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Optimising the performance of India's currency derivatives market

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Abstract
India's currency derivatives market has made some headway in terms of its contribution to the various stakeholders associated with it. However, it is held in well-informed circles that it is possible to optimise the market's performance by fine-tuning the regulatory framework, among other things. The researcher's interaction with the respondents, namely, traders, investors and consultants has indeed convinced him that such fine-tuning is within the realm of possibility and in fact, has been overdue. The researcher concludes upon his analysis that the tenor cap of 12 months needs to be raised to optimise the performance of the market. After all, the products have been in the market for quite some time and the regulator and the regulated have been by and large happy with the way the products have settled into a comfortable rhythm at the marketplace. Respondents are emphatic in their statement that new participants should be allowed into the market. This will eventually lead to the market becoming broader and deeper with newer and newer products introduced and more and more participants entering the market to trade in the said products. Thanks to the resultant surge in transactional volumes, transaction costs can be considerably reduced thereby helping in moving the currency trading market onshore completely. Presently, the slew of restrictions and higher transactional costs lead investors to seek other markets in our neighbourhood, like Singapore and Hong Kong. For example, new cross currency pairs like USD-EUR can be introduced considering the kind of popularity the said currency pair enjoys nationally and globally as well. To keep the participants riveted to the market, other measures like extending the trading hours to 11.30 PM should be attempted, concludes the researcher. After all SEBI has permitted the commodities segment to operate until 11.30 PM. A similar extension in the case of the currency derivatives segment has been long overdue. Since SEBI is the regulator of the currency derivatives market also, one fails to understand its disinclination to extend the trading hours in the case of the currency derivatives market.

Keywords: cap, cross-currency pair, onshore, optimise, regulatory framework, tenor

1. Introduction

1.1 Theoretical background of the problem

Currency futures have been in vogue in the country for quite some time now. Lately, currency options have also been introduced. While currency futures help the stakeholder to lock in a price for a given currency, currency options provide the best of both the worlds to the stakeholder, of course for a very small one-time fee. The OTC market in foreign exchange in the form of forward contrasts has established itself rather well in the country. It has since been followed by currency futures and currency options, in that order, the latter two in the exchange-traded format. Thus the country's trade and industry, investors, traders and other stakeholders have a basket of choice when it comes to hedging themselves against currency exposure. The RBI, SEBI and the government of India have been introducing newer products periodically although many experts would prefer to describe the so-called periodic introduction of new products as baby steps or as a fits-and-starts exercise.

1.2 Statement of the problem

The currency derivatives market not long ago referred to the OTC market by default in the case of India. However, the introduction of currency futures in the exchange-traded segment and the gradual expansion of the currency futures market on all parameters led to demands that currency options be introduced too. Thus arrived currency options in the country in the exchange-traded segment. This however was followed by demands for further enlarging the scope of the exchange-traded currency futures and currency options markets. In the circumstances, optimising the performance of the currency derivatives market has become indispensable. Hence the measures needed to achieve the said optimisation need to be identified. Further, it is also necessary to ascertain how the regulator can contribute its mite towards this end.

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. 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-USD, 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, including NSE 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. 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. 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 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.
3. The researchers examine the Indian currency market to ascertain if calendar anomalies still obtain. Their findings indicate that the returns from Monday to Wednesday are positive and higher than the returns generated on Thursday and Friday - the latter show negative returns. The returns during January are higher than the returns during the rest of the year. Further, all currencies exhibit a significant DOW (day of the week) and January effects in a pre-crisis period; however, post-crisis, these effects wane for all currencies indicating that the markets have become more efficient in the subsequent phase. The findings can also be attributed to the increased intervention in the forex market by the Reserve Bank of India after the crisis, aver the researchers. Their findings have significant implications for traders and investors. The investors may not be able to generate a higher level of profit by timing their positions in some pairs of currencies taking advantage of the DOW or January effect. This in turn indicates that the currency markets have become more efficient over time. The findings are in consonance with those emerging from the developed markets. The findings may appeal to the practitioners as well, in the sense that they can reckon the state of the financial market for financial decision making.
4. With the advent of the International Monetary Fund, the forex market has emerged as a unique services market. It is a distinct trading market where market awareness alone can contribute to the economy. Since the advent of this market, the USD has been the central unit of account and vehicle currency for settlement of international transactions. Still USD enjoys an unbeaten dominance with around 87 percent share of the global forex market. In the India of the past, transacting business through the silk route, exporting carpets to Arabian countries or exporting spices to Europe represent instances of forex trade. But a formal forex market came into being in 1973 when India introduced the Foreign Exchange Regulation Act (FERA). Even after four decades, its share of the global market is not significant. The researchers explore the dynamics of the Indian forex market in this paper. They also explore the possibility of promoting INR-dominated exports to make this market more vibrant. However, the researchers are handicapped by the absence of authentic data on the global foreign exchange market.
5. The researchers examine the impact of the introduction of currency derivatives on the exchange rate volatility of Euro. 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.

