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Why is the Indian Rupee Depreciating?

The Indian rupee touched a lifetime low of 68.85 against the US dollar on August 28, 2013. The rupee plunged by 3.7 percent on the day in its biggest single-day percentage fall in more than two decades. Since January 2013, the rupee has lost more than 20 percent of its value, the biggest loser among the Asian currencies.

There is no denying that India is not the only emerging market experiencing a rapid decline in its currency's value. Several emerging market currencies are also experiencing sharp depreciation over the prospect of imminent tapering of the US Federal Reserve's policy of quantitative easing (QE) program. The South African rand and the Brazilian real touched four-year lows against the US dollar in June 2013. Except the Chinese Yuan and Bangladeshi Taka, most Asian currencies have witnessed sharp depreciation since the beginning of 2013. Nevertheless, the Indian rupee has fared much worse than other emerging market currencies because of its twin deficits – current account and fiscal deficits. The foreign investors are particularly concerned over India's bloated current account deficit (CAD) which surged to a record high of US\$88.2 billion (4.8 percent of GDP) in 2012-13. Despite a modest recovery in the rupee's value between September 4 and 12, the investors remain wary of India's excessive dependence on volatile "hot money" flows to finance its current account deficit.

Over the past several months, India's exports have considerably slowed down due to weak demand from traditional markets such as the US and Europe. While high imports of gold and crude oil have

Thanks to the Federal Reserve's aggressive policy of QE, the investors borrowed cheap money in the US and invested in higher yielding assets in India, Indonesia, South Africa and other emerging markets.

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pushed country's trade and current account deficits wider. The gold and silver imports were nearly \$33 billion (bn) during January-May 2013.

From Capital Glut to Capital Flight

There is ample reason for concern that capital outflows from India and other emerging markets will rapidly accelerate if the Federal Reserve decides to curtail its bond-buying program on September 17. This move would lead to higher interest rates in the US and investors may dump risky emerging markets assets in favor of safe havens.

Since the beginning of QE program, much of the money has leaked into emerging markets offering higher yields and better growth prospects. The emerging markets have been the biggest beneficiaries of Fed's loose monetary policy, which has pumped extra liquidity since the global financial crisis of 2008. According to the IMF, emerging markets received nearly \$4 trillion in capital flows from 2009 to early this year.

The investors borrowed cheap short-term money in the US and invested in higher yielding assets in India, Indonesia, South Africa and other emerging markets. This resulted in more money flowing into debt, equity and commodity markets in these countries. In India, many companies resorted to heavy borrowings overseas. The massive capital inflows also enabled India to comfortably finance its trade and current account deficits rather than addressing the structural aspects of CAD.

However, this money will quickly leave India and other emerging markets when the tapering of QE program begins. Already, emerging markets are witnessing a huge outflow of dollars as investors have started pulling money out of bond and equity markets. The foreign investors pulled out a record Rs.620 bn (\$10 bn) from the Indian debt and equity markets during June-July 2013. If the Federal Reserve decides to taper the QE program, the liquidity withdrawal would continue to put pressure on the rupee over the next 12 to 18 months.

Other Developments

There are a host of other factors which have added to the bearish sentiments on the rupee. Economic growth in India in the first quarter (April-June 2013) slipped to 4.4% due to a contraction in manufacturing and mining. A sharp rise in domestic food prices has also put a grinding pressure on the rupee.

Apart from economic factors, the rupee remains vulnerable to rising global oil prices and geo-political tensions in the Middle East and North Africa. As the threat of US-led war against Syria rises, oil prices are expected to rise which will further make it difficult for the Indian government to reduce CAD since India imports over 80 percent of its oil.

