# Report on

# Foreign
# Exchange Reserves

Reserve Bank of India
Central Office
Mumbai

**2006-07 (covering period up to September 2006)**

**Content**

## Foreign Exchange Reserves

The Reserve Bank of India (RBI) undertook 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 also for enhancing the level of disclosure in this regard. These reports are being prepared with reference to positions as of 31st March and 30th September each year, with a time lag of about 3 months. The first such report with reference to September 30, 2003 was placed in the public domain on February 3, 2004. This is the seventh report on foreign exchange reserves with reference to September 30, 2006. 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 foreign exchange reserves, prepayment/repayment of external debt, Financial Transaction Plan (FTP) of IMF, adequacy of reserves, etc. In order 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 RBI Bulletin or visit RBI website (www.rbi.org.in) for accessing the first report on foreign exchange reserves.

### Movement of Reserves

### 1. Introduction

The level of foreign exchange reserves has steadily increased from US$ 5.8 billion as at end-March 1991 to US$ 113.0 billion by end-March 2004 and further to US$ 151.6 billion by end-March 2006. It stood at US$ 165.3 billion as at end-September 2006 (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 | Forex Reserves |
|---|---|---|---|---|---|
| **30-Sep-04** | 114,083 | 1 (1.0) | 4,192 | 1,303 | 119,579 |
| **31-Mar-05** | 135,571 | 5 (3.0) | 4,500 | 1,438 | 141,514 |
| **30-Sep-05** | 136,920 | 4 (3.0) | 4,712 | 1,423 | 143,058 |
| **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 |

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 US dollars.

2. SDR: Values in SDR have been indicated in parentheses.

3. Gold: Physical stock has remained unchanged at approximately 357 tonnes.
4. RTP refers to Reserve Tranche Position in IMF

## 2. Review of Growth of Reserves since 1991

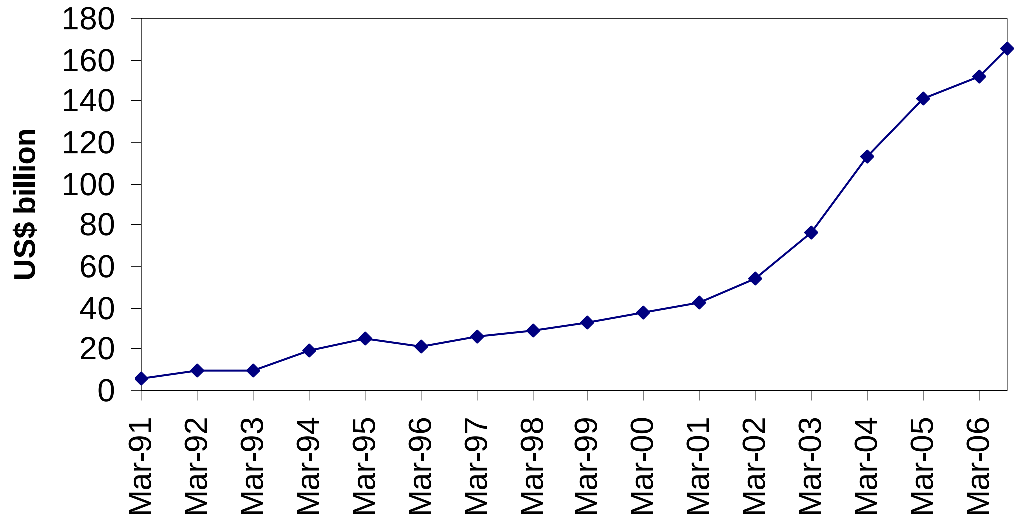
India's foreign exchange reserves have grown significantly since 1991. The reserves, which stood at US$ 5.8 billion at end-March 1991 increased gradually to US$ 25.2 billion by end-March 1995. The growth continued in the second half of the 1990s, with the reserves touching the level of US$ 38.0 billion 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 and further to US$ 165.3 billion by end-September 2006 (Chart 1). It may be mentioned that forex reserves data prior to 2002-03 do not include Reserve Tranche Position (RTP) in IMF. Table 2 details the major sources of accretion to foreign exchange reserves during the period from March 1991 to September 2006.

