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Foreign Exchange Trading: An Analysis on Currency Future Trading in India

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Abstract

Foreign Exchange trading in India has marked new land mark in India with the introduction currency future trading in the Indian Stock Exchanges of National Stock Exchange of India (NSE), Multi Commodity Stock Exchange for Currency (MCCX-SX) and United Stock Exchange of India (USE). Just after the launch of currency derivative in NSE on 28th August 2008, the volume of trading has increased many folds due the participation of small traders to large traders in export business. Currently future trading is noted to be a land mark history in India. This paper discuss the system of trading in the stock exchanges, and opportunities which has turn out to be a beneficial for the forex traders in the foreign trade.

Key Words: *Currency Future, Derivative, Trading, Market Exposure, Exchange Rate*

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1. INTRODUCTION

Introduction of currency futures into the Indian stock exchanges is find out to be a one of the greatest achievement in the Indian forex market. Indian stock exchanges have emerged as one of the best performing market in the Asian region. The Stock exchanges in India introduces variety of new class of financial product to its customers in all segment of stock market operations. It has already introduced new financial products under various categories of equities, derivatives, mutual funds, government securities, paper assets like gold funds, commodities of metals and agriculture products, interest rate products and currency derivatives trading. Global markets which has seen U-turn in the recent years, had fallen from peak to bottom and raising from bottom to peak at a great bull back which no investor or the trader would have expected. Many have seen back pain during this down fall of the market, concerning to the market volatility factor, stock exchanges have started introducing more of financial derivatives which would save investors to avert risk of big loss. Even investor can choose their product based on the risk category they like to trade or invest. This paper analyses about the emergence of currency exchange derivatives as a risk hedging instrument in the Indian stock exchanges, have attracted more number of investors in the foreign exchange market trading in India.

2. FOREIGN EXCHANGE AND CURRENCY DERIVATIVES MARKET GROWTH

Currency futures trading first started at the Chicago Mercantile Exchange (CME) in 1972, in less than one year after the system of fixed exchange rates was abandoned along with the gold standard exchange rate system. Some commodity traders at the CME did not have access to the inter-bank exchange markets in the early 1970s, when they believed that significant changes were about to take place in the currency market. This has given opportunity for establishing the International Monetary Market (IMM) and launched trading in seven currency futures on May 16, 1972. The Philadelphia Stock Exchange (PHLX) provided the impetus in December 1982, when it listed the first currency option contract of Pound Sterling/USD. The OTC markets in currency grew centered in London from the early 1980s.

The global trends in forex derivatives markets given the possible reasons for growth in the forex markets. Looking at the developments in India, focus was given to the launched exchange traded currency futures. The details on the growing trends in currency futures segment in the National Stock Exchange of India (NSE) are given in the section of business growth at NSE and other exchanges in India since inception

3. FOREIGN EXCHANGE MARKET IN INDIA

There is no exchange traded derivatives in the Indian foreign exchange market; however, a new law has been passed to permit the trading on currency futures derivatives. This was followed the recommendations for the establishment of a regulatory framework for derivatives as part of the Indian securities market by a committee chaired by L.C. Gupta. Currency derivatives have emerged as a new financial derivative in the Indian stock exchanges, first it has been introduced in National Stock of India on 28th August 2008. Generally derivatives are used as risk hedging instrument in the foreign exchange trade to manage the price fluctuations. But some of the traders use it for speculative purpose too.

4. CURRENCY FUTURE DERIVATIVE

Currency trading in the stock exchange is same as that of equities trading in the stock market. Currency future trading which have futures contract that permits one to buy or sell foreign

currency against underlying currency, in the Indian stock exchanges one can buy or sell the US$/Yen/Euro/Pound Sterling for the Indian Rupees. All these contracts traded in the stock exchange were against the Indian currency. Generally, focusing on the currency future derivative would provide the foreign traders to reduce risk of exchange rate volatility and also in the price of the export commodities. The currency future is viewed as one of the important derivative in the foreign exchange market were one can reduce the risk of change in price or change in cost of imported or exported commodities. Currency trading is introduced in the stock exchanges in order to bring the retail investors into the currency trading system as it can be traded in small lots, against huge investment class of peoples and the investment bankers who were the major traders into the currency derivatives.

Trading in derivative such as forwards, futures, and options are already exists in India, but Reserve Bank of India allowed forward trading in Rupee and Dollar denomination. Today forward contracts have become a liquid market which allows Cross Currency options trading. But emerge of the new product called currency future derivative has happened only due to new style of online based trading system.

