Does regulatory overkill often overshadow baby steps towards product innovation in the Indian currency derivatives market?

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Abstract

Often one is led to wonder whether with the exchange traded currency derivatives market of India, it is a case of one step forward and two steps back. One would be right in making such a statement given that a reform announced by the regulator is invariably accompanied by a rider and the two, namely the reform and the rider, seem to be pulling the market in opposite directions. The result is that the market remains more or less where it was, even after the so-called reforms are implemented.

The researcher believes that the first and foremost job of the regulator should be to ensure that the biggest chunk of the currency market, if not the entire currency market, is brought onshore. Once that is done, the other benefits will automatically accrue to all the stakeholders associated with the market. The researcher concludes that the regulations should catalyse creation of synthetic contracts and permit extension of trading hours to 11.30 PM as is the case with the commodities market. This should not be difficult considering that in the case of both the markets, the regulator is the same, namely, SEBI. The researcher has also suggested, how SEBI can ensure, in conjunction with the RBI, that the new contracts permitted by it take off comfortably and without any hiccups.

Keywords: commodities market; onshore; RBI; SEBI; synthetic contracts; trading hours

1. Introduction

The regulator has been introducing several measures to promote the growth of the currency derivatives market in the country lately. The intention is of course to attract more investment flows into the market and ensure that currency trading moves onshore. In fact, the staid Reserve Bank of India (RBI) went one step ahead and surprised some stakeholder categories by partially permitting speculative transactions in the foreign currency market. This is clear from the fact that investors can now hold an additional USD 5 million as part of the outstanding, apart from the USD 30 million they are entitled to presently. Typically, the additional limit comes with a rider, explicit or implicit: only those already holding an outstanding position of USD 30 million is entitled to this carrot! It is policy measure of this kind that leads the stakeholders to wonder whether the regulator is ambiguous or ambivalent!

1.1 Derivative Market

As we do advance booking to buy and sell a particular quantity of shares or commodities or currencies on a predetermined settlement date for prefixed price. As we are doing advance booking you need not pay the complete price. You need to pay only the margin money.

1.1.1 Currency Derivative

Currency derivatives are a contract between the seller and buyer, whose value is to be derived from the underlying asset, the current exchange rates is an agreement that two currencies may be exchanged at a future date at a stipulated rate.

1.1.2 Forex Regulation

The objective of regulation is to ensure fair and ethical business behaviour. Under current regulatory contracts, all forex brokers, investment banks and signal sellers are required to operate in strict compliance with the rules and standards laid down by the forex regulators or their activities can be deemed unlawful.
These bodies must be registered and licensed in the country where their operations are based, which ensures quality control standards are met.

1.1.3 Synthetic Contract
Synthetic is the term given to financial instruments that are created artificially by simulating other instruments with different cash flow patterns. Synthetic stock by purchasing a call option and simultaneously selling a put option on the same stock. The synthetic stock would have the same cash flows as the underlying security.

1.2 Statement of the problem
The exchange-traded currency derivatives market has no doubt been growing but is yet to realise its full potential. India is amongst the few economies in the world projected to grow at a healthy pace. In spite of economic upheavals witnessed in its immediate neighbourhood and distant neighbourhood, India’s economy has by and large remained stable save for a few short-lived hiccups. Given the uncertain phase the global economy finds itself in today and the inherent resilience of the Indian economy (as has been convincingly proved lately), the regulator should leverage the favourable environment to shift currency trading onshore even as it ensures that it does not go for the overkill for whatever reason, in the process. These are the two major issues the present study, namely, “Does regulatory overkill often overshadow baby steps towards product innovation in the Indian currency derivatives market?” seeks to address, among others.