**Table 2: Sources of Accretion to Foreign Exchange Reserves since 1991**

(US$ billion)

| Items | | | **1991-92 to 2006-07 (up to end-September 2006)** |
|---|---|---|---|
| **A** | | **Reserve Outstanding as on end-March 1991** | **5.8** |
| **B.I.** | | **Current Account Balance** | **-36.2** |
| **B.II.** | | **Capital Account (net) (a to e)** | **186.2** |
| | a. | Foreign Investment | 99.6 |
| | b. | NRI Deposit | 27.3 |
| | c. | External Assistance | 12.4 |
| | d. | External Commercial Borrowings | 26.6 |
| | e. | Other items in capital account | 20.3 |
| **B.III.** | | **Valuation change** | 9.4 |
| | | **Total (A+BI+BII+BIII)** | **165.3** |

**Chart I : Movements in Foreign Exchange Reserves**




### 3. Sources of Accretion to Reserves in the Recent Period

The increase in foreign exchange reserves in the recent period has been on account of capital and other inflows. Major sources of increase in foreign exchange reserves during April-September 2006 have been: (a) Foreign investment (b) External commercial borrowings and (c) Banking capital. Table 3 presents sources of accretion to reserves during the first half of 2006-07.

**Table 3: Sources of Accretion to Foreign Exchange Reserves**

(US $ billion)

| | | **Items** | **April-September 2006** | **April-September 2005** |
|---|---|---|---|---|
| **I.** | | **Current Account Balance** | **-11.7** | **-7.2** |
| **II.** | | **Capital Account (net) (a to f)** | **20.3** | **13.7** |
| | a. | Foreign Investment | 5.8 | 7.5 |
| | b. | Banking Capital | 3.2 | 2.8 |
| | | *Of which: NRI Deposits* | *2.0* | *0.2* |
| | c. | Short term credit | 1.9 | 1.0 |
| | d. | External Assistance | 0.4 | 0.4 |
| | e. | External Commercial Borrowings | 5.1 | 2.9 |
| | f. | Other items in capital account | 3.9* | -0.9 |
| **III.** | | **Valuation change** | **5.1** | **-5.0** |
| | | **Total (I+II+III)** | **13.7** | **1.5** |

* Mainly includes 'Other Capital' (comprising the leads and lags in export receipts, funds held abroad, India's subscription to international institutions, quota payments to IMF, remittances towards recouping the losses of branches/subsidiaries and residual item of other capital transactions not included elsewhere) of US $ 3 billion

An analysis of the sources of reserves accretion during the entire reform period from 1991 onwards reveals that the increase in forex reserves has been facilitated by an increase in the annual quantum of foreign direct investment (FDI) from US $ 129 million in 1991-92 to US$ 6.1 billion in 2004-05 and further to US$ 7.8 billion in 2005-06. During April-September 2006, FDI amounted to US$ 4.9 billion. Outstanding NRI deposits increased from US$ 13.7 billion at end-March 1991 to US$ 33.0 billion as at end-March 2005 and further to US$ 35.1 billion as at end-March 2006. As at end-September 2006, outstanding NRI deposit stood at US$ 36.6 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$ 827 million at end-December 1993 to US$ 45.3 billion at end-March 2006 and further to US$ 46.9 billion as at end-September 2006. Turning to the current account, India’s exports which were US$ 17.9 billion during 1991-92 increased to US$ 103.1 billion in 2005-06. India’s exports during first half of 2006-07 stood at US$ 60.3 billion. Invisibles, such as, private remittances have also contributed significantly to the current account. Net invisibles inflows increased from US$ 1.6 billion in 1991-92 to US$ 31.2 billion in 2004-05 and further to US$ 42.7 billion in 2005-06. During April-September 2006, net invisibles inflows were of the order of US$ 23.5 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 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, current account deficit widened further and was of the order of US$ 9.2 billion, driven mainly by strong import demand, both oil and non-oil. During first half of 2006-07, current account deficit was of the order of US$ 11.7 billion.

## 4. External Liabilities vis-à-vis Foreign Exchange Reserves

The accretion of 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 March 2006 (Table 4).

