

**Half Yearly Report on  
Foreign  
Exchange Reserves**

**Reserve Bank of India  
Central Office  
Mumbai**

**2008-09 (covering the period up to September 2008)**

## **Contents**

1. Introduction
2. Level and Composition of the Reserves
3. Review of Growth in Reserves since 1991
4. Sources of Accretion to the Reserves
5. External Liabilities vis-à-vis Foreign Exchange Reserves
6. Prepayment of External Debt
7. Financial Transaction Plan (FTP) of the IMF
8. Adequacy of Reserves
9. Investment Pattern and Earnings from the Foreign Currency Assets

### **Report on Foreign Exchange Reserves: Position as on September 30, 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 31<sup>st</sup> March and 30<sup>th</sup> September every year with a time lag of about 3 months. This is the eleventh report on foreign exchange reserves with reference to position as on September 30, 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 (<http://rbidocs.rbi.org.in/rdocs/Bulletin/PDFs/52069.pdf>) 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\$ 199.2 billion by end-March 2007 and further to US\$ 309.7 billion by end-March 2008. Thereafter, the reserves declined to US \$ 286.3 billion by end September 2008 (**Table 1**). Although both US dollar and Euro are intervention currencies, the foreign exchange reserves are denominated and expressed in US dollar only.

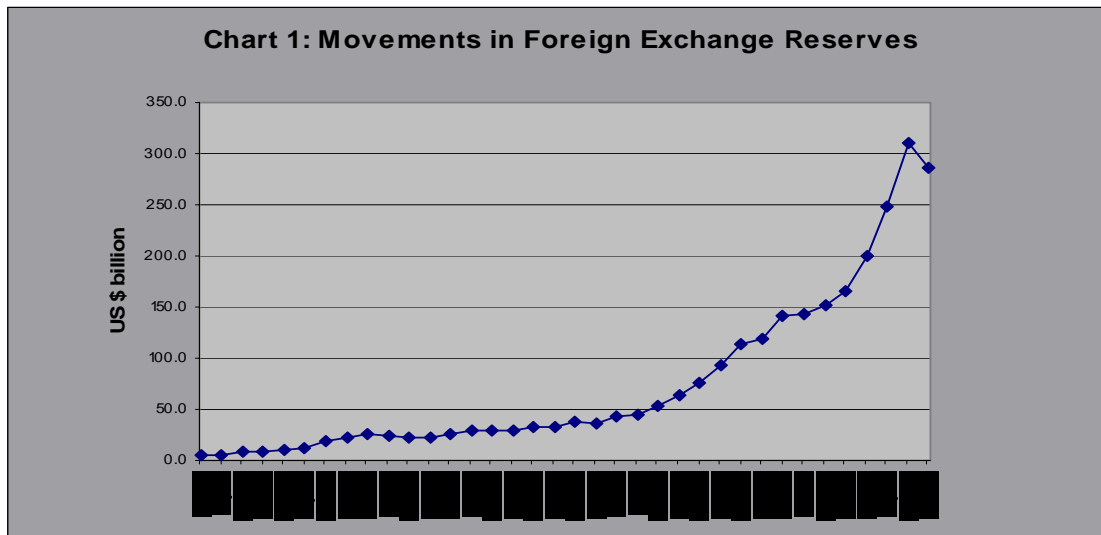
<b>Table 1: Movement in Reserves</b>					
(US \$ million)					
<b>Date</b>	<b>FCA</b>	<b>SDR</b>	<b>GOLD</b>	<b>RTP</b>	<b>Forex Reserves</b>
31-Mar-06	145,108	3 (2)	5,755	756	151,622
30-Sep-06	158,340	1 (1)	6,202	762	165,305
31-Mar-07	191,924	2 (1)	6,784	469	199,179
30-Sep-07	239,954	2 (1)	7,367	438	247,761
31-Mar-08	299,230	18 (11)	10,039	436	309,723
30-Sep-08	277,300	4 (2)	8,565	467	286,336

### Notes:

1. FCA (Foreign Currency Assets): FCAs are 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. Thereafter, the reserves declined to US \$ 286.3 billion by end September 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 foreign exchange reserves during the period from March 1991 to September 2008.

