

Foreign Exchange Reserves Management

Introduction

Chapter 4 discussed key developments in the external sector and changes in the regulatory regime. This chapter will concentrate on the management of the exchange rate and foreign exchange reserves. During the years of interest, in the wake of cross-border capital flows of unprecedented scale, the Reserve Bank needed to intervene deeply in the foreign exchange, or forex, market to stabilise the rupee and to devise measures to prevent currency speculation. While the Bank's stance on exchange rate was sometimes criticised, it succeeded in this aim, as this chapter will show. The chapter has four sections: The first two will deal with the exchange rate, presenting a chronological account of market intervention, and a discussion of some of the major debates and policy issues. The third section will deal with the management of reserves, and the fourth with policy on gold and its import, and related matters.

Exchange Rate Management: A Chronological Account

The Reserve Bank derives its authority to manage the exchange rate of the rupee from the Reserve Bank of India (RBI) Act, 1934. The word 'stability' in the phrase 'with a view to securing monetary stability ... and generally to operate the currency and credit system of the country to its advantage', appearing in the preamble, can mean internal as well as external stability. External stability, in turn, should mean maintaining a stable exchange rate. Section 40 of the Act, however, states that 'the Central Government may, by order, determine foreign exchange at such rates of exchange and on such conditions as the Central Government may from time to time ... determine'. These extracts suggest that exchange rate management is in the domain of the government, which delegated this power to the Reserve Bank. As we shall see, these clauses made the process of reforming exchange rate management a particularly interactive one.

Cross-border capital flows became more volatile from 1997 to 2008 because of both external and domestic developments, as we have seen (Chapters 3 and 4). Exchange rate management during this period became more challenging as a result. These eleven years can be divided into two parts. Between April 1997 and March 2003, the rupee (nominal) depreciated by nearly 25 per cent. In contrast, from April 2003 to March 2008, the nominal value of the rupee appreciated by around 19 per cent. During both the periods, the aim of exchange rate management was to manage the volatility of the rupee without a fixed target and allow it to find its level consistent with the 'fundamentals'.

Let us begin with a brief account of the institutional framework for market intervention. Following on the Sodhani Committee report, a Financial Markets Committee (FMC-RBI) was set up in early 1997.¹ The FMC-RBI met every day, generally in the morning. During the period of high volatility in the foreign exchange market, the FMC-RBI met more than once a day. After discussing the major developments in domestic and international markets, decisions were taken on daily intervention in different segments of the financial market. Generally, while the FMC-RBI decided about the Reserve Bank's intervention in money and government securities markets, the decision to intervene in the foreign exchange market was taken after members in the committee held discussions with the Governor.

How often and to what extent was market intervention used? In the rest of this section, the major episodes of intervention in the foreign exchange market and the context for such intervention are described year by year.

1997–98 to 2002–03

Subsequent to the unification of exchange rate in March 1993, the nominal exchange rate of the rupee vis-à-vis the United States (US) dollar remained steady at around ₹31.37 from March 1993 to August 1995.² From August 1995 to February 1996, after large swings, the rupee stabilised at around ₹35 per US dollar. April–August 1997 witnessed surplus conditions in the Indian foreign exchange market and continuation of a trend that had begun in 1996–97. As a result, the Reserve Bank mopped up US\$5.4 billion by way of net cumulative purchases from the market during this period.

On 15 August 1997, Deputy Governor Y. V. Reddy said that 'compared to March 1993, the appreciation of Indian rupee in real effective terms is around 14 percent'.³ This was perhaps the first time that the Reserve Bank

commented on contemporary exchange rate movements and acknowledged that the rupee was overvalued. As the rupee had appreciated in real terms, some correction was warranted. It seemed better that such correction took place at the initiative of the authorities rather than being forced by the market. Before making the speech, Deputy Governor Reddy had discussed with Governor Rangarajan about the statement that he would make on the status of the rupee. This was a calculated move.⁴ The *Economic Times* (20 August 1997) attributed to Prime Minister I. K. Gujral the view that the government would shortly fix a band to signal the exchange rate of the rupee in relation to the US dollar. The Reserve Bank issued a press release on the same day stating that the report was misleading.⁵ In any case, the rupee depreciated to ₹35.84 per US dollar on August 20 and to ₹36.08 on 21 August 1997.⁶

During October–December 1997, the nominal exchange rate of the rupee depreciated by 7.6 per cent. Corporates with large exposure to the foreign exchange market rushed to cover their position, which led to an increase in the forward premium.⁷ The liabilities of the Reserve Bank in terms of net forward market commitments rose from US\$944 million at the end of September 1997 to around US\$2 billion at the end of December 1997. That is, the Bank sold dollar to the tune of around US\$1 billion on a net basis in the forward market alone during that period. The intervention in the spot and forward segments of the market was supplemented by several monetary measures that eventually stabilised the exchange rate. But the improvement proved to be temporary. The Bank again undertook stringent monetary measures at the beginning of January 1998. By the end of January 1998, the nominal exchange rate had stabilised around ₹38.92 per US dollar and traded at around ₹39.5 per US dollar by March 1998. There was a loss of reserves to the extent of over US\$2 billion between September and December 1997.

During the first half of 1998–99, the situation turned adverse as the Asian crisis reached Russia and Brazil. Following a nuclear test, India faced economic sanctions by the US. The rupee moved sharply from ₹39.73 per US dollar at the beginning of May 1998 to ₹42.38 per US dollar on 11 June 1998. Outflows under the head of foreign institutional investment (FII), though only US\$137 million during May, contributed to the pressure on the rupee. In the first ten days of June 1998, the Reserve Bank sold US\$1.4 billion. The Bank issued a statement announcing a package of policy measures on 11 June 1998 to contain the volatility.⁸ The market responded positively to these measures and remained stable until August 1998. But fear of devaluation

of the Chinese renminbi and the deepening of a crisis in Russia made Indian markets turbulent again. The Bank announced a fresh package of measures on 20 August (also see Chapter 4). At the same time, the Resurgent India Bonds (RIBs) were launched following an announcement in the Union Budget 1998–99. As Deputy Governor Reddy would say later, the scheme was designed to manage an ‘extraordinary event’ caused by the sanctions on India and the downgrading of India’s sovereign rating.⁹ In contrast to cumulative sales by the Bank during May–July 1998, between August and March 1999, there was a cumulative purchase of dollars. The exchange rate, by and large, remained stable during September–March 1999, moving between ₹42.27 and ₹42.63 per US dollar.

The exchange rate traded within a range of ₹42.44–43.64 per US dollar during 1999–2000. The months of April and May 1999 saw an excess supply of dollars. The Bank purchased US\$1 billion (net) during these two months. From June to October 1999, excess demand conditions prevailed, partly caused by tensions on the India–Pakistan border in June 1999. During June–September 1999, the Bank made net sales. From November 1999 to March 2000, recovery in exports and sustained portfolio inflows enabled the Bank to make net purchases. The forward premia eased. The exchange rate averaged ₹43.33 per US dollar during 1999–2000, indicating a depreciation of about 2.9 per cent over the year.

During 2000–01, the rupee depreciated about 5.1 per cent against the US dollar and was highly volatile during May–October 2000. Thanks to the India Millennium Deposits (IMDs), which brought in US\$5.5 billion during October–December 2000, the rupee appreciated by 3.4 per cent and 8 per cent during 2000–01 against the pound sterling and the euro, respectively. In the next year (2001–02), the rupee was relatively stable and depreciated mildly by 1.9 per cent. Reflecting the nervous sentiment ruling financial markets in the wake of the September 11 events, the rupee depreciated against the dollar, the euro, the pound sterling and the Japanese yen by 1.1 per cent, 2.4 per cent, 2.9 per cent and 3.5 per cent, respectively, between August and September 2001. Between September and March 2002, there was a recovery. The Reserve Bank could make a net purchase of around US\$7.1 billion during 2001–02.

The rupee remained stable during the first four months of 2002–03, except for a brief period of uncertainty in May 2002. At the beginning of the year, rising crude oil prices, riots in Gujarat and short covering by importers imparted a downward pressure on the spot exchange rate of the rupee.

Escalated border tensions led to short covering, which reduced the spot rate even further in May. Reduced inflows through the FII channel weakened the rupee in June. Thereafter, improved supply conditions and weakening of the dollar against major currencies strengthened the rupee.

2003–04 to 2007–08

The year 2003–04 marked the beginning of a trend of appreciation. In 2003–04, the current account surplus in the balance of payments and surge in capital inflows contributed to the appreciation. Notwithstanding market interventions by the Reserve Bank by way of net purchase of US\$30.5 billion, the rupee appreciated by 9.3 per cent against the dollar during 2003–04. During the year, in the context of large capital inflows, the Bank introduced the Market Stabilisation Scheme (MSS) as a sterilisation tool to support its operations in the forex market. Interest on MSS securities was paid by the government, which was perceived by Finance Minister P. Chidambaram as a ‘subsidy to the export sector’.¹⁰

The rupee traded in a narrow range of ₹43.36 to ₹46.46 per US dollar during 2004–05, and appreciated by 2.2 per cent during the year, despite the Reserve Bank’s purchase of US\$20.8 billion. In the second quarter of 2005–06, the revaluation of the renminbi (21 July 2005) introduced some volatility in the market. The rise in oil prices and widening of current account deficit pushed the rupee down to ₹46.33 per US dollar on 8 December 2005. Subsequently, the rupee appreciated significantly, more than offsetting the impact of IMD redemptions. Purchases of US\$10.8 billion more than offset the sales of US\$6.5 billion under IMDs during February–March 2006. The traded range of the rupee was ₹43.14–46.97 per US dollar during 2006–07. In the earlier part of the year, the rupee depreciated but strengthened thereafter as oil prices stopped rising and capital inflows resumed.¹¹

Table 5.1 makes a concise statement of market intervention on a month-to-month basis. A few episodes stand out. For example, there was a record net purchase of US\$78 billion in 2007–08 despite outflows being encouraged to stem net capital inflows. The nominal exchange rate of the rupee appreciated from ₹44.61 per USD at the end of March 2006 to ₹39.98 at the end of March 2008.

