up to 400% of the net worth of the Indian company under the Automatic Route.
- Indian companies have been allowed to invest in energy and natural resources sectors such as oil, gas, coal and mineral ores in excess of the current limits with the prior approval of the Reserve Bank.
- Listed Indian companies have been allowed to undertake portfolio investment abroad up to 50% of the net worth (up from the earlier limit of 35%).
- The earlier limit for prepayment of ECBs without Reserve Bank approval has been increased from $400 million to $500 million, subject to compliance with the minimum average maturity period as applicable to the loan.
- The aggregate ceiling for overseas investments by mutual funds registered with SEBI has been increased from $5 billion to $7 billion.
- The earlier limit under the Liberalised Remittance Scheme (LRS) has been raised from $100,000 to $200,000 per financial year.

In addition, changes in policies are made from time to time to modulate debt-creating capital flows depending on the financing needs of the corporate sector and the vulnerability of the domestic economy to external shocks. Recently, to facilitate easy access by Indian corporates to foreign funds, the Reserve Bank has increased the limit on ECBs for rupee expenditure for permissible end uses under the Approval Route to $100 million for borrowers in the infrastructure sector and $50 million for other borrowers from the earlier limit of $20 million per financial year, with effect from 29 May 2008. The all-in-cost interest rate ceiling for ECBs and trade credits for imports into India have been raised. Effective 2 June 2008, entities in the services sector, viz hotels, hospitals and software companies, are allowed to avail themselves of ECBs up to $100 million per financial year, for the purpose of importing capital goods under the Approval Route. The limits on FII investment in the Indian debt market have been revised upwards from $4.7 billion ($3.2 billion in government securities and $1.5 billion in corporate bonds) to $8.0 billion ($5.0 billion and $3.0 billion respectively).

IV. Issues and challenges

The management of capital flows is a complex process encompassing a spectrum of policy choices, which inter alia include the appropriate level of reserves, monetary policy objectives related to liquidity management, and the maintenance of healthy financial market conditions with financial stability. The intensified pressures due to large and volatile capital flows in the recent period in an atmosphere of global uncertainties make the task significantly more complex and critical (Reddy (2008b)). India's Finance Minister, referring to "Managing Capital Flows" in the Mid-Year Review of 2007/08 dated 7 December 2007 stated that: "While there are international experiences in this regard with some successful and painful adjustment process, the specific Indian context requires innovative policy responses. Going forward, this would be a major challenge".

In view of the above, some of the major issues as well as emerging challenges in respect of management of capital flows to India include the following:

- In the face of large and volatile capital flows, the problem for monetary management is twofold. First, it has to distinguish implicitly between durable flows and transient flows. If capital flows are deemed to be durable and indefinite, questions arise regarding foreign exchange management. If the flows are deemed to be semi-durable, essentially reflecting the business cycle, the task of monetary and liquidity management is to smooth out their impact on the domestic economy, finding means to absorb liquidity in times of surplus and to inject it in times of deficit. Second, in the short term, daily, weekly or monthly volatility in flows needs to be smoothed to minimise the effect on domestic overnight interest rates. In practice, ex ante, it is difficult to distinguish what is durable, what is semi-durable and what is transient. Hence policy and practice effectively operate in an environment of uncertainty and a variety of instruments have to be used to manage liquidity in this fluid scenario.

- The challenges for monetary policy with an open capital account are exacerbated if domestic inflation rises. In the event of demand pressures building up, increases in interest rates might be advocated to sustain growth in a non-inflationary manner, but such action increases the possibility of further capital inflows if a significant part of these flows is interest sensitive and explicit policies to moderate flows are not undertaken. These flows could potentially reduce the efficacy of monetary policy tightening by enhancing liquidity. Such dilemmas complicate the conduct of monetary policy in India if inflation exceeds the indicative projections. During 2006/07, 2007/08 and 2008/09 so far, as domestic interest rates in India hardened on the back of withdrawal of monetary accommodation, external foreign currency borrowings by domestic corporates witnessed a significant jump, leading to even higher flows. Where there are no restrictions on overseas borrowings by banks and financial institutions, such entities could also annul the efforts of domestic monetary tightening.

