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Rupee Stability: Role of the Indian Central Bank

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ABSTRACT

The Indian rupee has remained maintained a stable movement in the recent past. On 19th December, 2024, IMF in the annual Article IV country report for India noted that from December 2022 to October 2023, the rupee-dollar rate “moved within a very narrow range” ([The Indian Express, Dec 22, 2024](#)). In response RBI iterated that the view was ‘incorrect’ and the evaluation “unjustified” ([Wion, Dec 20, 2024](#)). The RBI has, till date, consistently stated that it uses intervention to curb ‘excessive’ volatility but not to guide the value of the currency. Earlier, in September 2022, the MPC statement called rupee a “freely floating currency” with “market determined” exchange rate. In August 2023 MPC statement, RBI Governor stressed the fact that India has “adequate reserves” for forex “intervention” to curb “excessive volatility”¹. In this context, we look at the central bank’s intervention policies in the recent past to understand the impact of intervention on the rupee movement.

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¹ August Monetary policy statement of Governor, RBI “...forex outflows cause excessive volatility in the exchange rate of Indian Rupee, the RBI supplies US dollars to the market to curb volatility and to ensure that there is adequate forex liquidity. Thus, forex reserves are like an umbrella to use during rainy days”, https://www.rbi.org.in/Scripts/BS_PressReleaseDisplay.aspx?prid=56174

Rupee Stability: Role of the Indian Central Bank

1. Rupee: Movement in the recent times

Figure 1 shows the movement in the Indian rupee in the recent past (August 2022 to March 2024). We can see that from September 2022 to September 2023, the period from October 2023 to March 2024, has seen the range in rupee being substantially smaller. While the period from September 2022 to September 2023 has also seen a range bound movement the range has been greater, from 81.8 to 82.8. However, the movement from October 2023 to December 2024 has remained within 82.8 to 83.3. The lower panel of this Figure shows the Average True Range (ATR)², which is an indicator of volatility. We can see the volatility has substantially gone down from October 2023. Figure 2 shows the INR movement in the context of the movement in other currencies: Brazilian Real (BRL), Renminbi (CNY), South African Rand (ZAR), Indonesian Rupiah (IDR). It can be seen that, other than BRL, the emerging market currencies IDR, ZAR, CNY and INR has seen a sharp depreciation from 2022. While there has been greater stability in these currencies from 2023 onwards, the movement in INR is most stable. In fact, the period from October 2023, the INR movement has shown a sharp fall in volatility matched closely by the Renminbi's movement. The volatility, as measured in terms of standard deviation, for the period October 2023 to March 2024, is 0.00098 for INR, followed by 0.00179 in CNY. Further there are resistance maintained by rupee at certain levels as seen from Figure 1.

[Figure 1]

[Figure 2]

2. Rupee: A managed float?

As a context for the discussion ahead, let us examine the RBI stance on rupee over the years. India has been consistently characterized as a managed float regime by the RBI, with interventions in foreign exchange markets to curb 'excessive volatility' compared to the peer group currency (RBI 2013). RBI intervenes directly: both in spot and forward markets. However, interventions are conducted confidentially through 'select' public sector banks (Basu, 2009) to avoid speculation on rupee. India has therefore been a classic managed float, with consistent intervention in FX markets to stem volatility, rather than a freely floating currency, characterized by minimal direct interventions. Over the years, the RBI has also consistently stated that volatility reduction is a strong reason behind its presence in the foreign exchange market (Reddy 1997, 1998; Jalan 2003; Mohan 2006; Khan 2012, 2014, Das, August 2023). However, it is debatable whether RBI seeks to move the exchange rate towards 'target' values. While Jalan (2003) explicitly stated that RBI does not seek to target rates, the financial press has speculated on whether RBI intervention is to guide exchange rate movement in desired direction.

² Average True Range looks at the difference between the high and low values, or the range in prices during a trading session

The intervention data from RBI supports the categorization of rupee as a ‘managed float’. The post pandemic intervention data (published monthly by RBI) shows frequent spot and forward market interventions, both during depreciating and appreciating spells of the rupee. Figure 1 below shows foreign exchange (FX) intervention gained momentum in last two years in both spot and forward markets. Furthermore, intervention in the forward market have increased manifold post pandemic. Figure 3 shows both spot and forward intervention has been consistent, with the forward market intervention far greater than the spot intervention.