5. EXPERT COMMITTEE RECOMMENDATIONS

The appointment of an Expert Group on Foreign Exchange (popularly known as Sodhani Committee) in November 1994 is a landmark event of foreign exchange market in India. The group studied the prevailing foreign exchange market system and came up with the recommendations to develop a deepen and widen the forex market system. Tarapore Committee on Capital Account Convertibility of 1997 also recommended a number of measures relating to financial markets, especially forex markets. Some important developments in the policy framework for these markets over time is based on the recommendations of these committees and otherwise, have been:

i. Banks have been allowing freedom to fix their trading limits, permitted to borrow and invest funds in the overseas markets up to specified limits. They can also determine the interest rates on Foreign Currency Non-Resident (FCNR) deposits within ceilings and to use derivative products for the asset liability management.
ii. Corporates have given flexibility to use a variety of instruments like interest rates and currency swaps, caps/collars and forward rate agreements in the international forex market.
iii. In earlier periods the forward contracts could not be rebooked once cancelled, greater flexibility has now been given for booking cancellation and rebooking of forward contracts through currency future derivatives.
iv. Exporters and importers are also allowed to book forward contracts based on past exchange rate performance and the delivery condition have also been gradually liberalized.
v. In order to simplify procedural requirements for Small and Medium Enterprises (SME), RBI has granted flexibility for hedging underlying as well as to manage the anticipated economic exposures without going through the rigours of complex documentation formalities. To ensure that SMEs understand the risks of these products, only banks with whom the SMEs have credit relationship are allowed to offer such facilities. These facilities should also have some relationship with the turnover of the entity.

"Many Small and Medium Enterprises (SMEs) doing business overseas have tremendous potential. However, they need a standard financial instrument and transparent platform to manage their currency risks better" – Rakesh Kapoor, Banker, Treasury Department.

vi. Individuals have been permitted to hedge upto USD 100,000 on self declaration basis.
vii. Authorized Dealer (AD) banks can also enter into forward contracts with residents in respect of transactions denominated in foreign currency but settled in Indian Rupees including hedging the currency indexed exposure of importers in respect of customs duty payable on imports.
viii. Foreign Institutional Investors (FII), person's resident outside India having Foreign Direct Investment (FDI) in India and Non-resident Indians (NRI) is allowed to access to the forwards market to the extent of their exposure in the cash market. FIIs are permitted to hedge currency risk on the market value of entire investment in equity and/or debt in India as on a particular date using forwards.
ix. For FDI investors, forwards are permitted to hedge exchange rate risk on the market value of investments made in India since January 1, 1993; hedge exchange rate risk on dividend receivable on the investments in Indian companies and hedge exchange rate risk on proposed investment in India.
x. NRIs can hedge balances in NRE accounts using forwards and FCNR (B) accounts using rupee forwards as well as cross currency forwards.

The gross turnover in the OTC derivatives (swaps and forwards) segment of currency markets has been steadily increasing over time with activity picking up particularly in late 2007 and through 2008, following the increased volatility in USD-INR exchange rate. The average daily turnover, calculated on a monthly basis, reached an all time high of USD 35 billon in September, 2008. The year 2008 closed with average daily volumes of USD 28.63 billon in these markets over the full year.

6. LITERATURES ON CURRENCY DERIVATIVES

The literature review provides foundation for the study on currency future derivatives to understand the gap existing between past present systems of trading practices in the currency future derivative. For this study some of the literatures have proved to be a supportive in bringing out this paper. The literature discusses the concepts and introduction of currency future derivative in the Indian stock exchanges. It is estimated that the developing nations would join the systematic exchange system which is highly liquid and flexible for the traders to protect their risk in the foreign exchange market. Foreign exchange market which had history, when nations moved on from fixed exchange rate system to floating exchange rate system. Reviews have been collected only from 2008 as trade of currency future started only from august 2008 in India. This paper concentrates only on the currency trading system in the Indian Currency future market, so previous past history is not considered. Due to short period of time frame, only minimum number of literature only available on the currency future trading. Some the review of earlier studies opinion

Kumar and Seppi (1992) and **Jarrow (1992)** presents the impact of currency derivatives on spot market volatility and found that speculative trading executed by big players in the derivatives market increases the volatility in the spot exchange rate. Hence, currency futures trading

increases the spot market volatility. **Glen and Jorion (1993)** examined the usefulness of currency futures/forwards and concluded that currency risk can be minimized through futures/forward hedging.

Chatrath, Ramchander and Song (1996) analyzed the impact of currency futures trading on spot exchange rate volatility by establishing relationship between level of currency futures trading and the volatility in the spot rates of the British pound, Canadian dollar, Japanese yen, Swiss franc and Deutsche mark. They concluded that there exists a causal relationship between currency futures trading volume and exchange rate volatility and also found that the trading activity in currency futures has a positive impact on conditional volatility in the exchange rate changes.