The Belated Policy Response

During July-August 2013, following measures were announced by the Indian authorities to stem the depreciation of rupee and contain the current account deficit:

- The duties on the import of gold, silver and platinum were increased to 10 percent.
- The limits on foreign ownership of sensitive sectors (such as telecoms and insurance) were further liberalized.
- New restrictions were imposed on Indian residents seeking to send money abroad to buy property.
- In mid-August, the existing limits on overseas direct investments by Indian companies were substantially reduced. However, this policy was withdrawn by the new governor of RBI on September 3.
- The interest rates limits for deposits meant for non-resident Indians were liberalized.
- New restrictions on open interest on USD-INR trades were imposed.
- Banks have been banned from trading in domestic currency futures and the exchange-traded options market on their own. Banks can only trade on behalf of their clients.
- The margin requirement on the domestic dollar-rupee forward trade was increased to 100 percent of the traded amount, which means investors will have to give the entire amount of the transaction upfront.
- The state-owned oil marketing companies (OMCs) – which buy dollars to finance their imports – were asked to trade only with a single state-owned bank.

It is surprising to note is that the above-mentioned policy measures failed to arrest the sliding value of the rupee in the currency markets.

Forex Swap Window for OMCs: A Sensible Policy Move

On August 28, the RBI announced a forex swap window for OMCs to meet their daily dollar requirement of over \$400 million through a designated bank. The OMCs will have to return the dollars to the RBI at a later date. By offering this facility to OMCs, the RBI took away a monthly demand of \$9 bn from the currency markets. This sensible move by outgoing RBI governor D Subbarao had an immediate impact as it successfully tamed speculative pressures on the rupee.

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The Indian regulatory authorities have no powers to regulate and supervise the offshore rupee NDF market.

Being a 24x7 market, the offshore NDF market exerts considerable pressure on onshore currency markets, particularly when the market sentiment is fragile for the rupee.

The RBI had announced a similar forex facility for OMCs at the onset of global financial crisis in 2008. This facility, however, was subsequently withdrawn. In August 2013, Brazil also announced a \$60 bn currency swap facility for companies and investors who wish to buy dollars. Under this facility, the Banco Central do Brasil, country's central bank, will offer \$3 bn of dollar loans and swaps per week till December 31, 2013. The central bank may provide additional funds operations to meet the dollar demand.

The Rise of Offshore NDF Market

Amidst all these developments, the critical role played by the offshore non-delivery forward (NDF) market in determining the value of rupee should not be overlooked. The rupee NDF market has mushroomed in key global financial centers with the liberalization of trade and capital flows since the 1990s.

NDFs are over-the-counter (OTC) derivatives instruments¹ for trading in non-convertible currencies such as the Indian rupee and the Korean won. The contracts are called "non-deliverable" since no delivery of the underlying currency takes place on maturity. The counterparties settle the contracts on maturity by paying the difference between the spot rate (decided by the RBI) and NDF rate, usually in US dollars.

Since NDFs are the OTC derivatives, the actual size of the market is not known but various surveys suggest that the trading volumes in the NDF markets are larger than the onshore markets. According to a study by the Bank for International Settlements (BIS), the daily turnover in offshore rupee NDF market was \$10.8 bn in 2010, nearly 52 percent of the total turnover (\$20.8 bn) in foreign exchange forwards and forex swaps.²

The NDF market for the rupee is mainly concentrated in Singapore, Hong Kong, Dubai, London and New York. In recent years, London has become a key centre for trading in the rupee NDFs. According to FXJSC Semi-Annual FX Turnover Surveys, the average daily trading in rupee NDFs in London increased from \$1.5 bn in 2008 to \$5.2 bn in 2012, a jump of 250 percent.³

Being an offshore market, the Indian authorities have no powers to enforce regulations on it. The domestic banks and companies are not allowed to transact in the NDF markets. The main participants in the rupee NDF market consist of commercial and investment banks, hedge funds, currency speculators, international subsidiaries of Indian companies and big diamond merchants.

Although the NDF market is primarily meant to provide a platform to companies to hedge their foreign exchange risk and related exposures,

the dominant players in this market are the speculators (who bet on the movement of the rupee) and arbitrageurs (who exploit the price differentials between offshore and onshore markets).