**Table 4: International Investment Position of India**

**(US $ million)**

| | Item | March 2006 P |
|---|---|---|
| **A** | **Assets** | |
| 1. | Direct investment abroad | 12,066 |
| 2. | Portfolio investment | 1,290 |
| 3. | Other investments | 18,147 |
| 4. | Foreign Exchange Reserves | 151,622 |
| | **Total Foreign Assets** | **183,126** |
| **B** | **Liabilities** | |
| 1. | Direct investment in India | 50,258 |
| 2. | Portfolio investment | 63,361 |
| 3. | Other investments | 115,581 |
| | **Total Foreign Liabilities** | **229,200** |
| | **Net Foreign Liabilities (B-A)** | **46,075** |

P: Provisional
Source: Official website of Reserve Bank of India (http://www.rbi.org.in)

### 5. Prepayment/Repayment 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 World Bank (IBRD) 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 2005-06, no prepayment of high-cost multilateral/bilateral loan was carried out. During April-September, 2006, there was only one prepayment of US$ 58.7 million in the month of April 2006.

### 6. Financial Transaction Plan (FTP) of IMF

International Monetary Fund (IMF) designated India as a creditor under its Financial Transaction Plan (FTP) in February 2003, in terms of which 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 FTP. During 2004-05, SDR 61 million was made available under FTP to countries like Uruguay, Haiti, Dominican Republic and Sri Lanka. During May-June 2005, SDR 34 million was made available to countries like Turkey and Uruguay, Thus, the total quantum of India’s contribution under FTP by way of purchase was SDR 493 million at end-March 2006. India has been included in repurchase transactions of the FTP since November 2005. There have been 5 transactions during the period from November 2005 to February 2006 totaling SDR 466 million received from 3 countries, viz., Turkey, Algeria and Brazil. During April-September 2006, there have been no transactions (either purchases or repurchases) under FTP

**7. 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, 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 four 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 more recent period, assessment of reserve adequacy has been influenced by the introduction of new measures that are particularly relevant for emerging market countries like India. 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 done exercises based on intuition and risk models in order 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 17.0 months, which 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 10.4 months at end-September 2006. The ratio of short-term debt to foreign exchange reserves declined from 146.5 per cent at end-March 1991 to

4.2 per cent at end-March 2004 but increased slightly to 5.3 per cent as at end-March 2005, 5.7 per cent as at end-March 2006 and further to 6.4 per cent at end-September 2006. The ratio of volatile capital flows (defined to include cumulative portfolio inflows and short-term debt) to reserves declined from 146.6 per cent as at end-March 1991 to 35.2 per cent as at end-March 2004. However, this ratio increased moderately to 36.9 per cent as at end-March 2005 and further to 43.4 per cent as at end-March 2006. The ratio has, however, declined to 42.0 per cent as at end-September 2006.

**8. Investment Pattern and Earnings from Foreign Exchange Reserves**

The foreign exchange reserves are invested in multi-currency, multi-asset portfolios as per the existing norms, which are similar to international practices in this regard. As at end-September, 2006, out of the total foreign currency assets of US$ 158.3 billion, US$ 34.2 billion was invested in securities, US $ 76.4 billion was deposited with other central banks, BIS & IMF and US$ 47.7 billion was in the form of deposits with foreign commercial banks. (Table 5)

**Table 5: Deployment Pattern of Foreign Exchange Reserves**

**(US $ Million)**

| | As on March 31, 2006 | As on September 30, 2006 |
|---|---:|---:|
| (1) Foreign Currency Assets | 145,108 | 158,340 |
| (a)Securities | 35,172 | 34,150 |
| (b) Deposits with other central banks, BIS & IMF | 65,399 | 76,441 |
| (c) Deposits with foreign commercial banks | 44,537 | 47,749 |
| (2) Special Drawing Rights | 3 | 1 |
| (3) Gold (including gold deposits) | 5,755 | 6,202 |
| (4) Reserve Tranche Position | 756 | 762 |
| (5) Total Foreign Exchange Reserves | 151,622 | 165,305 |

During the year 2005-06 (July-June), the return on foreign currency assets and gold, after accounting for depreciation, increased to 3.9 per cent from 3.1 per cent during 2004-05, mainly because of hardening of global short-term interest rates.