- As far as the exchange rate is concerned, the large inflow of remittances and major and sustained growth in software exports coupled with capital inflows have the potential for possible overvaluation of the currency and the resultant erosion of long-term competitiveness of other traditional and goods sectors – a problem popularly known as Dutch disease. Given the fact that more people are in the goods sector, the human aspects of exchange rate management should not be lost sight of. The Dutch disease syndrome has so far been managed by way of reserves build-up and sterilisation, the former preventing excessive nominal appreciation and the latter preventing higher inflation. However, the issue remains how long and to what extent such an exchange rate management strategy would work given the fact that India is faced with large and continuing capital flows apart from strengthening current receipts on account of remittances and software exports. This issue has assumed increased importance over the last year with increased capital flows arising from the

higher sustained growth performance and significant enhancement of international confidence in the Indian economy (Mohan (2007a)).

- A related issue is whether there should be sterilised intervention and if so, the timing and quantum of such interventions. There is usually a cost attached to sterilisation operations. At the same time, it is also necessary to assess the indirect cost of not sterilising if there are signs of a Dutch disease caused by flows in the capital account. Most often, it is not a question of whether to sterilise or not, but how much to sterilise. That is an important issue of judgment that needs to be made in conjunction with domestic monetary and liquidity conditions.

- Even when capital flows are sterilised through open market operations, the costs could be large when sterilisation operations raise domestic interest rates and result in the trap of even greater capital flows. The fiscal impact of sterilisation also needs to be factored in, especially when a large stock of securities has to be issued for the purpose.

- Another issue relates to the choice and an appropriate mix of instruments for sterilisation. Each of the instruments (MSS, LAF and CRR) has different features and interactions. Utilisation of each of these will also depend on the permanency of the components of the flows and how they should be sterilised in the aggregate. Further, each instrument can be used in different ways. The LAF is able to take care of very short-period flows. The MSS handles the longer-term flows slightly better than the LAF, and the CRR is more appropriate for addressing fairly long-term flows. However, the effectiveness of the MSS will depend more on the initiatives of the market participants than on the decisions of the Reserve Bank. Operationally, the issue is often not *which* instrument but *how much* each instrument needs to be utilised, with due regard to the capital flows, market conditions and monetary as well as credit developments.

- While interventions are carried out with the objective of containing volatility in the forex market, intervention over a long period, especially when the exchange rate is moving in one direction, could make interventions less effective. However, a critical question is what would be the impact on expectations about future movements in forex markets if no intervention takes place. The challenges of intervention and management of expectations will be particularly daunting when financial contagion occurs, since such events are characterised by suddenness, high speed and large magnitudes of unexpected flows, in either direction. The quintessence for a relevant monetary policy is the speed of adjustment of the policy measures to rapidly changing situations.

- A further challenge for policy in the context of fuller capital account openness will be to preserve the financial stability of the system as further deregulation of capital outflows and debt inflows proceeds. This will require market development, enhancement of regulatory capacity in these areas, as well as human resource development in both financial intermediaries and non-financial entities.

- Another aspect of greater capital market openness concerns the presence of foreign banks in India. With fuller capital account convertibility and a greater presence of foreign banks over time, a number of issues will arise. First, if these large global banks have emerged as a result of real economies of scale and scope, how will smaller national banks compete in countries like India, and will they themselves need to generate a larger international presence? Second, there is considerable discussion today on overlaps and potential conflicts between home country regulators of foreign banks and host country regulators: how will these be addressed and resolved in the years to come? Third, given that operations in one country such as India are typically small relative to the global operations of these large banks, the attention of top management devoted to any particular country is typically low.

Consequently, any market or regulatory transgressions committed in one country by such a bank, which may have a significant impact on the banking or financial market of that country, are likely to have a negligible impact on the bank's global operations. It has been seen in recent years that even relatively strong regulatory action taken by regulators against such global banks has had a negligible market or reputational impact on them in terms of their stock price or similar metrics. Thus, there is a loss of regulatory effectiveness as a result of the presence of such financial conglomerates. Hence, there is inevitably a tension between the benefits that such global conglomerates bring and some regulatory and market structure and competition issues that may arise.

