Chapter 4

Exchange Rate Management in India

The concept of exchange rate regime has always been at the forefront of economic policy making and formulating economic development and growth strategies of any country. In the recent years, it has become all the more important in view of ongoing global imbalances. The channel through which the exchange rate regime might influence growth is trade, investment and productivity. Although there has been no conclusive evidence on exchange rate regime and its impact on growth, but the flexible exchange rate regimes provide more headroom for the conduct of monetary policy. Prof Robert Mundell showed that in a system of floating exchange rates, fiscal policy becomes blunt and monetary policy assumes importance as a tool of macroeconomic management. Under such an arrangement, the Central Banks should have autonomy to regulate interest rates and ensure unrestricted capital mobility. In contrast, a fixed exchange rate regime renders the monetary policy ineffectual and the fiscal policy becomes the instrument of policy.

4.1. Different Phases of Exchange Rate Regime in India

The evolution of India’s foreign exchange market may be viewed in line with the shifts in India’s exchange rate policies over the last few decades from a par value system to a basket-peg and further to a managed float exchange rate system.

Bretton-woods System of Exchange Rate (1947-71):

The IMF was conceived in July 1944, when representatives of 45 countries meeting in the town of Bretton Woods, New Hampshire, in the
northeastern United States, agreed on a framework for international economic cooperation, to be established after the Second World War. They believed that such a framework was necessary to avoid a repetition of the disastrous economic policies that had contributed to the Great Depression. The IMF came into formal existence in December 1945, when its first 29 member countries signed its Articles of Agreement. It began operations on March 1, 1947. Later that year, France became the first country to borrow from the IMF. The IMF’s membership began to expand in the late 1950s and during the 1960s as many African countries became independent and applied for membership. But the Cold War limited the Fund’s membership, with most countries in the Soviet sphere of influence not joining. The countries that joined the IMF between 1945 and 1971 agreed to keep their exchange rates (the value of their currencies in terms of the U.S. dollar and, in the case of the United States, the value of the dollar in terms of gold) pegged at rates that could be adjusted only to correct a “fundamental disequilibrium” in the balance of payments, and only with the IMF’s agreement. This par value system—also known as the Bretton Woods system—prevailed until 1971, when the U.S. government suspended the convertibility of the dollar (and dollar reserves held by other governments) into gold.

In India, the Reserve Bank as a central bank has always performed the function of maintaining the external value of the rupee. Historically, the rupee was linked with pound sterling, which continued even after the establishment of the RBI. During the period from 1947 to 1971, India followed the par value system of exchange rate. Initially the rupee’s external par value was fixed at 4.15 grains of fine gold. The Reserve Bank maintained the par value of the rupee within the permitted margin of ±1 per cent using pound sterling as the intervention currency. Since the sterling-dollar exchange rate was kept stable by the US monetary authority, the exchange rates of rupee in terms of gold as well as the dollar and other currencies were indirectly kept stable. The devaluation of rupee in September 1949 and June 1966 in terms of gold resulted in the reduction of the par value of

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rupee in terms of gold to 2.88 and 1.83 grains of fine gold, respectively. The exchange rate of the rupee remained unchanged between 1966 and 1971 (Chart 4.1).

![Chart 4.1: History of Rupee-Dollar Exchange Rate](chart.png)

Given the fixed exchange regime during this period, the foreign exchange market for all practical purposes was defunct. Banks were required to undertake only cover operations and maintain a 'square' or 'near square' position at all times. The objective of exchange controls was primarily to regulate the demand for foreign exchange for various purposes, within the limit set by the available supply. The Foreign Exchange Regulation Act initially enacted in 1947 was placed on a permanent basis in 1957. In terms of the provisions of the Act, the Reserve Bank, and in certain cases, the Central Government controlled and regulated the dealings in foreign exchange payments outside India, export and import of currency notes and bullion, transfers of securities between residents and non-residents, acquisition of foreign securities, etc.
Fall of Bretton-woods System (1971-91)

By the early 1960s, the U.S. dollar's fixed value against gold, under the Bretton Woods system of fixed exchange rates, was seen as overvalued. A sizable increase in domestic spending on President Lyndon Johnson's Great Society programs and a rise in military spending caused by the Vietnam War gradually worsened the overvaluation of the dollar. Thus, the Bretton-woods system got dissolved between 1968 and 1973. In August 1971, U.S. President Richard Nixon announced the "temporary" suspension of the dollar's convertibility into gold. While the dollar had struggled throughout most of the 1960s within the parity established at Bretton Woods, this crisis marked the breakdown of the system. An attempt to revive the fixed exchange rates failed, and by March 1973 the major currencies began to float against each other. Since the collapse of the Bretton Woods system, IMF members have been free to choose any form of exchange arrangement they wish (except pegging their currency to gold): allowing the currency to float freely, pegging it to another currency or a basket of currencies, adopting the currency of another country, participating in a currency bloc, or forming part of a monetary union.

Since with the breakdown of the Bretton Woods System in 1971 and the floatation of major currencies, the conduct of exchange rate policy posed a serious challenge to all central banks world wide as currency fluctuations opened up tremendous opportunities for market players to trade in currencies in a borderless market, it had implications for India as well. Indian rupee was linked to pound sterling in 1971. In order to overcome the weaknesses associated with a single currency peg and to ensure stability of the exchange rate, the rupee, with effect from September 1975, was pegged to a basket of currencies. The currency selection and weights assigned were left to the discretion of the Reserve Bank.

During the formative period of 1978-92, there were significant developments in foreign exchange market which had implications for evolving exchange rate system in India. For instance, in 1978, banks in
India were allowed to do intra-day trading in forex market. Banks were required to comply with the stipulation of maintaining ‘square’ or ‘near square’ position only at the close of business hours each day. The extent of position which could be left uncovered overnight (the open position) as well as the limits up to which dealers could trade during the day were to be decided by the management of banks. The exchange rate of the rupee during 1978-92 was officially determined by the Reserve Bank in terms of a weighted basket of currencies of India’s major trading partners and the exchange rate regime was characterised by daily announcement by the Reserve Bank of its buying and selling rates to the Authorised Dealers (ADs) for undertaking merchant transactions. The spread between the buying and the selling rates was 0.5 per cent and the market began to trade actively within this range. ADs were also permitted to trade in cross currencies (one convertible foreign currency versus another). However, no ‘position’ in this regard could originate in overseas markets. As opportunities to make profits began to emerge, major banks in India started quoting two-way prices against the rupee as well as in cross currencies and, gradually, trading volumes began to increase. This led to the adoption of widely different practices (some of them being irregular) and the need was felt for a comprehensive set of guidelines for operation of banks engaged in foreign exchange business. Accordingly, the guidelines for internal control over foreign exchange business were framed for adoption by the banks in 1981.

