

Chapter 40 EXCHANGE, COINAGE AND CURRENCY

Coinage and Currency

40.1 Under The Coinage Act 1906, the Government of India is charged with the responsibility of the production and supply of coins to the Reserve bank Of India(RBI). The RBI places an annual indent for this purpose and the Government of India draws up the production programme for the India Government Mints on the basis of the indent. The Mints are situated at Mumbai, Hyderabad, Kolkata and Noida have rich minting heritage and legacy of producing quality products. These mints are carrying out minting of all coins circulated in the country. India Government Mints (IGM) offer comprehensive range of services covering every stage of the minting process - from planning to the finished products. Utilization of advanced technology, innovation, quality and reliable delivery methods are some of the components of strength of these mints. IGMs have made a niche in the minting world - with excellence in design, expertise in minting precious metals, and above all, a long tradition of craftsmanship. Reliability is combined in a natural manner in design and production of individualistic solution that truly.

40.2 Coins in India are presently being issued in denominations of 10 paise, 20 paise, 25 paise, 50 paise, one rupee, two rupee, and five rupee. Coins upto 50 paise are called small coins, and coins of Rupee, one and above are called 'Rupee Coins'. Coins can be issued up to the denomination of ` 1000 as per the Coinage Act, 1906. Coins are received from the Mints and issued into circulation through its Regional Issue Offices/sub-offices of the Reserve Bank and a wide network of currency chests and coin depots maintained by banks and Government treasuries spread across the country. There are 4422 currency chest branches and 3784 small currency depots spread throughout the country. The currency chests and small coins depots distribute coins to the public, customers and other bank branches in their area of operation. The members of the public can approach the RBI offices of the above agencies for requirement of coins.

40.3 **Currency:** Currency Note Press, Nasik Road and bank Note Press, Dewas which are engaged in production of bank Notes for our country as well as for foreign countries using state of the art technology. More than 40% of the currency Notes circulated in India is printed by these units. Both the Currency Note printing Presses are ISO 9001:2000 & ISO 14001:2004 certified units having fool-proof accounting of security items, stringent security systems with ultra-modern eco-friendly efficient treatment facilities and complemented by a service department to ensure maximum in-transit security.

Foreign Exchange Reserves

40.4 The deregulation of financial markets has accelerated the pace of financial innovations and brought forth the need for regular and timely flow of qualitative financial statistics for pursuing sound macro-economic policies as well as promoting financial stability. In the context of the recent financial crises, the traditional issues in Financial Statistics such as timeliness in dissemination, accuracy, transparency, harmonisation,

international comparability, etc. have come into sharper focus. The **Reserve Bank of India , RBI** has the primary responsibility of collection, compilation and dissemination of data relating to foreign exchange reserves. The data are based on actual balances as per RBI records. India's foreign exchange reserves comprise **foreign currency assets (FCA), gold, special drawing rights (SDRs) and reserve tranche position (RTP) in the International Monetary Fund (IMF)**. The foreign currency assets, consisting of various currency holdings are converted into US dollar using the New York closing exchange rates. Gold is valued close to the international market prices. Conversion of SDRs into US dollar is done at the rates released by IMF. The level of foreign exchange reserves is largely the outcome of the Reserve Bank of India (RBI) intervention in the foreign exchange market to smoothen exchange rate volatility and valuation changes due to movement of the US dollar against other major currencies of the world. Foreign exchange reserves are accumulated when there is absorption of the excess foreign exchange flows by the RBI through intervention in the foreign exchange market, aid receipts, interest receipts and funding from the International Bank for Reconstruction and Development (IBRD), Asian Development Bank (ADB), International Development Association (IDA) etc.

Exchange Rate

40.5 The exchange rate is a key financial variable that affects decisions made by foreign exchange investors, exporters, importers, bankers, businesses, financial institutions, policymakers and tourists in the developed as well as developing world. Exchange rate fluctuations affect the value of international investment portfolios, competitiveness of exports and imports, value of international reserves, currency value of debt payments, and the cost to tourists in terms of the value of their currency. Movements in exchange rates thus have important implications for the economy's business cycle, trade and capital flows and are therefore crucial for understanding financial developments and changes in economic policy.

