# Half Yearly Report on Management of Foreign Exchange Reserves

April-September 2016



# **Reserve Bank of India**

Department of External Investments and Operations (DEIO) Central Office, Mumbai

## **Report on Management of Foreign Exchange Reserves**

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## **Developments during the Half Year ended September 2016**

### I.1 Introduction

The Reserve Bank of India publishes 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 at end-March and end-September each year. The present report (27<sup>th</sup> in the series) is with reference to the position as at end-September 2016.

The report is divided into two parts: Part I contains the developments regarding movement of foreign exchange reserves, information on the external liabilities *vis-à-vis* the reserves and adequacy of reserves, *etc.*, during the half-year under review. Objectives of reserve management, statutory provisions, risk management practices, information on transparency and disclosure practices followed by the RBI with regard to reserve management are covered in Part II.

### Part- I

### I.2 Movement of Foreign Exchange Reserves

### **I.2.1** Review of Growth of Foreign Exchange Reserves

The foreign exchange reserves stood at USD 360.2 billion as at end-March 2016. During the half year under review, reserves increased to USD 363.0 billion as at end-April 2016, which declined to USD 361.6 billion as at end-May 2016. Subsequent months witnessed an increase in the reserves, which stood at USD 363.5 billion as at end-June 2016, USD 366.5 billion as at end-July 2016, USD 366.8 billion as at end-August 2016 and USD 372.0 billion as at end of September 2016 (Table 1).

Although both US dollar and Euro are intervention currencies and the Foreign Currency Assets (FCA) are maintained in major currencies, 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, income arising out of the deployment of the foreign exchange reserves, external aid

receipts of the Central Government and changes on account of revaluation of the assets.

Table 1 : Movement in Foreign Exchange Reserves  (USD Million)					
March-16	336104	20115	1502	2456	360176
March-10			(1066)		
April-16	339025	20043	1511	2471	363049
			(1066)		
May-16	337361	20329	1495	2420	361605
May-10			(1066)		
J 16	339042	20576	1488	2400	363506
June-16			(1066)		
July-16	341044	21585	1485	2391	366504
July-10			(1066)		
August-16	341279	21643	1486	2393	366800
August-10			(1066)		
September-16	346711	21406	1487	2386	371990
September-10			(1066)		

Notes:

### **I.2.2 Sources of Accretion to Foreign Exchange Reserves**

Table 2 provides details of sources of variation in foreign exchange reserves during April-September 2016 vis-à-vis the corresponding period of the previous year. On balance of payments (BoP) basis (i.e., excluding valuation effects), the foreign exchange reserves increased by USD 15.5 billion during April-September 2016 as compared with an increase of USD 10.6 billion during the same period previous year. The valuation loss accounted for US\$ 3.7 billion during April-September 2016 as compared to a valuation loss of US\$ 1.9 billion during the same period a year ago.

<sup>(</sup>i) FCA (Foreign Currency Assets): FCA 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.

<sup>(</sup>ii) FCA excludes (a) investment in bonds issued by IIFC (UK) (b) SDR holdings of Reserve Bank, which is included under SDR and (c) amount lent to Sri Lanka under SAARC Swap and Special Currency Swap Arrangement, and Bhutan under SAARC Swap Arrangement.

<sup>(</sup>iii) SDR (Special Drawing Rights): (Values in SDR have been indicated in parentheses.)

<sup>(</sup>iv) RTP refers to the Reserve Tranche Position in the IMF.

<sup>(</sup>v) Difference, if any, is due to rounding off.

	Table 2: Sources of Variation to Foreign Exchange Reserves*				
			(USD billion)		
	Items	Apr-Sep 2015 -14.7	Apr-Sep 2016		
I.	Current Account Balance	-14.7	-3.7		
II.	Capital Account (net) (a to f)	25.3	19.2		
a.	Foreign Investment	13.4	29.4		
	Foreign Direct Investment	16.5	21.3		
	Portfolio Investment, (of which)	-3.1	8.2		
	FII	-3.8	7.9		
	ADR/GDR	0.4	0.0		
b.	Banking Capital, (of which)	18.3	-6.8		
	NRI Deposits	10.1	3.5		
c.	Short term credit	-2.5	-0.5		
d.	External Assistance	0.2	0.5		
e.	External Commercial Borrowings	-1.3	-4.6		
f.	Other items in capital account	-2.9	1.2		
III.	Valuation change	-1.9	-3.7		
	Total (I+II+III) @ Increase in reserves (+) / Decrease in reserves (-)	8.7	11.8		

<sup>\*:</sup> Based on old format of BoP.

