

Exchange rate developments

6.67 The dynamic nature of the relationship between a nation's balance of payments and its foreign exchange rate, as enunciated by the balance of payments approach to exchange rate determination, showed up in a nascent form late last year. It was fully in evidence in 2007-08 with the exchange rate of the rupee appreciating sharply in tandem with rising capital flows (Figure 6.8). With the demand for foreign exchange (debit side of BoP) not keeping pace with the supply of foreign exchange (credit side of BoP), the rupee appreciated against the US dollar by 4.5 per cent in April 2007 (over March 2007) and by 3.4 per cent in May 2007 over April 2007. The rupee also appreciated against other major currencies in the same period. Subsequently, two-way movement in the exchange rates was evident (Figure 6.8). In fact, against other major currencies the rupee depreciated in the later months after the strong bout of appreciation in the initial months.

6.68 The extent of appreciation or depreciation of the rupee varies according to the time horizons

Table 6.18 Rupee appreciation vis-à-vis major currencies^a

| | FY 2007-08 (April 3, 2007- Jan 16, 2008) | Annual (Dec 2006 to Dec 2007) |
|--------------|--|-------------------------------------|
| US dollar | 9.8 | 13.2 |
| U.K. pound | 11.0 | 9.9 |
| Japanese yen | 1.8 | 8.4 |
| Euro | -0.1 | 2.6 |

Source: RBI
a Based on average buying and selling rates reported by FEDAI.

as reference period. The rupee appreciated by 9.8 per cent against the US dollar during the current financial year between April 3, 2007, and January 16, 2008. The rupee appreciation against the US dollar over the past 12 months on year-on-year basis (December 2007 over December 2006) was a higher 13.2 per cent. The appreciation of the rupee against other major currencies was much less than against the US dollar (Table 6.18). It

Figure 6.8 Exchange rate of Rupee vis-a-vis major currentcies (2005-06 = 100)

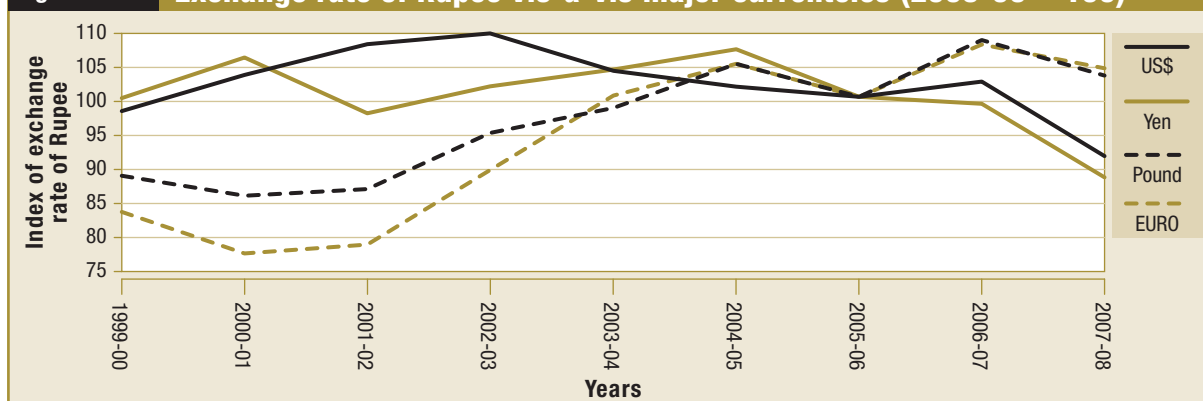
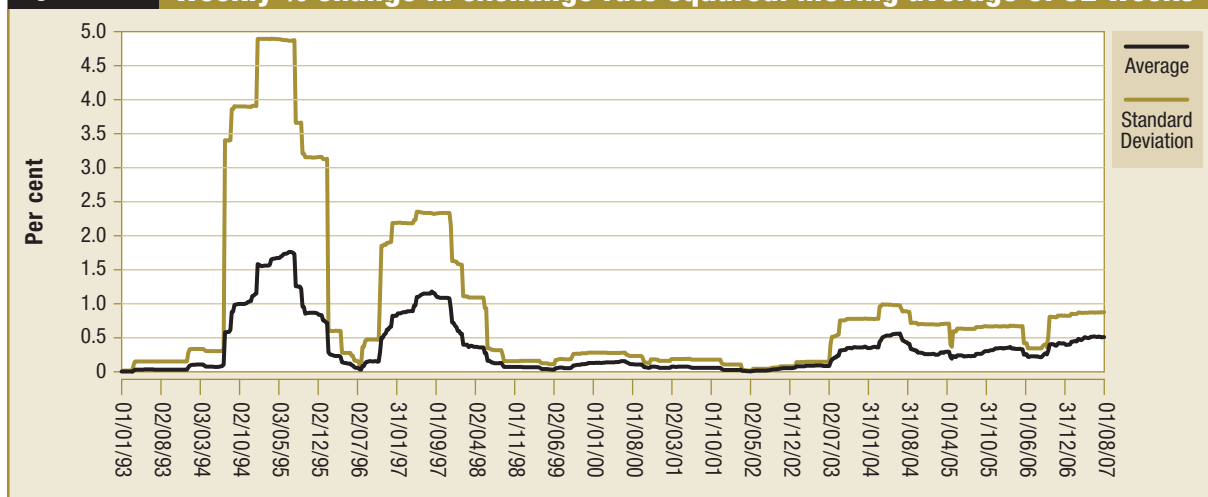