1.3 Review of literature
1. The Reserve Bank of India, in association with SEBI, is set to extend the currency futures trading time to 7.30 pm daily for three cross currency pairs: euro-dollar, pound-dollar and yen-dollar. It will impart some traction to the illiquid market, according to a section of market watchers. (Saikat, 2016) RBI believes that longer market hours will help market participants manage positions and track market movement round the clock. Presently, exchange traded futures markets close trading at 5 pm every day. They thus miss out on global moves, whether triggered by US job data or European Central Bank decisions, since these developments surface mostly in the later part of the day when the western markets commence business. Sharp currency fluctuations provide opportunities to speculators, hedgers and high net-worth individuals to make big money in currency derivatives, including futures. The currency futures market in India is illiquid leading the authorities to improve it. The average daily turnover in the currency futures market in FY16 is INR 17,860 crore, compared with compared with INR 12,705 crore in FY15, according to NSE. Regulators have been debating the USD conversion rate, at which any profit earned in that currency will be converted into INR. Also, some stakeholders are seeking extension of trading time for all pairs, including the INR-US dollar, up to 9.30 pm, as with the commodities market. Many corporate investors tap the offshore non-deliverable forwards, or NDF markets, which remain open round the clock, offering greater flexibility. The central bank has already permitted stock exchanges, includingNSE and BSE, to offer cross-currency futures contracts and exchange-traded option contracts in three currency pairs. But, exchanges are yet to introduce those pairs as they await final nod for operational clarity.

2. Trading hours have been extended only slightly and that too only for newly launched contracts. After all, news reports about the extension of trading hours in the exchange-based currency derivatives market and the introduction of cross-currency pairs were right (Mobis, 2016). As things stand, trading largely takes place in dollar-rupee futures and options contracts, which account for around 99 percent of the total open interest on the National Stock Exchange and BSE. Interest in other contracts such as the euro-rupee and yen-rupee is negligible. Market participants have been seeking new currency pairs, such as the euro-dollar, which is a vastly popular contract in global markets.

3. The Reserve Bank of India (RBI) has introduced cross-currency pairs in the exchange-traded currency derivatives market in order to facilitate efficient hedging (Business Standard, 2015). The cross currency pairs introduced are Euro-USD dollar, Pound Sterling-dollar and dollar-Japanese yen. Thus far, only pairs with the Indian rupee on one leg were allowed. Hence participants hedging their exposure had to do so through two transactions. For example, a Japanese investor desiring to hedge in dollars had to enter into yen-rupee and rupee-dollar options to ultimately arrive at the yen-dollar option. With the introduction of the dollar-yen pair, the market becomes more efficient. To take positions in such cross-currency pairs, a participant need not have any underlying exposure.

4. The researchers examine the price discovery and volatility spill-overs in spot and futures prices of four pairs of currencies, namely, USD/INR, EURO/INR, GBP/INR and JPY/INR and between futures prices of Multi-Commodity Stock Exchange (MCX-SX) and National Stock Exchange (NSE) in India (Sehgal, Ahmad, & Deisting, 2015). They conclude that there is a long-term equilibrium relationship between spot and futures and between futures markets. Between futures and spot prices, futures price appears to lead the spot price in the short-run. Volatility spill-over results indicate that the movement of volatility spill-over takes place from futures to spot in the short-run while the shift from spot to futures takes place in the long-run. However, the results reveal the dominance of MCX-SX over NSE in terms of volatility spill-overs. By and large, the findings of the study indicate the important role of futures market in price discovery as well as volatility spill-overs in India’s currency market. The results highlight the role of the futures market in the information transmission process as it appears to factor in new information quicker than the spot market. Hence, policymakers in emerging markets such as India should focus on the development of the relevant institutional and fiscal architecture, as well as regulatory reforms. As a result, the currency market trading platforms can achieve greater liquidity and efficiency.

5. The researchers examine the impact of the introduction of currency derivatives on the exchange rate volatility of Euro (Singh & Tripathi, 2016). The data used in their paper is comprised of the daily exchange rate of
Euro in terms of INR for the period April 2005 to March 2015. To explore the time series properties, the researchers used the Unit Root Test and the ARCH LM test. To study the impact on underlying volatility, they used the GARCH (1, 1) model. Their findings suggest that the introduction of currency futures has not reduced the volatility of the foreign exchange market in India.

6. Rampant globalisation, laissez-faire and the expansion of financial services has helped the foreign exchange markets emerge as the world's largest trading place. It has taken decades to build a huge forex trading place. This may not be the same in the coming future. (Foreign exchange, the world's biggest market, is). There are a lot of challenges that have cropped up -- like the dwindling of the overall market volume and employment levels at the biggest banks, trading in currencies, rigid and stringent bank regulation, the diminishing emerging market boom, exchange rate risk, mounting external debts and a secular slowdown in world growth and trade. The number of traders employed in Europe at the top 10 foreign exchange banks has dwindled over the last three years with supporting evidence. According to financial industry analytics data firm Coalition, the top 10 FX banks operating in Europe alone employed 332 people on their G10 European FX trading desks last year. That represents a fall of 30 per cent from the 475 employed in 2012. The maximum forex trading activity recorded was USD 6 trillion a day, which looks like a distant dream today.