			(US\$ billion)
Items			1991-92 to 2007-08 (up to end September 2008)
<b>A</b>	<b>Reserve Outstanding as on end-March 1991</b>		<b>5.8</b>
<b>B.I.</b>	<b>Current Account Balance</b>		<b>-74.1</b>
<b>B.II.</b>	<b>Capital Account (net) (a to e)</b>		<b>341.8</b>
	a. Foreign Investment		160.8
	of which:		
	(i) FDI		72.9
	(ii) FII		60.0
	b. NRI Deposits		30.8
	c. External Assistance		16.9
	d. External Commercial Borrowings		60.1
	e. Other items in Capital Account		73.2
<b>B.III.</b>	<b>Valuation Change</b>		<b>12.8</b>
	<b>Total (A+B.I+B.II+B.III)</b>		<b>286.3</b>

**Table 3** provides details of variation in foreign exchange reserves during April 2008 to September 2008 and the corresponding period of the previous year. The foreign exchange reserves have declined during April-September 2008 as against the accretion during April-September 2007 mainly due to a valuation loss of US \$ 20.9 billion. The valuation loss explained 89.3 per cent of decline in reserves during April-September 2008. Apart from current account deficit, outflows under FIIs were the other major sources contributing to decline in foreign exchange reserves during April-September 2008.

<b>Table 3: Sources of Variation in Foreign Exchange Reserves</b>			(US \$ billion)	
<b>Items</b>			<b>April-September 2008</b>	<b>April-September 2007</b>
<b>I.</b>		<b>Current Account Balance</b>	<b>-22.3</b>	<b>-11.0</b>
<b>II.</b>		<b>Capital Account (net) (a to f)</b>	<b>19.8</b>	<b>51.4</b>
	a	Foreign Investment	9.0	23.3
	b	Banking Capital	4.8	5.7
		<i>Of which: NRI Deposits</i>	<i>1.1</i>	<i>-0.1</i>
	c	Short Term Credit	3.2	6.6
	d	External Assistance	0.9	0.7
	e	External Commercial Borrowings	3.3	11.2
	f	Other items in Capital Account*	-1.4	3.9
<b>III.</b>		<b>Valuation Change</b>	<b>-20.9</b>	<b>8.1</b>
		<b>Total (I+II+III)</b>	<b>-23.4</b>	<b>48.6</b>

\* Other items in capital account, apart from 'Errors and Omissions', also comprise leads and lags in exports, funds held abroad, advances received pending issue of shares under FDI and transactions relating to 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 net foreign direct investment (FDI) from US \$ 129 million in 1991-92 to US\$ 15.4 billion in 2007-08. During April-September 2008, the net FDI amounted to US\$ 14.6 billion. FII investments in the Indian capital market, which commenced in January 1993, have shown significant increase over the subsequent years. Cumulative net FII investments increased from US\$ 1 million at end-March 1993 to US\$ 66.6 billion at end-March 2008 and it declined to US\$ 60.0 billion as at end-September 2008, showing a net decline of US \$ 6.6 billion during the first half of the current financial year. Outstanding NRI deposits increased from US\$ 14.0 billion at end-March 1991 to US\$ 43.7 billion as at end-March 2008. As at end-September 2008, the outstanding NRI deposit stood at US\$ 40.6 billion. Turning to

the current account, India's exports, which were US\$ 18.3 billion during 1991-92 increased to US\$ 166.2 billion in 2007-08. During 2008-09 (April-September), India's exports amounted to US \$ 96.7 billion. India's imports which were US \$ 24.1 billion in 1991-92 increased to US \$ 257.8 billion in 2007-08. During 2008-09 (April-September), India's imports amounted to US \$ 165.9 billion. 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\$ 74.6 billion in 2007-08. During April-September 2008, net invisibles were of the order of US\$ 46.8 billion. India's current account balance which was in deficit at 3.0 per cent of GDP in 1990-91 turned into a surplus of 0.7 per cent in 2001-02 and further a surplus of 1.2 per cent in 2002-03. A surplus of US \$ 14.1 billion was posted in the current account during the financial year 2003-04, driven mainly by the 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, driven mainly by the surge in oil prices in the international market. During 2005-06 and 2006-07, current account deficit widened further and remained around 1 per cent of GDP, driven mainly by strong import demand, both oil and non-oil. During 2007-08, the current account deficit amounted to US \$ 17.0 billion, constituting 1.5 per cent of GDP. During April-September 2008, current account deficit amounted to US \$ 22.3 billion led by high import payments.

