# Half Yearly Report on Management of Foreign Exchange Reserves

## April 2011 – September 2011

**Reserve Bank of India**
**Department of External Investments and Operations**
**Central Office**
**Mumbai**

**Report on Management of Foreign Exchange Reserves**

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## Part I: Developments during the half year

### I.1 Introduction

The Reserve Bank of India makes public half-yearly reports on management of foreign exchange reserves for bringing about more transparency and enhancing the level of disclosure. These reports are prepared half yearly with reference to the position as of March 31 and September 30 each year with a time lag of about three months. The present report is the 17th in the series with reference to the position as on September 30, 2011. The report is divided into two parts: Part I gives the developments regarding movement of reserves and information on the external liabilities *vis-à-vis* the foreign exchange reserves, prepayment / repayment of external debt, Financial Transaction Plan (FTP) of the IMF, adequacy of reserves, *etc.* during the half-year under review. Objectives of reserves management, statutory provisions, risk management practices, information on transparency and disclosure practices followed by the RBI with regard to the reserves management are covered in Part II.

### I.2 Movement of Reserves

#### I.2.1 Review of Growth of Reserves

The reserves stood at US$ 304.8 billion as at end-March, 2011. It increased to the peak level of US $ 322.0 billion as at end- August, 2011. Thereafter, it came down to US$ 311.5 billion at the end of September 2011**(**Table 1 **&** Chart 1**)**. The main reasons of decline are, *inter alia,* the revaluation effect and intervention in the domestic foreign exchange market.

Although both US dollar and Euro are intervention currencies and the Foreign Currency Assets (FCA) are maintained in major currencies like US dollar, Euro, Pound Sterling, Japanese Yen etc., the foreign exchange reserves are denominated and expressed in US dollar only. Movements in the FCA occur mainly on account of purchases and sales of foreign exchange by the RBI in the foreign exchange market in India, income arising out of the deployment of the foreign exchange reserves, external aid receipts of the Central Government and the effects of revaluation of the assets.

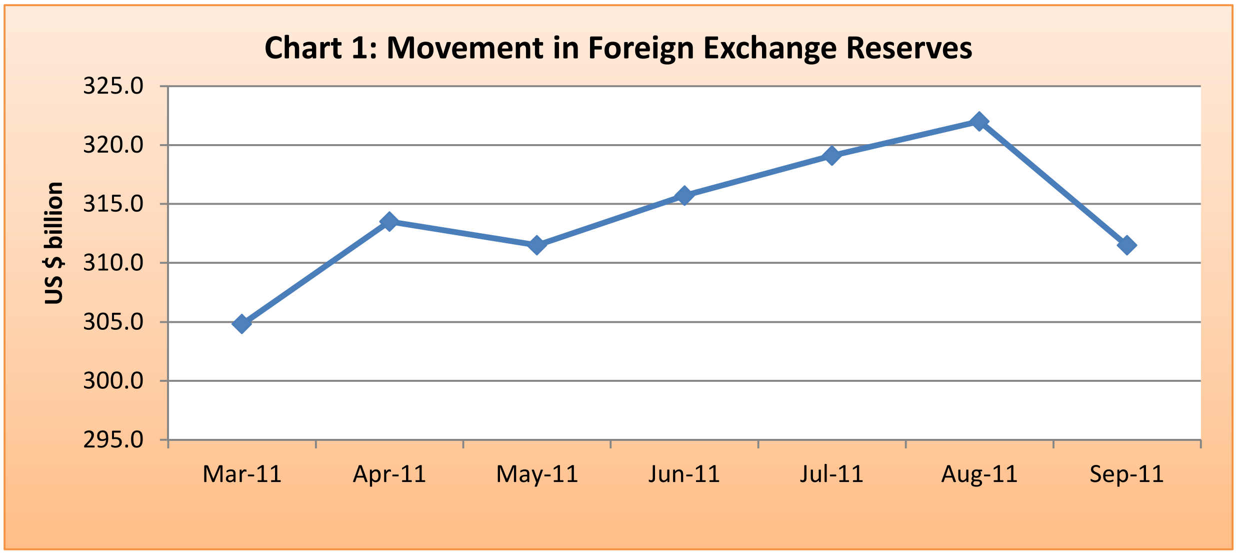
**Table 1 : Movement in Foreign Exchange Reserves**