[1]**SB Kamashetty (2008),** in the paper titled 'Exchange traded currency futures: A bird's eyeview', provides details on currency futures report presented by the Reserve Bank of India (RBI) and Securities Exchange Board of India (SEBI) on issues related to the exchange traded currency futures introduction in theIndian stock exchanges. It also discusses the guidelines on trading of currency futures in the stock exchanges.

[2] **Manoj Anand and K.P. Kaushik (2008),** 'Management Motivations for Use of Foreign Currency Derivatives in India', examines the management motivation of foreign currency derivatives usage in corporate India. For this study 640 companies are selected using currency derivatives or documented foreign exchange risk management practices at their companies. It is found that management currency future derivative is critical for their risk exposure in the foreign trade and to manage the volatility of price movement in the foreign market trade. They find currency future as hedging instrument.

[3]**Anuradha Guru (2009),** 'Forex Derivative Markets in India: Developments thus far and road ahead', exchanges the view on forex derivative market development from early period of currency system till the currency trade in national stock exchanges in India. It presents about the trade activities at NSE.

7. TRADING SYSTEM

Currency future trading in India today it is an automated online screen based system called 'NEAT' – National Exchange for Automated Trading' is used by National Stock Exchange (NSE). Trading at NSE or MCX-SX (Multi-Commodity Exchange for Currency Future) or USE (United Stock Exchange of India)

8. STANDARDISATION OF THE CONTRACT

The exchange of currency is between Indian currency (INR) and US dollar (USD). Market time of Trade is between 9am to 5pm. The contract size of the derivative is US 1000 with ticker size of 0.25 or INR 0.0025. With the maximum expiration period of 12 months for every contract traded. Final settlement is being done in cash on the last working day of the month. The final settlement is made on the reference rate which will be fixed by RBI prior to two working days of the contract,

[1] SB Kamashetty, "Exchange-Traded Currency Futures A Bird's Eyeview", Portfolio Organizer, The Icfai University, December 2008

[2] Manoj Anand and K.P. Kaushik (2008), "Management Motivations for Use of Foreign Currency Derivatives in India", IIMB Management Review, 20(3), July - September, 2008, pp. 324-339.

[3] Anuradha Guru, "Forex Derivative Markets in India: Developments thus far and road ahead", National Stock Exchange of India, April 2009

Table No – 1 - Currency Future Trading Standards and Specifications	
Underlying	USD - INR
Trading Hours (Monday to	09.00 am to 05.00pm
Contract Size	USD 1000
Tick Size	0.25 paisa or INR 0.0025
Trading Period	Maximum expiration period of 12 months
Contract Months	12 near calendar months
Contract Expiration Date	Last working day of the month (subject to holiday
Last Trading Day	Two working days prior to contract expiration date

Source: NSE

9. SETTLEMENT SYSTEM

Currency future contract settlement is done by National Securities Clearing Corporation Limited (NSCCL). Settlement of the daily trade is closed with mark to market settlement on a T+1 day basis and settlement of the final contract closer carried out on T+2 day basis. The price of the daily contract settlement is done on the basis of the last half an hour weight average price of the contract and for the contract which is not traded in the last half an hour on a day means; it is computed as per formula of

$$Fo = So\ e^{(r-r)ft}$$

Where Fo = Theoretical futures price
So = Value of the underlying
R = Cost of financing (using continuously compounded interest rate)
Rf = Foreign risk free interest rate
T = Time till expiration
e = 2.71828

Rate of Interest (r) is the relevant MIBOR rate or such other rate as may be specified by clearing corporation from time to time. Foreign risk free interest rate is the relevant LIBOR rate or such other rate as may be specified by the clearing corporation from time to time. The final settlement price for a future contract will be of RBI reference rate.

10. TRADE TIMINGS

Trading in currency future trading is from Monday to Friday between 9.00AM to 5.00PM on all working days except exchange declared holidays.

