Report on

Foreign Exchange Reserves

Reserve Bank of India Central Office Mumbai

2007-08 (covering the period up to March 2008)

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Report on Foreign Exchange Reserves: Position as on March 31, 2008

1. Introduction

In 2003, the Reserve Bank of India (RBI) had undertaken a review of the main policy and operational matters relating to management of the reserves, including transparency and disclosure and decided to compile and make public half-yearly reports on management of foreign exchange reserves for bringing about more transparency and enhancing the level of disclosure in this regard. The first such report with reference to September 30, 2003 was placed in the public domain on February 3, 2004. These reports are now being prepared with reference to position as of 31st March and 30th September every year with a time lag of about 3 months. This is the tenth report on foreign exchange reserves with reference to position as on March 31, 2008. The report is a compilation of quantitative information with regard to external reserves, such as, level of foreign exchange reserves, sources of accretion to foreign exchange reserves, external liabilities vis-à-vis the foreign exchange reserves, prepayment of external debt, Financial Transaction Plan (FTP) of the International Monetary Fund (IMF), adequacy of reserves, etc. To avoid repetition, Sections II and III of the first report, dealing with various matters relating to the qualitative aspects of management of forex reserves and cross-country comparison of disclosure in respect of management of external reserves, respectively, do not figure in this report. Interested readers may refer to March 2004 issue of the RBI Bulletin or visit RBI website (www.rbi.org.in) for accessing the first report on foreign exchange reserves.

2. Level and Composition of the Reserves

The level of foreign exchange reserves, which comprises the Foreign Currency Assets, Special Drawing Rights, Gold and the Reserve Tranche Position in the IMF, had steadily increased from US\$ 5.8 billion as at end-March 1991 to US\$ 151.6 billion by end-March 2006 and further to US\$ 199.2 billion by end-March 2007. It stood at US\$ 309.7 billion as at end-March 2008 (Table 1). Although both US dollar and Euro are intervention currencies, the foreign exchange reserves are denominated and expressed in US dollar only.

Table 1: Movement in Reserves

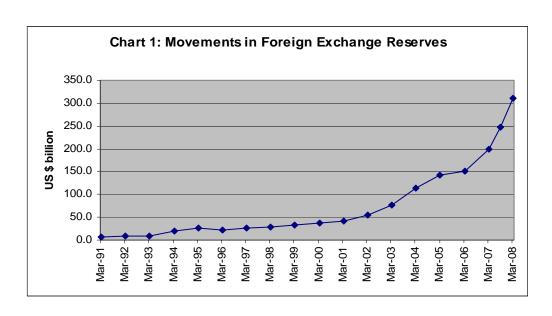
					(US \$ million)
Date	FCA	SDR	GOLD	RTP	Total Forex
					Reserves
				(5)	(6)
(I)	(2)	(3)	(4)		(1+2+3+4+5)
31-Mar-06	145,108	3 (2.0)	5,755	756	151,622
30-Sep-06	158,340	1 (0.9)	6,202	762	165,305
31-Mar-07	191,924	2 (1.0)	6,784	469	199,179
30-Sep-07	239,954	2 (1.0)	7,367	438	247,761
31-Mar-08	299,230	18 (11.0)	10,039	436	309,723

Note: 1. FCA (Foreign Currency Assets): FCA is maintained as a multicurrency portfolio, comprising major currencies, such as, US dollar, Euro, Pound sterling, Japanese yen, etc. and is valued in terms of US dollars.

- 2. SDR (Special Drawing Rights): Values in SDR have been indicated in parentheses.
- 3. Gold: Physical stock has remained unchanged at approximately 357 tonnes.
- 4. RTP refers to the Reserve Tranche Position in the IMF.