The foreign exchange market in India till the early 1990s, however, remained highly regulated with restrictions on external transactions, barriers to entry, low liquidity and high transaction costs. The exchange rate during this period was managed mainly for facilitating India’s imports. The strict control on foreign exchange transactions through the Foreign Exchange Regulations Act (FERA) had resulted in one of the largest and most efficient parallel markets for foreign exchange in the world, i.e., the hawala (unofficial) market. In short, In India, the exchange rate regime up to 1990 is best described as an adjustable nominal peg to a basket of currencies of major trading partners with a band. Against the backdrop of tight capital controls, exchange rate policy was governed by the preoccupation of conserving
foreign exchange and maintaining India’s competitiveness in international markets.

*Exchange Rate Regime during the post-Reform Period (Since 1991-92):*

By late 1980s and early 1990s, it was recognised that both macroeconomic policy and structural factors had led to balance of payment difficulties. Thus, the post-reform period was marked by measures aiming at widening and deepening of foreign exchange market and liberalisation of exchange control regimes.

During 1991, a point was reached when there was a good possibility of the country defaulting on one of its repayment installments. Borrowing from the market was out of the question, given the junk status accorded to Indian bonds by the rating agencies. The major item of import finance related to oil. Indian Oil Corporation was the canalising agency and it needed money. The SBI arranged for short-term Acceptance Credit in the inter-bank market in New York, which was just rolled over from day to day. It was then that RBI decided to keep $600 million with SBI in New York, as a contingency reserve for making import payments. Under such circumstances the central bank came up in July 1991 with the bold proposal of pledging its gold stocks to Bank of England and Bank of France and raises a short-term loan of $405 million. It was fully aware of the likely political fallout and the criticism that the country’s jewels were being pawned. The whole operation of physically transporting the stocks to London was carried out in secret under the close supervision of a Deputy Governor, who was in constant touch with the officer going in the truck to the airport. The gold was subsequently redeemed through repayments between September and November 1991. But what is not known to the public is the fact that in the process of refining the gold to meet international standards before its pledge there was a value addition which was most welcome at a critical time. India applied for IMF assistance. It was clear that in its absence the other avenues for raising resources would be closed. The IMF sent its ‘A team’ to India to discuss its conditionalities for lending, the elements of which are well known as the
Washington Consensus. The economic reforms were thus introduced because of the IMF conditionalities and not because of any sudden change of economic philosophy by the Government. There was a hectic period of the announcement of reforms by the newly-formed Government of P. V. Narasimha Rao, encompassing practically all aspects of economic policy.

The RBI’s first major announcement was the depreciation of the rupee, in two installments, i.e., on July 1 and 3, 1991 which was euphemistically termed as a "downward adjustment" of the value of the rupee. As a stabilisation measure, a two step downward exchange rate adjustment by 9 per cent and 11 per cent between July 1 and 3, 1991 was resorted to with a purpose to counter the massive drawdown in the foreign exchange reserves, to instill confidence among investors and to improve domestic competitiveness. That time, the Index of Real Effective Exchange Rates was used in policy formulation. However, it is no longer the deciding criterion for the central bank, given its limitations. A two-step adjustment of exchange rate in July 1991 effectively brought to close the regime of a pegged exchange rate. In fact, the downward adjustment of the exchange rate of the rupee in July 1991 set the stage for liberalisation of trade, industrial and foreign investment policies. Subsequently, the broad framework for reforms in the external sector was laid out in the Report of the High Level Committee on Balance of Payments (Chairman: Dr. C. Rangarajan).

According to Seshan (2005), “the markets were then taken by surprise, as there had been no inkling of such a large depreciation of the currency”.² At that point of time, it was felt that there was an urgency to overhaul the administered exchange rate system. The RBI Governor formed a three member internal group. The Group recommended the Liberalised Exchange Rate Management System (LERMS) which was later incorporated in the report of the High Level Committee on Balance of Payments. Following


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the recommendations of the Committee to move towards the market-
determined exchange rate, the Liberalised Exchange Rate Management
System (LERMS) was put in place in March 1992 initially involving a dual
exchange rate system. Under the LERMS, all foreign exchange receipts on
current account transactions (exports, remittances, etc.) were required to be
surrendered to the Authorised Dealers (ADs) in full. The rate of exchange for
conversion of 60 per cent of the proceeds of these transactions was the
market rate quoted by the ADs, while the remaining 40 per cent of the
proceeds were converted at the Reserve Bank’s official rate. The ADs, in
turn, were required to surrender these 40 per cent of their purchase of
foreign currencies to the Reserve Bank. They were free to retain the balance
60 per cent of foreign exchange for selling in the free market for permissible
transactions. The LERMS was essentially a transitional mechanism and a
downward adjustment in the official exchange rate took place in early
December 1992 and ultimate convergence of the dual rates was made
effective from March 1, 1993, leading to the introduction of a market-
determined exchange rate regime. LERMS treated current and capital
account transactions in different ways. There were requirements of
surrender of foreign exchange by the public to banks with some exceptions.
The working of LERMS was smooth from the beginning; contrary to the fears
that rupee will depreciate heavily.

Thus, post-crisis phase was marked by wide ranging reform measures
aimed at widening and deepening the foreign exchange market and
liberalisation of exchange control regimes. A credible macroeconomic,
structural and stabilisation programme encompassing trade, industry,
foreign investment, exchange rate, public finance and the financial sector
was put in place creating an environment conducive for the expansion of
trade and investment. It was recognised that trade policies, exchange rate
policies and industrial policies should form part of an integrated policy
framework to improve the overall productivity, competitiveness and
efficiency of the economic system, in general, and the external sector, in
particular.
The High Level Committee on Balance of Payments (Chairman Dr. C. Rangarajan) constituted by Government of India in February 1991, submitted an Interim Report in February 1992 and the final Report in February 1993. The committee identified certain important lessons learnt from the management of balance of payments in the Seventh Plan. These include: (a) No country can live beyond its means for long without running into difficulties. Budgetary deficit, revenue deficit and fiscal deficit all have implications for the drafting resources from the household and other sectors. Combined with inadequate returns on investments made out of borrowings, they contribute to a situation where in the environment was not conducive to a healthy balance of payments situation, (b) The current account deficit must be limited to a level that can be sustained by normal capital flows, (c) Export possibilities of India have been grossly underestimated and the import-intensity of strategy of import substitution not understood adequately, (d) There was an under-estimation of the impact of unrealistic exchange rate on the diversion of foreign exchange inflows from official to private channels, (e) The composition of capital flows is even more important than their size in as much as they affect the future liabilities on both capital and current account, (f) While the opportunities available through foreign investments were not exploited there was reliance on high-cost NRI deposits and external commercial borrowings which, though relatively inexpensive at that time, tended to result in bunched repayments, (g) an appropriate real effective exchange rate would constitute a necessary though not sufficient condition for export growth and (h) the level of foreign currency reserves and their management should be such as to provide assurance to international financial and trading community about the country’s ability to service its obligations.

