Ecowrap

FROM FLEXIBLE INFLATION TARGETING TO OPEN ECONOMY INFLATION TARGETING:TRANSCENDING THE RBI PATH

'Be the Bank of Choice for a Transforming India'

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We live in interesting times, otherwise what would explain the complete nonchalance shown in the rupee value, that has been showing steady appreciation even as the devastating second wave of COVID-19 has crippled economic activity. Rupee has gained 154 paise between 12 Apr'21– 7 May'21. We, however, believe this is perhaps the result of exchange rate anchored Inflation targeting that the RBI has assiduously shifted to recently. This is also evident from the recent changes in the RBI Quarterly Projection Model (QPM) model that has been calibrated to include balance of payments and exchange rate interactions as well.

So what has changed? In the merchant market (in both spot and forward segment) there was an excess supply of $86 billion during Apr'20– Feb'21. However in the interbank market there has been excess demand of $72 billion. Overall, merchant dollar supply is far higher than demand as they anticipate a stronger rupee and hence may be holding to short position in dollars, without even adequate hedging. This is being balanced by excess dollar demand in interbank market, but the net effect is a large supply of dollars at $14.4 billion, that has however reduced to $348 million in the last 5 months ended Feb'21. The supply of dollars in the spot market during Apr'20– Feb'21 by merchant segment is as much $101 billion, while in the forward merchant segment, there is an excess demand of $14.7 billion. The interbank market however shows an excess demand in both the segments.

The good thing is that given the prospects of higher domestic inflation, as supply disruptions mount, it is not doing any harm for RBI to lean with the wind and let rupee appreciate as it is reducing imported inflation when metal prices are rising, and clearing the liquidity overhang to some extent. In fact, the large supply of dollars will ensure that rupee will appreciate from the current levels and this could potentially play to the advantage of RBI in inflation management.

However, there is more to this exchange rate management. To neutralise any additional liquidity, the RBI is also intervening in the forward markets through swaps. RBI is doing what is called a sell/buy swap where the RBI is selling the dollars now to buy it back at a future date and paying a premium. Intervention in forward market is an important aspect of maintaining financial stability, although the move has been gradual. In the 1950's and early 1960's there was a considerable debate on the efficacy of intervention in the forward exchange market following John Sparos (Economic Journal, 1959). Going by John Sparos, the best way to fight currency speculation is to deliberately let the forward premia rise to unreasonable levels and thereby penalise the currency speculators as their exchange rate expectations about a depreciating domestic currency are belied.

Herein lies the future challenge. Rising forward premia makes the carry trade lucrative and inflows keep pouring which again leads to further currency appreciation and hence more liquidity overhang. In the end, there could be limits to sterilised intervention and rise in forward premia beyond a threshold level. It may be noted that a high premia also deters importers from hedging their dollar positions.

The challenges posed by the pandemic are being exacerbated by the confounding market behaviour. There could be always a possibility that growth outlook of US, UK and even European Union remains strong as the regions have recovered from multiple COVID-19 waves through aggressive vaccination. India is currently only in the initial phase of vaccination and in the midst of a catastrophic second wave. In that case, if capital flows reverse, exchange rate could start depreciating and inflationary pressures will mount further, thus complicating the task of MPC to balance the trade-off between growth and inflation. Additionally, the other issue is that with significant open positions in USDINR carry trade, a vibrant Non-Deliverable forward market with big players and a high forward premia, if due to any event, the positions are unwound, it can put significant depreciating pressure on the rupee.