V. Outlook

Recent global developments have considerably heightened the uncertainty surrounding the outlook for capital flows to India, complicating the conduct of monetary policy and liquidity management. In view of the strong fundamentals of the economy and massive injections of liquidity by central banks in advanced economies, there could be sustained inflows, as in the recent past. If the pressures intensify, it may necessitate stepped-up operations in terms of capital account management and more active liquidity management with all instruments at the command of the Reserve Bank. At the same time, it is necessary in the context of recent global events not to exclude the possibility of reversals of capital flows due to abrupt changes in sentiment or global liquidity conditions. In this scenario, it is important to be ready to deal with potentially large and volatile outflows along with spillovers. In this context, there is room for manoeuvre for the Reserve Bank to deal with both scenarios in terms of the flexibility in the deployment of instruments such as the MSS, CRR, SLR and LAF for active liquidity management in both directions, complemented by prudential regulations and instruments for capital account management.

Annex 1A:
Measures to manage capital inflows

	Current regulations
Foreign direct investment	FDI is permitted under the Automatic Route in items/activities in all sectors up to the sectoral caps except in certain sectors where investment is prohibited. Investments not permitted under the Automatic Route require approval from the Foreign Investment Promotion Board (FIPB). The receipt of remittance has to be reported to the RBI within 30 days from the date of receipt of funds and the issue of shares has to be reported to the RBI within 30 days from the date of issue by the investee company.
Advance against equity	An Indian company issuing shares to a person resident outside India can receive such amount in advance. The amount received has to be reported within 30 days from the date of receipt of funds There is no provision on allotment of shares within a specified time. The banks can refund the amount received as advance, provided they are satisfied with the bona fides of the applicant and are satisfied that no part of remittance represents interest on the funds received.
Foreign portfolio investment: FIIs	Investment by non-residents is permitted under the Portfolio Investment Scheme to entities registered as FIIs and their sub-accounts under SEBI (FII) regulations. Investment by individual FIIs is subject to a ceiling of 10% of the PUC of the company and aggregate FII investment is subject to a limit of 24% of PUC of the company. This limit can be increased by the company subject to the sectoral limit permitted under the FDI policy. The transactions are subject to daily reporting by designated ADs to the RBI for the purpose of monitoring adherence to the ceiling for aggregate investments.
Foreign portfolio investment: NRIs	Investment by NRIs under the Portfolio Investment Scheme is restricted to 5% by individual NRIs/OCBs and 10% in aggregate (which can be increased to 24% by the company concerned).
Issue of ADRs/GDRs	Indian companies are allowed to raise resources through issue of ADRs/GDRs and the eligibility of the issuer company is aligned with the requirements under the FDI policy. The issue of Sponsored ADRs/GDRs requires prior approval of the Ministry of Finance. A limited Two-way Fungibility scheme has been put in place by the government for ADRs/GDRs. Under this Scheme, a stock broker in India registered with SEBI can purchase shares of an Indian company from the market for conversion into ADRs/GDRs based on instructions received from overseas investors. Reissuance of ADRs/GDRs would be permitted to the extent of ADRs/GDRs which have been redeemed into underlying shares and sold in the Indian market.
Investment in mutual funds	FIIs and NRIs are allowed to invest in units of mutual funds without any limit.

	Current regulations (cont)
Investments in government securities and T-bills	FIIs are eligible to invest in these instruments within an overall limit of $5 billion. NRIs are allowed to invest in these instruments without any limit (on both a repatriation and non-repatriation basis). Multilateral institutions which have been allowed to float rupee bonds can invest in these instruments.
Investment in corporate debt	FIIs are permitted to invest in corporate debt within an overall limit of $3 billion.
Investment in commercial paper (CP)	FIIs are allowed to invest in CP subject to the limit applicable to corporate debt. NRIs are allowed to invest in CP on a non-repatriation basis.
Investments in Upper Tier II instruments by Indian banks	Investment by FIIs in Upper Tier II instruments raised in Indian rupees is allowed subject to a separate ceiling of $500 million.
Investment in other debt instruments	NRIs are allowed to invest in non-convertible debentures floated by Indian companies by way of a public issue. There is no limit on investment by NRIs in these instruments.
Foreign venture capital investors (FVCIs)	FVCIs registered with SEBI are allowed to invest in units of venture capital funds without any limit. FVCI investment in equity of Indian venture capital undertakings is also allowed. The limit for such investments would be based on the sectoral limits under the FDI policy. FVCIs are also allowed to invest in debt instruments floated by the IVCUs. There is no separate limit stipulated for investment in such instruments by FVCIs.
External commercial borrowings (ECBs)	Under the Automatic Route, ECBs up to $500 million per borrowing company per financial year are permitted only for foreign currency expenditure for permissible end uses. Borrowers in the infrastructure sector may undertake ECBs up to $100 million for rupee expenditure for permissible end uses under the Approval Route. In case of other borrowers, the limit for rupee expenditure for permissible end uses under the Approval Route has been raised to $50 million from the earlier limit of $20 million. Entities in the services sector, viz hotels, hospitals and software companies, have been allowed to undertake ECB up to $100 million per financial year for the purpose of importing capital goods under the Approval Route. The all-in-cost interest ceiling for borrowings with maturity of three to five years has been increased from 150 basis points to 200 basis points over six-month Libor. Similarly, the interest ceiling for loans maturing after five years has been raised to 350 basis points from 250 basis points over six-month Libor.