3. Review of Growth in Reserves since 1991

India's foreign exchange reserves have grown significantly since 1991. The reserves, which stood at US\$ 5.8 billion at end-March 1991, increased gradually to US\$ 25.2 billion by end-March 1995. The growth continued in the second half of the 1990s with the reserves touching the level of US\$ 38.0 billion by end-March 2000. Subsequently, the reserves rose to US\$ 113.0 billion by end-March 2004, US\$ 141.5 billion by end-March 2005, US\$ 151.6 billion by end March 2006, US\$ 199.2 billion by end-March 2007 and further to US\$ 309.7 billion by end-March 2008 (Chart 1). It may be mentioned that foreign exchange reserve data prior to 2002-03 do not include the Reserve Tranche Position (RTP) in the IMF.



4. Sources of Accretion to the Reserves

Table 2 details the major sources of accretion to the foreign exchange reserves during the period from March 1991 to March 2008.

Table 2: Sources of Accretion to the Foreign Exchange Reserves since 1991 (US\$ billion)

Items			1991-92 to 2007-08 (up to end March 2008)		
A		Reserve Outstanding as on end- March 1991	5.8		
B.I.		Current Account Balance	(-) 52.4		
B.II.		Capital Account (net)			
		(a to e)	322.6		
	a.	Foreign Investment	152.4		
		of which:			
		(i) FDI	59.2		
		(ii) FII	66.6		
	b.	NRI Deposits	29.8		
	C.	External Assistance	16.0		
	d.	External Commercial Borrowings	59.7		
	e.	Other items in the Capital Account*	64.7		
B.III.		Valuation Change	33.7		
		Total (A+BI+BII+BIII)	309.7		

^{*} Please see foot note under Table 3.

Table 3 provides details of accretion during April-March 2007-08 and the corresponding period of the previous year. The increase in the foreign exchange reserves has been on account of capital and other inflows. Major sources of increase in the foreign exchange reserves for the year 2007-08 have been: (a) foreign investment, (b) external commercial borrowings, (c) short-term credit, and (d) banking capital.

Table 3: Sources of Accretion to Foreign Exchange Reserves

(US \$ billion)

			/00 ¢ 2	•,
Items			April-March	April- March
			2007-08	2006-07
I.		Current Account Balance	-17.4	-9.8
II.		Capital Account (net) (a to f)	109.6	46.4
	a.	Foreign Investment (i+ii)	44.8	15.6
		(i) Foreign Direct Investments	15.5	8.5
		(ii) Portfolio Investments	29.3	7.1
	b.	Banking Capital	11.8	1.9
		of which: NRI Deposits	0.2	4.3
	C.	Short-Term Credit	17.7	6.6
	d.	External Assistance	2.1	1.8
	e.	External Commercial Borrowings	22.2	16.2
	f.	Other items in the Capital Account*	11.0	4.3
III.		Valuation Change	18.3	11.0
		Total (I+II+III)	110.5	47.6

*: 'Other Capital', apart from Errors and Omissions' comprises leads and lags in export, funds held abroad, advances received pending issue of shares under the FDI and transactions of capital receipts not included elsewhere. The transactions of these capital receipts mainly constitute cross border transactions relating to financial derivatives and hedging (margin payments and settlement), migrant transfers and other capital transfers (transfers of capital assets by the Indian migrants abroad, investment grants, payments of compensation), realization of guarantees, etc.

An analysis of the sources of reserves accretion during the entire reform period from 1991 onwards reveals that the increase in foreign exchange reserves has been facilitated by an increase in the quantum of cumulative net foreign direct investment (FDI) from US \$ 129 million in 1991-92 to US\$ 59.2 billion in 2007-08. During 2007-08, net FDI amounted to US\$ 15.5 billion. FII investments in the Indian capital market, which commenced in January 1993, have shown significant increase over the subsequent years. Cumulative net FII inflows increased from US\$ 1 million at end-March 1993 to US\$ 66.6 billion at end-March 2008, net accretion being US \$ 20.3 billion during the year 2007-08. Outstanding NRI deposits increased from US\$ 14.0 billion at end-March 1991 to US\$ 41.2 billion as at end-March 2007. As at end-March 2008, the outstanding NRI deposit stood at US\$ 43.7 billion. Under current account, India's exports, which were US\$ 18.3 billion during 1991-92, increased to US\$ 158.5 billion in 2007-08. India's imports, which were US\$ 24.1 billion in 1991-92, increased to US\$ 248.5 billion in 2007-08. Invisibles, in particular, private remittances have also contributed significantly to the current account. Net invisibles