The surge in capital inflows raised three main issues. These were the burgeoning foreign exchange reserves, increasing cost of sterilisation and rise

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Table 5.1 Net Sales/Purchases of US Dollars (in Billions) by the Reserve Bank

	1997– 98	1998– 99	1999– 2000	2000– 01	2001– 02	2002– 03	2003– 04	2004– 05	2005– 06	2006– 07	2007– 08
April	+ 0.64	+ 0.20	+ 0.04	+ 0.37	-0.02	+0.48	+1.43	+7.43	0.00	+4.31	+2.06
May	+ 1.39	- 0.75	+ 0.97	-0.90	+0.47	+0.09	+2.34	-0.22	0.00	+0.50	+4.43
June	+ 1.34	- 1.63	- 0.16	-1.05	+0.04	+0.24	+0.90	-0.41	-0.10	0.00	+3.19
July	+ 1.19	- 0.12	- 0.36	-0.41	-0.27	+1.83	+3.15	-1.18	+2.47	0.00	+11.43
Aug.	+ 0.87	+ 0.54	- 0.24	-0.47	+0.68	+1.18	+2.35	-0.88	+1.55	0.00	+1.82
Sept.	- 0.98	+ 0.76	- 0.53	-0.29	-0.89	+0.97	+2.34	+0.02	0.00	0.00	+11.87
Oct.	+ 0.19	+ 0.10	- 0.01	-0.49	+0.24	+1.17	+1.59	-0.10	0.00	0.00	+12.54
Nov.	- 1.59	+ 0.08	+ 0.62	+3.69	+1.54	+2.11	+3.45	+3.79	0.00	+3.20	+7.83
Dec.	- 0.41	- 0.08	+ 0.35	-0.16	+1.04	+1.68	+2.89	+1.39	-6.54	+1.82	+2.73
Jan.	+ 0.42	+ 0.48	+ 0.17	+0.83	+1.39	+1.78	+3.29	0.00	0.00	+2.83	+13.63
Feb.	- 0.68	+ 0.86	+ 0.74	+0.62	+0.57	+2.33	+3.36	+4.97	+2.61	+11.86	+3.88
Mar.	+ 1.45	+ 1.42	+ 1.65	+0.61	+2.28	+1.85	+3.38	+6.03	+8.15	+2.31	+2.81
Total	+3.83	+1.86	+3.24	+2.36	+7.06	+15.71	+30.47	+20.85	+8.14	+26.82	+78.20

Source: RBI, Database on Indian Economy.

Notes: Purchase *minus* sales; + means net purchase, including purchase leg under swaps and outright forwards; - means net sales including sale leg under swaps and outright forwards. Includes transactions under RIBs and IMDs. Data are based on value dates.

in inflation. The size of India's foreign exchange reserves was considered too large and any further increase would add to the opportunity cost of holding more than the required amount of reserves, as discussed in detail later in the chapter.

Exchange Rate Management: Debates and Practices

India was not alone in facing a challenge managing its exchange rates. Emerging economies often need to pursue multiple objectives, such as the promotion of exports, maintaining price and financial stability, and ensuring adequate inflow of foreign capital, which makes management of exchange rate a major task and a complicated one for central bankers.¹² The principle of exchange rate regulation, therefore, was a subject that received close attention of the Bank's management in these years. In this section of the chapter, the key issues of policy and interpretation are discussed.

What Kind of Exchange Rate Management System Did India Follow?

During the period 1975–92, the Reserve Bank set the exchange rate of the rupee in terms of a weighted basket of currencies of India's major trading partners. After a series of reforms, from 1 March 1993, the rupee became more or less fully market determined. Under the new arrangement, the day-to-day movements in exchange rates depended upon demand and supply conditions in the foreign exchange market. The goals were, first, to manage volatility without a fixed target and, second, to allow the rupee to find its level in line with the 'fundamentals'. The Bank monitored the developments in the financial markets at home and abroad closely, and took measures to reduce excessive volatility, and maintain an adequate level of foreign exchange reserves. A third and long-term goal was to help develop a deep and liquid foreign exchange market.¹³

What kind of exchange rate management system did India follow in these years? The question has been answered in different ways. The official position, as we have seen in this chapter, was that the exchange rate was market determined with no pre-set target rate or band but moderated by market intervention to avoid volatility. Did the Reserve Bank have a target rate? Was the Bank targeting a rate or trying to influence the rate to move in a direction? Deputy Governor Reddy explained that the Bank did not have a 'target exchange rate'.¹⁴ Determination of exchange rate was left to the forces of market demand and supply, subject to the condition that inexplicable volatility and suspected speculation required intervention. On another occasion, Governor Jalan clarified that 'flexibility in exchange rates is essential, but so is the ability to intervene, if and when necessary'.¹⁵ On this point of a target rate, the government and the Reserve Bank did not always hold identical views. In 1998 the government held the view that the exchange rate should not exceed a certain level. The Reserve Bank did not agree with the view.¹⁶

Should the Rupee Appreciate?

The question of how the exchange rate of the rupee should move came into sharp focus when the US dollar began depreciating against major currencies and the rupee started appreciating in the wake of incessant capital flows after 2002–03. Some analysts suggested that the rupee should be allowed to appreciate since foreign exchange reserves were already above optimum and

further purchase of US dollars by the Reserve Bank would lead to 'liquidity overhang'. Corporate houses that were net users of foreign exchange had benefited from the appreciation of the rupee, but exporters were in favour of intervention. The government had, however, left the decision to intervene to the Reserve Bank. The Bank intervened to preserve external competitiveness of the rupee and ensure financial stability, besides allowing the rupee to find its level consistent with the fundamentals. Sometimes, particularly after the Asian Crisis, the Reserve Bank resorted to covert intervention through public sector banks to maintain secrecy and guide the market.

The Bank, in fact, believed that exchange rates should be flexible and not fixed or pegged and that the Bank should intervene only to contain instability (also see Box 5.1). The Bank defended its position with the argument that the exchange rate should reflect fundamentals and inflation differentials over time, and, theoretically, it should appreciate when capital flows were strong and vice versa, though, in reality, the market behaviour between depreciation and appreciation would be asymmetrical. For example, during depreciation, there is a tendency to hold long positions in foreign currencies and hold back sales. Public pronouncements by the senior management of the Bank reiterated and justified the Bank's stance.¹⁷

Box 5.1 Reflections on Exchange Rate Management

I was leaving in November 1997, it was at that time I let the Rupee go down.... I did not hold it, spend the reserves to maintain it and that enabled my successor to carry on further.

C. Rangarajan, former Governor of the Reserve Bank

I would say that we fought an appreciation much more vigorously than a depreciation which is also sensible.

Montek Singh Ahluwalia, economist

... the pattern I discerned from within the Government as Finance Secretary, and from within the RBI as Governor, was that in the normal course, the Government was quite happy to leave the business of exchange rate management, including the long-term strategy, to the RBI. The Government took an activist role only in crisis times....

D. Subbarao, former Finance Secretary and former Governor of the Reserve Bank

Dealing with the Impossible Trinity

As capital account liberalisation progressed in India, the Reserve Bank needed to deal with the problem of the impossible trinity, which maintains that free capital movement, independent monetary policy and fixed exchange rate cannot be pursued simultaneously. Balancing these goals simultaneously being difficult, control over one pole of the trinity must be given up.¹⁸ India sought a solution to the conflict through a judicious mix of policies.

The challenge was a difficult one. Raising the policy rates could attract more capital inflow; reducing it could overheat the economy and cause inflation. Allowing the exchange rate to appreciate might reduce inflation but lead to further rise in the trade deficit. With regard to the management of the capital account, the Bank's apprehensions materialised in that as it progressively liberalised the capital account, capital inflows increased. In meeting these challenges, the Bank time and again underscored the point that full capital account convertibility could not be an option in a country like India with high gross fiscal deficit, current account deficit and high inflation. But capital account convertibility could be pursued as a process rather than an event. It was a cautious balancing act that the Bank had to undertake to manage stability in the country.

Did RBI Enjoy Autonomy in Exchange Rate Management?

As stated at the beginning of the chapter, exchange rate management is a subject of the union government but delegated to the Reserve Bank through periodic notifications. The government decides the exchange rate regime while the operational aspects are left to the Reserve Bank.

What exactly was the relationship between the two during this period of transition? There are no official records available to suggest that the government tried to influence or interfere in the day-to-day management of the exchange rate. Nor is there any correspondence to suggest that the Reserve Bank formally consulted the government in the conduct of exchange rate management. The matter relating to exchange rate appeared to have figured in the discussions during the periodic meetings of committees related to foreign exchange reserve management, short-term balance of payments monitoring group and external commercial borrowings, which were represented by both the Reserve Bank and the Government of India.

The government did sometimes express a preference for a strong rupee and against depreciation. For example, in August 1997, Finance Minister Chidambaram felt the need to defend the rupee as he did not want to send the message that India was affected by the contagion of the Asian crisis. Another instance relates to Governor Jalan's meeting with Prime Minister Atal Bihari Vajpayee and his senior ministers during the aftermath of the East Asian crisis in 1998, in which the Governor stated that the government should not ask him to defend the rupee (which had slipped below ₹40 to the dollar). When a senior minister asked him in that meeting how low it might go, Governor Jalan said anything was possible – even ₹100! There were no more questions, and thereafter the Governor had a free hand.¹⁹ In the meeting, Governor Jalan made it clear that while the Reserve Bank would do its best to stabilise the rupee, no target was sustainable. Prime Minister Vajpayee agreed.

In Governor Jalan's own words, exchange rate management by the Bank

is related to the question of autonomy, as it is of utmost importance to have a consensus, what you might call a view which is shared by both the government and RBI. Government is ultimately responsible to the Parliament, and because whatever be the fiscal or economic policy dimensions, politics does trump economics.²⁰

What Should Be the Monitoring Tool – REER or NEER?

