Terengganu International Finance and Economics Journal
Volume 1, Issue 2: 35-41, 2011

Survey of Currency Derivative Usage by INDIAN SMEs

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Abstract

This paper reports the results of a cross-sectional survey of the currency derivative usage by SMEs (Small and Medium enterprises) in India. The study was undertaken with the objective of studying the nature and extent of currency derivative usage by Indian SMEs and to understand the motive behind the usage of currency derivatives. This study is based on the primary data provided by 80 SMEs. The findings of the survey are in line with the expectation. More than half of respondents do not use currency derivatives in managing their currency exposure and prime reason for the same is high cost associated with derivative usage. Even those respondent SMEs who make use of derivative are mainly dependent on Forward contract and usage of other derivative product is trivial. The main reason behind non usage of Futures, Option Swaps and other structured products is that the above said products are not offered by the banks with whom they normally deal. This is due to the fact that most of the SMEs deal with Nationalised Public sector banks which do not offer and encourage the usage of the above said derivative products due to wide ranging reasons.

Keywords: *Currency Derivative, SME, Currency exposure, Reserve Bank of India*

1. INTRODUCTION

One basic problem that business enterprises, which are into international business face, is currency exposure. This problem can affect their assets, their liabilities and their operating cash flows. Foreign exchange/ Currency exposure is the sensitivity of changes in the real domestic currency value of assets, liabilities or operating income to unanticipated changes in exchange rates. After the declaration of policy of liberalization in early nineties, India resorted to Market determined Exchange rate system. Initially for quite some time (almost a decade) there was a continuous depreciation in the parity value of Indian rupee. Since 2003 there started a trend where in the inflow of Foreign exchange to India continuously increased. This set in a new trend of appreciation of Indian rupee. Exchange rate of Indian rupee against major currencies, especially USD underwent a drastic appreciation in the year 2007 and the trend was reversed in 2008 when there was a drastic depreciation. In this volatility of exchange rate, Indian Business enterprises which were into overseas operations faced significant currency exposure. One of the most convenient and most widely used techniques of managing Currency exposure is ‘**Currency Derivatives’.**

2. CURRENCY DERIVATIVES IN INDIA

The Reserve Bank of India (RBI), the central bank of the country, is also entrusted with the management of foreign exchange under the provisions of the Foreign Exchange Management Act or FEMA. As per the Master circular on risk management and interbank dealings, July 2009 of Reserve Bank of India (RBI) following is the list of Currency derivative products available in India

- Forward Contracts
- Foreign Currency-INR Option
- Cross-Currency option
- Foreign Currency-INR Swap

Government of India introduced **'Currency Futures'**, which is an exchange traded currency derivative in India from August 2008. Presently India does not have dedicated Currency Exchange and currency futures are traded through Stock and commodity exchanges. There has been a tremendous growth in the volume of currency derivatives traded in India which is shown in the following table.

Table 1: The growth in OTC volumes in India

Year	Gross OTC derivatives turnover in currency	Average daily gross turnover (in USD bn)
2005	1647	6.56
2006	2864	11.46
2007	5252	21.09
2008	7044	28.63

Source: Official website of RBI.

SME sector plays a pivotal role in India's economic growth. Approximately 40% of India's exports are routed through SMEs. Increased overseas operations and volatility in Indian currency has exposed Indian SME sector to currency risk which in turn necessitated them to manage the currency exposure. There is a wide spread opinion among business circle that in spite of increased exposure to currency risk Indian SME sector is not making extensive use of currency derivatives to manage their currency exposure. This study reports the findings of cross-sectional survey of the currency derivative usage by SMEs in India.