1.4 Research Gap

Given the country’s desire to move currency trading completely on shore, it is necessary to take stock of the overall picture of the exchange-traded currency derivatives market as of and examine how the performance of the market can be optimised. Only this can speed up the on-shore gravitation of currency trading. This can be done more effectively by ascertaining the measures required to optimise the performance of the market and by suitably recasting the regulatory policy. It is this gap that the reviewed studies have missed out on and the present study seeks to bridge.

1.5 Scope of the study

The study confines itself to the major stake-holders, namely, traders, investors and consultants based out of Bangalore, Karnataka.

1.6 Objectives of the study

The objectives of the study are to:

1. Ascertain the regulatory initiatives required to optimise the performance of the currency derivatives market
2. Examine the how the breadth and depth of the currency derivatives market can be improved.

1.7 Hypothesis proposed to be tested

The study proposes to test the following hypothesis:

"RBI needs to amend the circular allowing cross-currency pairs like EUR-USD to nullify the underlying stipulation concerning synthetic positions"

2. Research Design

The following paragraphs explain how the research is designed.

2.1 Research Methodology

The study is descriptive in nature and uses the 'fact-finding' survey method. Interview schedules specially designed for the purpose were administered to the respondents for collection of primary data. Being a structured / directive interview, the interview was conducted with a detailed standardised schedule.

2.2 Sources of data

Data required for the research has been collected from both primary and secondary sources. Primary data has been collected from investors, traders and consultants.

Secondary data has been collected from NSE, BSE, FEDAI, SEBI, RBI, the financial press, annual reports of RBI, top corporates and house journals of industry bodies / associations like CMIE, FICCI and CII and the various ministries (like the ministry of finance, ministry of corporate law, etc.) and the various departments of the government of India, in soft version and hard version. In addition, the researcher interacted extensively with other stakeholders associated with India's forex market.

2.3 Sampling Plan

Investors

Given the limited number of investors in the area covered by the study, purposive or judgement sampling under the non-probability method has been deployed. The researcher selected 50 investors operating in the area covered by the study at least for the past five years. This criterion, according to the researcher, is the most appropriate one for the present study. What is important is the typicality and the relevance of the sampling units to the study and not their 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

Simple random sampling under the probability sampling method has been undertaken to select the traders since it gives each element an equal and independent chance of being selected. Accordingly, Interview Schedules was administered to 60 traders who have been into this activity for at least five years. The first 30 Interview Schedules received from them, duly completed, were selected for the study.

Consultants

Given the limited number of consultants in the area covered by the study, purposive or judgement sampling under the non-probability method has been deployed. The researcher selected 30 consultants operating in the area covered by the study at least for the past ten years. This criterion, according to the researcher, is the most appropriate one for the present study. What is important is the typicality and the relevance of the sampling units to the study and not their overall representativeness to the population. Thus it guarantees inclusion of the relevant elements in the sample. Probability sampling plans cannot give such a guarantee.

2.4 Data collection instruments

Interview schedules, specially designed for the purpose, were drafted and pre-tested in order to identify the possible weaknesses in the instrument. Upon receipt of feedback, they were appropriately revised and finalised for administration to the respondents for collection of primary data.