Figure 6.9 Weekly % change in exchange rate squared: moving average of 52 weeks



even depreciated marginally against the Euro during the financial year (till January 16, 2008).

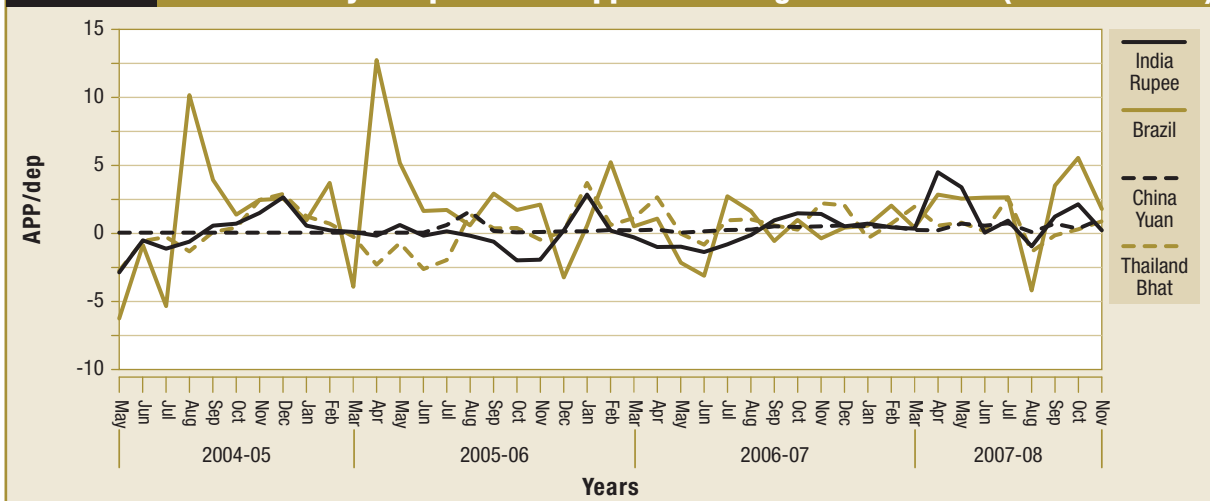
6.69 The appropriateness of the extent of rupee appreciation has come into sharp focus with the exporting community facing potential competitive loss, which was amplified by the fact that some of the competitor countries' currencies were depreciating against US dollar in the current financial year. The movements in nominal exchange rates of select countries indicate that major emerging market economies' currencies had appreciated even earlier (Figure 6.10).

6.70 In the extant classification of the exchange rate policies of countries by the IMF, India is

classified as a country with managed float without any fixed target or band. An analysis of the historical data on weekly movements in exchange rates of the rupee against the US dollar using data of the Federal Reserve of the US, reveals that after low levels of volatility (in change in exchange rate squared) between 1999-2000 and 2002-03, there has been some large changes since 2003-04 (Figure 6.9).