Another issue which engaged the attention of the Reserve Bank during the period was what the monitoring tool should be to assess the misalignment in the exchange rate. Should it be the real effective exchange rate (REER) or the nominal effective exchange rate (NEER)? The former trade-related indicator was important until India opened up to foreign capital. Tarapore I had recommended that the Bank should follow REER in its approach to exchange rate management. Tarapore II, stressing again the need for REER to be a valuable input into the formulation of exchange rate policy, noted:

The 1997 Committee (Tarapore I) had recommended that there should be a more transparent exchange rate policy with a Monitoring Band of + or - 5.0 percent around the neutral real effective exchange rate (REER) and that RBI should ordinarily not intervene within the band. The RBI has not accepted this recommendation.²¹

The REER reflected changes in the external value of a currency in relation to its trading partners in real terms, which was important for India's exports. But the nominal rate appeared to be more appropriate in the presence of a large capital inflow.

Similar questions arose in respect of *which* NEER or REER was to be used since there were two sets of indices, namely a thirty-six-currency index and a six-currency index. During the Asian crisis, it became necessary to have datasets of effective exchange rates with high frequency. In India, indices of NEER and REER based on thirty-six currencies of the countries that were major Indian trade partners were published by the Reserve Bank on a monthly basis. But the indices were available with a lag of three to four months, essentially for want of price data for all the countries. It was necessary to have a series available with short intervals, preferably on daily basis. An effort was made to construct REER and NEER series, shortening the number of countries covered but preserving the representativeness of the indices. Since the five major currencies – dollar, pound sterling, Deutschmark, yen and franc – represented 40 per cent of India's trade, the Bank in 1997 commenced compiling new REER and NEER series based on these five currencies.²² The indices were computed every day and put up to the top management for information, especially during crisis time in the second half of the 1990s.²³ Subsequently, the number of currencies was expanded to include the renminbi and the Hong Kong dollar, making it a six-currency index. At the same time, the thirty-six-currency indices were also revised and replaced with a new basket in 2005.²⁴

In 1998 for the first time, the Reserve Bank came out with an official statement on REER, saying that the Bank did not consider REER to be an effective tool for management of short-term movements in the exchange rates, which were subject to various influences, including capital flows. Besides, REER was beset with several methodological issues, such as the choice of a basket of currencies, of the base period, of trade weights and the price index.²⁵ Governor Jalan indicated that in the medium term and from the angle of preserving competitiveness, REER should be monitored as it reflected changes in the external value of a currency in relation to its trading partners in real terms, but that in day-to-day management the nominal rates were more important, these rates being sensitive to capital flows.²⁶ S. S. Tarapore, former Deputy Governor, wrote in 1999 that '[t]ill 1998, RBI used the real effective exchange rate (REER) as the lodestar. However, in recent times RBI has stopped using REER, but no

Table 5.2 Indices of Real Effective Exchange Rate (REER) and Nominal Effective Exchange Rate (NEER) of the Indian Rupee (Trade Weighted) (Base: 1993–94 April–March)

<i>Year</i>	<i>6-Currency Indices</i>		<i>36-Currency Indices</i>	
	<i>NEER</i>	<i>REER</i>	<i>NEER</i>	<i>REER</i>
1997–98	87.94	104.41	92.04	100.77
1998–99	77.49	96.14	89.05	93.04
1999–2000	77.16	97.69	91.02	95.99
2000–01	77.43	102.82	92.12	100.09
2001–02	76.04	102.71	91.58	100.86
2002–03	71.27	97.68	89.12	98.18
2003–04	69.97	99.17	87.14	99.56
2004–05	69.58	101.78	87.31	100.09
2005–06	72.28	107.30	89.95	102.35
2006–07	69.49	105.57	85.89	98.48
2007–08	74.76	114.23	93.91	104.81

Source: RBI monthly bulletin, various issues.

other indicator has been installed in its place. In practice, RBI is still following REER, though it is not admitting it in public'.²⁷ The Reserve Bank continued to de facto rely upon REER to manage the exchange rate.²⁸ Did the choice between REER and NEER matter? Table 5.2 shows movements in REER and NEER, which shows that despite intervention, the rupee remained overvalued in terms of REER by the end of March 2008.

Another dimension of exchange rate management, which became important during this period, was the growing non-deliverable forward (NDF) market.²⁹

Non-deliverable Forward (NDF) Market

Before the mid-1990s, the NDF market was of limited significance. Subsequently, the growth of trade and financial openness, a larger number of players in the foreign exchange market, persistent restrictions, and absence of instruments in the forward market encouraged NDF. Expansion in the NDF

market complicated exchange rate management, particularly during the period of depreciation of the rupee. The movements in exchange rate onshore were reported to be affected by the NDF rates, as NDF became more active when onshore markets were volatile and market agents expected some correction in the exchange rate. For example, trading in the rupee segment of the NDF market rose during the Asian crisis of 1997.

Whether movements in the NDF rates really provided the cue for day-to-day volatility in the exchange rate of the rupee in the domestic market was a moot question. Available studies were inconclusive on the point. An internal study referred to in the Reserve Bank's *Annual Report 2006–07* concluded that while these volumes were not large enough to affect the domestic onshore market under regular market conditions, these might impact the domestic spot market in volatile market conditions. In reality, there was no evidence of such an impact. In any case, the inconclusive answer on the relationship between the NDF and domestic markets continued to send mixed signals, complicating exchange rate management.

Management of Foreign Exchange Reserves

The reserves were managed based on the framework mutually agreed by the Reserve Bank and the Government of India.³⁰ The Bank consulted the government on all important matters relating to the foreign exchange reserve management.³¹ Within the given parameters, the Strategy Committee, headed by the Deputy Governor in charge of foreign exchange reserve management, met frequently to decide on various aspects of reserve management after holding discussions with the Governor. The FMC-RBI also provided inputs, besides coordinating the operationalisation of policies.

Composition and Level of Reserves

The foreign exchange reserves initially were defined to include three components – foreign currency assets (FCA), gold and Special Drawing Rights (SDRs). FCA and gold were held in the balance sheet of the Reserve Bank, and the SDRs were held in the government books of accounts. Since April 2002, reserve tranche position (RTP) in the International Monetary Fund (IMF) was also included as part of reserves in line with international practices.

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FCA and gold were managed by the Bank. Of course, FCA was the major portion of reserves (Table 5.3). Gold did not play an active role in reserve management except during the crisis in 1991 when the Bank temporarily pledged a part of its gold holdings to raise loans abroad. Gold holdings remained practically unchanged in terms of quantity during the period of the present study, except for small and occasional sales by the government to the Bank. SDRs and RTP, which broadly related to the IMF's SDR allocation and quota payment by its members, remained unimportant too.

During the balance of payments crisis of 1991, the level of reserves had plummeted to one of its lowest. FCAs, at less than US\$1 billion, were barely enough to finance three weeks of imports in June 1991. Since then, the level of foreign exchange reserves steadily increased (Table 5.3).

Reserves grew not only in absolute terms but also in relation to imports and external liabilities. The adequacy of reserves is best measured by trade- and

Table 5.3 Foreign Exchange Reserves

(US\$ million)

<i>End of</i>	<i>Foreign Currency Assets</i>	<i>Gold</i>	<i>SDRs</i>	<i>Reserve Tranche Position in IMF</i>	<i>Total</i>	<i>Import Cover of Reserves (in Months)</i>
1997–98	25,975	3,391	1		29,367	6.9
1998–99	29,522	2,960	8		32,490	8.2
1999–2000	35,058	2,974	4		38,036	8.2
2000–01	39,554	2,725	2		42,281	8.8
2001–02	51,049	3,047	10		54,106	11.5
2002–03	71,890	3,534	4	672	76,100	14.2
2003–04	107,448	4,198	2	1,311	112,959	16.9
2004–05	135,571	4,500	5	1,438	141,514	14.3
2005–06	145,108	5,755	3	756	151,622	11.6
2006–07	191,924	6,784	2	469	199,179	12.5
2007–08	299,230	10,039	18	436	309,723	14.4

Source: RBI monthly bulletin, various issues.

Note: Reserve tranche position in IMF was considered as part of foreign exchange reserves beginning April 2002.

debt-based indicators. The import cover of reserves rose steadily to as much as 16.9 months in 2003–04 and remained robust thereafter. The proportion of short-term debt, based on original maturity, to foreign exchange reserves substantially declined from 25.5 per cent to 4 per cent between 1997 and 2004 (end of March), before rising to 15.2 per cent in 2008. Similarly, the ratio of foreign exchange reserves to total external debt of India rose from 28.3 per cent to 137.9 per cent between 1997 and 2008. The ratio of net foreign exchange assets of the Bank to currency with the public rose markedly from around 72 per cent to 218 per cent, and the proportion of net foreign exchange assets of the entire banking sector to broad money (M3) more than doubled from 15 per cent to 32 per cent.

Evolution of Reserve Management Policy

Objectives

Until 1991, the reserve management policy consisted of buying and selling foreign currencies from and to authorised dealers to bridge the gap between supply and demand in the foreign exchange market, to finance government imports and other government payment obligations, particularly debt service payments, and to defend the exchange rate. Import cover of reserves appeared to have been the single indicator of the adequacy of reserves. Thus, India's approach to reserve management was traditional in the sense that the main aim was to maintain a level of reserves that was equivalent to a certain number of months of imports.

After the exchange rate of the rupee became market determined, there was a shift in India's approach. The scope of reserve management was expanded to address unforeseen contingencies, volatile capital flows and other developments. A single indicator approach was replaced by a multiple indicators approach and the number of indicators gradually expanded. While operationally the change in reserves was essentially seen as a result of sale and purchase of foreign currency by the Bank, the level of foreign exchange reserves and its management assumed special importance and became an integral part of exchange rate policy and capital account management.

Thus, the main objectives of maintaining reserves were to sustain confidence in monetary and exchange rate policies and stabilise markets, especially by absorbing shocks during times of crisis.