With regard to the exchange rate policy, the committee recommended that consideration be given to (i) a realistic exchange rate, (ii) avoiding use of exchange mechanisms for subsidization, (iii) maintaining adequate level
reserves to take care of short-term fluctuations, (iv) continuing the process of liberalization on current account, and (v) reinforcing effective control over capital transactions. The key to the maintenance of a realistic and a stable exchange rate is containing inflation through macro-economic policies and ensuring net capital receipts of the scale assumed in BoP projections. The Committee further recommended that a decision be taken to unify the exchange rate, as an important step towards full convertibility.

The committee submitted an Interim Report on the basis of which the Liberalized Exchange Rate Management System (LERMS) was introduced with effect from March 1, 1992 as a first step towards the full convertibility of the rupee on current account.

The dual exchange rate system was replaced by a unified exchange rate system in March 1993, whereby all foreign exchange receipts could be converted at market determined exchange rates. On unification of the exchange rates, the nominal exchange rate of the rupee against both the US dollar as also against a basket of currencies got adjusted lower, which almost nullified the impact of the previous inflation differential. The restrictions on a number of other current account transactions were relaxed. Unification of the exchange rates was supported by progressive liberalisation of the trade and payments regime. Convertibility for foreign direct investors was extended to portfolio investments by foreign institutional investors in Indian stock exchanges. Inflows of portfolio investment which were negligible up to 1992 have risen to an annual average level of US$ 2 billion in the period 1994-97. Furthermore, Indian corporates were allowed access to overseas financial markets in the form of Global Depository Receipts (GDRs) and Foreign Currency Convertible Bonds (FCCB s). Net -inflows against these instruments amounted to an annual average of about US$ 2 billion during 1993-1995. New deposit schemes for non resident Indians i.e. the Foreign Currency Non Resident (Banks) [FCNR(B)] and the Non Resident Non Repatriable Rupee Deposits [NRNRRD] schemes were launched with attractive features and schemes which carried exchange guarantees were
phased out. At the same time, access to external commercial borrowings was made flexible.

The unification of the exchange rate of the Indian rupee was an important step towards current account convertibility, which was finally achieved in August 1994, when India accepted obligations under Article VIII of the Articles of Agreement of the IMF. With the rupee becoming fully convertible on all current account transactions, the risk-bearing capacity of banks increased and foreign exchange trading volumes started rising. This was supplemented by wide-ranging reforms undertaken by the Reserve Bank in conjunction with the Government to remove market distortions and deepen the foreign exchange market. The process has been marked by ‘gradualism’ with measures being undertaken after extensive consultations with experts and market participants.

The appointment of an Expert Group on Foreign Exchange (popularly known as Sodhani Committee) in November 1994 is a landmark in the design of foreign exchange market in India. The Group studied the market in great detail and came up with far reaching recommendations to develop, deepen and widen the forex market. In the process of development of forex markets, banks have been accorded significant initiative and freedom to operate in the market.

Recommendations of the Expert Group on Foreign Exchange Markets in India

The Expert Group on Foreign Exchange Markets in India (Chairman: Shri O.P.Sodhani), which submitted its Report in 1995, identified various regulations inhibiting the growth of the market. The Group recommended that the corporates may be permitted to take a hedge upon declaring the existence of an exposure. The Group recommended that banks should be permitted to fix their own exchange position limits such as intra-day and overnight limits, subject to ensuring that the capital is provided/earmarked to the extent of 5 per cent of this limit based on internationally accepted guidelines. The Group favoured fixation of Aggregate Gap Limit (AGL), which would also include rupee transactions, by the managements of the banks.
based on capital, risk taking capacity, etc. It recommended that banks be allowed to initiate cross currency positions abroad and to lend or borrow short-term funds up to six months, subject to a specified ceiling. Another important suggestion related to allowing exporters to retain 100 per cent of their export earnings in any foreign currency with an Authorised Dealer (AD) in India, subject to liquidation of outstanding advances against export bills. The Group was also in favour of permitting ADs to determine the interest rates and maturity period in respect of FCNR (B) deposits. It recommended selective intervention by the Reserve Bank in the market so as to ensure greater orderliness in the market. In addition, the Group recommended various other short-term and long-term measures to activate and facilitate functioning of markets and promote the development of a vibrant derivative market. Short-term measures recommended included exemption of domestic interbank borrowings from SLR/CRR requirements to facilitate development of the term money market, cancellation and re-booking of currency options, permission to offer lower cost option strategies such as the ‘range forward’ and ‘ratio range forward’ and permitting ADs to offer any derivative products on a fully covered basis which can be freely used for their own asset liability management. As part of long-term measures, the Group suggested that the Reserve Bank should invite detailed proposals from banks for offering rupee-based derivatives, should refocus exchange control regulation and guidelines on risks rather than on products and frame a fresh set of guidelines for foreign exchange and derivatives risk management. As regards accounting and disclosure standards, the main recommendations included reviewing of policy procedures and transactions on an on-going basis by a risk control team independent of dealing and settlement functions, ensuring of uniform documentation and market practices by the Foreign Exchange Dealers’ Association of India (FEDAI) or any other body and development of accounting disclosure standards.

Most of the recommendations of the Sodhani Committee relating to the development of the foreign exchange market were implemented during the latter half of the 1990s. In addition, several initiatives aimed at
dismantling controls and providing an enabling environment to all entities engaged in foreign exchange transactions have been undertaken since the mid-1990s. The focus has been on developing the institutional framework and increasing the instruments for effective functioning, enhancing transparency and liberalising the conduct of foreign exchange business so as to move away from micro management of foreign exchange transactions to macro management of foreign exchange flows. An Internal Technical Group on the Foreign Exchange Markets (2005) set up by the Reserve Bank made various recommendations for further liberalisation of the extant regulations. Some of the recommendations such as freedom to cancel and rebook forward contracts of any tenor, delegation of powers to ADs for grant of permission to corporates to hedge their exposure to commodity price risk in the international commodity exchanges/markets and extension of the trading hours of the inter-bank foreign exchange market have since been implemented. Along with these specific measures aimed at developing the foreign exchange market, measures towards liberalising the capital account were also implemented during the last decade, guided to a large extent since 1997 by the Report of the Committee on Capital Account Convertibility (Chairman: Shri S.S.Tarapore).

Emphasising on an appropriate exchange rate policy, Tarapore Committee (1997) recommended the following:

- The RBI should have a Monitoring Exchange Rate Band of +/- 5.0 per cent around the neutral Real Effective Exchange Rate (REER). The RBI should ordinarily intervene as and when the REER is outside the band. The RBI should ordinarily not intervene when the REER is within the band. The RBI could, however, use its judgment to intervene even within the band to obviate speculative forces and unwarranted volatility.

