

# CURRENCY FUTURES IN INDIA

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## ABSTRACT

***An important milestone of Indian financial markets was reached on August 29, 2008, when the National Stock Exchange (NSE) launched currency futures for the first time in the country. The step was taken forward by the Reserve Bank of India (RBI) and Securities and Exchange Board of India (SEBI) jointly allowing USDINR currency futures in stock exchanges, albeit with some restrictions. Currency futures are derivatives that allow investors to buy or sell a currency on a future date at a previously fixed price. According to market analysts, introduction of currency futures in the Indian market will give companies as well as individuals greater flexibility in hedging their underlying currency exposure and will impart greater transparency and liquidity to the market.***

***According to the guidelines issued by the Central Bank, currently only USDINR future contracts with a size of \$1,000 each are available for trading and each contract will have contracts up to 12 month maturity period. The contracts will be quoted and settled in the local currency. FIIs and NRIs will not be allowed to trade directly, but this is expected to change once the local market has reached a maturity level. Based on the performance of the USDINR future contract, the RBI may also decide to permit currency futures contracts on other currencies like Pound, Yen and Euro. The objective of this paper is to discuss the regulations that apply to the currency futures market in India. It outlines the applications of currency futures and studies the performance of the USDINR future contract at the NSE since its inception. In addition to this, some suggestions to attract more participants into this market have been discussed.***

## INTRODUCTION

Indian financial markets have achieved another milestone with the launch currency futures at National Stock Exchange (NSE), on 29 August, 2008. The step was taken forward by the Reserve Bank of India (RBI) and Securities and Exchange Board of India (SEBI) jointly in their effort to make available a wider choice of hedging instruments to market participants in order to enable them to cope up with their currency exposures. The decision is indeed laudable and is of utmost importance keeping in mind the present macroeconomic conditions of the

economy. It is widely believed that the RBI was prompted to take this step after the Dubai Gold and Commodity Exchange (DGCX) started trading Rupee Futures in June 2007.

Currency futures are derivatives that allow investors to buy or sell a currency on a future date at a previously fixed price. Achieving a strong currency derivatives market is of critical importance for the economy. Futures' trading with currencies as the underlying assumes importance in the context of growing integration of the economy with the rest of the world and rapid development of the financial

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markets. There has been an upsurge in currency volatility in India and fear of foreign exchange losses have been continuously haunting Indian corporates. This initiative will certainly bring some respite. The move comes in the wake of losses incurred by several firms on account of buying complex derivative products which are also referred as 'exotics', and the resultant legal battle between them and the banks which sold such products.

### Origin of Currency Futures

Although the origin of futures can be traced back to 1848 when the Chicago Board of Trade (CBOT) introduced standardized forward contracts, the birth of currency futures is of relatively recent origin and was a sequel to the breakdown of the Bretton Woods currency system in 1970s. The resultant currency volatility after the collapse of the Bretton Woods currency system provided a business opportunity for launching futures contracts in foreign currencies. The International Monetary Market (IMM) of the Chicago Mercantile Exchange (CME) first conceived the idea of currency futures exchange by launching it in 1972.

Currency futures usually operate in markets that have fully convertible currencies. In India, currency futures have not been allowed so far because of controls on capital account in the external sector. However in view of the increased liberalization of capital account, wider hedging opportunities can strengthen economic agents' ability to cope up with market induced currency movements. Further, The Committee on Fuller Capital Account Convertibility has observed that internationally, many investors use futures rather than cash market to manage the duration of their portfolios because of the low upfront payments and

high speed of transactions. People also trade in futures with the hope of making profits out of speculation or arbitrage opportunities between the futures market and the cash market.

Guidelines issued by RBI for currency futures trading in India

The Reserve Bank of India (RBI), which oversees issues related to foreign exchange, has issued a set of guidelines for the launch of currency futures trading in India during November 2007. The intention behind the introduction of exchange traded rupee futures is to:

1. Provide an open access to foreign exchange market to a larger section of the population.
2. Bring greater transparency into the market and
3. Reduce cost of transaction.

