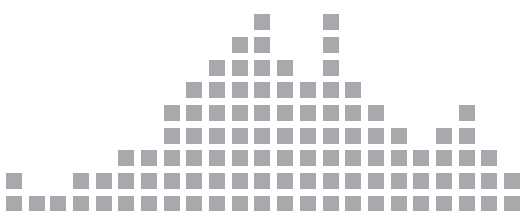


INTEREST RATE[^] FUTURES

MCX[^]SXTM
India's New Stock Exchange

www.mcx-sx.com



About MCX Stock Exchange (MCX-SX)

MCX Stock Exchange Limited (MCX-SX) is recognised by Securities and Exchange Board of India (SEBI) under Section 4 of Securities Contracts (Regulation) Act, 1956. The Exchange was notified a “recognised stock exchange” under Section 2(39) of the Companies Act, 1956 by Ministry of Corporate Affairs, Govt. of India, on December 21, 2012. Shareholders of the Exchange include India’s top public sector banks, private sector banks and domestic financial institutions who, together hold over 88% stake in the Exchange. MCX-SX is subjected to CAG Audit and has an independent professional management.

In line with global best practices and regulatory requirements, clearing and settlement of trades done on the Exchange are conducted through a separate clearing corporation – MCX-SX Clearing Corporation Ltd.

MCX-SX offers an electronic, transparent and hi-tech platform for trading in Capital Market, Futures & Options, Currency Derivatives and Debt Market segments. The Exchange has also received in-principle approval from SEBI for operationalizing SME trading platform. MCX-SX commenced operations in the Currency Derivatives (CD) Segment on October 7, 2008, under the regulatory framework of SEBI and Reserve Bank of India (RBI). MCX-SX launched Capital Market Segment, Futures and Options Segment and flagship index ‘SX40’ on February 9, 2013 and commenced trading from February 11, 2013. Trading in the ‘SX40’ index derivatives began from May 15, 2013. ‘SX40’ is a free-float based index consisting of 40 large-cap, liquid stocks representing diverse sectors of the economy. Its base value is 10,000 and base date is March 31, 2010. The index is designed to be a performance benchmark and facilitate creation of efficient investment and risk management instruments. The Debt Market Segment of MCX-SX, was launched on June 7, 2013, and trading commenced from June 10, 2013.

> Board of Directors

The Board of Directors of the Exchange are eminent personalities from different fields. Their vision, experience and expertise will enable MCX-SX to grow the Indian securities market and provide world-class services to all stakeholders.



Mr. Gopal K. Pillai, IAS (Retd.)
Chairman and
Public Interest Director

Former Union Home Secretary, Govt. of India



Mr. Thomas Mathew T.
Vice Chairman and
Public Interest Director

Retired as Current-in-Charge Chairman of LIC



Prof. (Mrs.) Ashima Goyal
Public Interest Director

Professor, Indira Gandhi Institute of
Development Research



Mr. D. R. Dogra
Public Interest Director

MD & CEO, Credit Analysis and
Research Ltd.



Mr. U. Venkataraman
Whole-time Director

Former Head-Treasury, IDBI Bank Ltd.

Shareholders

Shareholders of the Exchange include India's top public sector banks, private sector banks and domestic financial institutions who, together hold over 88% stake in the Exchange.



