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Benefits of Launching Non-USDINR Currency Futures Contracts in India



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Launch of USDINR futures trading in India has heralded significant participation by market participants having exposure to currency risk. Since the inception of futures trading, till October 2009, more than 152 million USDINR futures contracts (single side) have been transacted on MCX Stock Exchange alone. This is equivalent to a trading turnover value of Rs 738,000 crore. Exchange-traded currency futures platform in India has established global benchmarks in effective and efficient currency risk mitigation leading to better price discovery.

Given the fact that India's total foreign trade has quadrupled in just seven years, from USD 95 billion in 2000-01 to USD 414 billion in 2007-08, volatility in Indian forex markets has increased. The availability of over-the-counter (OTC) currency derivatives contracts has inherent limitations. The OTC markets could not address the need of micro small and medium scale enterprises (MSME) for mitigating currency risk; bid-ask spread for currency forward quotes for the MSME sector is usually wide due to smaller lot size of their import/export exposure. Many corporates had also exposed themselves needlessly to currency risk in OTC derivatives markets, especially in the non-USDINR exotic derivatives such as knock-in and knock-out option contracts, Constant Maturity Spread (CMS) Range Accruals, etc. This resulted in losses for corporates in excess of Rs 25,000 crore in 2007-08. This had accelerated the need for introducing a simple yet effective instrument in the form of USDINR futures.

The US dollar has been depreciating in the last few months. Due to the policy of sustaining the global meltdown using government funding, there is a significant liquidity overhang in the world economy. This is especially in the form of excess US dollars that have been printed to fund the default in the OTC derivatives markets in the US. EURUSD has increased from 1.2453 levels on November 20, 2008, to 1.5033 on October 22, 2009, indicating clearly the extent to which the US dollar has depreciated. Historically, commodities have been valued in US dollars. Every time the US dollar depreciates, the value of commodities increases. In 2008, when EURUSD increased to more than 1.59 levels, this resulted in a rally in crude oil prices to over USD 147 per barrel. With the collapse of Lehman Brothers, crude oil prices tumbled to as low as USD 33 per barrel by March 2009. Recently, once again, crude oil prices have crossed USD 80 per barrel, reflecting the increase in EURUSD to more than 1.50.

By 2007-08, more than 24 percent of India's foreign trade is with the OPEC countries, primarily due to increase in crude oil prices. In 2000-01, OPEC countries' share was just seven percent of the total foreign trade. The European Union countries form the second most important trading region, with over USD 69 billion (16.8 percent) of imports and exports in 2007-08, which is a 230 percent increase over the corresponding figure in 2000-01 of USD 20.92 billion. The entire North American continent contributes USD 45 billion of India's forex trade in 2007-08. With the importance of the US dollar diminishing in global trade, it is imperative for participants to not only mitigate risk against the US dollar, but also against other major currencies. Many OPEC countries are exploring options to change the currency for valuing their oil assets from the US dollar to Euro, which is a more stable currency. With depreciation of the US dollar, they prefer maintaining bulk of their currency assets in non-USD currencies or even gold. Gold prices have increased to more than USD 1068 per ounce in October 2009 from a low of USD 252 per ounce in 1999. This signifies a demand for a reliable alternate asset for investment purpose. This has been majorly due to depreciation of the US dollar.

Trading in non-USDINR currency futures is expected to provide a mechanism for market participants to hedge against volatility in other major currencies such as euro, yen, British pound, and possibly the Swiss franc. Following is a correlation matrix indicating the relationship between several major currencies trading against INR on an intra-day basis (5-minute data) for period between October 1, 2009 and October 28, 2009, everyday from 9 AM to 5 PM (IST).

