STCI Primary Dealer Ltd

The Impossible Trinity & System Liquidity

Highlights:

- ***The USD/INR currency pair has depreciated by 4.6 per cent against the dollar during FYTD 2024-25.***
- ***The effects of FII/FPI selling Indian assets and weak FDI inflows have led to a net FX sale by the central bank worth USD 45 Billion during Q3 FY2024-25.***
- ***The Impossible Trinity is at play again in India, as safe haven assets are in demand, prompting RBI to intervene in the dollar markets.***

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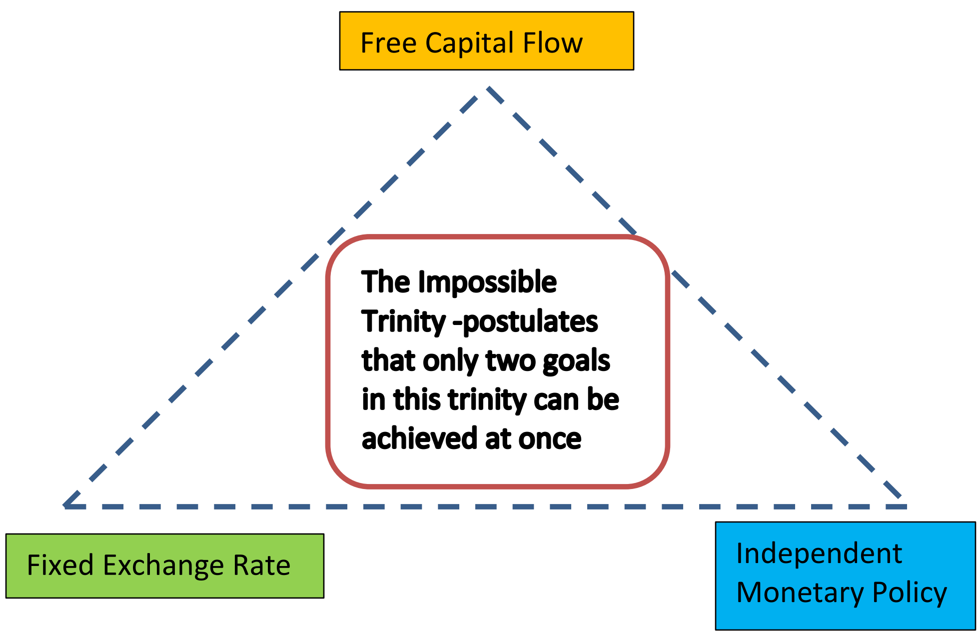
The recent movement of the USD/INR currency pair has brought attention on RBI's actions to curb the volatility in the Indian Rupee. This has been caused by two prominent factors, the interest rate spreads narrowing between US and India, indirectly affecting the capital flows and the significant appreciation of the dollar against major currencies since the US elections. RBI has been significantly intervening by selling dollars in the foreign exchange markets, and systemic liquidity deficit has deepened since October 2024. There are other factors at play, such as a build-up government cash balances and cash leakages. RBI announced liquidity injecting measures such as a 50 basis points CRR cut, OMO purchases and FX swaps. The Impossible Trinity or the relationship of a managed exchange rate, monetary policy and an open capital account have thus once, again come into the forefront. We look into the dynamics of RBI's recent actions and their effects on systemic liquidity.

Backdrop: The impossible trinity or the trilemma in economics states that an economy cannot have an independent monetary policy, a fixed exchange rate and also have full capital account convertibility simultaneously. For the Indian economy, the implications are different as India does not have a fixed exchange rate regime but rather a system termed as a *managed float*. This implies that the central bank i.e. RBI intervenes in the market only to curb excessive volatility. As the definition of the level of volatility which is excessive, is more or less arbitrary, there can be confusion on the real intent of the central bank leading multilateral agencies such as the IMF to term RBI as a stabilized arrangement based on their own criteria of excessive intervention.