Adequacy of Reserves

What is the optimum or adequate level of reserves? This question was debated quite often. The Indian approach to decide the adequate level of reserves was one of continuous revision and updating of the parameters of adequacy. The report of Rangarajan's Committee on Balance of Payments had noted that '[i]t has traditionally been the practice to view the level of desirable reserves as a percentage of the annual imports' and recommended that the other payment obligations should also be taken into account. The RBI *Annual Report 1997–98* indicated that there was a need to take into consideration a number of factors, including the shift in the pattern of leads and lags in payments and receipts during exchange market uncertainties, besides the size and quality of reserves. After the Asian crisis, in addition to a trade-based indicator, potential risks and the residual maturity of external debt became important considerations. At the same time, advantages of accumulating reserves were scaled against the carrying cost of reserves.

When capital flows became large and it was difficult to segregate temporary from permanent elements of flows, reserves were an insurance against the effects of a sudden reversal of capital flows. Sufficiently high level of reserves was necessary to ensure that even if there was prolonged uncertainty, reserves could cover the 'liquidity at risk'.³²

Deployment and Rate of Return

The reserves were invested in deposits abroad and approved foreign securities with considerations of safety, liquidity and yield of the funds so invested. The return on foreign exchange reserves was not a major concern. The scope of investment of reserves provided for in the sections and subsections of 17 and 33 of the RBI Act was conservative and limited. The Act permitted deposits with other central banks, foreign commercial banks and the Bank for International Settlements (BIS). In terms of instruments, only debt instruments issued by a sovereign, or carrying the sovereign guarantee, with the residual maturity not exceeding ten years, were allowed. There was also a provision for investment in other instruments and institutions, with the approval of the Central Board of Directors. Deployment of reserves, asset allocation and currency composition were periodically reviewed by the Committee on Foreign Exchange Reserve Management, chaired by the Governor. The Ministry of Finance was represented by the Finance Secretary.

Table 5.4 Deployment of Foreign Currency Assets

		(per cent)					
		<i>As at end</i>					
		<i>Mar-03</i>	<i>Mar-04</i>	<i>Mar-05</i>	<i>Mar-06</i>	<i>Mar-07</i>	<i>Mar-08</i>
1	Foreign Currency Assets	100.0	100.0	100.0	100.0	100.0	100.0
a.	Securities	37.5	32.6	27.2	24.2	27.6	34.6
b.	Deposits with other central banks and BIS	46.5	42.7	48.0	45.1	48.0	63.4
c.	Deposits with foreign commercial banks	16.0	24.7	24.8	30.7	24.4	2.0
		<i>Return on Forex reserves (July-June)</i>					
2	Return on FCA and gold	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
		3.1	2.1	3.1	3.9	4.6	4.8

Source: RBI, *Report on Management of Foreign Exchange Reserves* and *Annual Report*, various issues.

The share of different components in total investment varied over the years. However, the component of 'deposits' remained larger and deposits with 'other central banks and BIS' accounted for a major share in total investment. Austere restrictions imposed by the Act on the credit quality, counterparties of countries and institutions, and types of instruments implied that the safety of foreign exchange reserves was a major consideration. Consequently, the rate of return was relatively low (Table 5.4).

As the level of reserves increased after 2002-03, there was an expectation that returns would also increase in tandem. The rise in the share of FCAs in total reserves shifted the focus on risk profile and the overall return of such assets. The issue was often discussed in many quarters, including the Parliament. The Reserve Bank clarified the limitation imposed by the Act and underscored the fact that high returns were associated with high risks. Therefore, the objective of keeping the risks at a possible minimum level overrode the profit motive.³³ There was also another reason why returns on reserves were low. The Bank followed conservative accounting norms. While the portfolio of bonds and securities was marked to market, either the book value or market value, whichever was lower, was considered under the profit and loss account, implying that only depreciation was considered. Since reserves were on the rise during 2002-03, the accounting practice of booking only depreciation mattered. Incidentally, valuation gains or losses with respect to FCAs and gold were not booked in the

income account but were provided for under a separate reserve head of account called Exchange Fluctuation Reserve, which was called the Currency and Gold Revaluation Account from the year 2001–02.

Repo and Reverse Repo

Until 2000, the agencies that the Reserve Bank dealt with for the purpose of foreign exchange reserve management were commercial banks, financial institutions and securities brokers. In the strategy meeting on the deployment of foreign exchange reserves that Governor Jalan had with the Economic Affairs Secretary in June 2000, the government indicated its approval for ‘repurchase’ (repo) transactions with counterparties in international repo markets as one of the modes of reserve management. These were standard international instruments, in which central banks showed substantial interest for investment and funds management. The minutes of the meeting noted: ‘Repos and Reverse repos mitigate credit risks in lending/investment. It was decided to start with these operations which could be carried out within limits, after drawing up detailed operational guidelines.’ Accordingly, master agreements were drawn in consultation with the Legal Department, counterparties were selected, instruments were finalised, and the operational aspects and accounting procedures were set out. The initial limit for repos was set at around US\$625 million, which translated into just 2 per cent of FCAs.

Deposits with Foreign Commercial Banks

As stated earlier, a portion of foreign exchange assets was invested in short-term deposits with foreign commercial banks. For example, in 1996–97, such deposits formed around 25 per cent of the average total FCAs held during the year. Only major foreign banks were selected. The broad parameters for selection of banks were the rank, size, capital assets ratio in Tiers I and II, and high credit rating both for the country and the individual bank. The list of banks, revised every year, was quite diverse and large. For example, in 1998, there were seventy-four banks in the shortlist. Besides the annual review of the banks, an ongoing watch was kept throughout the year for adverse developments on the approved banks. A risk analysis was carried out for each bank. Cross-currency volatility of exchange rate was assessed. For the purpose of online monitoring

of both pre-settlement and settlement risk exposures on account of outstanding transactions, appropriate software applications were put in place.

Practices of Risk Management and Management Information System

Credit risk was addressed so far as the RBI Act provided for investment only in financial instruments issued by sovereigns, banks and international institutions. Selected counterparties were kept under watch. Limits for each counterparty and transaction were in place. The currency composition of FCA was kept confidential but revised regularly depending upon the perceptions of international currency movements. Regular management information system reports kept the executives of the Bank informed about the change in the currency composition. The US dollar was chosen as the numeraire currency.

The estimation of 'liquidity at risk' and the analysis of interest rate sensitivity of the reserves portfolio were conducted periodically. The focus was on keeping the duration short to minimise the risk and maintain a liquid portfolio. Operational risks were addressed by internal control systems with the clear demarcation of responsibilities of 'front and back' offices, which ensured several checks at each level of deal capture, deal processing and deal settlement.³⁴

External Asset Managers

In line with international practice, the Bank found it prudent to give a small portion of its foreign exchange assets to a few reputed external asset managers (EAMs), under the category of discretionary reserve management. The amount was small, but it was raised from time to time as the level of foreign exchange assets rose.³⁵ While selecting EAMs, the size of funds under management with the firm having the same risk profile as the Bank's, consistency of returns, track record, fees, technology and a variety of other indicators of capability were considered.³⁶ While it was important to have an optimal number of EAMs and a good volume of the fund for placement, the number of EAMs was small. The number gradually increased, though still remaining in single digit (six in 2002) for the most part. The selected EAMs were provided with investment guidelines specifying currency composition, maturity profile, permissible instruments and other required guidelines that were revised from time to time. A global custodian was appointed to oversee the assets managed by the EAMs.

The advantages of EAMs were several. Constant dialogue and interaction with the EAMs and the resultant feedback on the market enhanced in-house expertise. Further, EAMs afforded an opportunity to the Bank to provide a benchmark to compare and contrast the return on the assets managed by them and those managed by EAMs, which helped in fine-tuning strategy. On some occasions, earnings on the assets managed internally were found to be higher. The scheme also helped to create a mix of investment styles.

Bilateral Currency Swap Arrangement with Bank of Japan

In 2007, the Reserve Bank was engaged in negotiation with the Bank of Japan for an arrangement of a bilateral currency swap.³⁷ The first meeting on 13 February 2007 initiated discussions on the modalities of the swap arrangement. After several rounds of discussion, an agreement was finalised on 29 June 2008. The term of the agreement was three years from the date of signing, renewable by the consent of both the parties. In the history of the Reserve Bank, this was the first swap arrangement of its kind. Was the Bank authorised to undertake swap transaction under the RBI Act? The Legal Department confirmed that the transaction could be viewed as a derivative contract within the meaning of the Act.³⁸

Apart from conditions that commonly applied to such agreements, there were two important conditions governing the Indo-Japan currency swap agreement. It was specified that as long as the agreement was in effect, the borrower should have biannual consultations with the lender on economic and financial conditions, based on the information and data supplied to the latter in the specified format on various economic parameters. As long as any monetary obligation under this agreement remained outstanding, the borrower would also not impose any controls on capital outflows.

No withdrawals were made under the agreement by either India or Japan. However, on its expiry in 2011, the swap arrangement was renewed.

Cost of Rising Reserves

The surge in reserves had given rise to two concerns. One of these, as we have seen, concerned the cost of reserves. The other one concerned 'arbitrage' involved in higher inflows, particularly non-resident Indian (NRI) deposits. The cost of maintaining high reserves (as it was made up of borrowed resources

because India had current account deficit) and the opportunity cost of not utilising the reserves for productive purposes attracted the attention of both academics and policymakers. Some saw the building up of reserves as giving away national savings to the rest of the world, and not utilising them for domestic investment. Some had suspected that arbitrage opportunities gave rise to the flow of 'hot money'. The Bank's position was more measured, as Governor Jalan clarified:

[T]he bulk of additions to reserves in the recent period is on account of non-debt creating inflows.... On NRI rupee deposits, interest rates in the last couple of years have been in line with interest rates on deposits by residents, and are currently even lower than domestic interest rates. So far as other non-debt creating inflows (*i.e.*, foreign direct investment, portfolio investment or remittances) are concerned, such inflows by their very nature are commercial in nature and enjoy the same returns and risks, including exchange rate risk, as any other form of domestic investment or remittance by residents.... On the whole, under present conditions, it seems that the 'cost' of additional reserves is really a nonissue from a broader macro-economic point of view.³⁹

Redemptions of Resurgent India Bonds (RIBs) and India Millennium Deposits (IMDs): How Were They Handled?

