Intervention in foreign exchange markets: the approach of the Reserve Bank of India[1]

Reserve Bank of India

Abstract

The exchange rate of the rupee is determined largely by the market forces of demand and supply. The Reserve Bank of India has intervened occasionally to maintain orderly conditions and curb excessive volatility in the foreign exchange market. Being a current account deficit country, India is dependent on capital flows for financing the current account deficit. Given the dependence on volatile capital flows, there may be a case for augmenting forex reserves when the situation permits without any bias for a particular exchange rate band.

Keywords: capital flows, exchange rate, intervention, foreign exchange reserves

JEL classification: F32, F310

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Exchange rate policy

India moved to a market-determined exchange rate system in March 1993. Under the new system, the rupee's exchange rate against other currencies is determined largely by market demand and supply. The Reserve Bank of India intervenes occasionally, only for maintaining orderly conditions in the market by curbing excessive volatility.

Market microstructure

The Indian foreign exchange market has exhibited significant growth over the last decade, with average daily turnover recording a quantum jump from US$6 billion a year in 2000 to US$60 billion in recent times. The major market participants in the domestic foreign exchange market now include banks, corporates and foreign institutional investors (FIIs). Besides having an active over-the-counter market, India also has an exchange-traded currency futures and options market that has shown reasonable growth since its inception in 2008.

Current and capital account flows

Though large corporates continue to be the active players in the Indian market, the SMEs have also increased their presence. As one of the fastest growing economies in the world, India's demand for crude oil has been growing significantly over the years. With limited proven reserves, the bulk of India's crude requirement is met through imports. Also, in recent years India's gold imports have increased significantly, putting pressure on its current account. Besides the software exports, remittances from the Indian diaspora have been quite robust and have helped contain the current account deficit (CAD). India, as structurally a current account deficit economy, depends on capital flows to finance the CAD. During the last few years, India has witnessed a significant surge in capital flows in the form of Foreign Direct Investment (FDI), portfolio investments by FIIs and External Commercial Borrowings (ECB). Even deposits by non-residents have shown healthy growth. Table 1 provides a comparative look at the composition of net capital flows in the last five years.

Comparative composition of net capital flows

(in billions of US dollars) Table 1

	2011–12*	2010–11*	2009–10*	2008–09*	2007–08*
Current account balance	–78.2	–48.1	–38.2	–27.9	–15.7
Capital account	67.8	63.7	51.6	7.4	106.6
Of which the major headings are:					
FDI	22.1	11.8	18.0	22.4	15.9
FII	16.8	29.4	29.0	–15.0	20.3
ADR/GDR	0.6	2.0	3.3	1.2	6.6
ECB	10.3	12.2	2.0	7.9	22.6
Non-resident deposits	11.9	3.2	2.9	4.3	0.2

* April to March

Source: Reserve Bank of India

During the current financial year, while net FDI inflows moderated somewhat during April–November 2012, net FII inflows have shown a significant uptrend. Net FII inflows during 2012–13 (April 2012 to December 2012), at US$16.0 billion, were significantly higher than the corresponding period of the previous year (US$2.7 billion), thus providing temporary comfort for financing the CAD.

Intervention strategy and recent episodes of large scale intervention

As can be seen from Table 1, India relies heavily on capital flows to fund its CAD. Since these flows quite often prove large and lumpy, and bulk demands for oil imports and government payments get bunched up on many days, the Indian forex market becomes susceptible to bouts of volatility. As stated earlier, Reserve Bank of India's intervention in the market is aimed at cushioning volatility without targeting any specific exchange rate. In fact, the intervention strategy can in a sense be described as "leaning against the wind" to restore orderly conditions in the market and thus facilitate the real sector's access to the market.

The choice of market segment for intervention can vary from spot to outright forward depending on the prevailing market conditions. It may be appreciated that whether the Reserve Bank of India intervenes in the spot or in the outright forward market, the impact on the inter-bank spot rates remains same. The option of operating in either the spot or forward market, depending on the prevailing market conditions, gives the Reserve Bank of India's intervention operations greater manoeuvrability for modulating domestic rupee liquidity conditions in consonance with the prevailing monetary policy stance. Similarly, intervention can be direct or indirect, though the general preference is for indirect intervention through selected banks. Though both approaches have merits and drawbacks, the indirect approach has the advantage of maintaining the confidentiality of the intervention operations, thereby enhancing their effectiveness.