Since 2016, India has adopted a Flexible Inflation Targeting (FIT) framework which makes price stability the primary focus for the central bank. In this light, the management of the external sector becomes even more challenging in an uncertain global capital scenario resulting in sudden surges and reversals in capital flows. The recent depreciation of the USD/INR pair is a case in point.

The Impossible Trinity & Inflation Targeting: The concept of the impossible trinity or policy trilemma follows from the principle of the uncovered interest rate parity principle. This principle states that investors will compare the deposit rates between two countries and will be indifferent between the two interest rates as the exchange rate between the two countries will adjust such that the return on one currency will exactly equal the return on the other. In simple words, the interest rate of home currency is equal to the interest rate of foreign currency plus the expected rate of depreciation or appreciation in the home currency. This helps in understanding the determination of the spot exchange rates for any country, though this principle is not inviolable and many a times falls short of providing any neat explanation for currency movements, especially for emerging market economies like India.

Figure 1: The Impossible Trinity



As a result of this linear linkage between exchange rates and interest rates, if a country follows a fixed exchange rate regime along with an open capital account, and tries to implement monetary policy independently, significant capital outflows will require the country to defend the level of fixed exchange rate with its foreign exchange reserves. Hypothetically, if the outflows keep continuing there might arise a situation where the foreign exchange reserves sink to zero and the home currency would have to undergo a currency devaluation unless the monetary policy is changed to set interest rates in alignment with the foreign currency interest rates.

The USD/INR Movement: The Indian rupee has been through various phases of volatility in the period since the COVID-19 pandemic, and witnessed a sharp depreciation of ~8 per cent during the outbreak of the Russia-Ukraine conflict during April to November 2022. Since then the rupee had been more or less within the ₹ 82-84 per dollar range up to October 2024, during which period the USD/INR depreciated by ~2 per cent. A range bound rupee amidst volatile global economic and geopolitical conditions was the handiwork of RBI intervention in the FX markets, resulting in significant accumulation of the dollar reserves.

The USD 705 billion peak in FX reserves was reached during September 2024 as RBI kept buying dollars to avoid sharp rupee appreciation on the back of strong dollar inflows following India's inclusion in global bond indices. India follows an export promotion-based currency management policy, not letting the rupee appreciate too quickly.

Chart 1: DXY & USDINR

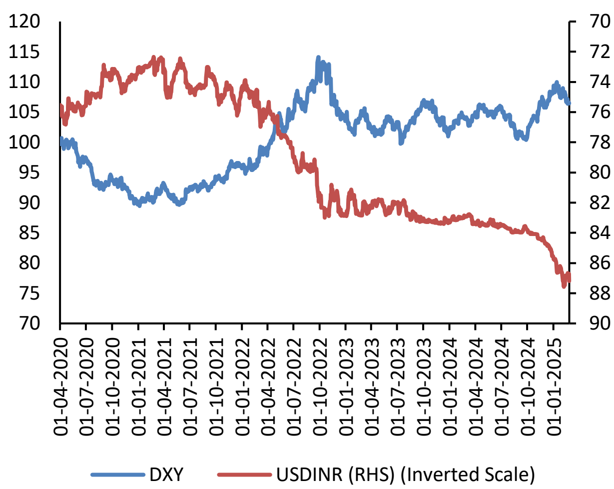
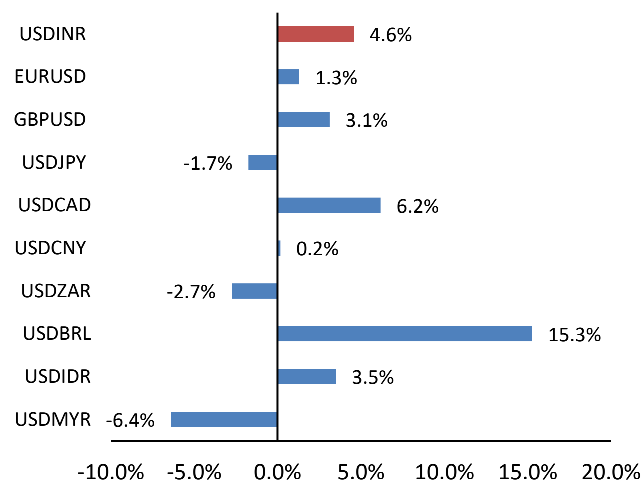