Following are the guidelines issued under the Reserve Bank of India Act, 1934.

### Definition

1. Currency Futures means a standardized foreign exchange derivative contract traded on a recognized stock exchange to buy or sell one currency against another on a specified future date, at a price specified on the date of contract, but does not include a forward contract.
2. Currency Futures market means the market in which currency futures are traded.

### Features of Currency Futures

Standardized currency futures shall have the following features:

1. Only USD-INR contracts are allowed to be traded.
2. The size of each contract shall be USD 1000

3. The contracts shall be quoted and settled in Indian Rupees.
4. The maturity of the contracts shall not exceed 12 months.
5. The settlement price shall be the Reserve Bank's Reference Rate on the last trading day.

#### Participants

1. No person other than 'a person resident in India' as defined in section 2 (v) of the Foreign Exchange Management Act, 1999 (Act 42 of 1999) shall participate in the currency futures market.
2. Notwithstanding sub-paragraph 1, no scheduled bank or such other agency falling under the regulatory purview of the Reserve Bank under the Reserve Bank of India Act, 1934, the Banking Regulation Act, 1949 or any other Act or instrument having the force of law shall participate in the currency futures market without the permission from the respective regulatory Departments of the Reserve Bank. Similarly, for participation by other regulated entities, concurrence from their respective regulators should be obtained.

#### Membership

1. The membership of the currency futures market of a recognized stock exchange shall be separate from the membership of the equity derivative segment or the cash segment. Membership for both trading and clearing, in the currency futures market shall be subject to the guidelines issued by the SEBI.
2. Banks authorized by the Reserve Bank of India under section 10 of the Foreign Exchange Management Act, 1999 as 'AD Category - I bank' are permitted to

become trading and clearing members of the currency futures market of the recognized stock exchanges, on their own account and on behalf of their clients, subject to fulfilling the following minimum prudential requirements:

- (a) Minimum networth of Rs.500 crores.
- (b) Minimum CRAR [Capital to Risk (Weighted) Assets Ratio, also called as Capital adequacy ratio] of 10 percent.
- (c) Net NPA (Non Performing Assts) should not exceed 3 percent.
- (d) Made net profit for last 3 years.

The AD Category - I banks which fulfill the prudential requirements should lay down detailed guidelines with the approval of their Boards for trading and clearing of currency futures contracts and management of risks.

3. AD Category - I Banks which do not meet the above minimum prudential requirements and AD Category - I banks which are Urban Cooperative banks or State Cooperative banks can participate in the currency futures markets only as clients, subject to approval from the respective regulatory departments of the Reserve Bank.

#### POSITION LIMITS

1. The position limits for various classes of participants in the currency futures market shall be subject to the guidelines issued by the SEBI.
2. The AD Category - I Banks, shall operate within prudential limits, such as net open positions and Net Open Positions (NOP) and Aggregate Gap (AG) limits. The exposure of the banks, on their own account, in the currency futures market shall form part of their NOP and AG limits.

## RISK MANAGEMENT MEASURES

The trading of currency futures shall be subject to maintaining initial, extreme loss and calendar spread margins and the Clearing Corporation / Clearing Houses of the exchanges should ensure maintenance of such margins by the participants on the basis of the guidelines issued by SEBI from time to time.

### Surveillance and Disclosures

The surveillance and disclosures of transactions in the currency futures market shall be carried out in accordance with the guidelines issued by the SEBI.

### Authorization to Currency Futures Exchanges/ Clearing Corporations

Recognized stock exchanges and their respective Clearing Corporations/Clearing Houses shall not deal in or otherwise undertake the business relating to currency futures unless they hold an authorization issued by the Reserve Bank under Section 10 (1) of the Foreign Exchange Management Act, 1999.