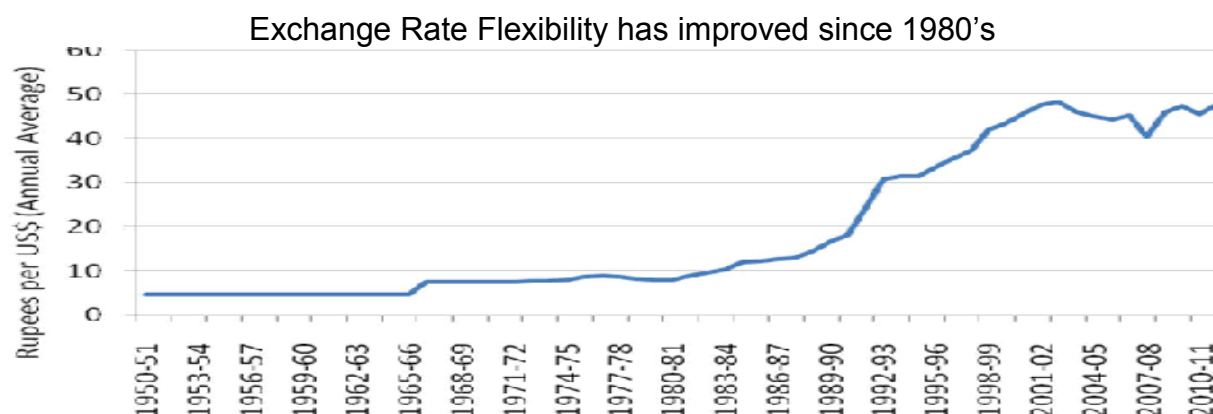
40.6 India has been operating on a managed floating exchange rate regime from March 1993, marking the start of an era of a market determined exchange rate regime of the rupee with provision for timely intervention by the central bank. As has been the experience with the exchange rate regimes the world over, the Reserve Bank as the central bank of the country has been actively participating in the market dynamics with a view to signaling its stance and maintaining orderly conditions in the foreign exchange market. As a result of calibrated and gradual capital account openness, the financial markets, particularly forex market, in India have also become increasingly integrated with the global network since 2003-04. This is reflected in the extent and magnitude of capital that has flown to India in recent years.

40.7 Decisions taken by Government of India, on account of Indian Exchange Rate are as follows:

1947-1971 The Foreign Exchange Market and Exchange Rate Par Value system of

exchange rate. Rupee's external par value was fixed in terms of gold with the pound sterling as the intervention currency.

- 1971 Breakdown of the Bretton-Woods system and floatation of major currencies. Rupee was linked to the pound sterling in December 1971.
- 1975 To ensure stability of the Rupee, and avoid the weaknesses associated with a single currency peg, the Rupee was pegged to a basket of currencies. Currency selection and weight assignment was left to the discretion of the RBI and not publicly announced.
- 1978 RBI allowed the domestic banks to undertake intra-day trading in foreign exchange.
- 1978-1992 Banks began to start quoting two-way prices against the Rupee as well as in other currencies. As trading volumes increased, the 'Guidelines for Internal Control over Foreign Exchange Business' were framed in 1981. The foreign exchange market was still highly regulated with several restrictions on external transactions, entry barriers and transactions costs. Foreign exchange transactions were controlled through the Foreign Exchange Regulations Act (FERA). These restrictions resulted in an extremely efficient unofficial parallel (hawala) market for foreign exchange.
- 1990-1991 Balance of Payments crisis
- July 1991 To stabilize the foreign exchange market, a two step downward exchange rate adjustment was done (9% and 11%). This was a decisive end to the pegged exchange rate regime.
- March 1992 To ease the transition to a market determined exchange rate system, the Liberalized Exchange Rate Management System (LERMS) was put in place, which used a dual exchange rate system. This was mostly a transitional system.
- March 1993 The dual rates converged, and the market determined exchange rate regime was introduced. All foreign exchange receipts could now be converted at market determined exchange rates.