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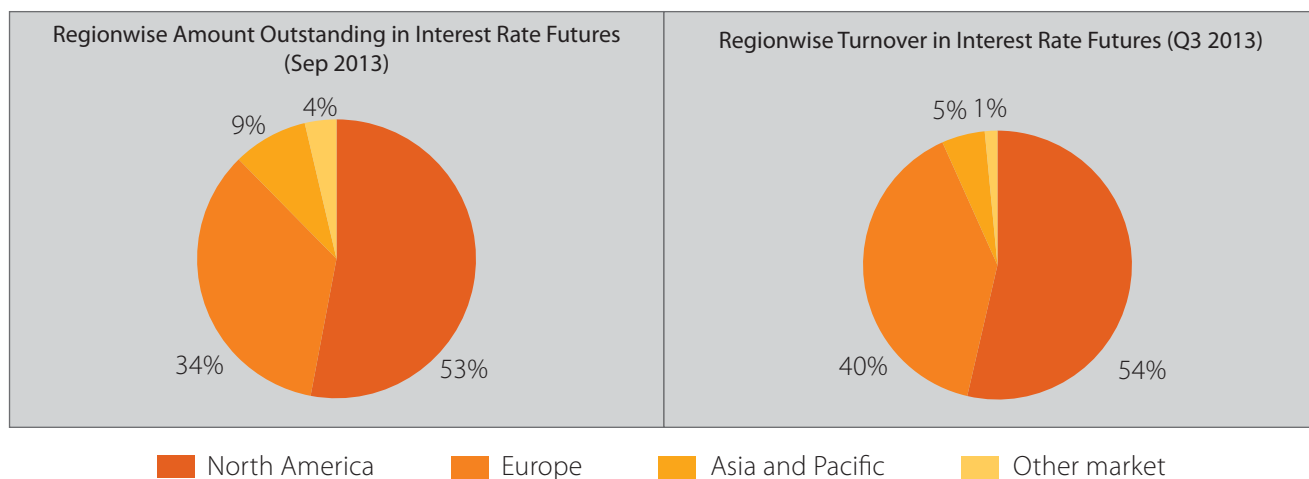
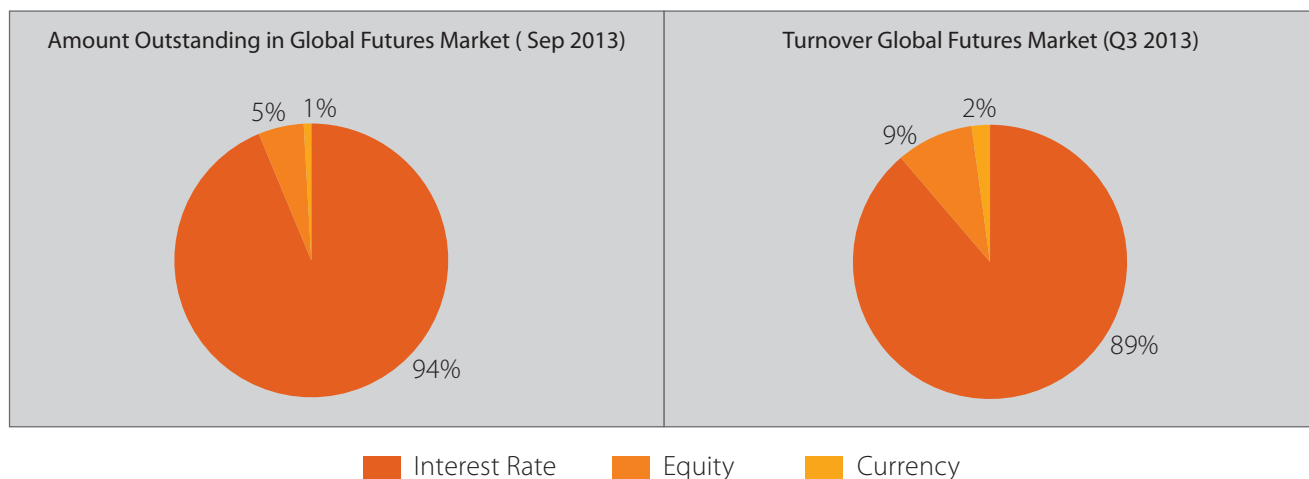
Overview of Interest Rate Futures

Exchange Traded Interest Rate Futures permitted by Securities and Exchange Board of India (SEBI) & Reserve Bank of India (RBI) marks a major policy and product innovation that will have significant impact on the deepening of financial markets in India.

Globally, according to data released by the Bank for International Settlement, Interest Rate Futures account for the largest volume and notional value among the financial derivatives traded on exchanges worldwide.

For financial markets in India, Interest Rate Futures present a much needed opportunity for hedging and risk management by a wide range of institutions and intermediaries namely Banks, Primary Dealers, Pension and Provident Funds, Corporates, Asset Management Companies, Financial Institutions, Foreign Institutional Investors and Retail Investors. Interest Rate Futures will help various constituencies in providing an effective and efficient mechanism to manage interest rate volatility.

Share of Interest Rate Futures in derivative market among Organized Exchanges Worldwide



Source: BIS table 23a of BIS quarterly review September 2013 updated on 08th December, 2013

Overview of Interest Rate Futures

Share of Exchange Traded Derivatives in US market and in Indian Market.

Notional Value of derivatives traded in 2012				
Derivative	United States		India	
	(In \$ Billion)	(in %)	(In \$ Billion)	(in %)
Stock	6,857.38	0.76	1,075.12	9.73
Stock Indices	77,857.89	8.67	5,452.10	49.36
Currency	31,845.75	3.54	1,432.59	12.97
Commodities	59,578.99	6.63	3,084.81	27.93
Interest rate	722,374.96	80.40	0.00	0.00
Total	898,514.96	100.00	11,044.62	100.00

Source: WFE, MCX, NCDEX, ACE & SEBI

➤ Benefits of Interest Rate Futures

- Expands the scope of the financial markets by deepening and widening the derivatives markets
- Allows hedgers to efficiently transfer risk to other participants of market
- Provide banks and financial institutions with an avenue for efficient Asset-Liability Management
- Enables Fund managers and Insurance companies to effectively manage their asset allocation and investments
- Helps to manage "Yield Curve Risk" arising out of adverse shift in market interest rates especially when banks have assets and liabilities across different tenors
- Helps to manage "Basis Risk", when yield on assets and costs on liabilities are based on different benchmarks
- Enables to hedge against "Repricing Risk" in asset-liability management
- Decreases the sensitivity of returns on bank assets and liabilities, due to volatility in interest rates
- Lower entry and exit costs by using IRF, as compared to Interest Rate Swaps (IRS)
- Clearing and settlement through exchange clearing houses ensures safety leading to decrease in risk capital allocation for hedged assets and better "Capital Adequacy Ratio"
- Smaller lot size of IRF provides avenue to develop mechanism for hedging risk exposure of retail clients
- Arbitrage between cash and futures markets
- Assists individuals in efficient management of the household balance sheet
- Simple derivative instrument and easy to understand due to its linear pay-offs