The Interview Schedules featured open questions and closed questions. Open questions were included since the objective was to identify opinions, ascertain degrees of knowledge and seek suggestions and more information. In some cases, the subject matter of the question could be outside the range of the respondent's experience and hence open questions were deemed a better alternative. Further, open questions would help in determining the depth of the feelings and intensity of the expressions of the respondent. Open questions might give the respondent a chance to think through the topic. Since it is practically impossible for the researcher to assess the level of information possessed by the respondent, open questions came in handy. The response freedom inherent in open questions could elicit a variety of frames of references from the respondent, which might provide unanticipated insights. Given the qualitative nature of the values the variables would elicit from the respondents, they could lend themselves ideally to statistical tools like Likert scale and chi-squared test.

2.5 Data processing and analysis plan

Non-parametric statistical units were used to test the association between some qualitative characters and conclusions were drawn on the basis of formation of H_o and H_1. To be specific, Likert scale and chi-square test were applied to test the hypotheses.

2.6 Limitations of the study

Primary data has at times been deduced through constant topic-oriented discussions with the respondents. It is possible that a certain degree of subjectivity, albeit negligible, has found its way in. In addition, one has to admit that the respondents, being human, could err. Hence, the researcher would like to admit that the findings of the thesis, which draw equally heavily from the discussions the researcher held with the said respondents, may have been affected, albeit to a negligible extent. In the circumstances, it will not affect the accuracy of the findings of the study.

3. Analysis of primary data collected from the 30 trader respondents

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

3.1 Regulatory initiatives to optimise the performance of the currency derivatives market

It is felt in well-informed circles that regulatory initiatives are required to optimise the performance of the currency derivatives market. Hence the researcher sought to know from the respondents the regulatory initiatives required to optimise the performance of the currency derivatives market. Their replies to the query appear in the following Table.

Table 1: Regulatory initiatives to optimise the performance of the currency derivatives market

Regulatory initiative	Number of respondents
The tenor cap of 12 months should be raised in the currency derivatives segment	27
RBI should permit new cross currency pairs like USD-EUR since the interest in other permitted cross currency pairs is negligible	26
FIIs and NRIs should be permitted to participate directly in currency derivatives trading.	25
RBI should allow new participants to trade in the market	24

According to 27 respondents, the tenor cap of 12 months should be raised in the currency derivatives segment. According to 26 respondents, RBI should permit new cross currency pairs like USD-EUR since the interest in other permitted cross currency pairs is negligible. According to 25 respondents, FIIs and NRIs should be permitted to participate directly in currency derivatives trading. According 24 respondents, RBI should allow new participants to trade in the market.

3.2 Imparting breadth and depth to the currency derivatives market

The currency derivatives market has been growing at a mulish pace in the country. There is scope for the market to pick up pace. One way to achieve it is by imparting breadth and depth to the market. Hence the researcher requested the respondents to suggest how the market can be made broader and deeper. Their replies to the query appear in the following Table.

Table 2: Imparting breadth and depth to the currency derivatives market

Imparting breadth and depth to the market	Number of respondents
RBI should extend the trading hours to 11.30 PM to help the traders and the market to benefit	27
Exchanges should reduce transaction costs for the participants	27
The presently-extended trading timings (up to 7.30 PM) should apply to currency pairs involving INR too	26
RBI should amend the circular allowing cross-currency pairs like EUR-USD to nullify the underlying stipulation concerning synthetic positions	25

To impart breadth and depth to the currency derivatives market, the RBI should extend the trading hours to 11.30 PM to help the traders and the market to benefit, according to 27 respondents. To impart breadth and depth to the currency derivatives market, exchanges should reduce transaction costs for the participants, according to 27 respondents. To impart breadth and depth to the currency derivatives market, the presently-extended trading timings (up to 7.30 PM) should apply to currency pairs involving INR too, according to 26 respondents. To impart breadth and depth to the currency derivatives market, RBI should amend the circular allowing cross-currency pairs like EUR-USD to nullify the underlying stipulation concerning synthetic positions, according to 25 respondents.

4. Analysis of primary data collected from the 50 investor respondents

In the following paragraphs, the primary data collected from the 50 investor respondents is analysed.

4.1 Regulatory initiatives to optimise the performance of the currency derivatives market

It is felt in well-informed circles that regulatory initiatives are required to optimise the performance of the currency derivatives market. Hence the researcher sought to know from the respondents the regulatory initiatives required to optimise the performance of the currency derivatives market. Their replies to the query appear in the following Table.