CORRELATION MATRIX

	USDINR	EURINR	GBPINR	INRJPY	CHFNR
USDINR	100.00%	79.36%	80.35%	-59.70%	78.41%
EURINR	79.36%	100.00%	80.38%	-10.97%	98.63%
GBPINR	80.35%	80.38%	100.00%	-30.48%	83.52%
INRJPY	-59.70%	-10.97%	-30.48%	100.00%	-17.15%
CHFNR	78.41%	98.63%	83.52%	-17.15%	100.00%

It may be observed that the correlation between CHFINR, EURINR, and GBPINR against USDINR is in excess of 78 percent. This is an indication that market participants having exposures to currencies other than the US dollar have significantly greater risk due to volatility in currency exchange rates. The USDJPY has decreased from more than 120 levels a year ago to less than 90. During this period, global markets witnessed unwinding of the carry trade. The carry trade is the result of low interest rates in Japan, giving access to cheaper funds. Corporates and investment bankers could borrow in yen and convert into US dollar. At time of repayment, the borrower needs to buy yen to repay the loan amount. There is risk of appreciating yen and depreciating US dollar. Many Indian corporates having yen exposure can effectively mitigate risk using JPYINR futures contracts. Similar is the case for borrowers, investors, exporters, and importers having exposure in euro and the British pound. Traders having exposure to imports and exports in euro payable and receivable respectively can mitigate risk using EURINR futures contracts directly. As of now, such traders need to access the OTC forward markets, or enter into exotic derivatives positions to mitigate risk.

The increase in forex trade only implies increasing volatility in currency rates. The USDINR is used for calculation of cross currency transactions. For example, if an exporter wants to sell euro and convert the amount into Indian rupee, he/she needs to use both the EURUSD rate and USDINR rate for conversion. For managing risk, it is required to do forward contracts on both these currency pairs, thus being subjected to bid-ask spread on two currency pairs. For this purpose, the EURUSD rate is taken from international markets. Excess demand for euro in global markets due to investors and central banks selling US dollars to transfer their holdings into other stable currencies is having adverse effect on the US dollar value. In the present context, the Indian rupee invariably needs the US dollar to value itself against other currencies such as the euro and the British pound. This, in turn, has adverse impact on the EURINR rate. Thus, the launch of futures contracts on non-USDINR currency pairs such as EURINR, INRJPY, and GBPINR can significantly reduce currency risk for market participants having exposure to these currencies. Since the correlation between euro and Swiss franc is almost 98.63 percent, participants with exposure to the Swiss franc can use the EURINR futures to hedge.

It would also provide investors with arbitrage opportunity between different currency pairs, thereby providing the much needed efficiency in the Indian forex markets. Spread traders can benefit by leveraging on the inter-market spread differentials between different currency pairs. Margin for spread trading is less than outright speculative positions. Ultimately, banks and corporates having exposure to currency risk are expected to benefit immensely by mitigating risk using exchange-traded currency futures contracts. Exchange-traded derivatives have inherent advantage in ensuring zero counterparty default risk, thanks to excellent risk management systems such as SPAN-based margins using Value-at-Risk measures as well as mark-to-market settlement of profits/ losses on T+1 day basis.