(US$ million)

| Date | FCA | SDR | Gold | RTP | Forex Reserves |
|---|---|---|---|---|---|
| 30-Sep-10 | 265,231 | 5,130 (3297) | 20,516 | 1,993 | 292,870 |
| 31-Mar-11 | 274,330 | 4,569 (2882) | 22,972 | 2,947 | 304,818 |
| 30-Apr-11 | 282,037 | 4,671 (2882) | 23,790 | 3,013 | 313,511 |
| 31-May-11 | 279,537 | 4,613 (2882) | 24,391 | 2,975 | 311,516 |
| 30-June-11 | 283,458 | 4,614 (2883) | 24,668 | 2,975 | 315,715 |
| 31-July-11 | 286,160 | 4,609 (2883) | 25,349 | 2,972 | 319,090 |
| 31-Aug-11 | 286,034 | 4638 (2884) | 28,319 | 2,991 | 321,982 |
| 30-Sep-11 | 275,699 | 4,504 (2884) | 28,667 | 2,612 | 311,482 |

**Notes:**

1. FCA (Foreign Currency Assets): FCAs are maintained as a multi-currency portfolio comprising major currencies, such as, US dollar, Euro, Pound sterling, Japanese yen, etc. and are valued in terms of US dollars.
2. FCA excludes US$ 250.0 million invested in foreign currency denominated bonds issued by IIFC (UK) since March 20, 2009 and excludes US$ 380.00 million since September 16, 2011.
3. SDR (Special Drawing Rights): Values in SDR have been indicated in parentheses.
4. RTP refers to the Reserve Tranche Position in the IMF.




**I.2.2 Sources of Accretion to the Reserves** Table 2 provides details of sources of variation in foreign exchange reserves during April-September 2011vis-à-vis the corresponding period of the previous year. On balance of payments basis (i.e., excluding valuation effects), the foreign exchange reserves increased by US$ 5.7 billion during April-September 2011 as compared with an increase of US$ 7.0 billion during the same period previous year. The valuation gain, reflecting the depreciation of the US dollar against the major international currencies, accounted for US$ 0.9 billion during April-September 2011 as compared to a valuation gain of US$ 6.8 billion during the same period a year ago.

| Table 2: Sources of Variation in Foreign Exchange Reserves | | | | |
|---|---|---|---|---|
| | | | | (US$ billion) |
| Items | | | 2010 | 2011 |
| | | | April-September | April-September |
| **I.** | | **Current Account Balance** | **-29.6** | **-32.8** |
| **II.** | | **Capital Account (net) (a to f)** | **36.6** | **38.6** |
| | a. | Foreign Investment (i+ii) | 30.8 | 13.7 |
| | | *(i) Foreign Direct Investment* | 7.0 | 12.3 |
| | | *(ii) Portfolio Investment* | 23.8 | 1.3 |
| | | *Of which:* | | |
| | | *FIIs* | *22.3* | *0.9* |
| | | *ADRs/GDRs* | *1.6* | *0.5* |
| | b. | External Commercial Borrowings | 5.7 | 10.6 |
| | c. | Banking Capital | 0.8 | 19.3 |
| | | *of which: NRI Deposits* | *2.2* | *3.9* |
| | d. | Short-Term Trade Credit | 6.9 | 5.9 |
| | e. | External Assistance | 3.0 | 0.7 |
| | f. | Other items in capital account* | -10.7 | -11.6 |
| **III.** | | **Valuation Change** | **6.8** | **0.9** |
| | | **Total (I+II+III) @** | **13.8** | **6.7** |

Note:*: (i) 'Other items in capital account' apart from 'Errors and Omissions' also include SDR allocations, leads and lags in exports, funds held abroad, advances received pending issue of shares under FDI and transactions of capital receipts not included elsewhere.(ii) Increase in reserves (+) / Decrease in reserves (-).