1.4 Research gap
The reviewed literature has not adequately dealt with the steps to be initiated to move currency trading onshore. Nor has it identified the areas where regulatory overkills have occurred. It is gaps of this kind the present study seeks to bridge.

1.5 Scope of the present study
The study confines itself to the major stake-holders, namely, investors and traders operating in and around Bangalore city.

1.6 Objectives of the study
The objectives of the study are to:
1. Ascertain the measures needed to grow the country’s exchange-traded currency derivatives market
2. Identify the handicaps faced by the participants of the currency derivatives market

1.7 Hypothesis proposed to be tested
The study proposes to test the following hypotheses:
"Extended trading hours will ensure that a large chunk of currency trading shifts on-shore "

1.8 Research design
1.8.1 Research methodology
The study is descriptive in nature and has used the ‘fact-finding’ survey method

1.8.2 Sources of data
Data required for the research has been collected from both primary and secondary sources.
Primary data has been collected by administering Interview Schedules to the respondents, namely, investors and traders.

Secondary data has been collected from reputed journals, magazines, newspapers, annual reports of top corporates and house journals of regulatory and industry bodies like RBI, SEBI, FICCI and CII.

In addition, the researcher has interacted extensively with other stakeholders associated with India’s currency derivatives market.

1.8.3 Sampling plan
Investors: Given the limited availability of investors in the area selected by the researcher for the study, purposive or judgement sampling under the non-probability method was deployed. The researcher selected 50 investors that she regarded as the most appropriate for the study. This criterion, according to the researcher, is ideal for the present study. What is important is the typicality and the relevance of the sampling units to the study and not the overall representativeness to the population. Thus it guarantees inclusion of the relevant elements in the sample. Probability sampling plans cannot give such a guarantee.

Traders: Given the limited availability of traders in the area selected by the researcher for the study, purposive or judgement sampling under the non-probability method was deployed. The researcher selected 30 traders that she regarded as the most appropriate for the study. This criterion, according to the researcher, is ideal for the present study. What is important is the typicality and the relevance of the sampling units to the study and not the overall representativeness to the population. Thus it guarantees inclusion of the relevant elements in the sample. Probability sampling plans cannot give such a guarantee.

1.8.4 Data collection instruments
Interview schedules, specially designed for the purpose, were administered to the respondents for collection of primary data.

1.8.5 Data processing and analysis plan
Non-parametric statistical units were used to test the association between some qualitative characters and conclusions will be drawn on the basis of formation of H0 and H1. To be specific, chi-square test will be applied to test the hypotheses.

1.8.6 Limitations of the study
Primary data could sometimes be deduced through constant topic-oriented discussions with the respondents. A certain degree of subjectivity, even if negligible, could cloud their views. However, the Researcher is confident that the subjectivity will be too insignificant to affect the accuracy of the findings of the study.

1.9 Investors
In the following paragraphs, the primary data collected from the 50 investors is analysed.

1.9.1 Regulatory overkill often overshadows baby steps towards product innovation
Often it is alleged in informed circles that baby steps towards product innovation at the forex market are overshadowed by regulatory overkill. Hence the researcher requested the respondents to justify their statement. Their replies to the query appear in the following Table.
The stipulation that any synthetic positions created using cross-currency pairs should be within the prescribed position limits could lead to breach of the client-level position for the synthetic contract is cited as a regulatory overkill by 47 respondents. Investors can now have additional USD five million of currency position outstanding, only if they have outstanding position of USD 30 mn already cited as a regulatory overkill by 46 respondents. Mulish pace of reforms will hobble the creation of centres of international financial services cited as a regulatory overkill by 44 respondents.