11. TRADE VOLUMES AND VALUES

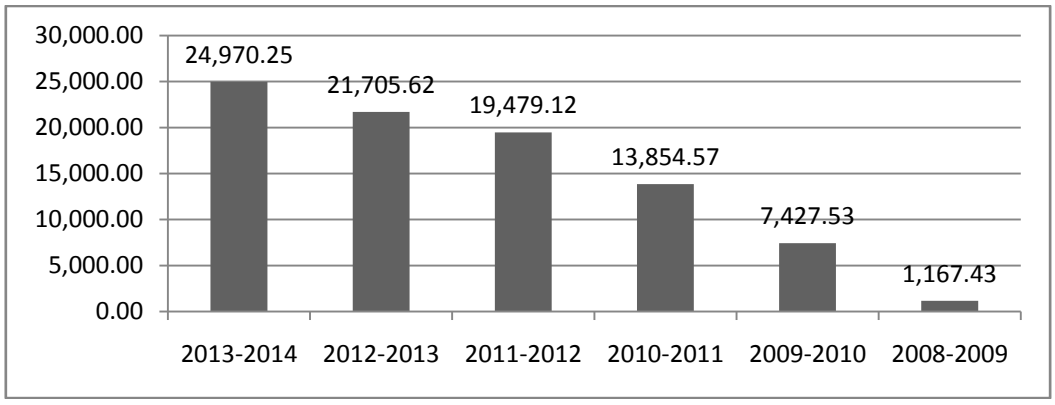
Traded volume in the currency future market is as high as other segment of the derivative contract. Even globally among derivative segment currency future is the most traded segment.

Table No – 2- Business growth in currency derivative segment

Year	Currency Futures		Currency Options		Total		Average Daily Turnover
	No of Contracts	Turnover (in crores)	No of Contracts	Notional Turnover (in crores)	No of contracts	Turnover (in crores)	In crores
2013-2014	4,78,33,662	2,63,799.62	2,47,79,033	1,35,724.31	7,26,12,695	3,99,523.93	24,970.25
2012-2013	68,41,59,263	37,65,105.33	27,50,84,185	15,09,359.32	95,92,43,448	52,74,464.65	21,705.62
2011-2012	70,13,71,974	33,78,488.92	27,19,72,158	12,96,500.98	97,33,44,132	46,74,989.91	19,479.12
2010-2011	71,21,81,928	32,79,002.13	3,74,20,147	1,70,785.59	74,96,02,075	34,49,787.72	13,854.57
2009-2010	37,86,06,983	17,82,608.04	-	-	37,86,06,983	17,82,608.04	7,427.53
2008-2009	3,26,72,768	1,62,272.43	-	-	3,26,72,768	1,62,272.43	1,167.43

Source: Prepared from the NSE data

Figure – 1 - Business growth in currency derivative segment



12. CONCLUSION

Thus introduction of currency derivatives in the Indian stock market has emerged as a new financial derivative product facilitating the foreign traders in India. Due to the demand of these products, it has seen highest growth within the one year period of introduction into the derivative segment. So there is more scope for derivatives study and research. With the current growth momentum and opportunity, the currency derivative segment is considered to be an emerging field in the derivative segment.

REFERENCES

[1]. Soenen L.A and Madura, Jeff. (1991). Foreign Exchange Management: A Strategic Approach, , Long Range Planning. Vol. 24, No. 5, pp.119-124.

[2]. Reddy, Y. V. (1997). The Future of India's Debt Market. Reserve Bank of India Bulletin, November.

[3]. Yoon Je Cho. (2000). Indian Capital Market Recent Developments and Policy Issues. Asian Development Bank.

[4]. Anuj Thakur, Rahul Karkun, Sameer and Sameer Kalra. (2002). Financial Derivative Market and its Development in India. Dhan, Finclub Quarterly Magazine, Indian Institute of Management, Calcutta.
[5]. Neeraj Gambhir and Manoj Goel. (2003). Foreign Exchange Derivatives Market in India – Status and Prospects. Derivatives Markets in India, pp.205-220.
[6]. Ahuja N.L. (2005). Managing Foreign Exchange Risk with Derivatives. paper presented at the International Conference of Asia-pacific Association of Derivatives (APAD) held at IIMBangalore, 27-30 July.
[7]. BIS Triennial Central Bank Survey of Foreign exchange and derivatives market activity, December 2007.
[8]. Gabriele Galati and Alexandra Heath. (2007). What drives the growth in FX activity? Interpreting the 2007 Triennial survey. BIS Quarterly Review, December 2007.
[9]. Madhoo Pavaskar. (2008). Economics of Currency Derivatives. Business Standard, August 14.
[10]. Nirvikar Singh. (2008). Currency futures trading in India. Emerging Markets Economic Monitor, RGE Monitor, 25th August.
[11]. Anuradha Guru. (2009). Forex Derivative Markets in India: Developments Thus Far and Road Ahead. National Stock Exchange, News Letter, April.
[12]. Partha Sinha. (2009). Currency futures clock 1,500% growth in 1 year. The Times of Now, August.
[13]. Tumellano Sebehela. (2009). Derivatives Hedging: SASOL (Pty)) Ltd. As an Example. The Icfai University Journal of Derivatives Markets, Vol. VI. No. 1.
[14]. National Stock Exchange of India, Reserve Bank of India.