Table 3: Regulatory initiatives to optimise the performance of the currency derivatives market

Regulatory initiative	Number of respondents
The tenor cap of 12 months should be raised in the currency derivatives segment	47
RBI should permit new cross currency pairs like USD-EUR since the interest in other permitted cross currency pairs is negligible	47
FIIs and NRIs should be permitted to participate directly in currency derivatives trading.	46
RBI should allow new participants to trade in the market	45

According to 47 respondents, the tenor cap of 12 months should be raised in the currency derivatives segment. According to 47 respondents, RBI should permit new cross currency pairs like USD-EUR since the interest in other permitted cross currency pairs is negligible. According to 46 respondents, FIIs and NRIs should be permitted to participate directly in currency derivatives trading. According 45 respondents, RBI should allow new participants to trade in the market.

4.2 Imparting breadth and depth to the currency derivatives market

The currency derivatives market has been growing at a mulish pace in the country. There is scope for the market to pick up pace. One way to achieve it is by imparting breadth and depth to the market. Hence the researcher requested the respondents to suggest how the market can be made broader and deeper. Their replies to the query appear in the following Table.

Table 4: Imparting breadth and depth to the currency derivatives market

Imparting breadth and depth to the market	Number of respondents
Exchanges should reduce transaction costs for the participants	47
RBI should extend the trading hours to 11.30 PM to help the traders and the market to benefit	46
RBI should amend the circular allowing cross-currency pairs like EUR-USD to nullify the underlying stipulation concerning synthetic positions	44
The presently-extended trading timings (up to 7.30 PM) should apply to currency pairs involving INR too	43

To impart breadth and depth to the currency derivatives market, exchanges should reduce transaction costs for the participants, according to 47 respondents. To impart breadth and depth to the currency derivatives market, the RBI should extend the trading hours to 11.30 PM to help the traders and the market to benefit, according to 46 respondents. To impart breadth and depth to the currency derivatives market, RBI should amend the circular allowing cross-currency pairs like EUR-USD to nullify the underlying stipulation concerning synthetic positions, according to 44 respondents. To impart breadth and depth to the currency derivatives market, the presently-extended trading timings (up to 7.30 PM) should apply to currency pairs involving INR too, according to 43 respondents.

5. Analysis of primary data collected from the 30 consultant respondents

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

5.1 Regulatory initiatives to optimise the performance of the currency derivatives market

It is felt in well-informed circles that regulatory initiatives are required to optimise the performance of the currency derivatives market. Hence the researcher sought to know from the respondents the regulatory initiatives required to optimise the performance of the currency derivatives market. Their replies to the query appear in the following Table.

Table 5: Regulatory initiatives to optimise the performance of the currency derivatives market

Regulatory initiative	Number of respondents
NRIs should be allowed to invest in exchange-traded currency futures	27
RBI should make all-out efforts to ensure that currency trading shifts onshore.	27
RBI should ensure that the volumes transacted in the currency market rise significantly to lure foreign investors	27
The tenor cap of 12 months should be raised in the currency derivatives segment	27
RBI should permit new cross currency pairs like USD-EUR since the interest in other permitted cross currency pairs is negligible	27
RBI should allow new participants to trade in the market	27
FIIs and NRIs should be permitted to participate directly in currency derivatives trading.	26

According to 27 respondents, NRIs should be allowed to invest in exchange-traded currency futures. According to 27 respondents, RBI should make all-out efforts to ensure that currency trading shifts onshore. According to 27 respondents, RBI should ensure that the volumes transacted in the currency market rise significantly to lure foreign investors. According to 27 respondents, the tenor cap of 12 months should be raised in the currency derivatives segment. According to 27 respondents, RBI should permit new cross currency pairs like USD-EUR since the interest in other permitted cross currency pairs is negligible. According 27 respondents, RBI should allow new participants to trade in the market. According to 26 respondents, FIIs and NRIs should be permitted to participate directly in currency derivatives trading.

5.2 Imparting breadth and depth to the currency derivatives market

The currency derivatives market has been growing at a mulish pace in the country. There is scope for the market to pick up pace. One way to achieve it is by imparting breadth and depth to the market. Hence the researcher requested the respondents to suggest how the market can be made broader and deeper. Their replies to the query appear in the following Table.