## POWERS OF RESERVE BANK

The Reserve Bank may from time to time modify the eligibility criteria for the participants, modify participant-wise position limits, prescribe margins and / or impose specific margins for identified participants, fix or modify any other prudential limits, or take such other actions as deemed necessary in public interest, in the interest of financial stability and orderly development and maintenance of foreign exchange market in India.

### Application of Currency futures

The potential gains of currency futures are multi dimensional in terms of availability of better risk management

tools to the market players, better price discovery mechanism and the resultant potential to lower transaction costs, apart from improved two-way information flows between the market and the policy makers. Currency futures will also contribute to a higher level of sophistication of the financial market and impart greater confidence in economic agents both within and outside the country. Currency futures offer several advantages to companies with international operations, fund managers, individuals, exporters, importers, hedge fund houses, non-banking institutions and speculators alike.

### Hedging

From the corporate perspective, currency risk hedging has assumed greater importance in the wake of excess volatility in the foreign exchange market which has impacted the balance-sheet of the companies.

Many reputed companies have reported huge foreign exchange losses in the quarter ended June 30, 2008. Moreover, in the current scenario where Indian companies are acquiring foreign companies and seeking funds abroad, the risk of exposure to various currencies have increased all the more. Currency futures can help in mitigating risk in such situations.

From the investor's perspective, a well balanced portfolio through diversification and low systematic risk is beneficial. Earlier, major stake holders of the currency markets were importers and exporters who hedged the risk by taking forward contracts for the currencies in over the counter market. We have a well developed over the counter currency forwards market amounting to a huge daily turnover of \$34 billion in India. The question then arises, why do we need

currency futures? The purpose of both is to protect the investors or companies from unfavorable movements in exchange rates, but the difference lies in the contract specifications. Forwards are customizable in terms of the amount and time for which the hedge is required. On the other hand futures are standardized contracts as per the specifications of the exchange. In an OTC market, deals are generally done over the telephone. Thus the transaction lacks transparency. Further, exchange traded futures would be preferred by many as the default risks would be minimized due to daily mark to market settlement and due to the involvement of clearing houses as the legal counter party to all trades executed at the exchange. Exchange traded currency future would be very liquid in nature, forwards are not that liquid, i.e. they cannot be bought and sold as and when desired. In addition to this, forwards trading takes place only between large players typically between banks and corporations or between banks themselves. This is one of the reasons for lack of transparency in forwards pricing.

Now, everyone including a traveler, small businessmen, a parent remitting fees for the ward studying abroad who are impacted by currency movement can participate in currency future market. Therefore, small sized contracts are initially permitted by the regulatory authorities. This would encourage more participants with even small currency exposures to come into the markets and take advantage of these contracts. As of now, there are many apprehensions regarding the success of currency futures. Hence, RBI and SEBI are being cautious in order to reduce the fear of speculation and

volatility. Therefore, FIIs and NRIs are being barred from entering the market initially.

### Speculation

Fluctuations in exchange rates can also be used to reap speculative profits. For instance, an investor expects exchange rate of USD to increase in coming few months. He buys one currency future contract of size 1000 USD. Assume that a one month USDINR contract is trading at Rs. 46.60. Thus the value of the contract is Rs. 46600. At expiry of the contract after one month, the exchange rate of USD moves up to Rs. 46.75 as anticipated by the investor. In this case, the investor makes a profit of Rs. 150 ( $1000 * Re.0 .15$ ).

Similarly, an investor who expects the exchange rate of the USD to fall in the coming few months may sell (short) USDINR future contracts. Assume that a one month USDINR contract is trading at Rs. 46.60. The investor decides to sell one future contract of 1000 USD. Thus the size of the contract is Rs. 46600 ( $46.60 \times 1000$ ). At the expiry of the contract, the exchange rate of USD declines to Rs. 45 as anticipated by the investor. In this case, the investor makes a profit of Rs. 1600 ( $1000 \times 1.6$ ).

Therefore, one can say that speculation increases liquidity in the market, which is important for any market to develop.