[Figure 3]

3. Mode of intervention and its impact

Figure 4 puts the intervention data in the context of the rupee movement. The topmost panel shows the rupee movement since 2019: the next panel two panels the spot intervention data (net purchase of dollars), and the forward intervention data respectively. The bottom most panel gives the reserve position. The sharp depreciation of rupee during the pandemic (spike up in rupee) matches the spike down in net purchase in the second panel, as spot sale of dollars were carried out. The forward market shows increased forward dollar sales during this time. From 2021 onwards where rupee had an appreciating spell, net purchases both in spot and forward have gone up. RBI has consistently used the dollar swap to avoid the impact of spot intervention on the domestic liquidity. The depreciating phase of rupee in 2022 sees a sharp fall in net purchase both in spot and forward markets, suggesting dollar sales. In 2023, intervention in spot and forward has kept rupee hovering at the 80-83 range. This can be seen in both the spot and forward intervention. The reserves chart shows a movement in tandem with the forward purchase data.

A few points are noteworthy:

1. The interventions during appreciation and depreciation has contained volatility.
2. The appreciating spells have been used to build up the reserves
3. The mode of intervention has shifted extensively to the forward market, which impacts the premiums and gives a forward guidance on the rupee. In effect, the present liabilities created out of dollar intervention are transferred to future.

[Figure 4]

[Figure 5]

To understand the future liabilities created by intervention, Figure 5 shows the maturity wise breakup of the liabilities. We can see that long term maturity was increasing post pandemic and spiked in the recent past from 2023 onwards. This suggests that forward swaps to be settled during this time were carried forward, or matching new swaps undertaken. The evidence suggests repercussions on domestic liquidity are being carefully handled by the central bank by intervening majorly through the forward market, but the maturity breakdown suggests increase in future liabilities. The reserve build-up to support intervention, it must be stressed, also has a cost in terms of investment in dollars.

What is the impact of intervention on businesses? The intervention methods may protect core businesses from vagaries of rupee movement, which we can assume, is something the central bank is keen about. The actions in the forward market by acting on premiums, impact the business decisions of the importers and exporters. However, buy-sell swaps, following depreciation, put downward pressure on premium, which will discourage exporters from hedging optimally. Importers in this case will hedge, encouraging future import decisions, rather than exports. This in effect will put further depreciating pressure on rupee, as seen during July 2022³. It is evident that RBI has prevented sharp crashes in rupee. However, reigning in the markets every time requires massive intervention, and dependence on reserves. Direct intervention, done through spot or forward, impacts businesses and has a cost, while ensuring stability of the exchange rate.

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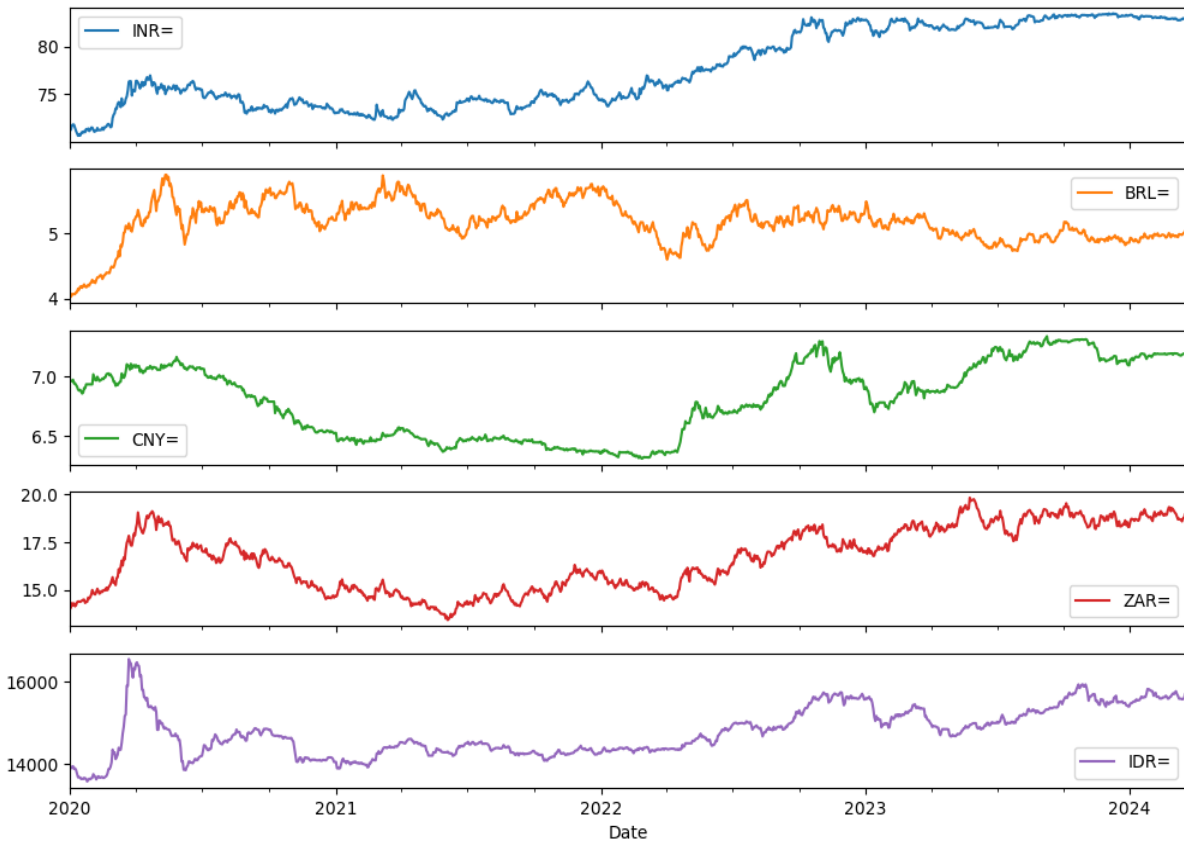
³ [rupee news: RBI may be back to spot intervention in defense of rupee - The Economic Times \(indiatimes.com\)](https://www.indiatimes.com)