The Growing Influence of NDF Market

Being a 24x7 market, the offshore NDF market exerts considerable pressure on onshore currency markets, particularly when the market sentiment is fragile for the rupee. Before Indian markets open for trading, the NDF markets in Hong Kong and Singapore set the price movement of the rupee. A bearish or bullish trend in the NDF market set the tone for trading in the domestic rupee market.

An empirical study by a RBI staff member found that there are volatility spillovers from NDF market to spot and forward markets in India.⁴ The study also found that the magnitude of volatility spillover from NDF to spot and forward markets has become higher after currency futures were introduced in India in 2008.⁵ This is probably due to large arbitrage taking place between futures and NDF market, says the study.

In its latest Annual Report (2012-13), the RBI has acknowledged that there is a long-term relationship between the spot and NDF markets for the rupee. “During the period of depreciation, shocks originating in the NDF market may carry more information, which gets reflected in on-shore segments of the market through mean and volatility spillovers”⁶, states the Report.

Foreign Banks Playing the Arbitrage Game

Since foreign banks and institutional investors are present in both onshore and offshore markets, they profit from huge arbitrage

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Rampant Manipulation in Singapore’s NDF Market

Singapore is the offshore hub for trading in the NDFs of key Asian currencies. In the wake of Libor rate-fixing scandal, the Monetary Authority of Singapore (MAS) initiated a review of process for setting rates for NDFs in September 2012. The investigations carried out by MAS found that traders from 20 banks communicated with each other through email and electronic messaging to influence the NDF rate setting process run by the Association of Banks in Singapore. Some of the prominent banks found guilty in the rate rigging were UBS, ING, Royal Bank of Scotland, BNP Paribas, Barclays and Deutsche Bank. Based on its investigations, the MAS took penal actions against banks for professional misconduct and unethical behavior. Nearly 50 traders were suspended and guilty banks were asked to set aside additional statutory reserves (in the range of S\$100-1200 million) with the MAS at zero interest for a period of one year.

Primarily six foreign banks (namely Citibank, HSBC, Deutsche Bank, UBS, J P Morgan, and Standard Chartered Bank) are the key players arbitraging between the rupee NDF market and domestic markets.

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opportunities using the prevailing negative sentiments in the market. Such entities buy dollar-rupee forwards in onshore market and sell forwards in offshore NDF market. According to India Forex Advisors (a foreign exchange consulting and treasury management firm), a large demand for forward dollar pushes up forward rate and thereby influences the spot exchange rate in India. As witnessed during July-August 2013, the increased speculative trading in the NDF market exacerbated volatility in both the spot and the forward market in India.

Primarily six foreign banks (namely Citibank, HSBC, Deutsche Bank, UBS, J P Morgan, and Standard Chartered Bank) are the key players arbitraging between the rupee NDF market and domestic markets. Besides, a few international subsidiaries of big Indian corporations and some diamond merchants are also engaged in arbitrage practice.

What are the Policy Options for India?

Several episodes of financial crises in the 1990s (from Mexico to Southeast Asia) highlight the eminent role played by current account deficits in triggering a currency crisis. An economic boom fueled by short-term capital inflows and debt-driven consumption is a recipe for currency crash.

India's external sector vulnerability is a symptom of a much deeper malaise in overall development strategy and domestic policymaking. Despite the deterioration in major indicators of external sector vulnerability, the policymakers remain complacent in defending India's growth story. There are no quick fixes to country's imbalanced external sector and the Indian economy remains vulnerable to external shocks and global liquidity conditions.

Some analysts believe that India can rely on its foreign exchange (forex) reserves of \$275 bn to arrest the currency fall. But India's short-term external debt (with a maturity of one year or less) has already reached an alarming level. According to the official statistics, India's short-term external debt stood at \$116 bn in March 2013 and the ratio of volatile capital flows (consisting of short-term debt and portfolio investments) to country's forex reserves was as high as 96 percent. At current levels, the forex reserves can barely meet the country's import bill for seven months.