### Currency Futures Trading at NSE – A Case Study

The contract specifications of the USDINR future contract traded at the NSE is given in Table 1.

|                               |   |  |   |
|-------------------------------|---|--|---|
| <b>Symbol</b>                 | USDINR  |  |   |
| <b>Market Type</b>            | N   |  |   |
| <b>Instrument Type</b>        | FUTCUR  |  |   |
| <b>Unit of Trading</b>        | 1 - 1 unit denotes 1000 USD   |  |   |
| <b>Underlying</b>             | The exchange rate in Indian Rupees for US Dollars   |  |   |
| <b>Tick Size</b>              | Rs.0.25 paise or INR 0.0025   |  |   |
| <b>Trading Hours</b>          | Monday to Friday <b>9:00 a.m. to 5:00 p.m.</b>  |  |   |
| <b>Contract Trading Cycle</b> | 12 month trading cycle  |  |   |
| <b>Last Trading Day</b>       | Two working days prior to the last business day of the expiry month at 12 noon.   |  |   |
| <b>Final Settlement Day</b>   | Last working day (excluding Saturdays) of the expiry month. The last working day will be the same as that for Interbank Settlements in Mumbai |  |   |
| <b>Quantity Freeze</b>        | 10,000 or greater   |  |   |
| <b>Base Price</b>             | Theoretical price on the 1st day of the contract.<br>On all other days, DSP of the contract   |  |   |
| <b>Price Operating Range</b>  | <b>Tenure upto 6 months</b>   | <b>Tenure greater than 6 months</b>                        |   |
|                               | +/-3 % of base price  | +/- 5% of base price                                       |   |
| <b>Position Limits</b>        | <b>Clients</b>  | <b>Trading Members</b>                                     | <b>Banks</b>  |
|                               | higher of 6% of total open interest or USD 5 million  | higher of 15% of the total open interest or USD 25 million | higher of 15% of the total open interest or USD 100 million |
| <b>Minimum Initial Margin</b> | 1.75% on day 1, 1% thereafter   |  |   |
| <b>Extreme Loss Margin</b>    | 1% of MTM value of open position  |  |   |
| <b>Calendar Spreads</b>       | Rs. 250/- per contract for all months of spread   |  |   |
| <b>Settlement</b>             | <b>Daily settlement</b> : T + 1   |  |   |
|                               | <b>Final settlement</b> : T + 2   |  |   |
| <b>Mode of Settlement</b>     | Cash settled in Indian Rupees   |  |   |
| <b>Daily Settlement Price</b> | Calculated on the basis of the last half an hour weighted average price.  |  |   |
| <b>Final Settlement Price</b> | RBI reference rate  |  |   |

Table 1 Contract Specification of USDINR Future Contract at NSE

source: [www.nseindia.com](http://www.nseindia.com)

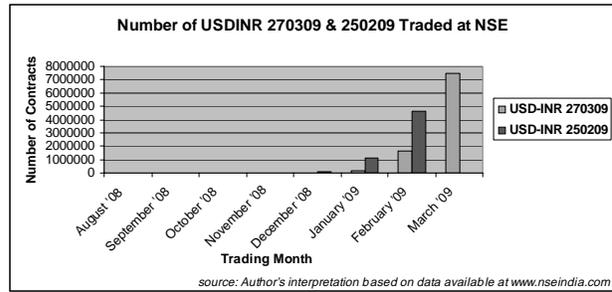
At any given point of time, there are twelve USD-INR future contracts available at the NSE for trading. These contracts have a tenure ranging from one month to twelve months. As on April 17, 2009, there are twelve USD-INR contracts available at the NSE. These have been mentioned along with their expiry dates in Table 2.