- The Committee further recommends that the RBI should undertake a periodic review of the neutral REER which could be changed as warranted by fundamentals. The Committee stresses that credibility of the exchange rate policy would be vital in the context
of CAC and to this extent there must be transparency in exchange rate policy: (i) the neutral REER i.e., the base period should be announced, (ii) the REER Monitoring Band should be declared, (iii) the REER should be published on a weekly basis with the same time lag as the publication of the reserves and (iv) changes in the neutral REER should be made public.

- As part of exchange rate management greater attention should be focused on ensuring that the forward exchange markets reflect the interest rate differentials.

For determining an appropriate exchange rate, the development of foreign exchange market is a prerequisite. Thus, various reform measures have been undertaken since the early 1990s which have had a profound effect on the market structure, depth, liquidity and efficiency of the Indian foreign exchange market. Banks have been allowed to use derivative products for hedging risks and asset-liability management purposes. Similarly, corporates have been given flexibility to book forward cover based on past turnover and are allowed to use a variety of instruments like interest rates and currency swaps, caps/collars and forward rate agreements. The swap market for hedging longer-term exposure has developed substantially in recent years. A number of steps have also been taken to liberalise the capital account covering foreign direct investment, portfolio investment, outward investment including direct investment as well as depository receipt and convertible bonds, opening of Indian corporate offices abroad and the like. In recent years, the Reserve Bank has delegated exchange control procedures to banks and authorised dealers to such an extent that there is hardly any need to approach the Reserve Bank for any approval. These reforms are being reflected in vibrancy in activity in various segments of the foreign exchange market with the daily turnover.

4.2. Present Exchange Rate Policy in India

In India, a market-determined exchange rate system was set in place in March, 1993. Since then, the exchange rate is largely determined by
demand and supply conditions in the market. The exchange rate policy in India is guided by the need to reduce excess volatility, prevent the emergence of destabilising speculative activities, help maintain adequate level of reserves and develop an orderly foreign exchange market. With a view to reducing the excess volatility in the foreign exchange market arising from lumpy demand and supply as well as leads and lags in merchant transactions, the Reserve Bank undertakes sale and purchase operations in the foreign exchange market. Such interventions, however, are not governed by any pre-determined target or band around the exchange rate. The Indian market, like other developing countries markets, is not yet very deep and broad, and can sometimes be characterised by uneven flow of demand and supply over different periods. In this situation, the Reserve Bank of India has to make sales and purchases of foreign currency in order to even out lumpy demand and supply in the relatively thin forex market and to smoothen erratic movements. However, such intervention is not guided by any predetermined target or band around the exchange rate. With the expansion of foreign exchange exposure of the Indian economy, the role of such uneven demands is supposed to reduce gradually. While it is not possible for any country to remain completely unaffected by developments in the international exchange markets, fortunately India had been able to keep the spillover effects of the Asian crisis to a minimum through constant monitoring and timely action, including recourse to strong monetary measures, when necessary, to prevent the emergence of self-fulfilling speculative activities.

The experience with capital flows has important lessons for the choice of the exchange rate regime. The advocacy for corner solutions – a fixed peg without monetary policy independence or a freely floating exchange rate retaining discretionary conduct of monetary policy – as discussed in section II of the Chapter is distinctly on the decline. According to Mohan (2006), the weight of experience seems to be tilting in favour of intermediate regimes with country-specific features, without targets for the level of the exchange rate and exchange market interventions to fight extreme market turbulence.
In general, emerging market economies have accumulated massive foreign exchange reserves as a circuit breaker for situations where unidirectional expectations become self-fulfilling.³

India’s integration with the world economy is getting stronger which has implications for the conduct of exchange rate policies in the future. The current and capital account (gross) as percentage to GDP being an indicator of openness suggest that it has increased from 41.8 per cent during 1990s to 112.4 per cent in 2008-09. With such an increase in exposure to the international economy, trade and other current account flows, along with capital flows, the Indian economy is entering uncharted territory, although a healthy one from all accounts (Mohan, 2006). So far India’s approach of broad market determination of the exchange rate, flexibility, combined with intervention as and when warranted, has served as well.

Given the fact that India’s exchange rate regime has been significantly liberalized from a pegged exchange rate to a managed floating exchange rate with less and less interventions by the central bank in the foreign exchange market, it is important to examine the exchange rate behaviour over the years in terms of its volatility. Accordingly, the following discussion focuses on this aspect.

**First Phase of Volatility: August 1995 to March 1996**

The period of 1993-95 is considered to be period of relatively stable rupee exchange rate. However, the rupee exchange rate witnessed some stress starting from the third quarter of calendar year 1995 at the back of unfounded expectations regarding the external payments situation. There was a slowdown in capital inflows in the wake of the Mexican crisis along with a moderate widening of the current account deficit on resurgence of activities in the real sector. In addition, the rise of US dollar against other major currencies after a bearish phase was also one of the factors contributing to this phenomenon. The downward pressure on rupee initially

got accelerated in October 1995 (exchange rate fell to Rs 35.65 per US dollar) and further in the first week of February 1996, rupee touched record low of Rs 37.95 per US dollar. During this period, unidirectional expectations of a free fall of rupee reinforced normal leads and lags in external receipts and payments, vitiating orderly market activity. This created a panic in the foreign exchange market as demand for cover by importers and cancellations of forward contracts by exporters led to mismatches of demand and supply in both spot and forward segment. This resulted in a substantial rise in forward premia between September 1995 and February 1996. The downward pressure on rupee exchange rate was also reflected in widening of bid-offer spread. To eliminate the inconsistency of the Reserve Bank buying rate, the Reserve Bank stopped publishing its quote on the Reuter screen with effect from October 4, 2005, offering only a buying quote to banks on specific request.

As a result, the Reserve Bank responded by intervening in the market to signal that the fundamentals were in place and to ensure that market correction of the overvalued exchange rate was orderly and calibrated. The tool was, however sharpened to cover not only spot but also swap and forward market segments. Further, it was decided to keep a watch over the day-to-day merchant demands of the largest bank which alone handled about 50 per cent of the import payments mainly of a single public sector undertaking in the oil sector. Thus, a system was put in place to obtain information about the latter’s daily requirement. Market intelligence and information gathering were strengthened and the Reserve Bank started obtaining direct price quotes from leading foreign exchange broking firms. Two basic approaches on intervention were adopted. On days when there was information about large all round demand, an aggressive stance was taken with intensive selling in larger lots with the objective of bringing down the exchange rate decisively. On other occasions, continual sale of small/moderate amounts was also made in order to avoid unduly large
intra-day variations. The first approach aimed at absorbing excess market demand while the latter was aimed at curbing ratchet effect^4.