@: Difference, if any, is due to rounding off

## I.3. 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) as at end September 2011 is furnished in Table 3.

| | Table 3: International Investment Position of India | |
|---|---|---|
| | | (US$ billion) |
| | **Item** | **September 2011** |
| **A** | **Total External Assets** | **434.7** |
| 1. | Direct Investment Abroad | 109.1 |
| 2. | Portfolio Investment | 1.5 |
| 3. | Other Investments | 12.7 |
| 4. | Foreign Exchange Reserves | 311.5 |
| **B** | **Total External Liabilities** | **659.6** |
| 1. | Direct Investment in India | 212.9 |
| 2. | Portfolio Investment | 161.5 |
| 3. | Other Investments | 285.2 |
| | **Net IIP (A-B)** | **(-) 224.9** |
| P: Provisional. | | |

The net IIP as at end September 2011 was negative at US$ 224.9 billion, implying that our external liabilities are more than the external assets. The net IIP as at end-September 2010 and end-March 2011 was US$ (-) 205.0 billion and US$ (-) 224.3 billion respectively.

## I.4 Adequacy of Reserves

Adequacy of reserves has emerged as an important parameter in gauging the 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 the 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, erstwhile Deputy Governor of the Reserve Bank of India 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. At the end of September 2011, the import cover declined to 8.5 months from 9.6 months at end-March 2011. The ratio of short-term debt[1] to the foreign exchange reserves which was 21.3 per cent at end-March 2011 increased to 23.0 per cent at end-September 2011. The ratio of volatile capital flows (defined to include cumulative portfolio inflows and short-term debt) to the reserves increased from 67.3 per cent as at end-March 2011 to 68.3 per cent as at end-September 2011.

[1] Redefined from 2005-06 by including suppliers' credit up to 180 days and FII investments in the Government of India Treasury Bills and other instruments and further in March 2007 by including external debt liabilities of the banking system and the investments in the Government securities by the foreign central banks and the international institutions.

## I.5. Management of Gold Reserves

The Reserve Bank held 557.75 tonnes of gold forming about 9.2 per cent of the total foreign exchange reserves in value terms as on September 31, 2011. Of these, 265.49 tonnes are held abroad in deposits / safe custody with the Bank of England and the Bank for International Settlements.

## I.6 Investment Pattern and Earnings of the Foreign Currency Assets

The foreign currency assets are invested in multi-currency, multi-asset portfolios as per the existing norms which are similar to the best international practices followed in this regard. As at end-September 2011, out of the total foreign currency assets of US$ 275.7 billion, US$ 144.4 billion was invested in securities, US$ 125.8 billion was deposited with other central banks, BIS and the IMF and US$ 5.5 billion was placed with the External Asset Managers (EAMs) **(**Table 4**).**

**Table 4 : Deployment Pattern of Foreign Currency Assets**

(US$ Million)

| | **As on September 30, 2011** | **As on March 31, 2011** |
|---|---|---|
| **Foreign Currency Assets *** | 275,699 | 274,330 |
| (a)Securities | 144,442 | 142,107 |
| (b) Deposits with other central banks, BIS & IMF | 125,776 | 126,900 |
| (c) Deposits with foreign commercial banks / funds placed with EAMs | 5,481 | 5,323 |

* Excludes US$ 250.0 million invested in foreign currency denominated bonds issued by IIFC (UK) since March 20, 2009 and excludes US$ 380.00 million since September 16, 2011.

The rate of earnings on foreign currency assets and gold decreased from 2.09 per cent in July 2009 - June 2010 to 1.74 in July 2010 to June 2011 reflecting the generally low global interest rate environment.