| CONTRACT NAME | EXPIRY DAY        |
|---------------|-------------------|
| USDINR 280409 | 28-April-2009     |
| USDINR 270509 | 27-May-2009       |
| USDINR 260609 | 26-June-2009      |
| USDINR 290709 | 29-July-2009      |
| USDINR 270809 | 27-August-2009    |
| USDINR 280909 | 28-September-2009 |
| USDINR 281009 | 28-October-2009   |
| USDINR 261109 | 26-November-2009  |
| USDINR 291209 | 29-December-2009  |
| USDINR 270110 | 27-January-2010   |
| USDINR 240210 | 24-February-2010  |
| USDINR 290310 | 29-March-2010     |

**Table 2 Currency Derivatives Contracts Available for Trading at NSE**

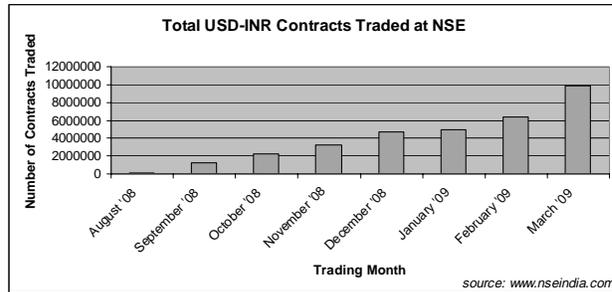
**Trading Statistics**

It has been observed that the trading at NSE has been dominated by the shorter tenure contracts and there is very little trade in contracts of four months maturity and beyond. Figure 1 attempts to do a comparative analysis of trading in March and February 2009 expiry USD-INR contracts at the NSE. It is evident that trading volumes in these contracts are negligible during August to December 2008. Moreover, in January and February 2009, the shorter tenure contract (i.e. USD-INR 250209) registers higher trades as compared to the longer tenure contracts (i.e. USD-INR 270309).



**Figure 1 Comparative Analysis of USD-INR 270309 and 250209**

Figure 2 reflects the total monthly turnover in all USDINR future contracts between August 2008 and March 2009 at the NSE. It is evident that trading in these future contracts has been registering a robust growth since its inception in August 2008.



**Figure 2 Trading Volumes in USDINR Future Contracts at NSE**

**Investor Awareness Efforts for Currency Derivatives**

To spread awareness about currency derivatives, the NSE has undertaken more than 220 interactive sessions in association with members, trade associations and professional groups in major towns across the country. In 2008-09, the NSE has also launched a certification course in currency derivatives called as “FEDAI-NSE Currency Futures (Basic) Module”.

**CONCLUSIONS**

The currency futures market is still at a very nascent stage in India. Even though,



it has shown a robust growth since its launch in August, it is still very small as compared to the more than USD 34 billion turnover in currency forward contracts in over the counter market. The dismal turnover of the currency future contract is mainly because of margin requirements by the clearing houses and low limit on the volume. Moreover, since the contracts are settled in Indian Rupees, it does not fulfill the requirements of traders who need possession of foreign exchange for their business. Currently only USDINR future contracts are available for trading. Hence a large section of the investors who have exposure to foreign currencies other than the USD cannot make use of the futures market for their needs. Further, the regulatory authorities have inhibited the participation of the FIIs and the NRIs into the currency futures market. These investors can only participate in OTC currency forward markets.

The SEBI has permitted the Mumbai Stock Exchange (BSE) and the Multi Commodity Exchange (MCX) to commence trading in currency futures. This is likely to attract more participants into the currency futures market. Further, in order to encourage active participation in currency derivatives segment, transaction charges on trades till March 31, 2009 have been waived off. However the members will have to pay Rs. 500 towards the investor protection fund. Based on the performance of the USDINR future contract, the RBI may also decide to permit currency futures contracts on other

currency pairs like EURO-INR, GBP-INR and YEN-INR. This is likely to meet the requirements of those investors who have exposure to foreign currencies other than the USD. The stock exchanges should undertake more investor awareness campaigns to educate investors towards currency derivatives as a risk hedging tool.

Finally as the markets become more mature and the currency derivative processes stabilize, the RBI should allow the FIIs and the NRIs to participate in the currency derivative markets in a phased manner.

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