As a result of such measures by the Reserve Bank, a strong recovery for rupee was observed during March–April 1996 and there was a decline in forward premia in April 1996 as stability prevailed in spot market and domestic interest rates began to ease. Although the Reserve Bank intervened actively in the markets since October 1995, and the transactions did have an impact on the exchange rate and domestic liquidity situation, the net sales in the foreign exchange market between October 1995 and June 1996 broadly evened out and as such the intervention helped in smoothening the volatility rather than propping up the exchange rate. Further, while intervention impinged on domestic liquidity quite sharply initially, the overall impact remained broadly balanced with small net injection of liquidity. The experience of volatility during 1995-96 showed that while intervention signalled the policy stance of the RBI, the ‘testing’ of the commitment to the stated policy by the market were also adequately addressed by supportive measures during this period.

**Second Phase of Stability: April 1996 to Mid-August 1997**

The period April 1996 to Mid-August 1997 was again characterised by a remarkable stability in the foreign exchange market. During this period, the spot exchange rate remained in the range of Rs.35.50- 36.00 per US dollar. The stability in the spot rate was reflected in the six month forward premia as well which remained range-bound within 6 to 9 per cent during the financial year 1996-97 and declined further during the first five months of the financial year 1997-98 within a range of 3 to 6 per cent enabled by easy liquidity conditions. From the second quarter of calendar year 1996 onwards, capital flows were also restored and the reserve loss was recouped within a short period of time.

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^4 The ‘ratchet effect’ means that in a bearish market situation if the rate falls even due to situational factors it does not recover easily on reversal of those factors.
Second Phase of Instability - Mid-August 1997 to August 1998

This phase of volatility was marked by the contagion effect of the South-East Asian currency crisis and other domestic factors. During 1997-98 and the first quarter of 1998-99, the exchange rate management became an increasingly difficult task. There were two periods of significant volatility in the Indian foreign exchange market: Phase I - from mid-August 1997 to January 1998, and Phase II - May 1998 till August 1998. As response to these developments, measures undertaken by the Reserve Bank included (i) intervention in both spot and forward segments of the foreign exchange market and (ii) adoption of stringent monetary and administrative measures, which, however, were rolled back immediately on attainment of stability.

Phase I

Notwithstanding the strong fundamentals, the rupee started showing a weakening trend in the last week of August, partly as a result of contagion effects of currency turbulence in South-East Asian countries. With inter-bank spot purchases (excluding sales by the Reserve Bank) exceeding inter-bank sales by a significant margin, the Reserve Bank sold foreign exchange of US $ 978 million in September.

In the forward market, excess demand conditions started emerging since August as importers rushed for cover to hedge large exposures which had remained uncovered in the earlier period and exporters cancelled forward contracts. As the premia spurted reflecting both demand - supply mismatches and a hardening of domestic interest rates in September 1997 (Table 4.1), the Reserve Bank sold foreign exchange in the forward market as well and as a result its outstanding forward liabilities rose by US$ 904 million during the month.

5 During late 1996 and early 1997, anticipation of stability in general and even appreciation of rupee in some quarters had led many market participants to keep their oversold or short positions unhedged and substitute some domestic debt by foreign currency borrowings to take advantage of interest arbitrage. In the wake of developments in South East Asia and market perceptions of exchange rate policy, there was a rush to cover unhedged positions by the market participants.
Table 4.1: Forward Premia (Monthly Average)  
(Per cent per annum)

<table>
<thead>
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<th>Month/Year</th>
<th>1-month</th>
<th>3-month</th>
<th>6-month</th>
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<tr>
<td>March</td>
<td>6.02</td>
<td>6.72</td>
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<td>August</td>
<td>5.07</td>
<td>5.19</td>
<td>5.50</td>
</tr>
<tr>
<td>September</td>
<td>6.90</td>
<td>6.82</td>
<td>6.63</td>
</tr>
<tr>
<td>October</td>
<td>4.23</td>
<td>5.08</td>
<td>5.52</td>
</tr>
<tr>
<td>November</td>
<td>6.51</td>
<td>6.90</td>
<td>6.89</td>
</tr>
<tr>
<td>December</td>
<td>9.42</td>
<td>9.22</td>
<td>8.60</td>
</tr>
<tr>
<td>1998</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>January</td>
<td>21.05</td>
<td>15.82</td>
<td>12.79</td>
</tr>
<tr>
<td>February</td>
<td>12.70</td>
<td>15.85</td>
<td>14.57</td>
</tr>
<tr>
<td>March</td>
<td>8.81</td>
<td>9.10</td>
<td>9.58</td>
</tr>
<tr>
<td>April</td>
<td>3.67</td>
<td>5.31</td>
<td>6.91</td>
</tr>
<tr>
<td>May</td>
<td>6.49</td>
<td>7.37</td>
<td>8.20</td>
</tr>
<tr>
<td>June</td>
<td>9.59</td>
<td>10.23</td>
<td>10.10</td>
</tr>
</tbody>
</table>

Among other measures, the Reserve Bank allowed banks to invest and borrow abroad up to 15 per cent of unimpaired Tier I capital in October 1997, which led to the resumption of capital flows and increase in volumes in the foreign exchange market, particularly in the outright forward and
swap segments. This allowed the Reserve Bank to undertake both spot and outright forward purchases and liquidate its forward liabilities. Market sentiment weakened sharply from November 1997 onwards in reaction to intensification of the crisis in South-East Asia, bearishness in domestic stock exchanges, uncertainties. Between November 1997 and January 1998, the exchange rate of the Indian rupee depreciated by around 9 per cent. The Reserve Bank undertook wide ranging and steep monetary and administrative measures on January 16, 1998 in order to curb the speculative tendencies among the market players and restore orderly conditions in the foreign exchange market. As a result of monetary measures of January 16, 1998, the stability in the foreign exchange market was restored and more importantly, the expectations of the market participants about further depreciation in the exchange rate of rupee were reversed. The monetary policy measures was successful in making forward premia prohibitively high and generating supply in the market, which further reinforced two way expectations. The reduced volatility in the market was evident in coefficient of variation which fell from 1.26 in January 1998 to 0.49 in February 1998 and further to 0.08 in March 1998. The exchange rate of rupee which had depreciated to Rs. 40.36 per US dollar as on January 16, 1998 appreciated to Rs. 39.50 on March 31, 1998. The six month forward premia which reached a peak of around 20 per cent in January 1998 came down to 7.0 by the end of March 1998.