There were two episodes of bunching of foreign exchange outflows during the period, one on account of redemption of RIBs at the end of September 2003 and another due to maturity of IMDs at the end of December 2005.⁴⁰ The outflows were required to be handled in a way that different segments of the financial market were not disrupted. The challenges were twofold: to ensure non-disruption of domestic interest rates and to meet the demand for hard currency without impairing the exchange rate. RIBs, launched in August 1998, had brought in US\$4.23 billion, the redemption value of which was US\$5.5 billion at the end of a five-year tenor. The apprehension of turmoil in the markets due to a large outflow of the dollar did not materialise, however. The Bank began building up the foreign exchange liquidity well in advance by contracting forward purchases.⁴¹

The IMD scheme, launched in 2000, had mobilised US\$5.5 billion and came up for redemption in December 2005. There was an outgo of US\$7.1 billion IMDs in just two days (28 and 29 December). Excess domestic liquidity was building up for two years and the outstanding MSS was unwound through

the normal process of the bonds maturing without being renewed, making it possible to handle liquidity requirement of around ₹28 billion without disrupting the system. But since there was a market perception of liquidity shortage, the call rate went up from 6.96 per cent to 7.15 per cent. On the foreign exchange side, the Bank had deployed IMD proceeds under foreign commercial and central bank deposits (FCBs) and Euro commercial papers, which had good liquidity and higher returns, so as to mature in December 2005. But only a part was used as it was decided in the internal Investment Committee meeting held on 15 December 2005 that only the FCBs matured till date, amounting to US\$3.6 billion, would be used (the rest by liquidating other types of investment) to meet the redemptions of IMD.⁴² The funds mobilised from liquidating investments were parked temporarily with the BIS for a few intervening days with a request to transfer it to the Reserve Bank's Nostro account, with the Federal Reserve Bank, New York, on 27 December 2005, which was finally transferred to State Bank of India's (SBI's) Nostro account on 28 and 29 December 2005. Consequently, foreign exchange assets of the Reserve Bank declined by US\$7.1 billion to US\$131 billion and the rupee slid marginally by 15 paise per US dollar.

Use of Reserves for Increasing the Level of Domestic Investment and Special Purpose Vehicle (SPV) for Use of Reserves

In the early 2000s, a public debate emerged over whether or not India should use its foreign exchange reserves to increase the level of investment. The issue was discussed in Parliament. Lalitbhai Mehta, Member of Parliament, asked whether the Golden Corridor infrastructure scheme could be funded from the foreign exchange reserves.⁴³ In reply to another question, whether a part of the FCA would be utilised for infrastructure investment, S. S. Palanimanickam, Minister of State in the Ministry of Finance, stated that 'an informed debate on the feasibility of such an utilisation is currently on'.⁴⁴ The Planning Commission noted that while the reserves did present such an opportunity, 'the extent to which we can draw down foreign exchange reserves for this purpose will depend upon our perception of the need for reserves to cover balance of payments risks'.⁴⁵

The Bank had reservations about the proposal. For example, Governor Jalan in 2003 stated that 'the equivalent rupee resources have already been

released by RBI to recipients of foreign exchange.... The decision on whether to invest, consume or deposit these additional rupee resources lies with recipients, and not with RBI. By all means, let us urge them to invest....'⁴⁶ The difference of opinion between the Bank and the government became a matter of another public debate.⁴⁷

In the meantime, at the Committee of Central Board meeting held on 30 July 2003, a Director enquired whether a part of the foreign exchange reserves should be placed as deposits with foreign branches of Indian banks; such a placement might improve the return on reserves and also provide low-cost funding to Indian banks abroad. The issue was discussed by the committee in its meeting held on 25 February 2004. The committee held none of the Indian banks was rated as investment grade and, more importantly, in case the reserves were maintained with domestically owned companies, those could not be construed as part of foreign exchange reserves as those might not be available for use by the monetary authorities, and international codes, too, never permitted such investments to be considered as part of foreign exchange reserves.

The Finance Minister announced in his Budget speech of 2007–08 that 'a small part of the foreign exchange reserves' would be used 'without the risk of monetary expansion' for the purpose of financing infrastructure development projects and an offshore wholly owned subsidiary of India Infrastructure Finance Company Ltd. (IIFCL), which was established in January 2006, would be set up. The government wanted the Reserve Bank to lend in foreign currency directly to IIFCL. The Bank in its Board meeting held on 9 March 2007 observed that only 'refinancing' was possible as Section 17 of the RBI Act did not allow 'direct' lending. In June 2007, the government indicated that in view of operational inconvenience and additional costs involved in the refinancing route suggested by the Board, the Reserve Bank should directly invest in IIFCL.⁴⁸ The government nominee (Finance Secretary D. Subbarao) said that in the government's view, direct lending was legally possible if the Bank's Board approved it. The Board, however, took a substantive view, re-examined different subsections of the RBI Act to conclude that subsection 13 allowed investment in securities. The foreign subsidiary of an SPV could, therefore, issue securities in the form of bonds to which the Bank can subscribe.⁴⁹ Subsequently, a scheme was crystallised which envisaged the Bank investing, in tranches of US\$250 million, up to US\$5 billion (subsequently increased to US\$10 billion) in fully government-guaranteed foreign-currency-denominated bonds issued by an overseas SPV of IIFCL.⁵⁰

Such a scheme for channelling foreign exchange funds to Indian private investment in infrastructure had no precedence.

Creation of Sovereign Wealth Fund

It was sometimes argued that a part of the reserves, which could be considered to be in excess of the usual requirements, be managed with the primary objective of earning higher returns, setting them aside for assigning to the sovereign wealth fund to earn higher returns on the lines of posterity funds of oil exporting countries, or the Singapore government's Investment Corporation. The issue was examined internally and the Reserve Bank did not find it viable to create a sovereign wealth fund. Besides governance, transparency and disclosure standards, there were a few other concerns. It was not clear how it would be possible to decide the adequacy of reserves in order to segregate 'excess' reserves. Second, citing Governor Reddy,

the Indian economy has twin deficits – a current account deficit as also a fiscal deficit. India's export basket is diversified and does not have any dominant 'exportable' natural resource output, which might promise significant revenue gains at the current juncture.... India is also having a negative international investment position with liabilities far exceeding the assets.⁵¹

Management of Gold

Gold Policy

When liberalisation measures were introduced after 1991, the policy on gold was also overhauled. The process of liberalisation of gold encompassed many issues, ranging from imports to hedging, assaying and hallmarking. The Bank had set up a Standing Committee on Gold and Precious Metals (SCGPM) in 1992 and revived it in 1997.⁵² Initially, the main task of the SCGPM was to look into the gold policy and make suggestions on the gold import policy to the Government of India from time to time, besides addressing issues relating to the development of the gold market and gold instruments. However, over time, almost all issues concerning gold were handled by the committee.⁵³

The SCGPM in its meeting held on 5 January 1998 discussed the possibility of authorised dealers (ADs) introducing a gold-denominated

deposit scheme. The main features of the scheme were finalised and sent to the government as a Budget proposal. The Union Budget for 1999–2000 announced the Gold Deposit Scheme (GDS), which was to be introduced by select banks. Against the backdrop of enormous quantities of gold imports (600–700 tonnes per year) during the latter part of the 1990s, the scheme was expected to become successful. The GDS was expected to serve two aims: provide depositors the safety and security of gold holding and the opportunity to earn interest on their idle gold holdings on the one hand, and encourage them to move away from the physical holding of gold to gold-based financial assets on the other.

The Reserve Bank issued guidelines in October 1999 to banks specifying what the scheme had envisaged and permitting them to accept deposits in any form, such as ornaments, jewellery or bars, which would be assayed and converted to scrap. The Bank fixed the tenure of the deposit, ranging from three to five years, prescribed a lock-in period if need be, set the interest to be paid to the depositors, allowed extending loans in the form of gold to domestic jewellers, and allowed banks to hedge their exposures in India as well as overseas. The cash reserve ratio on such deposits was decided to be applied at a minimum of 3 per cent.

Not all nominated banks that were allowed to import gold introduced the GDS. Initially, the Reserve Bank granted approval for accepting gold deposits to six banks, of which only five – SBI, Indian Overseas Bank, Allahabad Bank, Canara Bank and Corporation Bank – started the scheme. A target of 100 tonnes was set. By 31 January 2004, total mobilisation was only 7.6 tonnes. Most of the depositors were individuals. Major gold holders, such as institutions and Hindu temples, had not shown much interest. The scheme had such poor response because of inadequate publicity, sentimental attachment to gold, high cost (because of difference in the places of mobilisation, assaying and deployment), absence of an amnesty scheme for large holders and absence of a forward market, among other reasons. The poor response was discussed in the SCGPM meeting more than once. The committee held the view that the scheme was not viable in the present form and further restructuring was neither feasible nor desirable. Therefore, the Reserve Bank suggested to the government in August 2004 that individual banks could be allowed to opt out of the scheme if they so desired. Subsequently, the banks stopped accepting gold deposits under the GDS, making the scheme unsuccessful.

*Standardisation and Upgrading of Gold Reserves
Held by the Reserve Bank*

As part of monetary gold, the Reserve Bank held around 398 tonnes under international reserves as at the end of March 1997, which came down to 358 tonnes at the end of March 1999 due to redemptions under the Gold Bond scheme and remained at that level during the rest of the years referenced in the book. Of total gold holdings, 65 tonnes were held in the Banking Department and the rest formed part of assets of the Issue Department. Gold held under the Banking Department was kept abroad, which conformed to international standards in terms of quantity and quality. But some varieties of gold held in the Issue Department in the form of gold *tola* and ounce bars, coins and sovereigns, though small in their share (29 per cent) and the fineness of 0.995 to 0.999, were different in size as compared to international standards of the London Good Delivery Bars (LGDB). Since 1995, several options were explored to upgrade the gold stock.