3. REVIEW OF EXISTING LITERATURE ON THE SUBJECT

There are a number of academic research studies on Usage of Currency derivative. But bulk of the literature relates to developed economies and survey of MNC's. Literature available on the subject can be broadly classified in to studies indicating the usage and importance of currency derivatives and studies concentrating on the relative importance of different types of currency derivative used. It is widely held that business enterprises make extensive usage currency derivatives and it results in reduction in risk level. Bodnar, Hayt and Marston (1995) find that 76 percent of US non-financial firms manage foreign exchange risk using some foreign currency derivative or the other. Similarly Bodnar, Hayt and Marston (1998) conduct a Wharton survey of financial risk management by US non-financial firms. The results show that foreign currency derivatives are the most commonly used class of derivatives with 83 percent of derivatives-using firms utilizing them. Allayannis and Ofek (2001) find significant evidence that exporters prefer foreign currency derivatives to foreign currency debt while hedging their operations. Makar and Huffman (1997) examine how foreign exchange derivatives (FXDs) are used by 64 U.S. multinationals facing potentially significant economic exposure, to manage currency risk. Carter, Pantzalis and Simkins (2001) find that the use of currency derivatives, particularly forward contracts, was associated with reduced levels of foreign exchange exposure among US MNC's.

The next segment of literature concentrates on the types of currency derivatives used. Marshall (1994) find widespread use of both forwards and options. However the use of forwards was more widespread and they were used in more currencies. Bodnar, Martson and Haytts (1998) confirm that options are less frequently used than forwards. Furthermore they find that options are mainly used in long-term exposures. For Australian firms, Batten, Mellor and Wan (1993) find similar results: the most used instruments to hedge are forwards, options and currency swaps. Bodnar and Gebhardt (1999) state that German and US firms prefer to use OTC instruments (forward, swaps and options) rather than exchange-traded instruments such as futures. Howton and Perfect (1998) find that in 451 Fortune 500 / S&P

500 (FSP) firms and 461 randomly selected firms, forwards and futures were the most-often used currency contracts. Above studies indicate the widespread use of currency derivatives in managing the currency exposure. But, Pramborg (2004) reports that a proportion of firms that used derivatives was significantly lower in the Korean than in the Swedish sample. Wai (1993) finds that short-dated forward contracts are amongst the most widely used hedging techniques of Singapore companies. Probable the only study that concentrated on the usage of currency derivatives in India is of Anand and Kaushik (2008) who examine what motivates the management to use foreign currency derivatives in corporate India. The major objective of using derivatives is hedging the risk followed by arbitrage and price discovery. Speculative objective is the least preferred option in India. A common thread running through the above studies is that the currency derivatives are widely used by companies in developed countries and usage of currency derivatives is related with reduced currency exposure. The foregoing studies seem to suggest that firms with greater growth opportunities and tighter financial constraints are more inclined to use currency derivatives. Forward contract is undoubtedly the most preferred class of derivative and used extensively. This study assumes greater importance because of the fact that most studies concentrated on usage of currency derivative among Multinational companies in developed countries where as the present study is concentrating on currency derivative usage among SMEs.

4. METHODOLOGY OF THE STUDY

This paper reports the results of a cross-sectional survey of the currency derivative usage by SMEs in India. The study was undertaken with the objective of studying the nature and extent of currency derivative usage by Indian SMEs and to study the motive behind the usage of currency derivatives. The sample was selected form the data base of various trade and industry bodies. Convenient random sampling was adopted and care was taken to have questionnaire filled from SMEs with foreign exchange exposure. Out of 280 well structured questionnaires sent through e-mail and courier, 56 filled questionnaires were received constituting a response rate of 20%. As the response rate was poor some SME's were directly approached using personal contacts and 24 SMEs have answered to the questionnaire. Thus, result of the study is based on the analysis of the 80 respondent enterprises. All the 80 respondent enterprises are exporters and 27 of them have Imports also thus all the respondents have exposure to foreign exchange risk. As shown in Table1 (Appendix), out of 80 respondents, 29 are in to IT and ITES operation followed by 16 respondents from Engineering and Industrial product category and 14 and 21 respondents from other category and Pharma category respectively. The present study is purely based on primary source of data which is collected from respondent SMEs through a questionnaire. Study suffers from basic limitations in the form of limited sample size and most importantly non availability of secondary source of financial information of SMEs which could have helped in analyzing the degree of currency exposure faced by them and extent of currency derivative usage by said SMEs. The study is taken up with a primary hypothesis that majority of Indian SMEs does not make use of currency derivatives and even those SMEs which make use of currency derivatives use only forward contract in managing their currency exposure.