Annexure 1 India's Foreign Trade

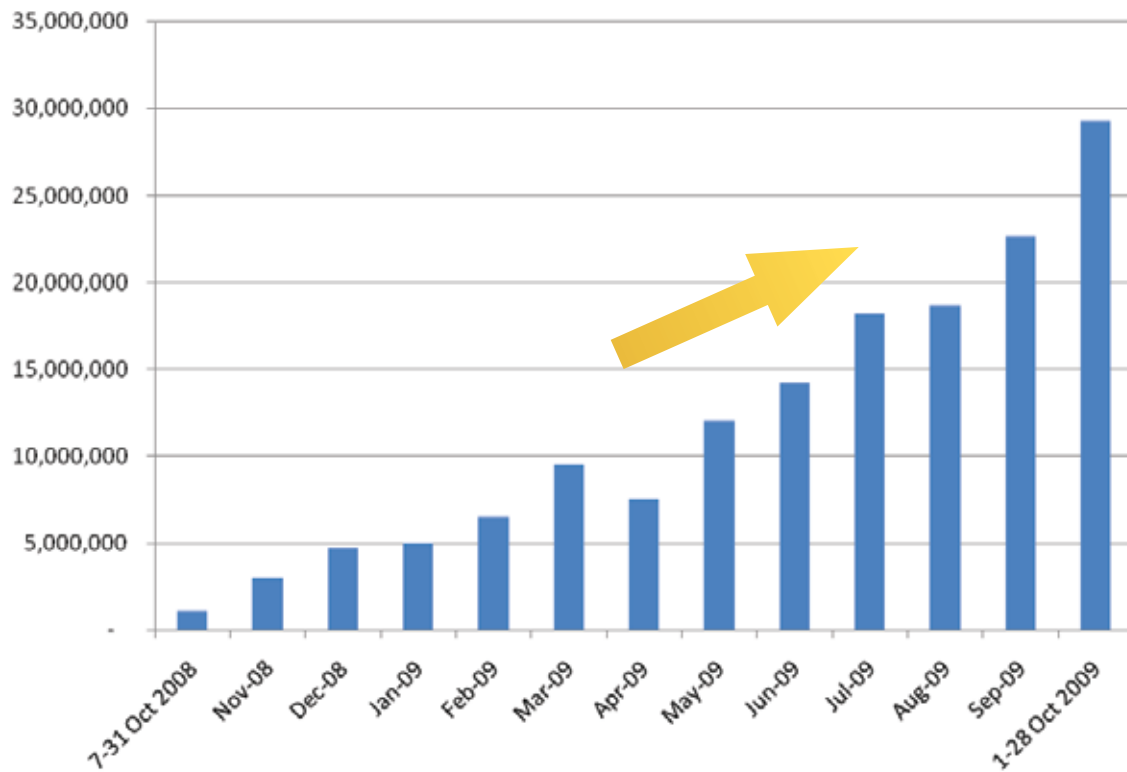
REGIONS	2000 - 01				2007 - 08			
	Exports	Imports	Total	Percentage	Exports	Imports	Total	Percentage
EU	10,410	10,510	20,920	22.00%	32,861	36,810	69,671	16.80%
North America	9,962	3,412	13,374	14.06%	21,977	22,991	44,969	10.84%
Asia-Oceania OECD countries	2,264	2,984	5,248	5.52%	5,162	14,496	19,659	4.74%
Other OECD countries	838	3,251	4,089	4.30%	2,642	13,147	15,790	3.81%
OPEC	4,850	2,689	7,539	7.93%	26,671	76,076	102,747	24.77%
Eastern Europe	1,318	850	2,168	2.28%	3,384	5,264	8,647	2.08%
Developing Countries	13,013	11,156	24,169	25.42%	69,572	80,648	150,220	36.22%
Others	1,906	15,683	17,590	18.50%	863	2,221	3,084	0.74%
Total	44,560	50,536	95,096		163,132	251,654	414,786	

Source: www.rbi.gov.in

(all in USD million)