One option was to ship out the gold stock to an international refinery and bring them back to India in the required size. But the cost involved was prohibitive. The second option was to exchange the portion of non-standard gold held in the Reserve Bank with commercial banks that were authorised to import gold, but banks raised the issue of customs duty and sales tax.⁵⁴ The Bank also toyed with the idea of setting up its own refinery to upgrade and standardise its gold holdings in the late 1990s. While the legal aspects were yet to be examined, the proposal was not found to be practical because the listing requirement for the London Good Delivery List maintained by the London Bullion Market Association was a minimum of five years of existence. Although the issue of upgrade and standardisation was not resolved, the Bank continued its dialogue with banks and other stakeholders to find an answer.

Gold Hedging

Beginning from 1991, the entire gold holding was valued at the prevailing prices in the international market, with resultant valuation changes (gain or loss) booked under a reserve head, the Exchange Fluctuation Reserve Account. Thus, gold reserves were exposed to price risk. During the period of price decline, the loss on account of valuation changes could not be avoided. This, in

turn, affected the balance sheet of the Bank. In fact, as international prices of gold fell in the 1990s, the Bank booked losses on this count. For example, during 1994–95 (April–March), a revaluation loss of ₹770 million was recorded.

Therefore, a need was felt to hedge the price risk through derivative products. But hedging was not a permitted activity under the RBI Act. The Legal Department held that even if the Act was amended, empowering the Bank to enter into gold derivative transactions, such transactions could not be undertaken because of the Forward Contract (Regulation) Act (FCRA), 1952, which prohibited options and futures in commodities (including gold), and recourse to gold futures and options for hedging could be made, provided an exemption from the application of the Act was allowed by the government under the provisions of the Act. On 13 January 1994, Governor Rangarajan wrote to Montek Singh Ahluwalia, Finance Secretary, Ministry of Finance, suggesting necessary amendments to the RBI Act as well as an exemption under the Act, enabling the Bank to hedge its gold holdings. On 27 November 1995, the Department of Economic Affairs conveyed the decision to ‘defer the matter’ without giving any reason.

The Bank revived the matter when the gold import policy was liberalised in 1997. The whole issue of forward trading was also discussed in a high-level coordination committee meeting held on 5 November 1997, drawing attention to the notification of 1969 under the FCRA, which put a blanket ban on all types of forward trading and exceptions made subsequently by amendments. Deputy Governor Reddy proposed that the notification could be modified such that the regulators (Securities and Exchange Board of India and the Reserve Bank) might be empowered to draw up appropriate guidelines in the area. Deputy Governor Reddy, subsequently, in March 1998 wrote to Finance Secretary Montek Singh Ahluwalia stating that the SCGPM was exploring the possibility of some kind of gold-denominated deposit scheme to be introduced by banks, to operationalise which, the Reserve Bank would have to allow banks to hedge gold price, and that in this context, it was necessary to delegate to the Bank the government’s powers of granting exemption.

Meanwhile, the views of the Additional Solicitor General of India, C. S. Vaidyanathan, on the issue of forward trading were conveyed to the Bank (22 June 1998). He was of the view that the FCRA would not apply to forward contract to be entered into by the Indian corporates in a foreign country. The R.V. Gupta Committee on Hedging through International Commodity Exchanges (1997) also suggested that Indian corporates should be allowed

to hedge in the commodity exchanges abroad. Corporates were allowed to cover their commodity price risk in international commodity exchanges in September 1998. In March 1999, Deputy Governor Reddy wrote to Finance Secretary Vijay Kelkar renewing the request for exemption from the FCRA, and delegation of powers to the Bank under the FCRA, and argued for allowing forward trading in gold domestically, if the GDS were to become successful. When the guidelines were issued for the GDS in October 1999, the need for modification in the provisions of the FCRA became urgent. Finally, on 1 March 2000, the government issued the necessary notification under the FCRA, fulfilling the request.

Assaying and Hallmarking

In November 1997, the National Foundation for Consumer Awareness and Studies filed a writ petition in the High Court of Kerala which, among others, drew attention to the absence of a hallmarking facility in India, and urged that hallmarking be made mandatory. The matter was referred to the Reserve Bank by the Ministry of Finance for its views. In its meeting held on 2 May 1998, the SCGPM stressed the need for assaying and hallmarking in India. In August 1998, the Bank set up a technical sub-group to examine the issue, comprising members drawn from the Bank, the World Gold Council, the India Government Mint and SBI. The group explored the possibility of some banks sponsoring the hallmarking activity. The Legal Department said that assaying and hallmarking could be performed in-house by a bank as incidental to the activity of buying and selling gold, which was a permitted activity under the Banking Regulations Act, but that it could not be performed as a specialised activity for a fee for other clients. Therefore, a separate subsidiary needed to be formed.

Meanwhile, the Bureau of Indian Standards proposed to introduce a hallmarking scheme in India. At the same time, four banks— SBI, Allahabad Bank, Corporation Bank and Canara Bank – decided to form a subsidiary of SBI with a foreign partner to provide a modern assaying facility in the country. Credit Suisse First Boston (CSFB), London, was chosen as the foreign partner. The new company was to be called SBI Gold and Precious Metals Pvt. Ltd. The Reserve Bank gave the necessary approval and was anxious to see the company in place, as it did not want hallmarking to become a monopoly of the Bureau. But the joint venture did not happen.

As SBI stated, there was little scope for hallmarking as the response to the GDS was poor and gold accumulation was insignificant. However, the Bureau announced on 11 April 2000 the launch of hallmarking of gold jewellery in India and gold jewellery certification.

Gold Imports

India had followed a very restrictive policy on the import of gold. The demand for gold, which was one of the highest in the world, was largely met by smuggled gold. The Gold Control Act, 1968, was repealed in 1990 and the Export–Import (Exim) policy for 1997–2002 permitted jewellery exporters to obtain gold, silver and platinum from existing nominated agencies like the Minerals and Metals Trading Corporation (MMTC), and any other agency to be authorised by the Bank. In view of the shift, in July 1997, the Bank announced the eligibility criteria for scheduled commercial banks to be authorised to import gold. By March 1999, fourteen banks were authorised to import gold. Banks were selected on the basis of parameters such as capital base, profitability and strength of risk management. Freer import reduced the difference between the international and domestic prices of gold. The difference during 1986–1991 was more than 30 per cent; in 2001, it was just 8.5 per cent. Smuggling of gold reduced at the same time.

The Exim policy announced on 28 January 2004 placed gold under the Open General Licence (OGL) Scheme, that is, removed it from the quantitative restrictions and allowed the import of gold by all entities, subject to the Reserve Bank's guidelines. Executive Director Shyamala Gopinath convened a meeting on 4 February 2004. Besides Bank officials, representatives of the Ministry of Commerce attended. This was followed by a meeting (10 February 2004) of the SCGPM. The meetings discussed the implications of the new policy and changes in Bank guidelines. Following these meetings, draft circulars were prepared and sent to Governor Reddy for information, who suggested the need for a detailed study.

An exhaustive joint study by the Foreign Exchange Department and the Department of External Investment and Operations (DEIO) was carried out and submitted to Governor Reddy. At the instance of Governor Reddy, Deputy Governor K. J. Udeshi wrote to D. C. Gupta, Finance Secretary, on 4 March 2004. The letter stated that the liberalisation of import of gold and silver required to be undertaken in conjunction with the rationalisation of

existing policies with respect to the export of gold and silver. For example, existing 'value addition norms' for eligibility with respect to jewellery export, except those making use of the facility of duty-free import of gold and silver under the advance licence scheme, should be removed. Baggage rules with respect to primary gold should be reviewed and made applicable for returning residents and NRIs on an equal footing. The letter also noted that countries with no control on capital account transactions generally allowed free import of gold and silver, and since India was not convertible on capital account, gold and silver had the characteristics of surrogate foreign exchange. The metals were used for both consumption and investment purposes and were easily tradeable so that there was a need to monitor the import and export of these metals, and an in-built mechanism needed to be in place for policy changes in future. This was followed up by a letter from Governor Reddy to Jaswant Singh, Finance Minister, dated 11 March 2004, explaining the stance of the Bank. Around this time, the Bullion Association and importers of gold complained about the delay in the Bank issuing guidelines for import.

On 31 March 2004, Joint Secretary (Ministry of Finance) P. K. Deb replied to Deputy Governor Udeshi's letter, saying that import of gold and silver by NRIs or persons returning from abroad cannot be reconsidered, as it was fraught with risks. The risk was that a person could go abroad for a few days, and return with a huge quantity of gold as a form of money laundering. The Bank agreed to this point of view. However, the government was silent on the gold export proposal. Subsequently, Director General of Foreign Trade (Ministry of Commerce) L. Mansingh wrote to Deputy Governor Udeshi on 22 April 2004, a copy of which was sent to the Ministry of Finance. The letter stated that 'there is no restriction on any tariff line pertaining to gold for its exports'. The letter also 'commended' the Bank's initiative to coordinate with the ministries and finalising its own position on gold. A second letter from Mansingh (31 May 2004) further clarified that to facilitate export of gold jewellery, certain specific provisions were included in the export-import policy and the handbook of procedures concerned. The Ministry of Finance also gave the clearance for issuance of guidelines by the Bank. When the Bank was about to issue the necessary circular, there were reports that gold imports had shot up phenomenally. The Bank took up the matter with the Ministry of Finance. Executive Director Shyamala Gopinath wrote to Deb, with a copy to the Joint Secretary, Ministry of Commerce, on 14 June 2004, mentioning that 'several banks have allowed large imports

of gold by gold traders without waiting for RBI guidelines.... [W]e need to revisit the entire policy'. Against these new developments, the SCGPM had a meeting on 15 September 2004. The members felt that liberalisation of gold import should be undertaken in a phased manner and that only the designated star export houses in the jewellery business should be initially allowed to import gold directly. This was communicated to the Ministry of Finance for consideration. The data collected from banks on gold imports were also supplied to the government.

In the meeting of the SCGPM held on 21 December 2004, government officials informed that both the Finance Minister and the Commerce Minister were of the view that the original policy of allowing free import of gold by all entities should be implemented. As this was not acceptable to the Reserve Bank, Gopinath, now Deputy Governor, wrote to Secretary (Department of Economic Affairs, Ministry of Finance) Rakesh Mohan, on 18 January 2005, reiterating the Bank's stance. When it was put up to him, Finance Minister P. Chidambaram recorded on the letter: 'I am inclined to agree with RBI's views. There are some policy-induced distortions as a result of the new foreign trade policy.... Please consult Revenue Secretary.' The opinions of the Revenue Secretary and others were against the Bank's position. On 23 March 2005, this was conveyed to the Bank.