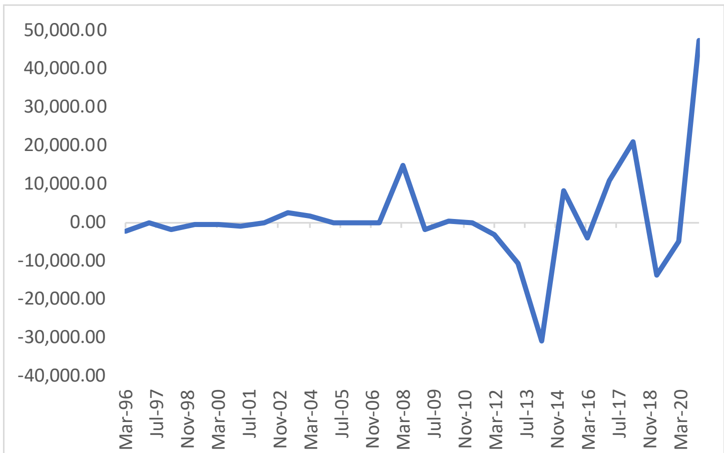
The RBI has played an amazing role through the pandemic and we only hope that fortune favours the brave! Bur for that, vaccination and specific administrative reforms by Centre and states in the interregnum in enabling a better medical infrastructure to prevent any further wave hold the ace.

ANCHORS FOR MONETARY POLICY

- Earlier, monetary authorities used to target the exchange rate, the nominal anchor, by pegging it to the currency of a stable, low inflation nation. However, because the pegged currency was at the mercy of a foreign currency it constrained the pegged currency central bank's ability to respond to economic and financial shocks.
- As a result, many countries have adopted flexible exchange rates. In India, too, we have seen this happen. In the post-independence period, India's exchange rate policy has seen a shift from a par value system to a basket-peg and further to a managed float exchange rate system. With the breakdown of the Bretton Woods System in 1971, the rupee was linked with pound sterling.

- 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 till the early 1990s. The initiation of economic reforms saw, a two step downward exchange rate adjustment by 9% and 11% between July 1 and 3, 1991 to counter the massive draw down in the foreign exchange reserves, to install confidence in the investors and to improve domestic competitiveness. The Liberalised Exchange Rate Management System (LERMS) was put in place in March 1992 involving the dual exchange rate system in the interim period. The dual exchange rate system was replaced by a unified exchange rate system in March 1993. Now, India is classified as a 'managed float' system and RBI intervenes only to curb excess volatility in the exchange rate market.
- Also, the adoption of the flexible inflation targeting regime from 2016 mandates that no other variable is explicitly targeted besides inflation. The Monetary Policy Committee has been successful in achieving this objective and has focused predominately on controlling inflation by changes in the interest rate. The external environment characterised by slow global growth and benign crude prices led to mitigation of risk transmission through external channels and hence the MPC did not have to worry excessively about financial instability brought about from sudden changes in external sector metrics.
- However, the pandemic has brought forward new policy dilemmas. RBI, like all other central banks has given growth a priority, while making sure that the system is financially stable. Developing countries' central banks, however, have been grappling with the floodgates of liquidity opened by advanced nations. Last year as the COVID crisis brewed, investors started pulling out capital flows from emerging economies, including India which impacted rupee adversely. However, as advanced economies were showing substantial weakness investors again started looking towards the emerging markets like India which showed resilience. After witnessing substantial capital outflows in Mar'-May'20, India started seeing massive inflows. Between Jun'20 and Jan'21, the FII inflows totaled $76 billion. This has put significant upward pressure on the rupee.
- In the past when growth was faltering it translated in depreciating rupee, which through the trade channel, helped the exports. The appreciating currency in times when growth is a priority, is not what the central bank is looking for, as it might hamper exports growth and affect overall growth adversely. Thus, it has engaged in active forex market intervention to not let the rupee appreciate, despite the positive impact it could have on inflation.
- RBI has been engaging in spot dollar purchases, which have led to record forex reserves in RBI's kitty. With the RBI intervention in the spot market, to mop up the dollars, rupee liquidity has been released. To neutralise any additional liquidity, the RBI is intervening in the forward markets through swaps. RBI is doing what is called a sell/buy swap where the RBI is selling the dollars now to buy it back at a future date and paying a premium.
- RBI can also directly buy dollars in the forward market and after the stipulated time of the contract, it can buy the dollars from the bank. Looking at the data, it appears that RBI has been intervening heavily in the forward market. From a net seller of dollar forward contracts, in July 2020, RBI turned into a net buyer of dollar forward contracts and its outstanding position is $47.3 billion dollar in Jan'21. The maturity breakdown shows that RBI has the highest residual maturity in the more than 3 months and less than 1 year bracket of the amount equivalent to $44 billion.
- Intervention in forward market is an important aspect of maintaining financial stability, although the move has been gradual. In the 1950's and early 1960's there was a considerable debate on the efficacy of intervention in the forward exchange market which was started by John Sparos. Following a policy of leaning against the wind in the spot exchange market and simultaneously leaning with the wind in the forward market is dubbed as the Sparos effect. Going by John Sparos, the best way to fight currency speculation is to deliberately let the forward premia rise to unreasonable levels and thereby penalise the currency speculators as their exchange rate expectations about a depreciating domestic currency are belied.