Firstly, New Delhi should take urgent policy measures to curb inessential imports. Since increasing exports may take considerable time, it is desirable to impose more curbs on gold, silver and non-essential items. In addition to higher custom duties, strict quantitative restrictions on the import of gold, silver and non-essential items should be imposed. The government should also consider imposing higher custom duties on those consumer electronics goods which are not part of Information

Technology Agreement of the WTO. Indeed, such a policy regime may encourage smuggling but there are ways and means to check it.

Since oil is the biggest item in its import bill, India should immediately accept Iran's offer to sell crude oil entirely in rupees and at concessional terms. By accepting this offer, India could potentially save \$8.5 bn in foreign exchange spending. Oil imports from Iran have declined substantially in the last five years due to unilateral sanctions imposed by the US and the European Union.

Secondly, India should immediately work out modalities for trading of goods in local currencies. India could begin trading in local currencies with BRICS partners and Asian countries. Russia, Malaysia and some other countries have expressed interest in trading in local currencies with India.

Thirdly, issuing dollar-denominated sovereign bonds in the midst of a crisis-like situation is a risky proposition. Besides, India will have to offer a higher rate of interest to attract investors which in turn would further increase country's external indebtedness.

Instead of approaching the IMF for a standby loan which comes with stiff conditions, India could enter into currency swap agreements with key trading partners. Recently, India and Japan expanded their bilateral currency swap facility to \$50 bn. On the sidelines of the G20 Summit at St Petersburg in September 2013, BRICS countries worked out operational details of launching a \$100 bn Contingent Reserve Arrangement (CRA) to ease balance of payment difficulties.

Fourthly, to rein in rampant speculation and manipulative activities in the offshore NDF market, the RBI should work out arrangements with other regulatory authorities in the form of information sharing and the setting of general standards. Currently, a new regulatory framework for OTC derivatives market is under preparation following the Dodd-Frank Act in the US, the European Market Infrastructure Regulation (EMIR) in Europe and the Basel III standards. As a member of G20, India should engage in the ongoing international initiatives aimed at increasing transparency and reducing systemic risk posed by the \$560 trillion global OTC derivatives market.

Lastly, the Indian authorities should not hesitate to impose capital controls as a macroeconomic policy tool to protect the domestic economy from a sudden capital flight. In this regard, capital controls imposed by Malaysia and Iceland on the capital outflows are worth examining.

Instead of approaching the IMF for a soft loan which comes with stiff conditions, India could enter into currency swap agreements with key trading partners.

The Indian authorities should not hesitate to impose capital controls as a macroeconomic policy tool to protect the domestic economy from a sudden capital flight.

— Kavaljit Singh

Notes and References

¹ The phrase “over-the-counter” refers to stocks, currencies, commodities and debt contracts between two parties which are traded through a dealer network, rather than on a formal exchange. A derivative is a financial instrument whose value is contingent on the value of an underlying security. For instance, a futures currency contract or a currency swap.

² Dong He and Robert N McCauley, *Offshore Markets for the Domestic Currency: Monetary and Financial Stability Issues*, BIS Working Papers No. 320, Monetary and Economic Department, Bank for International Settlements, September 2010, p. 16.

³ *BRIC Currencies Trading in London*, City of London, December 2012, p. 19. Available at <http://www.cityoflondon.gov.uk/business/economic-research-and-information/Pages/default.aspx>.

⁴ Harendra Kumar Behera, *Onshore and Offshore Market for Indian Rupee: Recent Evidence on Volatility and Shock Spillover*, MPRA Paper No. 22247, January 2010. Available at <http://mpra.ub.uni-muenchen.de/22247/>.

⁵ Ibid.

⁶ Annual Report 2012-13, Reserve Bank of India, Mumbai, August 2013, p. 54. Available at <http://rbidocs.rbi.org.in/rdocs/AnnualReport/PDFs/01FLAR22082013.pdf>.

Briefing Paper # 11

September 2013

This Briefing Paper is prepared and published by Madhyam in cooperation with SOMO (The Netherlands).

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Madhyam
148, Maitri Apartments
Plot # 28, Patparganj
I. P. Extension, Delhi - 110092
Phone: 91-11-43036919
Email: madhyamdelhi@gmail.com
Website: www.madhyam.org.in