6.71 While currencies of some competitor countries may be depreciating reflective of their respective country contexts, replication of such policies in India would engender risks of a painful exit. The bout of appreciation of the rupee against

Figure 6.10 Cross country comparison of appreciation against US dollar (annual M-o-M)



Box 6.3 Exchange rate and competitiveness

With increased capital inflows and appreciating rupee, concerns about possible overvaluation of the currency and consequential loss of long-term competitiveness of exports in traditional and goods sectors – popularly known as the “Dutch disease,” have arisen. The exchange rate policy addresses such concerns with an ability to intervene to smoothen volatility, prevent the emergence of destabilizing speculative activities, help maintain adequate level of reserves, besides developing an orderly foreign exchange market.

The impact of exchange rate appreciation/depreciation on the balance of goods and services is sometimes used to derive a benchmark exchange rate that is consistent with a nil balance on this account. A recent IMF staff research using a model of the “Consultative Group on Exchange Rates” indicates that Indian rupee is close to its equilibrium level. From a medium- to long-run perspective, the key to sustainable growth of industry/services sector exports lies in productivity growth. The growth literature emphasizes the key role played by total factor productivity in the growth process.

It is, however, difficult to establish a relationship between aggregate exports and the real exchange rate in the short term. A large unexpected appreciation of the exchange rate can make it difficult for some sectors to adjust or adapt to it. While, there could be some competitive loss for some sections of exporters, the recourse to corner solutions for protecting competitiveness of exporters from the vagaries of capital flows through greater intervention in the foreign exchange markets on the one side and greater flexibility to deepen the process of integration as has been suggested on the opposite side of the spectrum, do not have any empirical anchoring as nations in transitional processes had tailored policies to specific contexts. The Government’s response has been to provide due relief to such sections in the export sectors and facilitate the process of adjustment towards greater competitiveness via productivity gains.

the US dollar in evidence since the second half of 2006-07 could be attributed to the effect of depreciation of the US dollar against all major currencies and the surge in capital inflows. The appreciation of major currencies against the US dollar was highest in the period March 2006–November 2007. The Euro appreciated by 22.2 per cent; UK pound appreciated by 18.8 per cent; and Japanese yen appreciated by 5.5 per cent. The levels of appreciation were lower on a longer time frame (March 2005–November 2007). Major currencies of emerging markets have appreciated against the US dollar. Brazilian real appreciated by 21.6 per cent in the period March 2006–November 2007. The Thai baht appreciated by 15.1 per cent in the same period. The rupee appreciation at 12.8 per cent in the same period (In the first 8 months of the current financial year it was at 11.6 per cent) followed the general trend in emerging market economies. While the extent of appreciation was one of the largest among the major economies in the eight months of the current financial year, over a longer period it followed the trend in emerging market economies with large capital inflows. In the period March 2006 to November 2007, the Chinese yuan appreciated by 8.24 per cent as against an appreciation of 12.79 per cent in the Indian rupee. The period from April 2004 to November 2007 was one of the periods over which the cumulative appreciation of the two countries was similar but yuan appreciation was relatively gradual (Figure 6.10).

6.72 There are other competitor countries that have evidenced depreciation against the US dollar even as major economies' currencies appreciated. Any comparison of the exchange rate movement across currencies needs to factor the changing dynamics of the process of determination of the exchange rate. An important determinant of the exchange rates in the current emerging markets has been the extent of capital flows. Where net capital flows were far in excess of the financing needs, a reversal in the medium-term or short-term exchange rate movements is a distinct possibility. Furthermore, capital flows in gross terms are often much higher than net flows. Thus day to day exchange rate changes can entail considerable overshooting in underdeveloped markets. The gross volume of turnover in the inter-bank foreign exchange market, which has considerable bearing on the day to day indicative exchange rates of Foreign Exchange Dealers Association of India, has risen substantially and exceeded US\$ 7.4 billion on spot basis on November 30, 2007. Besides, transactions like swaps have overtaken spot deals in terms of turnover in the inter-bank market in November 2007. The latter points to the adaptation by market participants to the appreciating rupee. With lumpy nature of demand and stable supplies, short-run forces sustaining even a higher value of the rupee than what long-term structural and medium-term cyclical influences would suggest could not be fully ruled out.