Outstanding Net Forward Sales (-)/ Purchase (+) at the end of month (US $ million)



Source: RBI

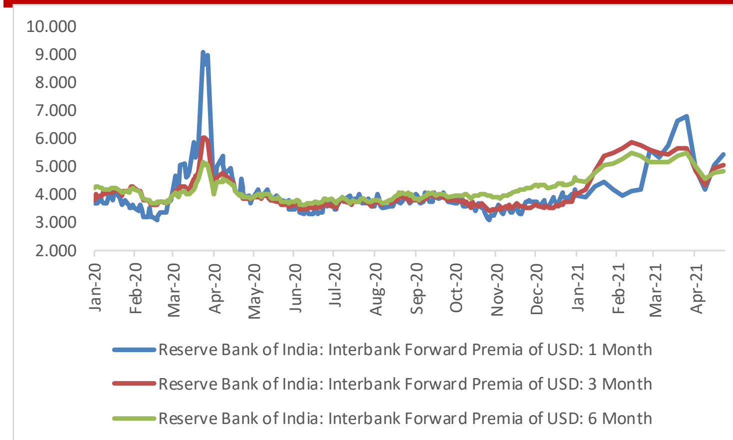
CURRENT SITUATION

- Currently, rupee has been trading with an appreciating bias in the spot market while in the forward markets the rising premia signals a weaker currency in the future. The RBI intervention in the forward markets could be pushing up the forward premia. But a rising forward premia is a signal for carry traders to pour in more money in the market, as they earn profits from currency arbitrage. By the ex-ante uncovered interest parity (UIP) condition in international finance, higher yielding currencies are expected to depreciate against the (foreign) lower paying counterpart. In practice, however, this condition is often violated. If we look at the scenario playing out in Indian exchange rate market, there is clear evidence that UIP is not holding.
- Rising forward premia makes the carry trade lucrative and inflows keep pouring which again leads to appreciation. In the forex market, in the merchant market there was an excess supply during Apr'20– Feb'20 (till 26th Feb). In the forward segment, there was demand for dollars in Dec'21 and Jan'21. But as premia rose it has deterred importers from hedging their dollar positions. Till Apr'20-Feb'21, the excess forward demand has been $14.7 billion. However in the interbank market the trend is quite opposite and there has been excess demand of dollars in both the spot and forward segment. For the entire market, the demand for dollars was higher in the Apr'20-Feb'21 period, driven by the interbank spot market. However, a tepid forward demand for dollars in the interbank market shows that, the appreciating bias on rupee remains.
- Recently in April, with the RBI announcing ₹1 lakh crore bond-buying plan, sharp depreciation pressures on rupee was seen. The rupee lost 115 paise on the day of this announcement and breached 75 within a week. However, since then rupee has again started stabilizing as RBI intervened and provided support to rupee.
- Also, with markets factoring in that many other countries had recovered from the second wave and the expectation that rising inflation will withhold RBI from letting the rupee depreciate rapidly, the speculators have again started demanding rupee and shorting dollar. However, the data for forward purchases is available with only a lag and going by the spot rupee exchange rate, it appears that rupee is going from strength to strength.

WAY FORWARD FOR RBI

- Now, what does this puzzling behaviour of the markets entail for the flexible inflation targeting regime in the open economy framework?