The meeting of the SCGPM on 1 April 2005 ended inconclusively. Director (Ministry of Finance) Shyamala Shukla wrote on 6 July 2005 to the Bank that 'the concerned number of authorised importers should be expanded beyond the current designated agents'. At the same time, there was no respite in the increase in gold imports. In October 2005, the Bank again requested the government to put on hold the proposal of free import of gold. On 28 February 2006, Joint Secretary (Ministry of Finance) Kumar Sanjay Krishna wrote to Deputy Governor Shyamala Gopinath that the 'Ministry of Finance recommends that the present policy for import of gold may be liberalised by adequately increasing the number of commercial banks authorised, thereby restoring status quo, that is, allowing only nominated and authorised entities to import gold'.

A new problem had arisen. The usance period allowed for the import of gold under the letters of credit was 180 to 360 days. Some exporters took advantage of the arbitrage opportunity. They imported gold in large quantities, which they sold in the domestic market immediately, and fulfilled export obligation closer to the expiry of the usance period by exporting substandard

jewellery. Because domestic interest rates were higher than the international rates, handsome profits were made out of the transactions. The matter was discussed in the meeting of the SCGPM held on 10 February 2004. Executive Director (Gem and Jewellery Export Promotion Council) S. Ramaswamy suggested that the usance period be reduced to ninety days. The Bank issued a circular on 9 July 2004 to that effect.

In 2004, a proposal was made by the government to reduce the tariff on gold to zero. Joint Secretary (Department of Commerce) R. Gopalan, wrote to the Bank (March 2004), seeking its views on the proposal, which fell under Non-Agricultural Market Access of the World Trade Organization. In response, Deputy Governor Rakesh Mohan wrote on 2 April 2004: '[G]old is not like any other commodity and has implications for the financial stability of the country being surrogate foreign exchange.... Therefore, we are not in favour of binding duty on gold to zero.'

Gold Loan for Domestic Jewellery Manufactures

In 1978, banks had been advised not to extend any loan against gold bullion. But they could lend against gold ornaments after ensuring that the loans were not for speculative purposes. Even after liberalisation of the gold import policy in 1997–98, these restrictions continued. In December 1998, nominated banks that were authorised to import gold could also disburse gold loans to jewellery exporters. However, only three banks – SBI, Bank of Nova Scotia (BNS) and Corporation Bank – were active. In March 2003, BNS was allowed to lend to domestic users. But BNS began lending to the customers of other banks as well against letters of credit. Quoting the example of BNS, a few other banks approached the Reserve Bank for permission to lend. Internally, there was a view that the permission granted to BNS be withdrawn. Deputy Governor Shyamala Gopinath suggested in December 2004 that before withdrawing the scheme, an interdepartmental team should study the product offered by BNS. The Deputy Governors' Committee (committee of Deputy Governors set up to sort out interdepartmental issues) could then take a final view on the matter. A group of senior officers of the Department of Banking Operations and Development, the Foreign Exchange Department and the DEIO studied the scheme and concluded that, instead of withdrawing the scheme, allowing more banks to lend imported gold would not only make it a level playing field but might also result in lower lending rates. In the

meantime, the SCGPM also recommended that the request of other banks might be accepted. In September 2005, all nominated banks (for the import of gold) were permitted to extend gold (metal) loans to domestic jewellery manufacturers as well as customers of other banks. The tenor of the gold loan to the domestic users was also extended from 90 days to a maximum of 180 days in February 2007.

Conclusion

Exchange rate policy pursued by the Reserve Bank was integrated into the overall management of the external sector. The policy had two aims: to intervene in the foreign exchange market in order to reduce excessive volatility in the exchange rate of the rupee and to initiate measures to prevent speculative attacks on the currency. Although the Bank's stance on exchange rate was sometimes criticised, the day-to-day operation of the system did achieve its main goal – stability in the market. The aim of the management of reserves was to ensure safety, liquidity and optimisation of returns. Tarapore, former Deputy Governor, reflected in 1999 that though the articulation of a clear policy by the Bank had been weak, its management of a build-up of reserves deserved praise.⁵⁵

In both cases, exchange rate and reserve management, the view of the Bank and that of the government often differed. But even on the most difficult issues, the consultative process between the ministries and the Bank worked well enough to eventually find compromise solutions.

Notes

1. With the senior officers of the Monetary Policy Department (MPD), the Department of External Investments and Operations (DEIO), and the Internal Debt Management Department (IDMD) as members (see Chapter 6). Officers of other departments were co-opted when necessary. Quite often Deputy Governors and Executive Directors, in charge of the departments concerned, also attended the meetings.
2. In 1992–93, under the Liberalised Exchange Rate Management System, the rupee became partially convertible on the current account through a dual exchange rate. The official exchange rate was reduced in December 1992 and the two rates unified in March 1993.
3. Y. V. Reddy, 'Exchange Rate Management: Dilemmas', Inaugural address, XIth National Assembly Forex Association of India, Goa, 15 August 1997.

4. The rupee did not, however, show much volatility immediately after the speech. The rupee, which traded at ₹35.73 per US dollar on 14 August 1997, remained at the same level on 18 August (16–17 August being Saturday and Sunday) and, in fact, strengthened to ₹35.71 per US dollar on 19 August.
5. The press release stated:

It is clarified that while the Committee on Capital Account Convertibility had recommended a band in relation to a neutral real effective exchange rate, no decision in this regard has been taken by the government and RBI. While the exchange rate will continue to be determined by market forces, it is recognised that the exchange rate management will have to balance the needs of the exporters to have a favourable exchange rate and the need to prevent monetary expansion from going beyond what is considered appropriate for maintaining price stability.
6. On the positive side, these developments, together with subsequent measures, are said to have contributed to the growth of the Indian foreign exchange market. Second, there was also a view that because of the depreciation of the rupee, partly due to the statements made by the authorities, it did not become as volatile as other Asian currencies during the Asian crisis in 1997–98.
7. The average one-month forward premium rose from 4.23 per cent in October 1997 to 9.42 per cent in December 1997.
8. See <https://rbidocs.rbi.org.in/rdocs/PressRelease/PDFs/2313.pdf>. Also see Chapters 3 and 4.
9. Y. V. Reddy, 'Managing Capital Flows', Address at a seminar at the Asia-Pacific Research Centre, Stanford University, USA, 23, November 1998, <https://rbidocs.rbi.org.in/rdocs/Speeches/PDFs/4399.pdf>.
10. Union Budget (2008–09), Budget speech, para 90.
11. Barring a few short episodes, including the effect of the subprime mortgage crisis in the US, the rupee appreciated by 9 per cent against the dollar, 7.6 per cent against the pound sterling, but depreciated by 7.8 per cent against the euro, 7.6 per cent against the yen and 1.1 per cent against the yuan.
12. Speaking on the subject, Governor Jalan said that the issue 'is particularly crucial for developing countries where foreign exchange markets are generally thin, which do not have automatic access to reserves of other central banks, and where large volatility in exchange markets can have significant real effect'. Bimal Jalan, 'Welcome Remarks at the 11th C. D. Deshmukh Memorial Lecture', Mumbai, 7 December 2000.
13. Y. V. Reddy, 'Overcoming Challenges in a Globalising Economy: Managing India's External Sector', Lecture at the India Programme of the Foreign Policy Centre, London, 23 June 2005.
14. On a similar question raised by Moody's Investors Service, in a meeting held on 17 August 1998. Also see Reddy, 'Managing Capital Flows'; and Bimal

Jalan, 'Remarks', Seminar on International Financial Architecture, Bank of England, London, 5 July 2002.

15. Jalan, 'Remarks'.
16. 'In the midst of the Asian crisis ... there was a view that the exchange rate should be stable within a range. In our country also, at that time government's informal view was that it should not be allowed to exceed a certain level. However, based on its own experience, RBI's view at that time, during discussion with government, was that any target set for the exchange rate is bound to be flawed and cannot be sustained' (Bimal Jalan, 'Autonomy of the Central Bank', Transcript of the Comments by Former Governors of Reserve Bank of India, Bimal Jalan, Y. V. Reddy and D. Subbarao, *Newsletter*, March 2014, https://www.cafral.org.in/sfControl/content/DocumentFile/Autonomy_of_the_central_bank.pdf)
17. Deliberating on the issue, Governor Jalan noted that whereas the case for depreciation and that for appreciation both had merit, large-scale intervention risked the 'emergence of macroeconomic problems which are worse than what they are trying to solve'. Bimal Jalan, Address at 14th National Assembly of Forex Association of India, 14 August 2003.
18. Recognising the problem, Governor Jalan said:

[I]n theory, the recommended approach is either free float or a currency board. In reality, however[,] ... most countries have adopted intermediate regimes of various types, including fixed pegs, crawling pegs, fixed rates within bands, managed floats with no pre-announced path, and independent floats with foreign exchange intervention moderating the rate of change and preventing undue fluctuations. (Bimal Jalan, 'Development and Management of Forex Markets: A Central Banking Perspective', Inaugural Remarks at the 21st Asia Pacific Congress, New Delhi, 1 December 2000)

The International Monetary Fund (IMF) in its 2007 Article IV consultation report (Country Report No. 08/51, February 2008) recognised the trinity issue, and said that 'the stated policy of a managed but market determined exchange rate with no target path, and intervention only to curb short-term volatility remains appropriate' for India. The IMF recommended a more flexible rupee in order to avoid the cost of sterilisation consequent on rising net foreign assets in the balance sheet of the Bank. IMF, 'India: Selected Issues', Country Report No. 08/52, Washington DC, 2008.