As indicated earlier, any large and lumpy capital flow has the potential to cause undue volatility in the market, and thereby necessitate intervention by the Reserve Bank of India. In recent times, with an eye on the overarching objective of maintaining orderliness in the forex market and curbing speculative tendencies, the Reserve Bank of India has intervened in the market on both sides. The scale of intervention is indicated in Table 2.

Net purchases of US dollars by the Reserve Bank of India

(in billions of US dollars) Table 2

Period	Net purchases
2006–07*	(+) 26.8
2007–08*	(+) 78.2
2008–09*	(–) 34.9
2009–10*	(–) 2.5
2010–11*	(+) 1.7
2011–12*	(–) 20.1
2012–13 (till Jan'13)	(–) 3.1

* April to March

Source: Reserve Bank of India

In 2006–08, the Reserve Bank of India intervened in the market by buying US dollars as the country witnessed large and lumpy capital inflows far in excess of the economy's absorptive capacity. The rupee, however, came under sharp depreciation pressure in the aftermath the of global financial crisis, especially immediately following the Lehman collapse in September 2008, and this forced the Reserve Bank of India to sell US dollars in order to restore orderliness in the market. In 2009–11, domestic foreign exchange markets generally remained stable with the rupee exhibiting range-bound movement. This was reflected in the very limited scale of intervention operations undertaken by the Reserve Bank of India during that period (Table 2). After the US long-term rating was downgraded by one of the rating agencies in early August 2011, the rupee along with other emerging market currencies fell very sharply. Such sharp movements are often associated with heightened volatility. In order to ensure stability in the market, the Reserve Bank of India had to step in by selling US dollars in the market. It should be noted that for durable impact, interventions have often been combined with measures involving capital account management to modulate foreign flows.

Movement of the rupee vis-à-vis other currencies

Table 3 gives the movement of the Indian rupee and some selected currencies against the US dollar. It is quite clear that the Indian rupee has largely moved in tandem with other emerging currencies.

Movement in currency exchange rate vis-à-vis the US dollar

(percentage) Table 3

Currency	2010–11*	2011–12*	2012–13**
Current account deficit countries			
Brazilian real	9.3	–10.6	–8.3
Indian rupee	0.7	–12.4	–4.4
South African rand	7.6	–11.6	–14.6
Turkish lira	–1.7	–13.3	1.3
Current account surplus countries			
South Korean won	3.3	–3.2	4.1
Russian rouble	3.5	–3.0	–2.4

*April–March **To January, 2013

Source: Reuters

While the major trigger for intervention has been the volatility factor, the Reserve Bank of India does track the Real Effective Exchange Rate (REER) of the rupee in trade-weighted terms. It has remained overvalued based on the six-currency index, but undervalued based on the 36-currency REER index (Table 4). The divergence between the two indices only indicates that the REER is not a very effective tool in deciding on the timing of interventions, though it remains useful in assessing the directional movements of the rupee vis-à-vis a basket of other currencies.

Movement of REER & NEER (trade-based weights) of the Indian rupee

Baseline 2004–05=100 Table 4

Year	36-currency		6-currency	
	REER	NEER	REER	NEER
December 2009	96.18	91.10	103.99	87.21
December 2010 (P)	103.62	93.91	117.48	92.29
December 2011 (P)	91.58	80.83	103.75	78.06
December 2012 (P)	90.74	78.01	104.71	75.05