Figure 1
INR MOVEMENT (August 2022 to March 24)



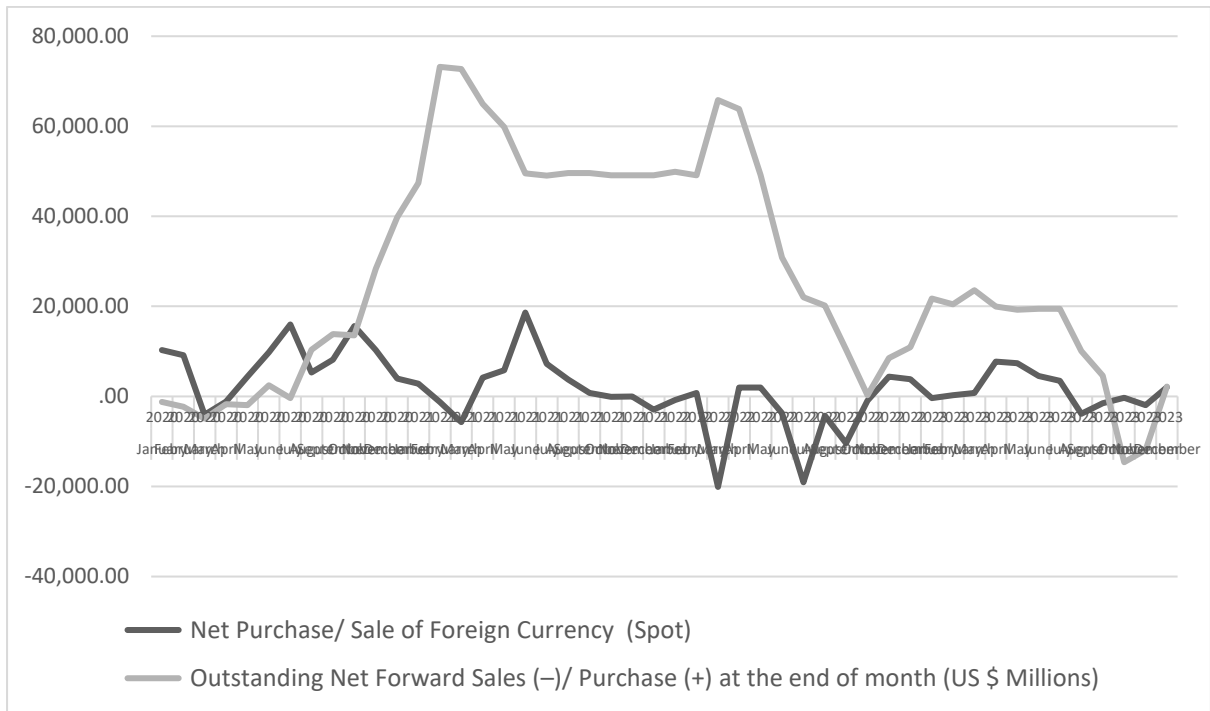
Source: Eikon, Refinitiv

Figure 2
Movement in major currencies



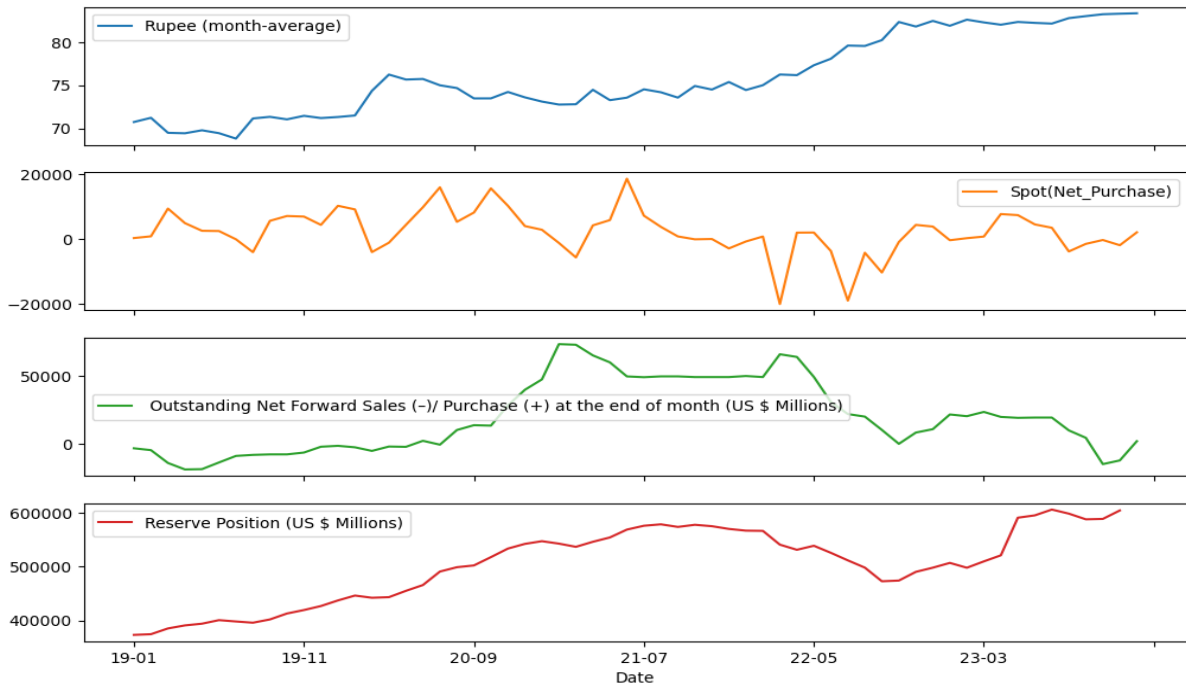
Raw data source: Eikon, Refinitiv

Figure 3
RBI interventions in the Forex market (Spot and Forward)