**1.9.2 Streamlining the regulatory regime to raise transactions in volume and value terms**

The forex market of the country has immense potential. However, the reforms at the forex market have been too mulish and too half-hearted to raise the market transactions in value and volume terms. Hence the researcher requested the respondents to suggest how the regulatory regime can be streamlined for the purpose. Their replies to the query appear in the following Table.

**The stipulation that any synthetic positions created using cross-currency pairs should be within the prescribed position limits could lead to breach of the client-level position for the synthetic contract.**

** Investors can now have additional USD five million of currency position outstanding, only if they have outstanding position of USD 30 mn already**

**Mulish pace of reforms will hobble the creation of centres of international financial services**

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**1.10 Traders**

In the following paragraphs, the primary data collected from the 30 traders is analysed.

**1.10.1 Regulatory overkill often overshadows baby steps towards product innovation**

Often it is alleged in informed circles that baby steps towards product innovation at the forex market are overshadowed by regulatory overkill. Hence the researcher requested the respondents to justify their statement. Their replies to the query appear in the following Table.

**Streamlining measures**

- Operational clarity should be furnished to NSE and BSE so trading in cross-currency futures and exchange-traded options can gather pace.
- The current trading timings (up to 7.30 PM) should apply to currency pairs involving INR too.
- Trading in currency derivatives should be extended to 11.30 PM for all currency pairs to improve liquidity in the currency futures market.
- Extended trading hours will ensure that a large chunk of currency trading shifts on-shore.

**Table 2:** Streamlining the regulatory regime to raise transactions in volume and value terms

<table>
<thead>
<tr>
<th>Instances of overkill</th>
<th>Number of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>The stipulation that any synthetic positions created using cross-currency pairs should be within the prescribed position limits could lead to breach of the client-level position for the synthetic contract.</td>
<td>47</td>
</tr>
<tr>
<td>Investors can now have additional USD five million of currency position outstanding, only if they have outstanding position of USD 30 mn already</td>
<td>46</td>
</tr>
<tr>
<td>Mulish pace of reforms will hobble the creation of centres of international financial services</td>
<td>44</td>
</tr>
</tbody>
</table>

**The current trading timings (up to 7.30 PM) should apply to currency pairs involving INR too.**

**Trading in currency derivatives should be extended to 11.30 PM for all currency pairs to improve liquidity in the currency futures market.**

**Extended trading hours will ensure that a large chunk of currency trading shifts on-shore.**

**Table 3:** Streamlining the regulatory regime to raise transactions in volume and value terms

<table>
<thead>
<tr>
<th>Streamlining measures</th>
<th>Number of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>The stipulation that any synthetic positions created using cross-currency pairs should be within the prescribed position limits could lead to breach of the client-level position for the synthetic contract.</td>
<td>27</td>
</tr>
<tr>
<td>Investors can now have additional USD five million of currency position outstanding, only if they have outstanding position of USD 30 mn already</td>
<td>25</td>
</tr>
<tr>
<td>Mulish pace of reforms will hobble the creation of centres of international financial services</td>
<td>24</td>
</tr>
</tbody>
</table>

**Table 4:** Streamlining the regulatory regime to raise transactions in volume and value terms

<table>
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</tr>
<tr>
<td>Trading in currency derivatives should be extended to 11.30 PM for all currency pairs to improve liquidity in the currency futures market.</td>
<td>27</td>
</tr>
</tbody>
</table>
The current trading timings (up to 7.30 PM) should apply to currency pairs involving INR too, according to 27 respondents. Trading in currency derivatives should be extended to 11.30 PM for all currency pairs to improve liquidity in the currency futures market, according to 27 respondents. Operational clarity should be furnished to NSE and BSE so trading in cross-currency futures and exchange-traded options can gather pace, according to 25 respondents. Extended trading hours will ensure that a large chunk of currency trading shifts on-shore, according to 24 respondents.

1.11 Summary of findings

In the following paragraphs, a summarised version of the findings arrived at in respect of the three categories of respondents is furnished.

1.11.1 Investors

1. The stipulation that any synthetic positions created using cross-currency pairs should be within the prescribed position limits could lead to breach of the client-level position for the synthetic contract is cited as a regulatory overkill by 47 respondents. Investors can now have additional USD five million of currency position outstanding, only if they have outstanding position of USD 30 mn already cited as a regulatory overkill by 46 respondents. Mulish pace of reforms will hobble the creation of centres of international financial services cited as a regulatory overkill by 44 respondents.