	Current regulations (cont)
Trade credit	Import linked short-term loans (trade credit) up to $20 million per import transaction for all permissible imports with a maturity of one year is allowed under the Automatic Route. Trade credit up to $20 million per import transaction with maturity of less than three years is allowed for import of capital goods under the Automatic Route.
Delayed import payments	In case of delayed import payments due to disputes or financial difficulties, ADs can remit the amount subject to an all-in-cost ceiling of Libor plus 50 basis points for a period up to one year and Libor plus 125 basis points for periods of less than three years. However, interest payment for delayed payment of trade credit can be made for periods of less than three years.
Export advance	Export advance can be obtained for 12 months. The rate of interest for export advance up to one year is Libor plus 100 basis points.
Bank borrowing overseas	Restricted to 25% of Tier I or $10 million, whichever is higher. Borrowings for export finance and subordinated debt are outside this ceiling.
Investments by NRIs in immoveable property	NRIs are permitted to freely acquire immoveable property (other than agricultural land, plantations and farmhouses). There are no restrictions regarding the number of such properties to be acquired. The only restriction is that where the property is acquired out of inward remittances, the repatriation is restricted to the principal amount for two residential properties. [There is no such restriction in respect of commercial property.] NRIs are also permitted to obtain housing loans for acquiring property in India and repayment of such loans by close relatives is also permitted.

Annex 1B:
Measures to manage capital outflows

	Current regulations
Direct investment overseas by corporates and registered partnerships	Allowed up to 400% of the net worth under the Automatic Route. With a view to providing greater flexibility to Indian parties for investment abroad, it has been decided to allow Indian companies to invest in excess of 400% of their net worth, as on the date of the last audited balance sheet, in the energy and natural resources sectors such as oil, gas, coal and mineral ores with the prior approval of the Reserve Bank. AD Category I banks may allow remittance up to 400% of the net worth of the Indian entities to invest in overseas unincorporated entities in the oil sector after ensuring that the proposal has been approved by the competent authority and is duly supported by a certified copy of the Board Resolution approving such investment.
Direct investment overseas by exporter proprietorships	Specific approval subject to conditions.
Portfolio investment by Indian listed companies	Allowed up to 50% of the net worth in listed shares and rated and listed debt instruments.
Individuals	
(i) LRS Foreign security acquisition	(i) $200,000 for permissible capital and current accounts during a financial year.
(ii) Qualification shares	(ii) 1% of share capital with remittance restricted to $20000.
(iii) Shares of JV/WOS abroad by director of Indian employee/ parent (software only)	(iii) $10,000 per employee in block of five years.
(iv) ADR/GDR of Indian company in knowledge based sector by employees/working directors	(iv) $50,000 in block of five years.
(v) ESOP, inheritance	(v) Permitted.
Domestic mutual funds in various overseas instruments	Mutual funds can now invest overseas up to $7 billion in a wide range of instruments.

	Current regulations (cont)
Venture capital funds in venture capital undertakings	$500 million.
ECBs	Prepayment of ECBs up to $500 million can be allowed by AD Category I banks without prior approval of the Reserve Bank subject to compliance with the minimum average maturity period as applicable to the loan.
Lending by Indian subsidiary to overseas parent	Case by case.
Bank lending overseas subsidiaries of Indian companies	Restricted to 20% of net worth and to JV/WOS of Indian companies with at least 51% Indian shareholding.

Annex 2:
Measures towards fuller capital account convertibility

Recommendations by Tarapore Committee (2006)

(i) The Committee recommends that the overall ECB ceiling as also the ceiling for automatic approval should be gradually raised. Rupee denominated ECB (payable in foreign currency) should be outside the ECB ceiling.