5. ANALYSIS OF RESULTS AND FINDINGS

5.1 Usage of currency derivatives

As shown in Table 1 (Appendix), 37 respondents constituting 46% are using currency derivatives to manage their currency exposure where as another 54% of respondents are not making use of any derivative instruments in spite of being exposed to currency risk.

5.2 Type of derivative used
Currency forward which is an OTC derivative in India is used by all the 37 respondent SMEs distantly followed by 4 respondents using currency options and another 3 respondents using futures. None of the SMEs are going for Swaps and Any other structured products.

5.3 Reasons for non usage of currency derivatives
More than half of the respondent SMEs are not making use of any currency derivatives. An attempt was made to know the reason for the same. Respondents were asked to indicate the importance attached to the reasons in a scale of five. Five indicate that the respondent SMEs give at most importance and one indicates that the reason is given least importance. As shown in the Table 5 (Appendix), most important reason behind non usage of derivative instruments is the feeling that the losses and gains from currency fluctuation even out in the long run. The respondents have given a rating of 3.8 in a scale of 5 for the above reason. High cost associated with currency derivatives and low exposure is also key reasons behind non usage of derivatives. Significantly, none has cited lack of proper enlightenment / awareness as the reason.

5.4 Frequency of usage of derivatives
It is necessary to ascertain how frequently the said techniques are used. This is because some may have used it tentatively and some may have used it seriously and yet some may have used it just for the novelty of it. Hence the researcher sought to ascertain from the respondents how frequently they used the said derivatives. The frequency is indicated on a five-point scale with 5 standing for ‘always’, 4 standing for ‘almost always’, 3 standing for ‘frequently’, 2 standing for ‘occasionally’ and 1 standing for ‘never’. Currency forward is the most frequently derivative with a frequency of 4.2, distinctly followed by options and Futures with a respective rating of 1.3 and 1.24.

5.5 Objective of currency derivative usage
As per RBI regulations currency derivatives (forward, Options Swaps) can be used by only those who are exposed to currency risk and only for hedging purpose. Only currency futures can be used for speculation purpose in India. The respondents of the present study were asked to indicate the primary objective behind using the currency derivative instrument. All those SMEs which are using currency derivatives opine that hedging of currency exposure is their primary objectives. Only 3 respondent SMEs are using currency derivatives for speculation and it is interesting to note that all these respondents are using currency futures. But none of the respondents feel that arbitrage and price discovery is their objective behind using currency derivatives.

5.6 Percentage of currency exposure hedged with currency derivative
Although all the 37 respondent SMEs are who are using the currency derivative says it is meant for hedging, there is a possibility that respondents may use it to cover their exposure fully or partly. In the circumstances, the researcher enquired of the respondents to what extent they hedged their exposure using currency derivative. As shown in Table 4 (Appendix), there is an equal distribution of responses and 96% respondents cover 20% to 80% of their exposure using currency derivatives.

5.7 Level of satisfaction with forward contract
The study was undertaken with the hypothesis that the forward contract is the most widely used derivative among derivative users therefore it is necessary to know the satisfaction level of users of forward contract. Out of 37forward contract users, 24 (65%) feels that they are highly satisfied followed by 10 (27%) SMEs who feel their satisfaction level is moderate and only 3 users opine that they are dissatisfied with forward contract. Apart from

ascertaining the popularity of the device as a whole, it is necessary to ascertain how popular the individual aspects of the device are. The researcher felt it is necessary to ascertain from the respondents their satisfaction levels in respect of the individual aspects of the forward contracts. An analysis of mean values as shown in Table 6 (Appendix), and frequencies leads to the conclusion that satisfaction level is very high as far as the cancellation and re-booking and currency of hedging is concerned where the mean value of satisfaction is more than 4. Respondent SMEs are even satisfied with tenure but some dissatisfaction can be seen relating to aspects like cost and documentation where the mean value of satisfaction is around 2. Implied cost of using forward is an important area where is there is a dissatisfaction among the users of forward contract.