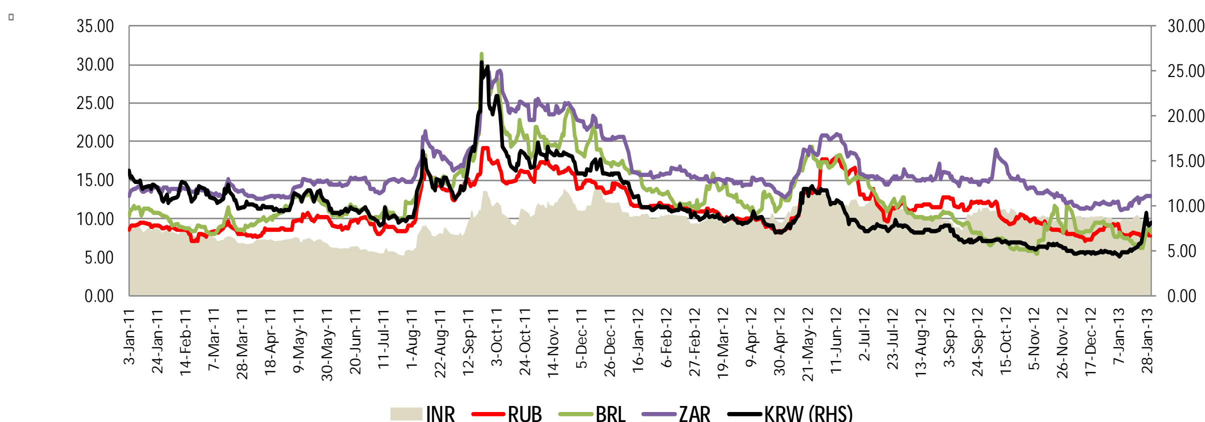
P: provisional

Source: Reserve Bank of India

The rupee has also exhibited reduced volatility during recent months, as can be seen from Figure 1, suggesting that the Reserve Bank of India interventions have been largely successful in cushioning volatility and restoring orderly conditions in the market.

Volatility of select currencies against the US dollar

January 2011 to January 2013 Figure 1



Source: Bloomberg

Sustainability of the intervention strategy

An issue that has been engaging our attention in the last few years is whether our intervention strategy can be uniform irrespective of whether we engage on the buy side or on the sell side. A lot would depend on factors such as prevailing market liquidity conditions and the level of forex reserves. An inherent asymmetry is unavoidable given that the economy is running a large CAD, and hence, from the perspective of available reserves, buying US dollars may seem preferable to selling US dollars. But a significant point that differentiates India's approach is that the country has never resorted to any kind of competitive depreciation to gain export advantage – a factor that may be considered to have additional relevance in the context of so-called "currency war" that is being widely discussed in recent times.

This underlines the issue of adequacy of reserves which has emerged as an important parameter in gauging a country's ability to absorb external shocks.

Adequacy of foreign exchange reserves

The overall approach to the management of India's foreign exchange reserves takes into account the changing composition of the balance of payments, and endeavours to reflect the "liquidity risks" associated with different types of flows, as well as other requirements. India's current level of reserves may seem "large" in comparison with many other countries, but it has to be seen against the backdrop of twin deficits that India runs, i.e., the current account deficit and the fiscal deficit. There is one more dimension to the reserves – their composition. Unlike many other countries, India has not accumulated its reserves by virtue of having a surplus current account, but rather on account of having capital flows far in excess of the absorptive capacity of the economy. In that sense, one can argue that reserves held by India are not truly "earned", but rather "borrowed" in nature, and that they may be required to be "returned" should the capital flow reverse as it did during 2008–09.

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.

According to the traditional approach of assessing reserve adequacy in terms of import cover, the situation has worsened as the reserves' ability to cover future import payments has declined in recent months (the import cover was down to 7.2 months at the end of September 2012 from 9.6 months at end-March 2011, and from a high of 14 months about five years back). Even in terms of other parameters, such as the ratio of short-term debt to foreign exchange reserves, and the ratio of volatile capital flows to reserves,[2] the trend has been worsening. This leads to the question of whether there is a need to increase the reserves. In other words, can it be said that besides aiming to reduce excessive exchange rate volatility, the exchange rate policy should also take into account the need for maintaining an adequate level of foreign exchange reserves so as to ensure that, in the case of prolonged uncertainty, reserves can cover the "liquidity at risk" on all accounts over a reasonably long period.

The recent measures announced by the Government and the Reserve Bank of India, which were aimed at increasing the capital flows into the country, may provide an opportunity to recoup some of the reserves utilised for intervention and help in meeting external and domestic commitments. During times when the capital flows are large and lumpy, and exceed the absorptive capacity of the economy, an appropriate intervention strategy might not only achieve the objective of ensuring

[2] The ratio of short-term debt to foreign exchange reserves, which was 21.3 per cent at end-March 2011, had increased to 28.7 per cent at end-September 2012. The ratio of volatile capital flows (defined to include cumulative portfolio inflows and short-term debt) to reserves increased from 67.3 per cent at end-March 2011 to 83.9 per cent at end-September2012.

orderly conditions by curbing the excessive volatility, but also ensure augmentation of forex reserves commensurate with growing external and domestic commitments.