Chart 2: Movement in Currencies (%)

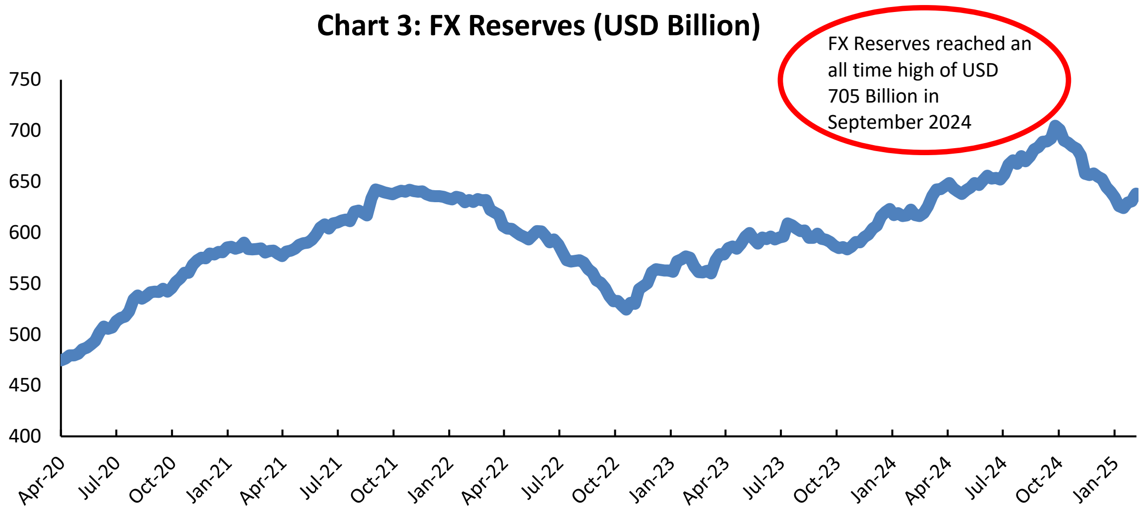


Source: Bloomberg

Capital Flows: The Indian scenario has been quite fragile in terms of the dependence on the foreign flows to bolster financing the current account deficit of the country which stands at 1.2% of GDP as of Q2FY2024-25. Net Foreign Direct Investments have declined by USD 3.3 billion in Q3 FY2024-25 and portfolio investments remain volatile and subject to the vagaries of the international interest rates in general and the US interest rates in particular. During Q3 FY2024-25, FII/FPIs have net sold USD 11.9 billion or approximately ₹ 1 lakh crore aggregated over debt and equity assets.

Trade deficit for the third quarter is estimated to be ~USD 36.8 billion dollars, and total outflows are estimated to be around USD 51.6 billion. The Chinese yuan also depreciated against the dollar by 0.2 per cent during Q3 FY2024-25, which would be negative for

Indian exports as Chinese exports would be more competitive on a relative basis vis-à-vis the Indian exports. Post October 2024, when India began witnessing capital outflows, and RBI sold dollars on the market in an attempt to stem the sharp depreciation of the USD/INR currency pair.