**Note**: 'Other items in capital account' apart from 'Errors and Omissions' 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.

### **I.3 Forward Outstanding**

The net forward assets (receivables) of the Reserve Bank in domestic foreign exchange market stood at USD 4,890 million as at the end of September 2016.

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

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 2016, is furnished in Table 3.

<sup>@:</sup> Difference, if any, is due to rounding off.

Table 3: International Investment Position of India					
			(USD Billion)		
Item	l	End-Mar	End-Sep		
		2016 (PR)	2016 (P)		
A. T	otal External Assets	550.1	564.8		
1.	Direct Investment	141.6	140.2		
2.	Portfolio Investment	2.5	2.3		
3.	Other Investment	45.8	50.3		
4.	Foreign Exchange Reserves	360.2	372.0		
B. T	otal External Liabilities	911.3	932.4		
1.	Direct Investment	293.9	311.7		
2.	Portfolio Investment	224.8	232.1		
3.	Other Investment	392.6	388.6		
<b>C.</b> .	Net IIP (A-B)@	(-) 361.2	(-)367.6		
P : P1	rovisional, PR: Partially Revised;				
	ifference, if any, is due to rounding off.				

The net IIP as at end-September 2016 was negative at USD 367.6 billion, implying that our external liabilities are more than external assets. The net IIP as at end-September 2015 and end- March 2016 was USD (-) 357.0 billion and USD (-) 361.2 billion respectively<sup>1</sup>.

### I.5 Adequacy of Reserves

At the end of September 2016, the import cover increased to 12.0 months from 10.9 months at end-March 2016. The ratio of short-term debt to foreign exchange reserves, which was 23.1 per cent at end-March 2016, declined to 21.8 per cent at end-September 2016. The ratio of volatile capital flows (defined to include cumulative portfolio inflows and outstanding short-term debt) to reserves declined from 87.1 per cent at end-March 2016 to 85.8 per cent at end-September 2016.

### I.6. Management of Gold Reserves

The Reserve Bank holds 557.77 tonnes of gold; of which, 265.49 tonnes are held overseas in safe custody with the Bank of England and the Bank for International Settlements (BIS). Gold as a share of the total foreign exchange reserves in value

<sup>&</sup>lt;sup>1</sup> Partially revised figures and may not tally with figures published in the previous reports.

terms (USD) stood at about 5.75 per cent as at end-September, 2016.

### I.7 Investment Pattern and Earnings of the Foreign Currency Assets

The foreign currency assets comprise multi-currency assets that are held in multi-asset portfolios as per the existing norms, which are similar to the best international practices followed in this regard. As at end-September 2016 out of the total foreign currency assets of USD 346.7 billion, USD 229.0 billion was invested in securities, USD 95.7 billion was deposited with other central banks, the BIS and the International Monetary Fund (IMF) and remaining USD 22.0 billion comprised deposits with overseas branches of commercial banks (Table 4).

Table 4 : Deployment Pattern of Foreign Currency Assets				
	(USD Million)			
As at end of	As at end of			
Mar 2016	Sep 2016			
336,104	346,711			
224,800 (66.9)	228,986 (66.1)			
91,639 (27.3)	95,724 (27.6)			
19,665 (5.8)	22,001 (6.3)			
1	As at end of Mar 2016  336,104  224,800 (66.9)  91,639 (27.3) 19,665			

<sup>\*</sup> FCA excludes (a) investment in bonds issued by IIFC (UK) (b) SDR holdings of Reserve Bank which is included under SDR and (c) amount lent to Sri Lanka under SAARC Swap and Special Currency Swap Arrangement and Bhutan under SAARC Swap Arrangement. (d) Figures in parenthesis indicate percentage to total FCA.

The rate of earnings on foreign currency assets, which was 1.36 per cent during the July 2014-June 2015 (RBI Financial year), decreased to 1.29 per cent during the July 2015-June 2016.

### **I.8 Other Related Aspects**

# I.8.1 Financial Transaction Plan (FTP) of the IMF

During the half year under review, there were (a) nil purchase transaction and (b) three repurchase transactions amounting to USD 84.2 million.