Nominal Effective Exchange Rate (NEER) and Real Effective Exchange Rate (REER)

40.8 The indices of Nominal Effective Exchange Rate (NEER) and Real Effective Exchange Rate (REER) are used as indicators of external competitiveness. NEER is the weighted average of bilateral nominal exchange rates of the home currency in terms of foreign currencies. Conceptually, the REER, defined as a weighted average of nominal exchange rates adjusted for relative price differential between the domestic and foreign countries, relates to the purchasing power parity (PPP) hypothesis. The rupee is considered to be fairly valued if the REER is close to 100 or the base-year value. Other things remaining same, higher domestic inflation vis-à-vis its trade partners will reflect in appreciation of the REER and hence there is a view that the nominal exchange rate should depreciate to keep it at base-year levels.

40.9 The Reserve Bank of India (RBI) has been constructing five-country and thirty six country indices of NEER and REER as part of its communication policy and to aid researchers and analysts. These indices are published in the Bank's monthly Bulletin. Three major developments as set out in the following paragraphs have necessitated a review of the existing indices.

40.10 First, introduction of the Euro (notes and coins) with effect from January 1, 2002 necessitated the need to replace the existing national currencies of the Euro zone by the common currency for the members, which formed part of RBI's 5-country and 36-country REER/NEER indices. The European Commission (Eurostat) introduced a harmonised index of consumer prices (HICP) for the member countries, which entailed individual consumer price indices to be replaced by HICP in the construction of the REER. Second, there has been a significant shift in India's trade relations across countries/regions, mainly towards developing and emerging economies during the last decade, requiring a change in the currency basket and the weights assigned to India's trading partners included in the REER. Third, earlier, as there was no single composite consumer price index (CPI) in the country, the RBI used the wholesale price index (WPI) as the measure in the price ratio to publish the REER. With the CPI new series of

the Central Statistics Office (CSO) being made available, the RBI has used it to compute the REER indices of the Indian rupee. Even the base year of WPI had been revised (1993-94=100) before the CPI based indices (2004-05=100) could be calculated.

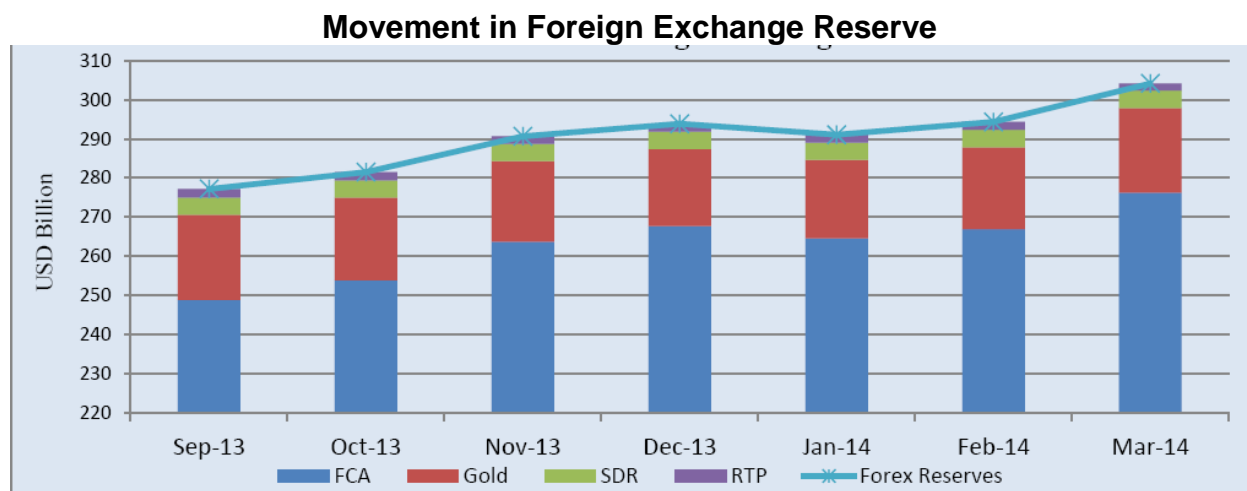
40.11 Against the above backdrop, the Reserve Bank has now decided to replace its existing 5-country indices with new six-currency indices of NEER/REER. The thirty six country indices have also been revised and replaced with new 36-currency indices of NEER/REER.