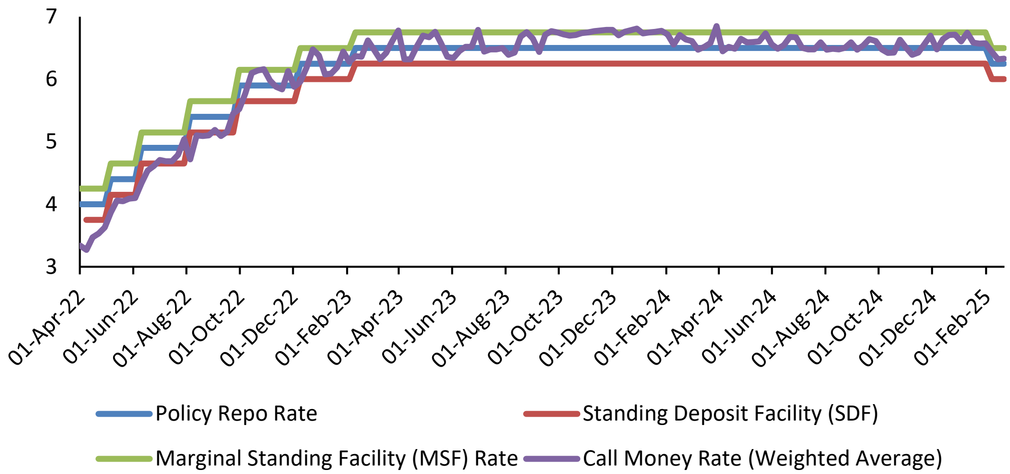
Source: RBI

Implications of RBI's Dollar Sales on Liquidity: Since October 2024, RBI has aggressively sold dollars in the open market to support the rupee. Forex reserves dipped by USD 64.4 billion of which net sale of dollars amounts to ~USD 45 billion on the spot market during Q3FY2024-25. The immediate effect of such significant spot sales on the banking system has been the outflow of INR from the banking system i.e. a scarcity of rupee liquidity. This would naturally result in the operating rate i.e. Weighted Average call rate (WACR) to rise hover between the repo and MSF rate which is the upper end of the liquidity corridor.

In terms of the LAF corridor, the call rate trading above the repo rate, is counter to the objective of monetary policy to keep the WACR within the repo and the SDF (earlier it was the reverse repo rate). To curb this reaction in the money markets, RBI often does "sterilized" intervention, i.e. buying sovereign bonds to dampen the effect of significant dollar sales and inject the system with adequate liquidity. RBI has begun injecting liquidity by OMO operations. RBI has also cut CRR conducted longer term FX Swaps to provide adequate durable liquidity. This is excluding the usual VRR/VRRR auctions RBI conducts to smoothen the day-to-day operational liquidity needs of the banking system.

RBI has significant outstanding net short forward positions worth USD 67.94 billion as of December 2024 and also in the non-deliverable forwards (NDF) markets. Though forward positions have no immediate liquidity impact, foreign exchange reserves can be construed to be lesser by an equivalent amount since RBI will have to sell dollars in the forward markets if it decides not to roll over the same.

Chart 4: Money Market Rates (Per cent)