As normalcy returned in the foreign exchange market, the easing of monetary measures continued. The interest rate on fixed rate ‘repos’ (now ‘reverse repo’) was reduced to 7 per cent as on April 2, 1998 and further to 6 per cent on April 29, 1998. On April 29, 1998 the export refinance limit was also increased from 50 per cent to 100 per cent of the incremental export credit eligible for refinance. The CRR and Bank Rate were also reduced to earlier levels. While it is generally accepted that India could escape the 1997 crisis unscathed, it needs to be recognised that it has been essentially due to the proactive policy responses taken by the Reserve Bank. The Reserve Bank of India acted swiftly to curb speculative activities and
change market expectations. Direct intervention followed by administrative measures were undertaken initially but when the volatility continued and sentiment remained unchanged, monetary measures were undertaken to reverse unidirectional expectations

**Phase II**

During the post-South East Asian crisis also, the management of external sector continued to be a major challenge particularly during May to June 1998 as a result of reaction to intensification of South East Asian crisis, bearishness in domestic stock exchanges, uncertainties created by internal developments and the strengthening of US dollar against major currencies, particularly yen. During this phase, India was also confronted with certain other developments like economic sanctions imposed by several industrial countries, suspension of fresh multilateral lending (except for certain specified sectors), downgrading of country rating by international rating agencies and reduction in investment by FIs. As a result of these developments, the foreign exchange market again witnessed increased pressure during May-June 1998. The exchange rate of the rupee which was Rs. 39.73 per US dollar at the end of April 1998, depreciated to Rs. 42.92 per US dollar on June 23, 1998.

The Reserve Bank announced a package of policy measures on June 11, 1998 to contain the volatility in foreign exchange market. These included: (a) announcement of the Reserve Bank’s preparedness to sell foreign exchange in the market to meet any mismatch between demand and supply; (b) allowing FIs to manage their exchange risk exposure by undertaking foreign exchange cover on their incremental equity investment with effect from June 12, 1998; (c) advising importers as well as banks to monitor their credit utilisation so as to meet genuine foreign exchange demand and discourage undue build-up of inventory; (d) allowing domestic financial institutions, with the Reserve Bank’s approval, to buy back their own debt paper or other Indian papers from international markets; (e) allowing banks/ADs, acting on behalf of the FIs, to approach the Reserve
Bank for direct purchase of foreign exchange; and (f) advising banks to charge a spread of not more than 1.5 percentage points above LIBOR on export credit in foreign currency as against the earlier norm of not exceeding 2-2.5 percentage points. Responding to these policy measures, the foreign exchange market returned to normalcy for some time but again came under stress in August 1998.

With the deepening of the Russian financial turmoil and the fear of Chinese Renminbi devaluation influencing the foreign exchange market, there appeared excess demand pressures in August 1998 in the spot segment of the foreign exchange market (Chart 4.2). The Rupee registered its lowest level of Rs.43.42 per US dollar on August 19, 1998. Responding to these developments, the Reserve Bank announced a fresh package of measures on August 20, 1998 in order to prevent speculative sentiments building up pressure on the orderly functioning of the market. These measures included: (a) a hike in CRR from 10.0 per cent to 11.0 per cent, (b) an increase in the repo rate from 5 per cent to 8 per cent, (c) enhancement of forward cover facilities to FIIs, (d) withdrawal of facility of rebooking the cancelled contracts for imports and splitting forward and spot legs for a commitment and (e) allowing flexibility in the use of Exchange Earners Foreign Currency (EEFC) accounts while restricting the extension of time limit for repatriation of export proceeds to exceptional circumstances.

![Chart 4.2: Movement in Exchange Rate](image-url)
A distinguishing aspect of the foreign exchange market interventions during the 1997-98 volatility episode 1997-98 was that instead of doing the transactions directly with ADs, few select public sector banks were chosen as intermediaries and were allowed to undertake deals in the inter-bank market at the direction of the Reserve Bank for which they were provided cover by the Reserve Bank at the end of the business hours of each day. The main reason for adopting an indirect intervention strategy in preference to a direct one was to provide a cover for RBI’s operations and reduce its visibility and hence make it more effective. However, the fact that RBI was intervening in the market through a few other public sector banks was not disclosed though in due course of time, it was known to the market. Besides, as a measure of abundant precaution and also to send a signal internationally regarding the intrinsic strength of the economy, India floated the Resurgent India Bonds (RIBs) in August 1998 and managed to raise US $ 4.2 billion through the scheme.

As a result of swift policy responses to manage the crisis and a favourable macroeconomic condition, India was successful in containing the contagion effect of the Asian crisis. During this episode, macroeconomic conditions were sound as evident in low current account deficit, comfortable foreign exchange reserves amounting to import cover of over seven months, a market-determined exchange rate, low level of short-term debt, and absence of asset price inflation or credit boom. Adequate capital controls also helped in insulating the economy from contagion effect of the East Asian crisis. In short, the exchange rate of the Indian rupee remained low during second half of the 1990s, when most of the Asian currencies witnessed high level of volatility.

**Phase of Relative Stability with Intermittent Event-Related Volatility (September 1998- March 2003)**

The measures announced by the Reserve Bank coupled with the success of the RIB issue changed the market sentiment and restored orderly conditions in the foreign exchange market. The rupee remained generally stable during September 1998 to May 1999 with the exchange rate varying
in the range of Rs 42.20 – Rs 42.90 per US dollar. This was also the period when the European Union countries adopted the euro as their single currency. As a result, the Reserve Bank also started monitoring movement of Rupee vis-à-vis Euro in addition to dollar.

There was slight pressure on Indian rupee during June-October 1999 caused by heightened tension in the border resulting in Reserve Bank intervention in foreign exchange market. In the period from November 1999 till March 2000, the rupee traded in a narrow band around Rs 43.50 per US dollar. Recovery in exports coupled with sustained portfolio inflows, however, provided support to the exchange rate.

In the subsequent period between April 2000 and March 2003, the exchange rate generally remained stable with intermittent periods of volatility reflecting certain international developments. Sharp rise in international crude oil prices, cross-currency movements of the US dollar vis-à-vis other major international currencies and reduced portfolio flows on account of successive interest rate increases in industrial countries during the first quarter of 2000-01 led to a depreciation of the exchange rate to below Rs 44.00 per US dollar in May 2000 and further to below Rs 45.00 per US dollar in July 2000. In order to reduce uncertainty in the foreign exchange market, the Reserve Bank responded promptly with policy actions. Besides, the introduction of the liquidity Adjustment Facility (LAF) effective June 5, 2000 allowed Reserve Bank an additional lever for influencing the short term liquidity conditions. Financing through India Millennium Deposits (IMDs) was attempted as a pre-emptive measure to tackle hardening of world petroleum prices and the consequent possible depletion of India’s foreign exchange reserves.