## I.7 Other Related Aspects

### I.7.1 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. During April-September 2011, there was only one purchase transaction. US$ 54.1 million was made available to Portugal under this transaction. The Total purchase transactions since May 2003 amounted to US$ 2,186 million as at the end of September 2011. India was included in repurchase transactions of the FTP since November 2005. There was no repurchase transaction during April 2011 to September 2011.

### I.7.2 Investments under Note Purchase Agreement with IMF

In order to strengthen the IMF’s lendable resources, the RBI had entered into a Note Purchase Agreement (NPA) with the IMF under which the RBI had committed to purchase IMF Notes for an amount up to the equivalent of US$10 billion. The IMF’s amended and expanded New Arrangements to Borrow (NAB) became effective on March 11, 2011. India has committed to providing resources up to SDR 8740.82 million (approximately US$ 14 billion) to the IMF under this arrangement which shall subsume commitment made under NPA. Under the NAB, the Government of India is the participant while the RBI shall hold the NAB claims. The RBI has subscribed to notes equivalent to US$ 1143.5 million under the NAB till end-September 2011.

## Part II. Objectives of Reserve Management, Legal framework, Risk Management practices, Transparency and disclosure.

### II.1. Objectives of Reserves Management

The guiding objectives of foreign exchange reserves management in India are similar to those of many central banks in the world. The demands placed on the foreign exchange reserves may vary widely depending upon a variety of factors including the exchange rate regime adopted by the country, the extent of openness of the economy, the size of the external sector in a country's GDP and the nature of markets operating in the country. While liquidity and safety constitute the twin objectives of reserve management in India, return optimisation becomes an embedded strategy within this framework.

### II.2. Legal Framework and Policies

The Reserve Bank of India Act, 1934 provides the overarching legal framework for deployment of reserves in different foreign currency assets (FCA) and gold within the broad parameters of currencies, instruments, issuers and counterparties. The essential legal framework for reserves management is provided in sub-sections 17 (6A), 17(12), 17(12A), 17(13) and 33 (6) of the above Act. In brief, the law broadly permits the following investment categories:

> (i) deposits with other central banks and the Bank for International Settlements (BIS);
>
> (ii) deposits with foreign commercial banks;
>
> (iii) debt instruments representing sovereign/sovereign-guaranteed liability with residual maturity for the debt papers not exceeding 10 years;

(iv) other instruments / institutions as approved by the Central Board of the Reserve Bank in accordance with the provisions of the Act; and

(v) dealing in certain types of derivatives.

### II.3 Risk Management

Sound risk management is an integral part of efficient foreign exchange reserves management. The strategy for reserves management places emphasis on managing and controlling the exposure to financial and operational risks associated with deployment of reserves. The broad strategy for reserve management including currency composition and investment policy is decided in consultation with the Government of India. The risk management functions are aimed at ensuring development of sound governance structure in line with the best international practices, improved accountability, a culture of risk awareness across all operations, efficient allocation of resources and development of in-house skills and expertise. The risks attendant on deployment of reserves, viz., credit risk, market risk, liquidity risk and operational risk and the systems employed to manage these risks are detailed in the following paragraphs.

#### II.3.1 Credit Risk

Credit risk is defined as the potential that a borrower or counterparty will fail to meet its obligation in accordance with agreed terms. The Reserve Bank has been extremely sensitive to the credit risk it faces on the investment of foreign exchange reserves in the international markets. The Reserve Bank's investments in bonds/treasury bills represent debt obligations of highly rated sovereigns and supranational entities. Further, deposits are placed with central banks, the Bank for International Settlements (BIS) and select foreign banks.

RBI has framed requisite guidelines stipulating criteria for issuers / counterparties / investments with a view to enhancing the safety and liquidity aspects of the reserves. The Reserve Bank continues to apply stringent criteria for selection of counterparties. Credit exposure *vis-à-vis* sanctioned limit in respect of approved counterparties is monitored continuously. Developments regarding counterparties are constantly under watch. The basic objective of such an on-going exercise is to assess whether counterparty's credit quality is under potential threat.