Recent Developments:

40.12 Foreign Exchange Reserves : Beginning from a low level of US\$ 5.8 billion at end-March 1991, India's foreign exchange reserves increased gradually to US\$ 25.2 billion by end-March 1995, US\$ 38.0 billion by end-March 2000, US\$ 113.0 billion by end-March 2004 and US\$ 199.2 billion by end-March 2007. The reserves stood at US\$ 314.6 billion at end-May 2008 before declining to US\$ 252.0 billion at the end of March 2009. The decline in reserves in 2008-09 was inter alia a fallout of the global crisis and strengthening of the US dollar vis-à-vis other international currencies. Foreign exchange reserves increased to US\$ 279.1 billion at end-March 2010, mainly on account of valuation gain as the US dollar depreciated against most of the major international currencies. In fiscal 2010-11, the reserves again showed an increasing trend, reaching US\$ 304.8 billion at end-March 2011. In fiscal 2011-12, they reached all-time high of US\$ 322.0 billion at end-August 2011. However, they declined thereafter and stood at US\$ 294.4 billion at end-March 2012 and US\$ 292.0 billion at end-March 2013. As against a reserve accretion of US\$ 15.5 billion on BoP basis as at end March 2014, foreign exchange reserves in nominal terms increased by only US\$ 12.2 billion (to 304.2 billion US\$) as there was a valuation loss in the non-US dollar assets held owing to cross-currency movements and the decline in gold prices. As at end May 2014, foreign exchange reserves stood at US\$ 312.2 billion.

Sl No.	Year (at end March)	Foreign exchange reserves	Total increase(+)/ decrease(-) in reserves over previous year	Increase(+)/ decrease(-) in reserves on BoP basis	Increase(+)/ decrease (-) in reserves due to valuation effect
1	2008-09	252.0	(-)57.7	(-)20.1	(-)37.6
2	2009-10	279.1	(+)27.1	(+)13.4	(+)13.7
3	2010-11	304.8	(+)25.7	(+)13.1	(+)12.6
4	2011-12	294.4	(-)10.4	(-)12.8	(+)2.4
5	2012-13	292.0	(-)2.4	(+)3.8	(-)6.2
6	2013-14	304.2	(+)12.2	(+)15.5	(-)3.3

40.13 Foreign currency assets are the main component of foreign exchange reserves and were US\$ 276.4 billion at end March 2014. A second major component of the reserves was gold valued at US\$ 21.6 billion at end March 2014, lower than US\$ 25.7 at end March 2013. Special drawing rights (SDRs) and the reserve tranche position in the IMF were at US\$ 4.5 billion and US\$ 1.8 billion respectively at end March 2014.



External Liabilities vis-à-vis Foreign Exchange Reserves

40.14 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-March 2014 is as under

International Investment Position of India (USD Billion)	
Item	March-14 (P)
A. Total External Assets	483.2
1.Direct Investment	128.7
2.Portfolio Investment	1.1
3.Other Investment	49.2
4.Foreign Exchange Reserves	304.2
B. Total External Liabilities	814.8
1. Direct Investment	242.7
2. Portfolio Investment	193.0
3.Other Investment	379.1
Net IIP (A-B)@	-331.6

PR: Partially Revised @ Difference, if any, is due to rounding off.