Table 6: Imparting breadth and depth to the currency derivatives market

Imparting breadth and depth to the market	Number of respondents
RBI should extend the trading hours to 11.30 PM to help the traders and the market to benefit	27
Exchanges should reduce transaction costs for the participants	27
The presently-extended trading timings (up to 7.30 PM) should apply to currency pairs involving INR too	27
RBI should amend the circular allowing cross-currency pairs like EUR-USD to nullify the underlying stipulation concerning synthetic positions	26

To impart breadth and depth to the currency derivatives market, the RBI should extend the trading hours to 11.30 PM to help the traders and the market to benefit, according to 27 respondents. To impart breadth and depth to the currency derivatives market, exchanges should reduce transaction costs for the participants, according to 27 respondents. To impart breadth and depth to the currency derivatives market, the presently-extended trading timings (up to 7.30 PM) should apply to currency pairs involving INR too, according to 27 respondents. To impart breadth and depth to the currency derivatives market, RBI should amend the circular allowing cross-currency pairs like EUR-USD to nullify the underlying stipulation concerning synthetic positions, according to 26 respondents.

6. Summary of findings

In the following paragraphs, a summarised version of the findings arrived at, by analysing the primary data furnished by respondents, is furnished:

6.1 Trader respondents

1. According to 27 respondents, the tenor cap of 12 months should be raised in the currency derivatives segment. According to 26 respondents, RBI should permit new cross currency pairs like USD-EUR since the interest in other permitted cross currency pairs is negligible. According to 25 respondents, FIIs and NRIs should be permitted to participate directly in currency derivatives trading. According 24 respondents, RBI should allow new participants to trade in the market.
2. To impart breadth and depth to the currency derivatives market, the RBI should extend the trading hours to 11.30 PM to help the traders and the market to benefit, according to 27 respondents. To impart breadth and depth to the currency derivatives market, exchanges should reduce transaction costs for the participants, according to 27 respondents. To impart breadth and depth to the currency derivatives market, the presently-extended trading timings (up to 7.30 PM) should apply to currency pairs involving INR too, according to 26 respondents. To impart breadth and depth to the currency derivatives market, RBI should amend the circular allowing cross-currency pairs like EUR-USD to nullify the underlying stipulation concerning synthetic positions, according to 25 respondents.

6.2 Investor respondents

1. According to 47 respondents, the tenor cap of 12 months should be raised in the currency derivatives segment. According to 47 respondents, RBI should permit new cross currency pairs like USD-EUR since the interest in other permitted cross currency pairs is negligible. According to 46 respondents, FIIs and NRIs should be permitted to participate directly in currency derivatives trading. According 45 respondents, RBI should allow new participants to trade in the market.
2. To impart breadth and depth to the currency derivatives market, exchanges should reduce transaction costs for the participants, according to 47 respondents. To impart breadth and depth to the currency derivatives market, the RBI should extend the trading hours to 11.30 PM to help the traders and the market to benefit, according to 46 respondents. To impart breadth and depth to the currency derivatives market, RBI should amend the circular allowing cross-currency pairs like EUR-USD to nullify the underlying stipulation concerning synthetic positions, according to 44 respondents. To impart breadth and depth to the currency derivatives market, the presently-extended trading timings (up to 7.30 PM) should apply to currency pairs involving INR too, according to 43 respondents.

6.3 Consultant respondents

1. According to 27 respondents, NRIs should be allowed to invest in exchange-traded currency futures. According to 27 respondents, RBI should make all-out efforts to ensure that currency trading shifts onshore. According to 27 respondents, RBI should ensure that the volumes transacted in the currency market rise significantly to lure foreign investors. According to 27 respondents, the tenor cap of 12 months should be raised in the currency derivatives segment. According to 27 respondents, RBI should permit new cross currency pairs like USD-EUR since the interest in other permitted cross currency pairs is negligible. According 27 respondents, RBI should allow new participants to trade in the market. According to 26 respondents, FIIs and NRIs should be permitted to participate directly in currency derivatives trading.
2. To impart breadth and depth to the currency derivatives market, the RBI should extend the trading hours to 11.30 PM to help the traders and the market to benefit, according to 27 respondents. To impart breadth and depth to the currency derivatives market, exchanges should reduce transaction costs for the participants, according to 27 respondents. To impart breadth and depth to the currency derivatives market, the presently-extended trading timings (up to 7.30 PM) should apply to currency pairs involving INR too, according to 27 respondents. To impart breadth and depth to the currency derivatives market, RBI should amend the circular allowing cross-currency pairs like EUR-USD to nullify the underlying stipulation concerning synthetic positions, according to 26 respondents.