2. Operational clarity should be furnished to NSE and BSE so trading in cross-currency futures and exchange-traded options can gather pace, according to 47 respondents. The current trading timings (up to 7.30 PM) should apply to currency pairs involving INR too, according to 47 respondents. Trading in currency derivatives should be extended to 11.30 PM for all currency pairs to improve liquidity in the currency futures market, according to 46 respondents. Extended trading hours will ensure that a large chunk of currency trading shifts on-shore, according to 44 respondents.

1.11.2 Traders

1. The stipulation that any synthetic positions created using cross-currency pairs should be within the prescribed position limits could lead to breach of the client-level position for the synthetic contract is cited as a regulatory overkill by 27 respondents. Investors can now have additional USD five million of currency position outstanding, only if they have outstanding position of USD 30 mn already cited as a regulatory overkill by 25 respondents. Mulish pace of reforms will hobble the creation of centres of international financial services cited as a regulatory overkill by 24 respondents.

2. The current trading timings (up to 7.30 PM) should apply to currency pairs involving INR too, according to 27 respondents. Trading in currency derivatives should be extended to 11.30 PM for all currency pairs to improve liquidity in the currency futures market, according to 27 respondents. Operational clarity should be furnished to NSE and BSE so trading in cross-currency futures and exchange-traded options can gather pace, according to 25 respondents. Extended trading hours will ensure that a large chunk of currency trading shifts on-shore, according to 24 respondents.

1.12 Conclusions

Conclusions relate to the hypotheses. They are answers to the research questions.

1.12.1 Hypothesis testing

Hypothesis

As explained, the following is the hypothesis proposed to be tested: “Extended trading hours will ensure that a large chunk of currency trading shifts on-shore”

Hence H₀ and H₁ are as follows:

H₀: Extended trading hours will not ensure that a large chunk of currency trading shifts on-shore
H₁: Extended trading hours will ensure that a large chunk of currency trading shifts on-shore

On the basis of the primary data collected from the respondents, vide Tables: 2 and 4, a chi-square test was applied to ascertain the association, if any, between the two variables. The following Table reveals the computation made using MS-Excel:

<table>
<thead>
<tr>
<th>Category</th>
<th>Yes</th>
<th>No</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investors</td>
<td>44</td>
<td>6</td>
<td>50</td>
</tr>
<tr>
<td>Traders</td>
<td>24</td>
<td>6</td>
<td>30</td>
</tr>
<tr>
<td>Total</td>
<td>68</td>
<td>12</td>
<td>80</td>
</tr>
</tbody>
</table>

The calculated value of "X²" is 0.4183, lower than the table value of 3.8415 for an alpha of 0.05 at one degree of freedom. Hence the null hypothesis is accepted and the alternate hypothesis is rejected.

1.13 Researcher’s recommendations

1. The regulatory rider accompanying synthetic positions is unfortunate, to say the least. This is because the rider can give rise anomalous consequences. For example, a trader may end up creating a synthetic EUR-INR exposure worth USD 10 mn, by taking a USD-INR contract worth USD 10 mn and a EUR-USD contract worth USD 10 mn, in that order. Individually, the two
positions are lawful but the resultant synthetic exposure breaches the client level position, which is USD five million. In simple terms, traders with a USD-INR exposure will not be able to take positions in the EUR-USD contracts.

2. The regulator would do well to aggregate all of the client’s or trading member’s positions and defined a threshold for aggregate short / long rupee exposure in the currency markets. Alternatively, the regulator can monitor only USD-INR exposure (direct and synthetic), ignoring other synthetic positions, as long as the client does not does not violate the cap in individual contracts. This will ensure that new contracts take off comfortably.

3. Trading global contracts makes sense when they overlay with major markets like those in the US. With commodities markets already operating till 11.30 pm and handling settlements smoothly under the oversight of the Securities and Exchange Board of India, permitting the same time slot to the exchange-traded currency derivatives segment should not pose any problem to the oversight agency, which is SEBI here too.

4. It is ironical that the regulator on the one hand claims that creation of centres of international financial services is its top priority even as its reforms targeted at the exchange-traded currency derivatives markets seem to come in fits-and-starts.

2. References