inflows, comprising mainly private transfer remittances and services, increased from US\$ 1.6 billion in 1991-92 to US\$ 53.4 billion in 2006-07. During April-March 2007-08, net invisibles were of the order of US\$ 72.7 billion. India's current account balance, which was in deficit at 3.1 per cent of GDP in 1990-91, turned into a surplus of 0.7 per cent in 2001-02 and 1.3 per cent in 2002-03. A surplus of US\$ 14.1 billion (2.3 per cent of GDP) was posted in the current account during the financial year 2003-04, mainly due to surplus in the invisibles account. However, this was not sustained during 2004-05 with the current account posting a deficit of US\$ 2.5 billion (0.4 per cent of GDP). During 2005-06, current account deficit widened further and was of the order of US\$ 9.9 billion, accounting for 1.2 per cent of GDP, driven mainly by strong import demand, both oil and non-oil. During 2006-07, the current account deficit amounted to US\$ 9.8 billion, constituting 1.1 per cent of GDP. During 2007-08, current account deficit increased to US\$ 17.4 billion (1.5 per cent of GDP).

5. External Liabilities vis-à-vis Foreign Exchange Reserves

The accretion to the foreign exchange reserves needs to be seen in the light of total external liabilities of the country. India's International Investment Position (IIP), which is a summary record of the stock of country's external financial assets and liabilities, is available as of end December 2007 (Table 4).

Table 4: International Investment Position of India

(US \$ billion)

	Item	Dec 2007 (P)
Α	Total Foreign Assets	331.73
1.	Direct investment abroad	38.95
2.	Portfolio investment	0.56
3.	Other investments	16.90
4.	Foreign Exchange Reserves	275.32
В	Total Foreign Liabilities	405.64
1.	Direct investment in India	102.38
2.	Portfolio investment	124.58
3.	Other investments	178.68
	Net Foreign Liabilities (B-A)	73.91

P: Provisional

6. Prepayment of External Debt

The significant increase in forex reserves enabled prepayment of certain high-cost foreign currency loans of the Government of India from the Asian Development Bank (ADB) and the International Bank for Reconstruction and Development (IBRD) / World Bank amounting to US\$ 3.03 billion during February 2003. During 2003-04, prepayment of certain high cost loans to IBRD and ADB amounting to US\$ 2.6 billion was carried out by the Government. Additionally, prepayment of bilateral loans amounting to US\$ 1.1 million was also made. Thus, the total quantum of prepayments was of the order of US\$ 3.7 billion during 2003-04. During 2004-05, prepayment of bilateral loan to the tune of US\$ 30.3 million was made. During 2006-07, there was only one prepayment of US\$ 58.7 million in the month of April 2006. There was no pre-payment of any debt during 2007-08.

7. Financial Transaction Plan (FTP) of the IMF

International Monetary Fund (IMF) designated India as a creditor under its Financial Transaction Plan (FTP) in February 2003. In terms of this arrangement, India participated in the IMF's financial support to Burundi in March-May 2003 with a contribution of SDR 5 million and to Brazil in June-September 2003 with SDR 350 million. In December 2003, SDR 43 million was made available to Indonesia under the FTP. During 2004-05, SDR 61 million was made available under the FTP to countries like Uruguay, Haiti, Dominican Republic and Sri Lanka. During May-June 2005, SDR 34 million was made available to Turkey and Uruguay. Thereafter, there were two purchase transactions during 2007-08, viz., SDR 32 million by Bangladesh on April 7, 2008 and SDR 55 million by Turkey on May 14, 2008. Thus, the total purchase transactions amounted to 580 million as at end June 2008. India was included in repurchase transactions of the FTP since November 2005. There were 17 repurchase transactions during the period from November 2005 to June 2008 totalling SDR 749 million received from 6 countries, viz., Turkey, Algeria, Brazil, Indonesia, Uruguay and Ukraine.