7. Conclusions

Conclusions are inferences / generalisations drawn from the findings and relate to hypotheses. They are answers to the research questions or the statements of acceptance or rejection of hypotheses. As explained already, this study proposes to test the following hypothesis:

“RBI needs to amend the circular allowing cross-currency pairs like EUR-USD to nullify the underlying stipulation concerning synthetic positions**”**

Hence H_0 and H_1 are as follows:

H_0: RBI need not amend the circular allowing cross-currency pairs like EUR-USD to nullify the underlying stipulation concerning synthetic positions

H_1: RBI needs to amend the circular allowing cross-currency pairs like EUR-USD to nullify the underlying stipulation concerning synthetic positions

On the basis of the primary data collected from the respondents, vide Tables: 2, 4 and 6, a chi-square test was applied to ascertain the association, if any, between the three variables. The following Table reveals the computation made using MS-Excel.

Table 7

Category	**Observed Values**		
	Yes	**No**	**Total**
Traders	25	5	30
Investors	44	6	50
Consultants	26	4	30
Total	95	15	110
Expected Values			
Category	Yes	No	Total
Traders	25.90909091	4.090909091	30
Investors	43.18181818	6.818181818	50
Consultants	25.90909091	4.090909091	30
Total	95	15	110
	Yes	No	
o-e	-0.9091	0.9091	
	0.8182	-0.8182	
	0.0909	-0.0909	
(o-e)^2	1.0000	1.0000	
	1.0000	1.0000	
	1.0000	1.0000	
((o-e)^2)/e	0.0386	0.2444	
	0.0232	0.1467	
	0.0386	0.2444	
CV	0.1004	0.6356	0.7359
TV			5.991464547
p			0.99

The calculated value of χ^2 is *0.7359*, lower than the table value of *5.991465* for an alpha of 0.05 at two degrees of freedom. Hence the null hypothesis is accepted and the research hypothesis is rejected.

8. Recommendations

The following are the researcher's recommendations:

1. The tenor cap of 12 months needs to be raised. The regulator does not have to err on the side of caution now that the currency derivatives have been in vogue for quite some time and the participants have understood their responsibilities and conducted themselves responsibly. On their part, the regulators too have not come across any serious violations on the part of traders and investors and hence sticking with the extant 12-month tenor cap is uncalled for. Raising the cap beyond 12 months will provide some welcome relief to traders and investors since they do not have to roll over the contracts once the tenor cap of 12 months is about to be breached.
2. Trading mostly takes place in USD-INR futures and options contracts. They account for almost all the total open interest on the National Stock Exchange and BSE. Interest in other contracts like the EUR-INR and JPY-INR is negligible. Market participants require new currency pairs, like the EUR-USD, which should be permitted given their popularity across the globe.
3. FIIs and NRIs should be allowed to participate directly in currency derivatives trading. The market is now mature enough and stable enough to withstand the pressures of volatility. Hence direct participation by the said stakeholders should be permitted.
4. Foreign investors prefer overseas markets to the Indian market because of the low volumes transacted in the Indian currency market. Hence the RBI would do well to allow new participants to trade in the market. This will go some way in bringing the currency market on shore.
5. Presently, commodities markets have been operating until 11.30 pm and there have been no hiccups. It is the same Securities and Exchange Board of India that is now regulating commodity exchanges. It is unbelievable that SEBI is comfortable with allowing the commodities market to trade till 11.30 pm, but uncomfortable with allowing the currency derivatives market to operate until 11.30 pm. After all global contracts can deliver more to the participants if they can overlay with leading markets like those in US.
6. To impart breadth and depth to the currency derivatives market, the presently-extended trading timings (up to 7.30 PM) should apply to currency pairs involving INR too. Keeping out currency pairs that involve INR for the purpose is unfair.
7. Regulations hold that any synthetic positions created using cross-currency pairs should be within the prescribed position limits. But the client may end up creating a synthetic euro-rupee exposure that breaches the client-level position for the contract that is set at a lower level, unintendedly.

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