(ii) The Committee has concerns about the volume of trade credit as there could be sudden changes in the availability of such credit. Furthermore, there are concerns as to whether the trade credit numbers are fully captured in the data even while noting that suppliers' credit of less than 180 days are excluded from these data. Import-linked short-term loans should be monitored in a comprehensive manner. The per transaction limit of $20 million should be reviewed and the scheme revamped to avoid unlimited borrowing.

(iii) Recognising that Indian industry is successfully building up its presence abroad, there is a strong case for liberalising the present limits for corporate investment abroad. The Committee recommends that the limits for such outflows should be raised in phases from 200% of net worth to 400% of net worth. Furthermore, for non-corporate businesses, it is recommended that the limits should be aligned with those for corporates.

(iv) EEFC Account holders should be provided foreign currency current/savings accounts with cheque writing facility and interest bearing term deposits.

(v) Project exports should be provided greater flexibility and these facilities should be also provided for service exports.

(vi) FIIs should be prohibited from investing fresh money raised through PNs. Existing PN-holders may be provided an exit route and phased out completely within one year.

(vii) The Committee recommends that non-resident corporates should be allowed to invest in the Indian stock markets through SEBI-registered entities including mutual funds and Portfolio Management Schemes who will be individually responsible for fulfilling Know your Customer (KYC) and Financial Action Task Force (FATF) norms. The money should come through bank accounts in India.

(viii) At present, only multilateral institutions are allowed to raise rupee bonds in India. To encourage, selectively, the raising of rupee denominated bonds, the Committee recommends that other institutions/corporates should be allowed to raise rupee bonds (with an option to convert into foreign exchange) subject to an overall ceiling which should be gradually raised.

(ix) The banks' borrowing facilities are at present restrictive though there are various special facilities which are outside the ceiling. The Committee recommends that the limits for borrowing overseas should be linked to paid-up capital and free reserves, and not to unimpaired Tier I capital, as at present, and raised gradually to 100% by 2010/11. Ultimately, all types of external liabilities of banks should be within an overall limit.

(x) At present, only mutual funds are permitted to invest overseas subject to stipulations for each fund. The Committee recommends that the various stipulations on individual fund limits and the proportion in relation to NAV should be abolished. The overall ceilings should be raised from the present level of $2 billion to $3 billion in Phase I (2006/07), to $4 billion in Phase II (by 2008/09) and to $5 billion in Phase III (by 2010/11). The Committee further recommends that these facilities should be available, apart from Mutual Funds, to SEBI registered portfolio management schemes.

(xi) The present facility for individuals to freely remit $25,000 per calendar year enables individuals to open foreign currency accounts overseas. The Committee recommends that this annual limit be successively raised to $50,000 in Phase I, $100,000 in Phase II and $200,000 in Phase III. Difficulties in operating this scheme should be reviewed. Since this facility straddles the current and capital accounts, the Committee recommends that where current account transactions are restricted, ie gifts, donations and travel, these should be raised to an overall ceiling of $25,000 without any sub-limit.

(xii) At present only NRIs are allowed to maintain FCNR(B) and NR(E)RA deposits. The Committee recommends that non-residents (other than NRIs) should also be allowed access to these deposit schemes. Since NRIs enjoy tax concessions on FCNR(B) and NR(E)RA deposits, it would be necessary to provide FCNR(B)/NR(E)RA deposit facilities as separate and distinct schemes for non-residents (other than NRIs) without tax benefits. In Phase I, the NRs (other than NRIs) could be first provided the FCNR(B) deposit facility, without tax benefits, subject to KYC/FATF norms. In Phase II, the NR(E)RA deposit scheme, with cheque writing facility, could be provided to NRs (other than NRIs) without tax benefits after the system has in place KYC/FATF norms. The present tax regulations on FCNR(B) and NR(E)RA deposits for NRIs should be reviewed by the government.

(xiii) At present, only NRIs are allowed to invest in companies on the Indian stock exchanges subject to certain stipulations. The Committee recommends that all individual non-residents should be allowed to invest in the Indian stock market through SEBI registered entities including mutual funds and Portfolio Management Schemes who will be responsible for meeting KYC and FATF norms and that the money should come through bank accounts in India.

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