Forward premia % pa



Source: CEIC

Turnover in the foreign exchange market ($ mn)

Month	Merchant			Interbank			Grand Total
	Forward Excess Demand	Spot Excess Demand	Total Excess Demand	Forward Excess Demand	Spot Excess Demand	Total Excess Demand	
Feb'21	-1,450	-2,830	-4,280	2922	9171	12,093	7,813
Jan'21	6,695	-8,014	-1,319	4990	1383	6,373	5,054
Dec'20	4,521	-12,779	-8,258	7610	-929	6,680	-1,578
Nov'20	-3,260	-10,441	-13,701	6317	2259	8,575	-5,126
Oct'20	-1,876	-12,300	-14,176	-1120	8785	7,664	-6,512
Sep'20	1,257	-7,174	-5,917	4303	2973	7,276	1,359
Aug'20	1,650	-13,461	-11,811	4595	3181	7,776	-4,035
July'20	2,239	-8,466	-6,227	341	7,248	7,589	1,362
Jun'20	1,726	-12,647	-10,921	943	6,354	7,297	-3,624
May'20	1,495	-7,603	-6,108	1,661	-202	1,459	-4,649
Apr'20	1,691	-5,476	-3,785	2,663	-3,326	-663	-4,448
Mar'20	9,343	-4,694	4,649	4,937	-9,601	-4,664	-15
Feb'20	3,053	-8,884	-5,831	1,875	3,693	5,568	-263
Jan'20	4,471	-8,532	-4,061	-628	4,109	3,481	-580
Dec'19	5,897	-11,599	-5,702	2,838	3,520	6,358	656

Source: RBI

- With significant open positions in USDINR carry trade, a vibrant Non-Deliverable forward market with big players and a high forward premia, if due to any event, the positions are unwound, it can put significant depreciating pressure on the rupee, thus impacting inflation adversely.
- For an inflation targeting regime, the key variable to target is inflation but in the current situation growth concerns outweigh inflationary pressures. So will a depreciation induced inflation force MPC to raise rates?
- As per a recent report by RBI, the monetary policy rate is not found to respond directly to exchange rate movements or the federal funds rate, although the conduct of monetary policy is sensitive to financial shocks, both global and domestic.
- Estimates of Exchange Rate Pass Through suggest some moderation during the Flexible Inflation Targeting period, but inflation can still alter by 0.1-0.13% for every 1% change in exchange rate, warranting that the exchange rate be closely monitored as a key information variable for the conduct of monetary policy.

- RBI had also been utilizing the Quarterly Projection Model (QPM), a forward-looking, open economy, calibrated, new-Keynesian gap model, incorporating specific characteristics of the Indian economy, which provided the basis for decisions under the FIT. Taking into account the changing dynamics, the model has been calibrated recently to include balance of payments and exchange rate interactions as well.
- So, the exchange rate component does get factored in implicitly. However, with the principle of one variable for one target, the MPC cannot explicitly target the exchange rate, while targeting interest rate as well.
- So what can RBI do? It can adopt the exchange rate anchored Inflation targeting, as referred to by Buffie et al (2018), who have shown in their analytical experiments that this type of targeting does indeed help to enhance the viability of forward-looking IT and could enhance credibility.
- The combination of two instruments (interest rates and sterilised intervention) to achieve two objectives (price stability and exchange rate stability) is consistent with Tinbergen's principle: the interest rate is adjusted to achieve the inflation target level, whereas foreign exchange market intervention aims to mitigate large, temporary deviations in the exchange rate from its medium-term equilibrium value, assuming that the central bank knows that value with some degree of certainty.
- This two-target, two-instrument regime is needed especially for developing countries who battle the burden of expectations much more severely than advanced nations. we should not forget that by March 2008, RBI had also entered into forward dollar purchase contracts worth $14.7 billion and as capital flows reversed, it turned into a net seller by the end of March 2009 to support the rupee.
- The challenges posed by the pandemic are being exacerbated by the confounding market behaviour. However, with near zero yields in advanced nations in US and a continued stance of monetary easing, the upward bias to rupee might remain through capital inflows, unless we witness a huge current account deficit owing to rise in commodity prices. This could be a possibility as growth outlook of US, UK and even European Union remains strong as the regions have recovered from multiple COVID-19 waves through aggressive vaccination that India is currently only in the initial phase. In that case, if capital flows reverse, exchange rate could start depreciating and inflationary pressures will mount further, thus complicating the task of MPC to balance the trade-off between growth and inflation.

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