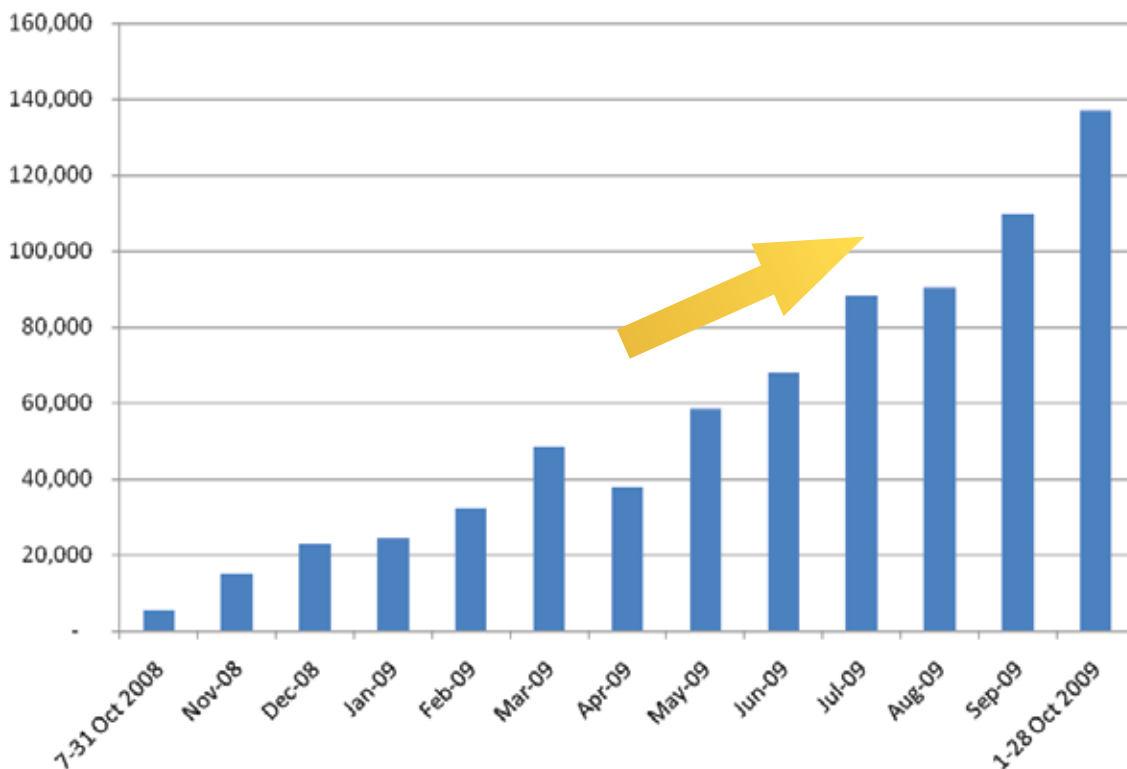
Annexure 2

No. of USDINR Futures Contracts Traded on MCX-SX (single side)

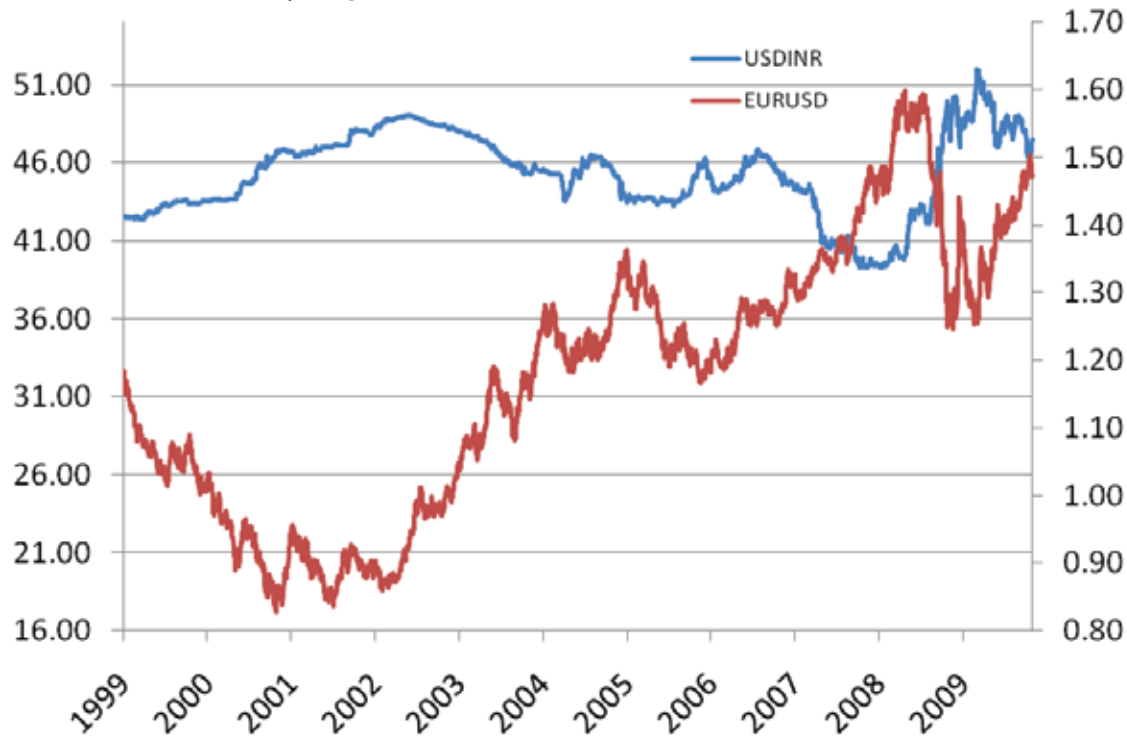


Annexure 3

Turnover Value of USDINR Futures Contracts Traded on MCX-SX



Annexure 4
EURUSD vs. USDINR Daily Graph



Annexure 5
Intra-Day Graph of EURINR and USDINR