Orderly conditions prevailed in the foreign exchange market for more than year from August 2000 till about early September 2001. The nervous sentiment of the foreign exchange market in the aftermath of September 11, 2001 terrorist attack in the US resulted in substantial rupee depreciation during September 11-20, 2001. Along with market sales, the Reserve Bank
responded through a package of measures and liquidity operations during September 15-25, 2001. These measures included: (i) a reiteration by the Reserve Bank to keeping interest rates stable with adequate liquidity; (ii) assurance to sell foreign exchange to meet any unusual supply-demand gap; (iii) opening a purchase window for select Government securities on an auction basis; (iv) relaxation in FII investment limits up to the sectoral cap/statutory ceiling; (v) a special financial package for large value exports of six select products; and, (vi) reduction in interest rates on export credit by one percentage point. The exchange rate again came under some pressure following the attack on Indian Parliament on December 13, 2001. These twin pressures on the market resulted in the rupee falling below Rs 48 per US dollar mark during this period. Tightness prevailed in the foreign exchange market for a short spell during April-May 2002 in view of tensions in Gujarat, rising crude oil prices and border tensions. The rupee touched Rs 49 per US dollar in May 2002, the lowest exchange rate ever. During rest of the financial year 2002-03, the rupee dollar exchange rate showed signs of firming up in view of large foreign inflows into the economy.

This period was also marked by reform measures aimed at developing the institutional framework for effective functioning of the foreign exchange market in India. With a view to facilitating external payments in a liberalized regime, the new legislation Foreign Exchange Management Act (FEMA) was passed which came into effect from June 1, 2000. The FEMA, replacing the FERA, reflected a shift in policy emphasis from conservation to management of foreign exchange consistent with the orderly evolution of trade and payments and the foreign exchange markets; from a 'citizenship' basis to a 'residency' basis in the conduct of foreign exchange transactions; and from criminal procedures of enforcement to civil procedures - all under a transparent framework promoting accountability. In addition, setting up of Clearing Corporation of India Limited (CCIL) by the Reserve Bank in 2001 was also an important development. The CCIL providing guaranteed settlement of transactions has played an instrumental role in lowering risks in Indian financial markets. CCIL commenced settlement of foreign
exchange operations for inter-bank US Dollar/INR spot and forward trades from November 12, 2002.

**2003-04 onwards - Period with huge capital flows**

There have been significant surge in capital inflows in Indian economy since 2003-04. As a result of excess supply conditions, the rupee generally exhibited appreciating trend against the US dollar during this period (Chart 4.3). The Reserve Bank had resorted to sterilisation operations to manage the liquidity impact of the large inflows. Faced with the finite stock of the Government of India securities with the Reserve Bank, Market Stabilisation Scheme (MSS) was introduced in April 2004 under which G-Sec dated securities/Treasury Bills have been issued by the Reserve Bank to absorb liquidity. Consequently, it resulted in large accumulation of foreign exchange reserves since end-March 2002. In addition, a number of other policy initiatives have been periodically taken to offset the expansionary impact of external flows on domestic money supply.

On a few occasions, there has been pressure on Indian rupee associated mainly with FII outflows, global oil prices and behaviour of dollar
in international markets. Rupee was under pressure from mid-May 2005 onwards when the excess supply situation changed because of the turbulence in equity markets on account of political uncertainty leading to outflows by FIs and rising global oil prices. On May 17, 2004, when stock market exhibited record fall, the Reserve Bank communicated its willingness to provide liquidity in order to avoid any spill over to other market segments e.g., money, government and forex market. Although this helped in restoring orderly conditions in the market on that particular day, but the rupee continued to remain under pressure till almost August 2004. The pressure on the rupee started easing from September 2004 onwards with the revival in FII flows, step-up in trade credits and external commercial borrowings by importers. In subsequent months, remittances from exporters and heavy FII inflows continued to provide strength to the rupee against the US dollar.

Orderly conditions generally prevailed in the foreign exchange market in 2005-06\(^6\). However, pressure had built up on the rupee from end-August 2005 with the rise of global oil prices, sharp increase in the current account deficit and strong US dollar. Nevertheless, with the revival of FII inflows and weakening of the US dollar in the international markets, the rupee again showed a sharp appreciating trend beginning with the second half of December 2005 despite the IMD redemptions. Sales of US $ 6.5 billion during December 2005 on account of redemption of IMDs were recouped by purchases of US $ 10.8 billion during February-March, 2006.

During 2006-07, factors like persistent rise in international crude oil prices and FII outflows put downward pressure on rupee which reached Rs.46.97 against the US dollar on July 19, 2006. The rupee, however, strengthened thereafter on the back of moderation in crude oil prices, large capital inflows and weakening of the US dollar in the international markets to reach Rs.43.14 per US dollar on March 28, 2007. Rupee continued to remain strong during 2007-08 in view of persistent large capital inflows, fed rate cut, weakening of US dollar vis-à-vis other major currencies and strong

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\(^6\) The rupee witnessed some appreciation following the revaluation of the Chinese Renminbi on July 21, 2005. The rupee reached Rs.43.56 per US dollar on August 18, 2005.
performance of the domestic economy. Since March 2008, however, there were some depreciation pressures on the rupee dollar exchange rate in view of rising global oil prices and domestic inflationary pressures. The Reserve bank sold about US$ 1.5 billion during March 2008 after a gap of almost 27 months (though on net basis, RBI was purchaser).

A holistic look at the entire period since 1993 when India moved towards market determined exchange rates reveals that the Indian Rupee has generally depreciated against the dollar except during the period 2003 to 2005 and during 2007-08 when rupee had appreciated on account of dollar's global weakness and large capital inflows. For the period as a whole, 1993-94 to 2007-08, the Indian Rupee has depreciated against dollar by about 22 per cent. The rupee has also depreciated against other major international currencies.

Table 4.2: Movements of Indian Rupee 1995-96 to 2008-09

<table>
<thead>
<tr>
<th>Year</th>
<th>Range (Rs per US $)</th>
<th>Average Exchange Rate (Rs per US $)</th>
<th>Daily average Appreciation/Depreciation</th>
<th>Coefficient of Variation (%)</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995-96</td>
<td>31.37-37.95</td>
<td>33.45</td>
<td>-6.13</td>
<td>5.8</td>
<td>1.93</td>
</tr>
<tr>
<td>1996-97</td>
<td>34.14-35.96</td>
<td>35.50</td>
<td>-5.77</td>
<td>1.3</td>
<td>0.48</td>
</tr>
<tr>
<td>1997-98</td>
<td>35.70-40.36</td>
<td>37.16</td>
<td>-4.47</td>
<td>4.2</td>
<td>1.57</td>
</tr>
<tr>
<td>1998-99</td>
<td>39.48-43.42</td>
<td>42.07</td>
<td>-11.67</td>
<td>2.1</td>
<td>0.90</td>
</tr>
<tr>
<td>1999-00</td>
<td>42.44-44.79</td>
<td>43.33</td>
<td>-2.91</td>
<td>0.7</td>
<td>0.29</td>
</tr>
<tr>
<td>2000-01</td>
<td>43.61-46.89</td>
<td>45.68</td>
<td>-5.14</td>
<td>2.3</td>
<td>1.07</td>
</tr>
<tr>
<td>2001-02</td>
<td>46.56-48.85</td>
<td>47.69</td>
<td>-4.21</td>
<td>1.4</td>
<td>0.67</td>
</tr>
<tr>
<td>2002-03</td>
<td>47.51-49.06</td>
<td>48.40</td>
<td>-1.47</td>
<td>0.9</td>
<td>0.45</td>
</tr>
<tr>
<td>2003-04</td>
<td>43.45-47.46</td>
<td>45.92</td>
<td>5.40</td>
<td>1.6</td>
<td>0.72</td>
</tr>
<tr>
<td>2004-05</td>
<td>43.36-46.46</td>
<td>44.95</td>
<td>2.16</td>
<td>2.3</td>
<td>1.03</td>
</tr>
<tr>
<td>2005-06</td>
<td>43.30-46.33</td>
<td>44.28</td>
<td>1.51</td>
<td>1.5</td>
<td>1.79</td>
</tr>
<tr>
<td>2006-07</td>
<td>43.14-46.97</td>
<td>45.28</td>
<td>-2.45</td>
<td>2.0</td>
<td>0.89</td>
</tr>
<tr>
<td>2007-08</td>
<td>39.26-43.15</td>
<td>40.24</td>
<td>12.52</td>
<td>2.0</td>
<td>0.83</td>
</tr>
<tr>
<td>2008-09</td>
<td>39.89-46.70</td>
<td>45.91</td>
<td>-5.47</td>
<td>7.8</td>
<td>3.58</td>
</tr>
</tbody>
</table>