# I.8.2 Investments under New Arrangements to Borrow (NAB) and Note Purchase Agreement (NPA) with IMF

The IMF's amended and expanded New Arrangements to Borrow (NAB) became effective on March 11, 2011. India had committed to provide resources up to SDR 8,740.82 million to the IMF under this arrangement. Consequent to the payment of quota increase to IMF under the Fourteenth General Review of Quotas in February 2016, India's commitment under NAB has been reduced to SDR 4,440.91 million in February 2016. RBI has subscribed to Notes equivalent to SDR 776.09 million under NAB till end - September, 2016, as part of GoI's Contribution. In terms of the Note Purchase Agreement (NPA) 2012, entered into between RBI and IMF, RBI has agreed to invest an amount equivalent to USD 10 billion in SDR denominated Notes issued by IMF.

### I.8.3 SAARC Swap Arrangement between India and Sri Lanka

Central Bank of Sri Lanka (CBSL) had signed Currency Swap Agreement (under the SAARC Swap Framework) with the RBI on March 25, 2015, which is valid till March 24, 2018. In terms of the agreement, CBSL can avail a maximum amount of USD 400 million for three months and can be rolled over for a maximum of two times, three months each. CBSL had availed USD 400 million on March 8, 2016 for three months, which has been rolled over for three months on June 08, 2016 and again for three months on September 08, 2016.

### I.8.4 SAARC Swap Arrangement between India and Bhutan

Royal Monetary Authority of Bhutan (RMAB) had signed Currency Swap Agreement (under the revised SAARC Swap Framework) with the RBI on March 17, 2016, which is valid till March 16, 2019. In terms of the agreement, RMAB can avail a maximum amount of USD 100 million or its equivalent for three months and can be rolled over for a maximum of two times, three months each. Accordingly, RMAB has availed USD 100 million in INR terms on June 17, 2016 for three months, and it has been rolled over for three months till December 19, 2016.

# I.8.5 Investment in bonds issued by IIFC (UK)

The Reserve Bank has the mandate to invest up to USD 5 billion, in the bonds issued by the India Infrastructure Finance Company (UK) Limited. As at end-September 2016, the amount invested in such bonds stood at USD 2,100 million.

### Part-II

# Objectives of Reserve Management, Legal Framework, Risk Management Practices, Transparency and Disclosure

### **II.1. Objectives of Reserve Management**

The guiding objectives of foreign exchange reserve 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 is kept in view 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 and gold within the broad parameters of currencies, instruments, issuers and counterparties. The essential legal framework for reserve 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 overseas branches of 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**

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

The Reserve Bank is 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, central banks and supranational entities. Further, deposits are placed with central banks, the BIS and overseas branches of commercial banks.

RBI has framed requisite guidelines for selection of issuers/ counterparties 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 any 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 market risk for central banks are currency risk, interest rate risk and movement in gold prices. Gains/losses on valuation of FCA and gold due to movements in the exchange rates and/or price of gold are booked under a balance sheet head named the Currency and Gold Revaluation Account (CGRA). The balances in CGRA provide a buffer against exchange rate/gold price fluctuations which in recent times have shown sharp volatility. Foreign dated securities are valued at market prices prevailing on the last business day of each month and the appreciation/depreciation arising therefrom is transferred to the Investment Revaluation Account (IRA). The balance in IRA is meant to provide cushion against changes in the security prices over the holding period.

### II.3.2.1 Currency Risk

Currency risk arises due to movements in the exchange rates. Decisions are taken on the long-term exposure to different currencies, depending on the likely movements in exchange rates and other considerations in the medium and long-term (e.g., maintenance of major portion of reserves in the intervention currency, 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 adverse impact of interest rate movements. The interest rate sensitivity of the portfolio is identified in terms of the benchmark duration and the permitted deviation from the benchmark.

### 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, overseas branches of 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/emergency needs.

# II.3.3 Operational Risk and Control System

In tune with the global trend, close 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 the 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, including generation of payment instructions, is also subject to internal control guidelines based on the principle of one-point data entry. 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 internal annual inspection, the accounts are audited by external statutory auditors. There is a comprehensive reporting mechanism covering significant areas of activity/operations relating to reserve management. These are 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.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 81 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.