Recent measures

With a view to augmenting capital flows to the country and preventing market participants from making uni-directional speculative bets on the Indian rupee, the Government and the Reserve Bank of India have taken several measures in recent times (Box 1).

Sterilisation strategy

In order to sterilise the impact of forex intervention, the Reserve Bank has a variety of tools available at its disposal, such as open market operations, changes in the cash reserve ratio for banks, and the Market Stabilisation Scheme (MSS). Though all the tools have been used either singly or in combination with other tools to manage sterilisation operations, the MSS remains the most heavily preferred tool in times of large capital inflows. Under the MSS, the Government issues marketable securities that are similar in all respects to other marketable securities issued under the Government's market borrowing programme. The money withdrawn from the system is kept in a separate identifiable cash account that the Government maintains with Reserve Bank of India. The money so collected is not available to the Government for its usual expenses. The cash balances held under the MSS can be utilised only for redemption of maturing securities under the MSS, whereas the periodic coupon payments for the securities issued under the MSS are provided for separately in the Government's annual budget.

Conclusion

India's exchange rate policy framework has not undergone any major change in recent times despite having run a large current account deficit for years now. This has been true since 1993, when India moved to a market-determined exchange rate system. The rupee's exchange rate against other currencies is determined largely by the market forces of demand and supply. The Reserve Bank of India intervenes occasionally to maintain orderly conditions in the market by curbing excessive volatility. India's forex reserves provide a cushion at times of sudden capital flow reversals. On most of the parameters generally used for measuring the adequacy of reserves, India's reserves have fallen in recent times. Structurally current account deficit countries like India have been depending on capital flows, which may often be highly volatile. Hence, for financing the current account deficit, there may be a case for augmenting the forex reserves as and when the situation permits, without any particular bias related to exchange rate movements.

Box 1

Recent measures taken to augment capital flows

Measures aimed at augmenting capital flows

Investments

- Policies relating to FII investment in Government securities (G-sec) and long-term infrastructure bonds have been revised.
- The non-resident investor base has been broadened to include long-term investors like foreign central banks, sovereign wealth funds, pension funds, etc.
- Investment limits for FIIs in G-sec and corporate bonds have been increased to US$25 billion and US$50 billion respectively.
- Qualified Foreign Investors (QFIs) have been allowed to invest in equity shares of Indian companies and corporate debt securities on a repatriation basis.

Non-resident deposits

- Interest rate ceilings on non-resident rupee deposits (NRE/NRO accounts) and NRO accounts have been deregulated, and the interest rate ceilings on non-resident foreign currency (FCNR (B)) deposits have been revised upwards.

External Commercial Borrowings

- The all-in-cost ceiling for ECBs has been rationalized.
- It has been mandated that ECB proceeds meant for rupee expenditure must be brought into India.

Others

- Guidelines related to Exchange Earners' Foreign Currency (EEFC) accounts have been rationalized to enhance short term forex inflows.

Measures aimed at curbing speculative behaviour by market participants

- Rebooking of cancelled forward contracts involving the rupee booked by residents to hedge transactions has not been permitted.
  - Since July 2012, exporters have been allowed to cancel and rebook 25 per cent of the total contracts booked for hedging their export exposure.
- The facility for importers availing themselves of the past performance facility was reduced to 25 per cent of the average of actual import/export turnover of the previous three financial years or the actual import/export turnover of the previous year, whichever is higher.
  - All forward contracts are mandated to be structured on a fully deliverable basis.
- Transactions undertaken by Authorised Dealers (ADs) on behalf of clients are for actual remittances/delivery only and cannot be cancelled/cash settled.
- Rebooking of cancelled forward contracts booked by FIIs is not permitted.
  - The forward contracts may, however, be rolled over on or before maturity.
- The Net Overnight Open Position Limits (NOOPL) and intra-day open position/daylight limit of AD banks has been reduced.
  - Some of the above measures have been relaxed subsequently for the genuine hedging requirements of the real sector and to smooth liquidity pressure in the market.
- Positions taken by banks in currency futures/options cannot be offset by undertaking positions in the OTC market.
- The NOOPL of the banks as applicable to the positions involving the rupee as one of the currencies would not include positions taken by banks on the exchanges.