5.8 Reason for non usage currency derivative other than forward contract

Among derivative users all are making use of forward but only a negligible portion of respondents are using Futures and Option and none are making use of Swaps and other structured products. An attempt was made to know the reason for the same. Respondents were asked to indicate the importance attached to the reasons for non usage of said derivative products in a scale of five. Five indicate that the respondent SMEs give at most importance and one indicates that the reason is given least importance. As shown in the Table 7 (Appendix), most important reason given by respondent SMEs is that the above said products are not offered by the banks with whom they normally deal. Other important reasons include high cost associated with those products and lack of expertise to understand and use it.

6. SUMMARY AND CONCLUSIONS

Present study reports the currency derivative usage by SMEs in India. The study was undertaken with the objective of studying the nature and extent of currency derivative usage by Indian SMEs and to study the motive behind the usage of currency derivatives. Little more than half of SME respondents do not make use of any currency derivatives in managing their currency exposure. Reason behind non usage of derivative instruments is due to high cost associated with it, low exposure and most importantly the feeling that the losses and gains from currency fluctuation even out in the long run. Those respondent SMEs which make use of currency derivatives do so primarily for hedging their currency exposure. Currency forward is the most widely and frequently used currency derivative among the derivative users. Majority of respondent SMEs are satisfied with currency forward and satisfaction level is high relating to procedural aspects but not so relating to cost aspect of currency forward. Reason behind non usage of instruments like futures, options or swaps is that it is not offered by their bankers and it is costly affair to handle it. In the light of volatility of Indian rupee against major currencies, especially USD Indian business enterprises especially SMEs are facing increased exposure to currency risk. In spite of this Indian SMEs are not making effective use of currency derivative and even those who making use of it, the dependency is on simple derivative contract. The Indian currency derivatives market is still in a nascent stage of development but offers tremendous growth potential. Once the full convertibility of rupee is implemented, one can hope to see Indian enterprises including SMEs rigorously participating in currency derivative market. Applicability of conclusion of this study is limited as only very few SMEs in India over just one time period. However, the results from this empirical study are encouraging and interesting; leading us to conclude that there is scope for more rigorous study along these lines.

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Appendix

Table 1: Nature of operations and usage of Currency derivatives by respondent enterprises

Nature of operations	User of currency derivatives	Non user of currency derivatives	Total
IT and ITES	12	17	29
Pharmaceuticals	8	06	14
Engineering	9	7	16
Others	8	13	21
Total	37	43	80

Table 2: Type of derivative products used

Type of currency Derivative used	IT and ITES	Pharma	Engineering	Others	Total
Currency forward	12	8	9	8	**37**
Currency futures	2	1	0	0	**03**
Currency Options	2	0	0	2	**04**
Swaps	0	0	0	0	**0**
Any other Structured products	0	0	0	0	**0**

Table 3: Table showing the different objectives of using currency derivatives

Objective	No of respondents	percentage
Hedging risk	37	100
Speculation	03	08
Price discovery	00	00
Arbitrage	00	00

Table 4: Exposure Hedged with External Hedging techniques

Exposure Hedged	Frequency	Percentage
Up to 20%	0	0
21-40%	11	30
41-60%	12	33
61-80%	12	33
Above 80%	2	4
Total	37	100

Table 5: Reasons for non usage of currency derivatives

Reasons	Mean Value
Lack of proper enlightenment / awareness	1.3
Exposure too low to justify derivative usage	3.4
Expertise inadequate to manage Issues associated with derivative	2.2
Loss arising from non usage of derivative is insignificant	2.6
losses and gains from currency fluctuation even out in the long run	3.8
cost associated with derivative exceeds anticipated benefits	3.6
Non availability of Industry-friendly derivative products.	2.8

Table 6: Satisfaction relating to aspects of Forward Contracts

Aspect	Mean value of satisfaction
Cancellation and rebooking	4.2
Cost	1.8
Tenure	3.6
Currency hedged	4.1
Documentation	2.1

Table 7: Reasons for non usage of derivatives other than Forward Contracts

Reasons	Mean Value
Lack of expertise to understand and use the products	2.8
Not offered by Banks with whom foreign exchange dealings are undertaken.	4.3
High cost associated with the products	3.4