Source: Reserve Bank of India.

Another important feature has been the reduction in the volatility of Indian exchange rate during last few years. Among all currencies worldwide,
which are not on a nominal peg, and certainly among all emerging market economies, the volatility of rupee dollar rate has remained lower. The REER of India has been relatively stable compared to other key Asian countries. The volatility measured in terms of effective exchange rates i.e. 6 currency NEER and REER indices for India also reveal lower volatility for rupee as compared with other countries such as the US and Japan for the recent period (Table 4.2).

As is clear from the foregoing analysis, the central theme of RBI’s exchange rate policy has been to maintain orderly market conditions. The various episodes of volatility of exchange rate of the rupee have been managed in a flexible and pragmatic manner. Policy responses have varied as per the need of the situation. An important aspect of policy response in India to the various episodes of volatility has been market intervention combined with monetary and administrative measures to meet the threats to financial stability while complementary or parallel recourse has been taken to communications through speeches, press releases (Reddy, 2006).

Moving forward, as India progresses towards completely freer capital regime and gets more and more integrated with the rest of the world, managing periods of volatility is bound to pose greater challenges in view of the impossible trinity of independent monetary policy, open capital account and exchange rate regime. Preserving stability in the market would require more flexibility, adaptability and innovations with regard to the strategy for liquidity management as well as exchange rate management. Also, with the likely turnover in the foreign exchange market rising in future, further development of the foreign exchange market will be crucial to manage the associated risks. Given the volatility of capital flows, it remains to be seen whether financial market development in a country like India can be such that this volatility does not result in unacceptable disruption in exchange rate determination with inevitable real sector consequences and in domestic monetary conditions (Mohan, 2007).
4.3. Views of Committee on FCAC (2007) on Exchange Rate Policy in India

Assessing the evolving situation in the Indian economy and the context of a liberalised capital account, the Committee on the Fuller Capital Account Convertibility 2006 emphasised that exchange rate management in India calls for skillful operations by the central bank as there could be large capital inflows resulting in appreciation of the exchange rate and a loss of India's international competitiveness; equally, large capital outflows could result in sharp depreciation of the currency which could be dislocative to the economy. The articulation of the exchange rate policy gives the Committee some concern. The Indian exchange rate regime is classified by the IMF as a “managed float with no predetermined path for the exchange rate”. The authorities have centered the articulation of the exchange rate policy on managing volatility. The Committee is of the view that apart from volatility what is more important is the level of the exchange rate. Movements of the Indian rupee vis-à-vis different currencies would show sharp directional differences as these currencies could move in different directions. While these cannot be controlled, sharp appreciation or depreciation of the exchange rate in real effective terms can have adverse impacts on the economy.

The RBI has already undertaken a revision of indices on the nominal effective exchange rate (NEER) and the REER. The base year and country composition of the 6-country and 36-country indices have been altered. While appreciating the limitation of the REER index in the context of a rapid growth of services, the Committee recommended that work needs to be undertaken by the RBI to refine the REER index by incorporation of services to the extent possible. Furthermore, for periods where there are large import duty adjustments, these should be built into the construction of the REER. According to the RBI, these indices are constructed “as part of its communication policy and to aid researchers and analysts”. The Committee would, however, stressed that the REER should also be a valuable input into the formulation of the RBI’s exchange rate policy.
As regards the development of financial markets in the context of exchange rate management, the Committee emphasised that exchange rates and interest rates are interlinked. In an efficient market, the forward margin on the exchange rate should normally be equal to the interest differential between the two currencies. Any country intending to introduce FCAC needs to ensure that different market segments are not only well developed but also that they are well integrated. Otherwise, shocks to one or more market segments would not get transmitted to other segments efficiently so that the entire financial system is able to absorb the shocks with minimal damage.

The committee raised some concerns regarding articulation of the exchange rate policy. It noted that the authorities have centred the articulation of the exchange rate policy on managing volatility. The Committee was of the view that apart from volatility what is more important is the level of the exchange rate. The Committee recommends that work needs to be undertaken by the RBI to refine the REER index by incorporation of services to the extent possible. Furthermore, for periods where there are large import duty adjustments, these should be built into the construction of the REER. According to the RBI, these indices are constructed “as part of its communication policy and to aid researchers and analysts”. The Committee, however, stressed that the REER should also be a valuable input into the formulation of the RBI’s exchange rate policy. The committee was in full consensus that the exchange rate should not be allowed to be significantly overvalued, and thereby hurt the competitive nature of the economy.

The 2007 Committee on FCAC also reiterated its earlier stance that the RBI should have a Monitoring Exchange Rate Band of +/- 5.0 per cent around the neutral REER. As and when the REER moves beyond the band, the RBI “should ordinarily intervene”. It further added that as an operative rule, if the CAD persists beyond 3 per cent of GDP (referred as an outer sustainable limit, at the present time) the exchange rate policy should be reviewed.
4.4. Summing Up

As the Indian economy moves to greater capital account convertibility, albeit at a gradual pace, monetary policy and exchange rate policy will be increasingly inter-twined. It is in this context that the conflict of the impossible trinity – independent monetary policy, open capital account and a managed exchange rate comes at the forefront. Technically, all parameters of the trinity cannot be simultaneously attained, but the approach of the Indian policy authorities has been to work towards optimising intermediate solutions which to a greater extent has remained successful. In this context, Committee on FCAC (2007) noted that the move to fuller capital account convertibility would need to derive synergies between the quest for monetary stability and an appropriate exchange rate regime which would be supportive of the growth objectives.