40.15 The net IIP as at end-March, 2014 was negative at USD 331.6 billion, implying that our external liabilities are more than the external assets. The net IIP as at end

March, 2013 and end-September, 2013 was USD (-) 326.7 billion and USD (-) 302 billion respectively.

Adequacy of Reserves

40.16 Adequacy of reserves has emerged as an important parameter in gauging the ability to absorb external shocks. One popular measure of reserve adequacy requires that the usable foreign exchange reserves should exceed scheduled amortisation of foreign currency debts (assuming no rollovers) during the following year. The ratio of short-term debt to the foreign exchange reserves, which was 33.1 per cent at end-March 2013, declined to 29.3 per cent at end-March, 2014 after having risen to 34.2 per cent at end-September, 2013. The ratio of volatile capital flows (defined to include cumulative portfolio inflows and short-term debt) to the reserves decreased from 96.1 per cent as at end-March 2013 to 90.4 per cent as at end-March, 2014 after rising during the first half of FY 2013-14 to reach 97.2 per cent at end-September, 2013. At end-March 2014, the import cover, however, increased to 7.8 months from 7.0 months at the end of previous FY.

40.17 **Exchange Rate** : The vulnerability of the rupee as well as the currencies of other emerging market and developing economies came to the fore in May 2013 as a result of the announcement by US Fed about tapering of its asset purchases. While capital flows on a net basis continued to be broadly adequate at that time, the rupee depreciated sharply on the vulnerability concerns affecting expectations on the rupee emanating from the confluence of factors of elevated CAD and large withdrawal from the FII debt segment. However, the rupee became resilient when the US Fed taper actually happened subsequently.

40.18 In 2013-14, the rupee started to depreciate on a month-on month basis starting May 2013. This process of depreciation was more pronounced in June 2013 and August 2013 when there were large depreciation in excess of 5 per cent on a month-on-month basis. Rupee depreciated sharply by around 19.4 per cent against the US dollar from the level of 55.4 per US dollar on May 22, 2013 to a historic low of 68.85 per US dollar on August 28, 2013. The average exchange rate of the rupee reached a peak in September 2013 at Rs 63.75 per US dollar. Thereafter, on the strength of the measures taken by the government to reduce the CAD and the RBI and government to boost capital flows, the rupee rebounded to reach an average level of Rs 61.62 per US dollar in the month of October 2013. The rupee has subsequently been range bound and stable in 2013-14

40.19 The annual average exchange rate of the rupee went up from Rs 45.56 per US dollar in 2010-11 to Rs 47.92 per US dollar in 2011-12 and further to Rs 54.41 per US dollar in 2012-13. It rose to reach an average of Rs 60.50 per US dollar in 2013-14. The intra-year levels of depreciation have been sharper in some months; but exhibit two-way movements within the broad rising trend. While the depreciation could in part be explained by the levels of CAD and its financing by net capital flows, the movement in monthly average exchange rates in the latter half of 2013-14 also reflects the levels of intervention by the RBI to shore up its reserves, which had been rundown in the initial parts of the year. The exchange rate in 2014-15 reflects the same pattern as in the latter half of 2013-14 with a surge in FII flows impacting the foreign exchange and equity markets favourably; but the rupee appreciation has been limited relative to the rise in equity indices. The levels of the rupee exchange rate ought to reflect the fundamentals of the BoP as per the tenets of 'equilibrium exchange rate' and in this regard, real exchange rates are indicators that need to be looked at.