8. Adequacy of Reserves

Adequacy of reserves has emerged as an important parameter in gauging the country's ability to absorb external shocks. With the changing profile of capital flows, the traditional approach of assessing reserve adequacy in terms of import cover has been broadened to include a number of parameters which take into account the size, composition and risk profiles of various types of capital flows as well as the types of external shocks to which the economy is vulnerable. Various suggestions in this regard were made by the High Level Committee on Balance of Payments, chaired by Dr. C. Rangarajan, erstwhile Governor of Reserve Bank of India, Committee on Capital Account Convertibility and Committee on Fuller Capital Account Convertibility chaired by Shri S.S.Tarapore, former Deputy Governor of RBI. In the recent period, assessment of reserve adequacy has been influenced by the introduction of new measures. One such measure requires that the usable foreign exchange reserves should exceed scheduled amortisation of foreign currency debts (assuming no rollovers) during the following year. The other one is based on a "Liquidity at Risk" approach that takes into account the foreseeable risks that a country could face. This approach requires that a country's foreign exchange liquidity position could be calculated under a range of possible outcomes for relevant financial variables, such as, Current Account Balance, capital account flows like FDIs, FII investments, External Commercial Borrowings, Non-Resident Deposits, etc. Reserve Bank of India has been undertaking exercises based on intuition and risk models to estimate "Liquidity at Risk (LAR)" of the reserves.

The traditional trade-based indicator of reserve adequacy, viz, import cover of reserves had fallen to a low of 3 weeks of imports at end-December 1990, rose to 11.5 months of imports at end-March 2002 and increased further to 14.2 months of imports. At end-March 2004, the import cover of reserves was 16.9 months and it came down to 14.3 months as at end-March 2005 and further to 11.6 months as at end-March 2006. The import cover for reserves was 12.5 months at end-March 2007 and 12.4 months at end September 2007. The import cover rose to 15 months as at end-March 2008. The ratio of short-term debt (redefined since 2005-06 by including suppliers' credit upto 180 days) to the foreign exchange reserves declined from 146.5 per cent at end-March 1991 to 12.5 per cent as at end-March 2005 but increased to 12.9 per cent as at end-March 2006, to 13.2 per cent at end-March 2007 and to 13.9 per cent at end-September 2007. The short term debt to

reserves ratio further increased to 14.3 per cent at end-March 2008. The ratio of short term debt and portfolio stocks to reserves declined from 146.6 per cent as at end-March 1991 to 45.3 per cent as at end-March 2007 and to 44.4 per cent as at end-March 2008.

9. Investment Pattern and Earnings from the Foreign Currency Assets

The foreign currency assets are invested in multi-currency, multi-asset portfolios as per the existing norms broadly in line with the best international practices in this regard. As at end-March 2008, out of the total foreign currency assets of US\$ 299.2 billion, US\$ 103.6 billion was invested in securities, US \$ 189.6 billion was deposited with other central banks, the Bank for International Settlements (BIS) and the International Monetary Fund (IMF) and US\$ 6.0 billion was held in the form of deposits with foreign commercial banks / funds placed with the External Asset Managers (EAMs) (Table 5).

Table 5: Deployment Pattern of Foreign Currency Assets

(US \$ Million)

	As on March 31, 2008	As on September 30, 2007
Foreign Currency Assets	299,230	239,954
(a)Securities	103,569	67,212
(b) Deposits with other central banks, BIS & IMF	189,645	137,348
(c) Deposits with foreign commercial banks / funds placed with the EAMs	6,016	35,394

During the year 2006-07 (July-June), the return on foreign currency assets and gold, after accounting for depreciation, increased to 4.6 per cent from 3.9 per cent during 2005-06.