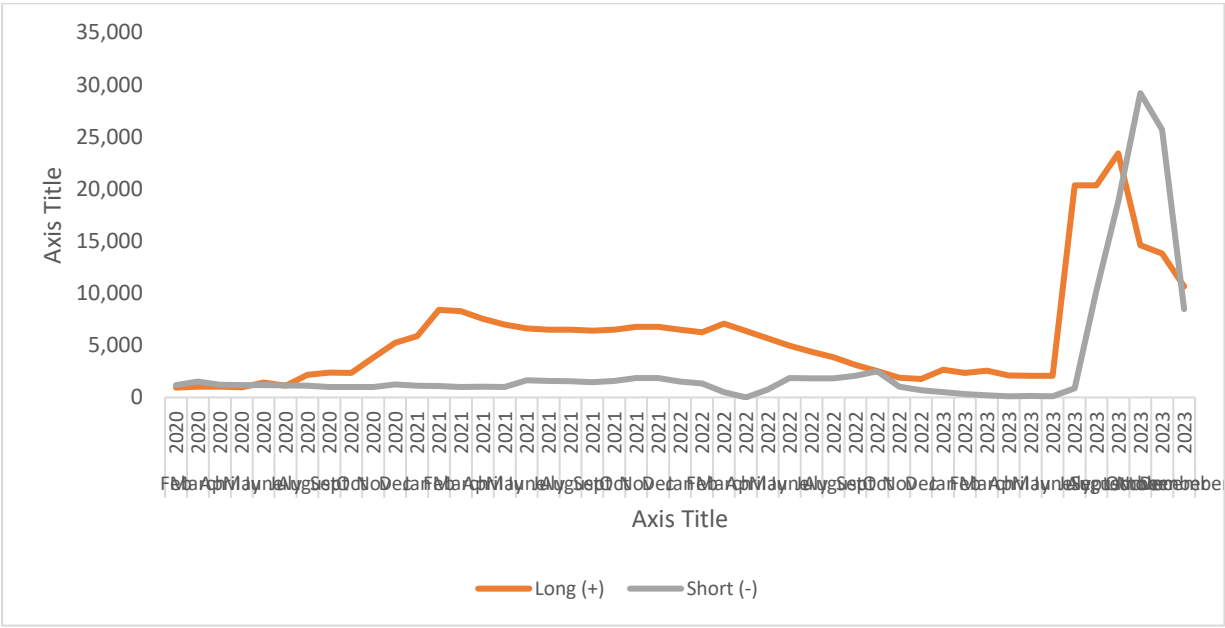
Raw data source: RBI database

Figure 4
Rupee movement, Spot Intervention, Forward Intervention, Reserves



Raw data source: RBI database

Figure 5
Maturity Breakdown (by Residual Maturity) of Outstanding Forwards of RBI (US \$Crores)



Raw data source: RBI database