40.20 Movement of Rupee vs some major currencies is tabulated below:

EXCHANGE RATE OF THE INDIAN RUPEE
(Financial Year – Annual Average and End-year Rates)

Year	SDR		US Dollar		Pound Sterling		Deutsche Mark/Euro		Japanese Yen	
	Average	End-year	Average	End-year	Average	End-year	Average	End-year	Average	End-year
1970-71	7.50	7.50	7.56	7.50	18.00	18.13	2.05	2.07	2.08	2.10
1975-76	10.36	10.38	8.68	8.97	18.39	17.19	3.45	3.54	3.00	3.00
1980-81	10.18	10.06	7.91	8.19	18.50	18.38	4.19	3.90	3.75	3.90
1985-86	12.92	13.99	12.23	12.31	16.85	18.25	4.56	5.30	5.62	6.80
1990-91	24.84	26.41	17.94	19.64	33.19	34.05	11.44	11.43	12.79	13.90
1995-96	50.48	50.16	33.45	34.35	52.35	52.43	23.40	23.30	34.84	32.30
2000-01	59.55	58.80	45.68	46.64	67.55	66.58	41.48	41.01	41.41	37.43
2005-06	64.49	64.26	44.27	44.61	79.05	77.80	53.91	54.19	39.14	38.02
2010-11	69.72	70.79	45.58	44.65	70.89	71.92	60.22	63.24	53.30	54.02
2011-12	75.31	79.25	47.92	51.16	76.39	81.80	65.89	68.36	60.75	62.43
2012-13	83.03	81.48	54.41	54.39	85.97	82.32	70.07	69.54	65.85	57.76

40.21 NEER & REER : As evident from movements in the REER (base 2004-05 = 100) based on the CPI, there is overvaluation of the rupee. The levels of overvaluation are much higher in terms of six-currency export-based weights. However, in terms of the REER with base year 2012-13, there is depreciation and consequently the rupee is undervalued. Therefore, the choice of base year and currencies used in the basket is important in the context of analysis of the REER. A recent article in *Business Standard* (OP-Ed dated 23.6.2014) by Martin Kessler and Arvind Subramanian applying the purchasing power parity (PPP) approach and using the latest PPP estimates of the

World Bank finds that the rupee is persistently undervalued in excess of 30 per cent of its equilibrium value. As the net capital flows that were incentivized to shore up the exchange rate of the rupee were of the debt variety, this had implications for the level of external debt. Table indicating movement in NEER & REER is as follows :

**Indices Of Real Effective Exchange Rate (REER) And Nominal Effective Exchange Rate (NEER) Of Indian Rupee
(36- Currency Bilateral Weights) (Financial Year - Annual Average)
(Base:1993-94 = 100)**

Year	Export Based Weights		Trade Based Weights	
	REER	NEER	REER	NEER
1993-94	100.14	99.97	100.13	99.97
1994-95	105.10	98.48	104.59	99.21
1995-96	100.31	91.04	98.42	91.65
1996-97	98.76	88.86	96.64	89.08
1997-98	103.26	92.11	100.95	92.17
1998-99	94.23	90.12	92.84	88.76
1999-00	95.06	90.31	95.75	90.90
2000-01	98.64	90.13	100.04	92.11
2001-02	98.68	89.11	100.87	91.52
2002-03	95.94	87.04	98.19	89.22
2003-04	98.98	87.86	99.50	87.15
2004-05	98.24	88.34	100.05	87.28

(Base:2004-05 = 100)

Year	Export Based Weights		Trade Based Weights	
	REER	NEER	REER	NEER
2004-05	100.03	100.00	100.01	100.00
2005-06	102.01	102.20	102.38	102.24
2006-07	100.47	98.00	100.76	97.63
2007-08	109.23	105.61	109.20	104.75
2008-09	99.72	94.00	99.65	93.34
2009-10	104.97	91.42	103.88	90.94
2010-11	115.02	94.74	112.68	93.54
2011-12	113.18	89.13	110.27	87.38
2012-13	108.71	80.05	105.57	78.32
2013-14	105.48	73.56	103.27	72.32

Note : 1. Data for 2012-13 and 2013-14 are provisional.

2. REER indices are recalculated from 1993-94 onwards using the new Wholesale Price Index (WPI) series (Base : 1993-94 = 100 and on the basis of new CPI since 2004-05 .

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