### II.3.2 Market Risk

Market risk for a multi-currency portfolio represents the potential change in valuations that result from movements in financial market prices, for example, changes in interest rates, foreign exchange rates, equity prices and commodity prices. The major sources of the market risk for central banks are currency risk, interest rate risk and movement in gold prices.

**II.3.2.1 Currency Risk**: Currency risk arises due to uncertainty in exchange rates. Decisions are taken regarding the long-term exposure on different currencies depending on the likely movements in exchange rate and other considerations in the medium and long-term (e.g., maintenance of major portion of reserves in the intervention currency, the approximate currency profile of the reserves in line with the changing external trade profile of the country, benefit of diversification, etc.). The decision making procedure is supported by reviews of the strategy on a regular basis.

**II.3.2.2 Interest Rate Risk:** The crucial aspect of the management of interest rate risk is to protect the value of the investments as much as possible from the adverse impact of the interest rate movements. The interest rate sensitivity of the reserves portfolio is identified in terms of benchmark duration and the permitted deviation from the benchmark. The focus of the investment strategy revolves around the need to keep the interest rate risk of the portfolio reasonably low with a view to minimising losses arising out of adverse interest rate movements, if any.

### II.3.2.3 Liquidity Risk

Liquidity risk involves the risk of not being able to sell an instrument or close a position when required without facing significant costs. The reserves need to have a high level of liquidity at all times in order to be able to meet any unforeseen and emergency needs. Any adverse development has to be met with reserves and, hence, the need for a highly liquid portfolio is a necessary constraint in the investment strategy. The choice of instruments determines the liquidity of the portfolio. For example, in some markets, treasury securities could be liquidated in large volumes without much distortion of the price in the market and, thus, can be considered as liquid. Except fixed deposits with the BIS, foreign commercial banks and central banks and securities issued by supranationals, almost all other types of investments are highly liquid instruments which could be converted into cash at short notice. The Reserve Bank closely monitors the portion of the reserves which could be converted into cash at a very short notice to meet any unforeseen / emergent needs.

### II.3.3 Operational Risk and Control System

In tune with the global trend, considerable attention is paid to strengthen the operational risk control arrangements. Key operational procedures are documented. Internally, there is total separation of the front office and back office functions and the internal control systems ensure several checks at the stages of deal capture, deal processing and settlement. The deal processing and settlement system is also subject to internal control guidelines based on the principle of one point data entry and powers are delegated to officers at various levels for generation of payment instructions. There is a system of concurrent audit for monitoring compliance in respect of all the internal control guidelines. Further, reconciliation of accounts is done regularly. In addition to annual inspection by the internal machinery of the Reserve Bank for this purpose and statutory audit of accounts by external auditors, there is a system of appointing special external auditors to audit the dealing room operations. There is a comprehensive reporting mechanism covering significant areas of activity / operations relating to reserve management. These are being provided to the senior management periodically, *viz.*, on daily, weekly, monthly, quarterly, half-yearly and yearly intervals, depending on the type and sensitivity of information. The Reserve Bank uses SWIFT as the messaging platform to settle its trades and send financial messages to its counterparties, banks with whom nostro accounts are maintained, custodians of securities and other business partners.

### II.3.4 ISO Certification

The Information Security Management Systems (ISMS) of the Department of External Investments and Operations of the Bank is compliant with the provisions of ISO 27001 Standards.

### II.4 Transparency and Disclosures

The Reserve Bank has been making available in the public domain data relating to foreign exchange reserves, its operations in foreign exchange market, position of the country's external assets and liabilities and earnings from deployment of foreign currency assets and gold through periodic press releases of its Weekly Statistical Supplements, monthly Bulletins, Annual Reports, etc. The Reserve Bank's approach with regard to transparency and disclosure closely follows international best practices in this regard. The Reserve Bank is among the 72 central banks across the globe which has adopted the Special Data Dissemination Standards (SDDS) template of the IMF for publication of the detailed data on foreign exchange reserves. Such data are made available on monthly basis on the Reserve Bank's website.