19. T. N. Ninan, *Business Standard* (editorial), 16 July 2016.
20. Jalan, 'Autonomy of the Central Bank'.
21. RBI, 'Report of the Committee on Fuller Capital Account Convertibility', 2006, pp. 17–18.
22. Rajiv Ranjan, Assistant Adviser, Department of External Investment and Operations, who had earlier constructed the thirty-six-currency REER,

- attempted the first set of five-currency REER and expanded subsequently to include six currencies.
23. The Reserve Bank began publishing these indices, giving the monthly movements in its monthly bulletin, beginning July 1998, along with the thirty-six-currency indices. With the introduction of the euro, the franc and the mark were replaced (1 January 2002).
 24. In 2007, there was a move to include services data in the REER index, but the required monthly data on export and import of services were not available for all countries.
 25. RBI, 'Statement on Recent Developments in the Foreign Exchange Markets', 11 June 1998.
 26. Bimal Jalan, 'Development and Management of Forex Markets: A Central Banking Perspective', Inaugural Remarks at the 21st Asia Pacific Congress, New Delhi, 1 December 2000.
 27. S. S. Tarapore, 'Exchange Rate: Slave or Master', *Business Standard*, 17 December 1999.
 28. In fact, former Governor Reddy wrote:

[W]e were guided by REER in practice.... The rule of thumb was: movements within 5 per cent of the rate as per REER would be welcome. Movements between 5 and 10 per cent warranted close observation and intervention if the volatility was higher than normal. Deviation of more than 10 per cent warranted intervention.... Prolonged stability at a rate also warranted our attention.... We felt that the markets were also comfortable with this arrangement. (Y. V. Reddy, *Advice and Dissent: My Life in Public Service* [Delhi: Harper Collins, 2017], p. 276.)
 29. See Chapter 6 on financial markets for a detailed account of NDF.
 30. The legal framework for management of foreign exchange reserves was provided by the RBI Act, 1934. While its preamble empowered the Reserve Bank to hold the foreign exchange reserves, different sections and subsections of the Act stipulated the minimum amount and also recommended the desired composition and instruments of reserves. The word 'reserves' refers to both foreign exchange reserves and domestic reserves (bank reserves). Forex reserves relate to foreign currency assets held in cash, securities, bonds and deposits with international banks and institutions, and gold in the Banking and Issue Departments. Sections 17 and 33 of the Act spelt out the broad ways in which foreign exchange reserves were to be deployed and managed.
 31. Y. V. Reddy, 'Forex Reserves, Stabilization Funds and Sovereign Wealth Funds: Indian Perspective', Golden Jubilee Celebrations of the Foreign Exchange Dealers' Association of India, Mumbai, 8 October 2007.
 32. The adequacy of reserves issue was debated in Parliament. On the question of whether the government proposed to utilise the foreign exchange reserves

beyond prudent norms (Jagmeet Singh Brar, Member of Parliament [MP], Starred Question No. 170, answered on 12 December 2003), the government replied that

the policy for reserve management is judiciously built upon a host of identifiable factors and other contingencies which *inter alia* include size of the current account deficit; the size of short-term liabilities, the possible variability in portfolio investment and other types of capital flows, pressures on the balance of payments arising out of external shocks and movements in the repatriable foreign currency deposits of NRIs.

This approach conformed closely to the statements made by the Bank.

33. The Reserve Bank stressed that while safety and liquidity of investment were the main tenets of reserve management, the primary objective was to preserve the long-term value of the reserves, that is, avoid risks even if the returns were relatively low. Y. V. Reddy, 'The Role of Government-owned Investment Vehicles and Capital Flows: Indian Perspective', Address at a session on 'The Role of Government-owned Investment Vehicles in Global Capital Flows' at the International Capital Markets and Emerging Markets Roundtable, Washington DC, 14 April 2008, *BIS Quarterly Review* 44 (2008), <https://www.bis.org/review/r080416d.pdf>.
34. Further, the system of concurrent audit for monitoring the compliance of internal control guidelines was in place. Nostro accounts of important currencies were monitored and reconciled on a daily basis. Central banks were the custodians for the major part of these securities. Although external auditors conducted statutory audit, a special external auditor was appointed to audit dealing room operations. The Inspection Department of the Bank carried out regular inspections of the Department of External Investments and Operations.
35. For example, it was US\$500 million in 1996, which was raised gradually to reach US\$2.8 billion in 2007. An upper limit was set in 2006 at US\$5 billion or 5 per cent of foreign exchange assets, whichever was lower, which was revised to 5 per cent or US\$10 billion in 2007. Similarly, the amount assigned to individual EAMs, too, was not significant at US\$75 million in 1996, which was increased to a maximum of US\$1 billion in 2007.
36. A scoring model awarded marks on a scale of 0 to 5 for each parameter. A committee of senior officers appointed by the Deputy Governor reviewed and finalised the rating and selection. An EAM who obtained a score of over 60 per cent was considered.
37. Deputy Governor Shyamala Gopinath and Sanjay Krishna, Joint Secretary at the Ministry of Finance, were the main negotiators from the Indian side, while the Japanese team was led by Naoyuki Shinohara, Director-General, International Bureau, from the Ministry of Finance.

38. The arrangement was for a maximum amount of US\$3 billion, essentially to tide over temporary balance of payments problems. The tenure of the swap was three months, which could be renewed seven times for three months each, meaning the total life of a drawal would be two years. The applicable interest rate was a three-month London Interbank Offered Rate (LIBOR) plus 150 basis points (bps) for the first drawal, the tenure of which was ninety days. Thereafter, starting with the second renewal, the premium added to the LIBOR would increase by 50 bps for every two renewals, provided that such premium shall never exceed 300 bps. There was also a clause of 'late interest' on delayed repayment. The interest and late interest would be computed from the original maturity date of the relevant swap transaction and every one month thereafter.
39. Bimal Jalan, Address at 14th National Assembly of Forex Association of India, 14 August 2003.
40. See Chapter 4 for other details of the two schemes.
41. An amount of US\$2.97 billion was met out of forward purchases and the rest was paid from the reserves. The payments were made to State Bank of India (SBI) in two tranches on 29 September and 1 October 2003 as SBI was the issuing bank. Call rate (weighted average) just edged up from 4.44 per cent to 4.55 per cent and foreign exchange currency assets of the Reserve Bank did not fall but instead rose by US\$771 million on a week-to-week basis. Exchange rate of the rupee per USD showed a small appreciation of 19 paise.
42. This was due to two reasons: (a) deposits under FCBs carried higher yield rate by a few basis points compared to BIS term deposit or Bank of England deposit bids and (b) using the entire maturity of FCBs would have led to the depletion of cushion to be maintained for the backing of note issue in terms of Section 33(6) of the RBI Act.
43. Rajya Sabha, Unstarred Q. No. 3295 answered on 25 April 2000.
44. Rajya Sabha, PQ, RS No.1179, 12 December 2004.
45. Planning Commission, Government of India, *Mid-Term Appraisal of the Tenth Five Year Plan (2002–2007)* (New Delhi: Government of India, 2007), p. 472.
46. Bimal Jalan, Address at 14th National Assembly of Forex Association of India, 14 August 2003.
47. Rajeev Shukla, MP, Rajya Sabha (Rajya Sabha, Unstarred Q. No. 1179 answered on 14 December 2004), asked, '[H]ow does Government propose to raise funds, particularly since RBI is not in favour of utilising the foreign exchange reserves for the purpose', to which the government did not give any direct answer. To a related question asked by Uday Pratap Singh, MP, Rajya Sabha, on the utilisation of reserves (Rajya Sabha, Unstarred Q. No. 1190 answered on 14 December 2004), the government replied that 'any decision to utilise a part of foreign exchange reserves for funding domestic projects

requires careful assessment *inter alia*, of the impact of such a measure on the fiscal situation, money supply, exchange rate, domestic interest rates, reserve adequacy and inflation’.

48. During the discussion at the board meeting held in Kolkata on 13 December 2007, other options, such as the government buying foreign exchange from the Bank against issue of government securities, and the Bank extending ways and means advances and bridge finance, did not find favour because they were not in line with the Fiscal Responsibility and Budget Management targets, as emphasised by the Bank. The Act provided that the central government shall not borrow from the Bank except under exceptional circumstances.
49. The Board also deliberated upon the terms and conditions of the Bank’s investment, including tenor, rate of interest, government guarantee, drawal mechanism, end use and repayment. Tenor was fixed at a maximum of ten years as the RBI Act did not permit beyond it. Interest rate was linked to LIBOR.
50. On 7 February 2008 IIFCL (United Kingdom [UK]) was incorporated with the Registrar of Companies of England and Wales at London under the UK Companies Act, 1985, for on-lending to Indian companies implementing infrastructure projects in India, and/or to co-finance the external commercial borrowings of such projects for capital expenditure incurred outside India. The Bank made its first tranche of investment of US\$250 million on 20 March 2009.
51. Reddy, ‘The Role of Government-owned Investment Vehicles and Capital Flows’.
52. Consequent to the announcement of the Export–Import (Exim) policy (1997–2002) by the government in 1997, the Bank revived and activated the committee in March 1997 with V. Subrahmanyam, Executive Director, in charge of DEIO as Chairman. Members were drawn from relevant departments of the Bank.
53. Membership of the SCGPM was also gradually expanded to include representatives of the Ministry of Finance, the Ministry of Commerce and SBI.
54. The Bank also tried to put through ‘location swap’, whereby swap arrangement would be entered with international bullion banks such as the Union Bank of Switzerland. The mechanism was the following: Swap deals would be entered into with international banks who were suppliers of gold to Indian importers such as the Minerals and Metals Trading Corporation. These international banks would source the gold from the Reserve Bank by way of swap arrangement and supply it to the importing agencies in India. The concerned international bank would credit the equivalent volume of gold into the Reserve Bank’s account with the Bank of England, London, and the Reserve Bank would hold this as gold deposit with the Bank of England.

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This proposal was approved by the Government of India in 1995 and, legally, it was possible to hold gold deposits abroad except for a minimum quantity worth ₹1.15 billion to be held in the assets of the Issue Department as specified in the provisions of Section 33 of the RBI Act. But the scheme did not take off mainly due to lack of interest shown by gold importers.

55. Tarapore, 'Exchange Rate'.