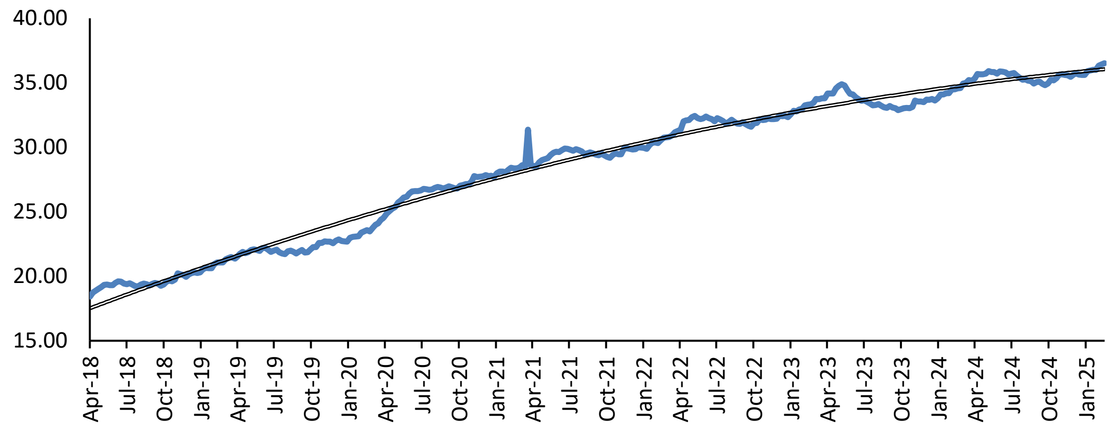
Source:RBI

Liquidity Management by RBI: The three autonomous drivers of liquidity, government cash balances, capital flows and currency in circulation have been straining system liquidity. The Union Government has stuck to its fiscal consolidation path and remained conservative in terms of spending, leading to episodic and large accumulation of cash balances in the government accounts creating a drag on system liquidity. Moreover, banks are facing the heat due to the Just-in-Time (JIT) accounting that has been introduced recently, under SNA SPARSH, which enables real time money transfer for all government and state government accounts depriving banks of the erstwhile float or idle cash lying in the bank accounts for weeks and sometime months. Also, deposit growth has slowed into single digits at 6% as on February 21, 2025.

The total intervention from October 2024 in spot dollar sales has been USD 45 billion or ~₹ 3.8 lakh crore in Q3 FY2024-25. These interventions of the RBI have had an adverse and lingering effect on the banking system liquidity since much of the interventions have been unsterilized. RBI has announced OMOs worth ₹ 2.0 lakh crore in Q4 FY2024-25, of which it has already conducted ₹1.5 lakh crore worth of purchases. RBI has also conducted its usual onscreen NDS-OMO purchases worth ₹ 38,865 crore FYTD2024-25, and in the initial part of the financial year RBI also sold securities worth ₹ 24,090 crore.

Currency-in-Circulation (CIC) which is also an autonomous driver of liquidity has been on the rise since the festive season and has particularly increased due to the cash usage during the Mahakumbh. The latest updated data published by RBI, which indicates currency in circulation to be ₹ 36.5 lakh crore as on 21st February,2025, and the currency leakage is estimated at ₹ 1.04 lakh crore since December 2024, which coincides with the busy season and also the activity pre-MahaKumbh.

Chart 5: Currency in Ciruclation (In ₹ Lakh Crore)



Source:RBI

The currency leakage has pulled the circulating currency above trend, indicating an additional strain on the banking system liquidity. In terms of magnitude, the leakage is less than 3 per cent of the total currency in circulation though from a liquidity perspective it adds to the pressure on the banking system which is already facing a deficit on average of ₹ 1.43 lakh crore from December 2024 to 4th March 2025, despite the various liquidity management measures taken by the central bank including a CRR cut of 50 basis points in December 2024 injecting ~₹ 1.2 lakh crore, a total OMO purchase of ~₹ 1.9 lakh crore so far. In addition to this, RBI has also conducted FX Buy/sell swaps amounting to USD 15.2 billion, or ~₹ 1.3 lakh crore where RBI would buy dollars in the spot market and the effect on system liquidity will be similar to the OMO purchases, though this would lead to some appreciation of the dollar in the short term.

Conclusion:

In effect, the RBI has injected durable liquidity worth ~₹ 4.5 lakh crore with the CRR cut, FX Swaps and OMO purchases and yet the system remains in deficit as all the three autonomous drivers of liquidity remain adverse with the central government piling up cash balances, dollar capital outflows and steady leakages in currency. This in addition to the new Just-in-time payment methodology being adopted to bring in efficient management of cash in government accounts both in the central and state cash flows has aggravated the liquidity tightness in the banking system. Robust capital inflows from the external front are associated with higher credit growth, which can be seen during the year FY2022-23, and to an extent during FY2023-24. This trend has reversed in FY2024-25 on the back of capital outflows. The central bank has used its tool kit to manage and smoothen exchange rate volatility as far as possible, though the extent of the effect can be seen in the fall of the INR in recent times.

The recent spate of volatile movements that the USD/INR currency pair post October 2024 puts the limelight on the currency and liquidity management of the central bank and also the global environment that emerging market economies are facing and will continue to face in the near future. The world is seeing increasing fragmentation and barriers to the global trade, with the largest economies in the world contemplating and implementing restrictive tariff barriers to trade flows and labor immigration. The theory of impossible trinity comes to relevance in the real world especially during such episodes of strong capital outflows.

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