## 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 June 2008 (**Table 4**).

<b>Table 4: International Investment Position of India</b>	
(US \$ billion)	
<b>Item</b>	<b>June 2008 (P)</b>
<b>A Total Foreign Assets</b>	<b>377.64</b>
1. Direct Investment Abroad	48.21
2. Portfolio Investment	0.70
3. Other Investments	16.64
4. Foreign Exchange Reserves	312.09
<b>B Total Foreign Liabilities</b>	<b>426.76</b>
1. Direct Investment in India	119.54
2. Portfolio Investment	107.98
3. Other Investments	199.24
<b>Net Foreign Liabilities (B-A)</b>	<b>49.12</b>
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 the IBRD and the ADB amounting to US\$ 2.6 billion was made 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 loans 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 and 2008-09 (up to September 2008).

## **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. During 2007-08, SDR 317 million was made available to countries like Bangladesh, Turkey and Pakistan. Thus, the total purchase transactions amounted to SDR 810 million as at the end of December 2008. India was included in repurchase transactions of the FTP since November 2005. There were 21 repurchase transactions during the period from November 2005 to December 2008 totalling SDR 772 million received from 7 countries, viz., Turkey, Algeria, Brazil, Indonesia, Uruguay, Ukraine and Moldova.

## **8. Adequacy of Reserves**

Adequacy of reserves has emerged as an important parameter in gauging its 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. The High Level Committee on Balance of Payments, which was chaired by Dr. C. Rangarajan, the erstwhile Governor of Reserve

Bank of India, had suggested that, while determining the adequacy of reserves, due attention should be paid to payment obligations, in addition to the traditional measure of import cover of 3 to 4 months. In 1997, the Report of Committee on Capital Account Convertibility under the chairmanship of Shri S.S.Tarapore suggested alternative measures of adequacy of reserves which, in addition to trade-based indicators, also included money-based and debt-based indicators. Similar views have been held by the Committee on Fuller Capital Account Convertibility (Chairman: Shri S.S.Tarapore, July 2006).

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" rule 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, exchange rates, commodity prices, credit spreads, 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, which fell 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 or about five years of debt servicing at end-March 2003. At end-March 2004, the import cover of reserves was 16.9 months, which came down to 14.4 months as at end-March 2008 and further to 11.2 months as at end-September 2008. The ratio of short-term debt<sup>1</sup> 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 slightly to 12.9 per cent as at end-March 2006. With broadening the coverage of short-term debt, the ratio further increased to 14.1 per cent at end-March 2007, to 15.2 per cent at end-March 2008 and then to 20.2 per cent at end September 2008. The ratio of volatile capital flows (which is defined to include cumulative portfolio inflows and short-term debts) to the reserves declined from 146.6 per cent as at end-March 1991 to 46.2 per cent as at end March 2007. The ratio, which had declined to 45.4 per cent at end-March 2008, increased to 48.2 per cent as at the end of September 2008.

---

<sup>1</sup> Redefined from 2005-06 by including suppliers' credit up to 180 days and FII investment in Government treasury bill and other instruments and further in March 2007 by including external debt liabilities of banking system and investment in Government securities by foreign central banks and international institutions



## 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-September 2008, out of the total foreign currency assets of US\$ 277.3 billion, US\$ 111.3 billion was invested in securities, US \$ 160.6 billion was deposited with other central banks, the Bank for International Settlements (BIS) and the International Monetary Fund (IMF) and US\$ 5.4 billion was held in the form of deposits with foreign commercial banks / funds placed with the External Asset Managers (EAMs)

(Table 5).

<b>Table 5: Deployment Pattern of Foreign Currency Assets</b>		
	(US \$ Million)	
	<b>As on September 30, 2008</b>	<b>As on March 31, 2008</b>
<b>Foreign Currency Assets</b>	<b>277,300</b>	<b>299,230</b>
(a)Securities	111,287	103,569
(b) Deposits with other central banks, BIS & IMF	160,587	189,645
(c) Deposits with foreign commercial banks / funds placed with EAMs	5,426	6,016

During the year 2007-08 (July-June), the return on foreign currency assets and gold, after accounting for depreciation, increased to 4.8 per cent from 4.6 per cent during 2006-07.