Table 6.19 Appreciation in select currencies against US dollar

| Reference period | Brazil reals | China yuan | Hong Kong dollar | Mexico pesos | Pakistan rupee | Singapore Sing \$ | Thailand baht | Indian rupee |
|------------------|--------------|------------|------------------|--------------|----------------|-------------------|---------------|--------------|
| Mar 05/Nov 07 | 52.85 | 11.49 | 0.28 | 2.46 | -3.04 | 12.69 | 13.93 | 10.69 |
| Mar 06/Nov 07 | 21.59 | 8.24 | -0.23 | -1.47 | -1.61 | 12.07 | 15.05 | 12.79 |
| Mar 07/Nov 07 | 18.03 | 4.25 | 0.46 | 2.39 | -0.45 | 5.38 | 3.48 | 11.64 |

Source: International Financial Statistics, IMF.

Table 6.20 Movements in select currencies of the region against dollar

| Month/Year | Bangladesh taka | Indonesia rupiah | Korea won | Malaysia ringgit | Philippines pesos | Sri Lanka rupees |
|----------------|-----------------|-------------------|-----------|------------------|-------------------|------------------|
| Mar. 06/Nov 07 | 2.40 | 0.23 ^a | 6.36 | 9.47 | 18.51 | -7.09 |
| Mar. 07/Nov 07 | 0.48 | 0.60 ^a | 2.86 | 3.25 | 12.26 | -1.06 |

Source: International Financial Statistics, IMF.

^a October instead of November.

6.73 An analysis of the data shows that in the first eight months of the current financial year (average exchange rate of November 2007 over average exchange rate of March 2007), while Brazil and India had higher nominal appreciation than China and Thailand, the real appreciation was higher in Brazil and China. A longer time frame changes the position to some extent (Tables 6.19 and 6.20).

6.74 While the magnitudes of appreciation or depreciation in nominal terms are indicative, the real impact on the economy is often assessed through the nominal effective exchange rate (NEER) and real effective exchange rate (REER) indices. The REER index of the Bank for International Settlements (BIS) provides details of the average bilateral exchange rates adjusted by relative consumer prices for 52 economies including India. The broad trends in appreciation of major emerging market currencies against the US dollar were similar (Figure 6.11). High correlations of the indices also attest to the effect of a general depreciation of the US dollar against the currencies of emerging market economies.

6.75 The RBI, after a review of the effective exchange rate indices, replaced its earlier series of five country effective exchange rates with six currency indices in December 2005. The weights of the index were revised and problems related to the sharp uptrend in the data of price indices of China for some years were adjusted (details in RBI Bulletin, January 2008). The NEER of the

Indian rupee (six currency trade-based weights), which is the weighted average of bilateral nominal exchange rates of the home currency in terms of foreign currencies, of the RBI depreciated by 4.6 per cent in 2006-07 – higher than the levels indicated by headline exchange rate of the rupee against the US dollar. In the current financial year (as on December 20, 2007), the NEER appreciated by 6.8 per cent. The NEER (36 currency, Base 1993-94) as per the export-based weight-based index also evinced a similar pattern. The REER (six currency, trade-based weights) that indicates the real competitiveness by factoring the relative price levels of competitors, after depreciating in 2006-07, appreciated by 7.2 per cent in 2007-08 (Table 6.21). Any real impact of the rupee appreciation on exports needs to reckon the loss in REER terms.

Table 6.21 Appreciation/depreciation of rupee as per NEER/REER

| Index | 2006-07 | 2007-08 |
|---------------------|--------------|---------|
| 6 currency indices | Base:1993-94 | |
| NEER trade based | -4.63 | 6.76 |
| REER trade based | -1.71 | 7.21 |
| 36 currency indices | | |
| NEER export based | -4.07 | 9.08 |
| REER export based | -3.08 | 8.10 |

Source: RBI.

Note: 1. Data for 6 currency indices up to December 20, 2007.

2. Data for 36 currency indices up to October 2007 .

Figure 6.11 REER of selected countries