Salient Features of Exchange Traded Interest Rate Futures

- Increased market reach enables higher liquidity
- Greater protection against counterparty default risk due to novation by Clearing House of the Exchange
- Enhanced transparency through automated anonymous order matching system
- Efficient price discovery
- Futures contract permitted for various tenors ranging from 91 days to 10 years, enables market participants to spread their hedging across various maturities
- Efficient and robust risk management system ensures monitoring of various risks on a real time basis and taking pro-active steps to mitigate the same
- Uniform standards and well-established procedures in IRF market allow symmetry of information across various participants. Standardized products that allow for gauging the utility and effectiveness of different positions and strategies
- Online real-time dissemination of prices
- Guaranteed settlement by the Clearing Corporation eliminates counter party risk thereby increasing the capital efficiency of the market participants

➤ Interest Rate Futures - Market Participants

- Banks
- Primary Dealers
- Mutual Funds
- Insurance Companies
- Provident and Pension Funds
- Corporate Houses
- Brokers
- Foreign Institutional Investors
- Retail Individuals

Membership Eligibility Criteria

Existing Member: As per SEBI circular issued in 2009, any existing member of the Currency and/or Equity Derivatives Segments can seek membership in Interest Rate Futures by complying with the following requirements:

Member	Currency Derivatives Segment	Equity Derivatives Segment
Trading Member	Consent Letter as per the prescribed format	<ul style="list-style-type: none"> • Consent Letter as per the prescribed format • Networth certificate • Trading Member Undertaking • Margin Deposits for Currency Derivative Segment • Clearing Member and Trading Member agreement
Clearing Member	Consent Letter as per the prescribed format	<ul style="list-style-type: none"> • Consent Letter as per the prescribed format • Networth certificate • Clearing Member Undertaking • Settlement Bank Account for Currency Derivatives Segment • Margin Deposits for Currency Derivative Segment • Minimum Liquid Net Worth

New Member: New member desirous of seeking membership for trading in Interest Rate Futures shall complete the membership formalities as per the process describe in the following link of MCX-SX website:

<http://mcx-sx.com/member/membership/pages/membership-process.aspx>

➤ IT Infrastructure - Connectivity

Members of Currency and/or Equity Derivatives Segment can use their connectivity modes and interface as under:

➤ Exchange Connectivity Modes

- Point-of-presence (POP)
- Leased Line – MPLS
- VSAT
- Internet Based Trading (IBT)

➤ Front Office Interface

- Support for FIX API
- Direct market Access (DMA)
- Computer to Computer Link (CTCL)

Product Design - A Snapshot

Symbol	883GS2023	716GS2023
Instrument Type	FUTIRF	
Unit of trading	Each futures contract shall represent 2000 underlying bonds of total face value of INR 2,00,000/-	
Underlying	8.83% Gol 25-Nov-2023	7.16% Gol 20-May-2023
Coupon	8.83%	7.16%
Trading hours	Monday to Friday 9:00 a.m. to 5.00 p.m.	
Contract Value	Quoted price * 2000	
Quotation	One Bond of face value Rs 100	
Tick size	0.25 paise (or INR 0.0025)	
Contract trading cycle	Maximum of Three serial monthly contracts with maturity of one-month, two-month and three-month shall be available simultaneously	
Daily Contract Settlement Value	Daily settlement price (DSP) * 2000	
Daily settlement Price (DSP)	<p>DSP shall be calculated on the basis of the last half an hour volume weighted average price of such contract. In the absence of last half an hour trading on the Exchange, theoretical futures price shall be considered for computation of DSP.</p> <p>For computing theoretical futures price, following shall be considered:-</p> <ul style="list-style-type: none"> Weighted average price of underlying bond in last two hours of trading on NDS-OM If no trades are executed in the underlying bond then, a theoretical price with reference to FIMMDA rates shall be used. 	
Final Settlement price (FSP)	Final Settlement price will be arrived at by calculating the weighted average price of the underlying bond based on the prices during the last two hours of the trading on NDS-OM. If less than 5 trades are executed in the underlying bond during the last two hours of trading, then FIMMDA price shall be used for final settlement.	
Expiry/ Last trading day	The expiry / last trading day for the contract shall be the last Thursday of the expiry month. If any expiry day is a trading holiday / shut period, then the expiry/ last trading day shall be the previous trading day	
Daily settlement (Mark-to-Market)	T+1 in Cash (INR)	
Final settlement	T+1 in Cash (INR)	

Margin	<p>Applicable Margins:</p> <ol style="list-style-type: none"> Initial Margin: To cover 99% VaR over a one day horizon subject to minimum 1.5%. However, the initial margin on the first day shall be 2.80% Extreme Loss Margin: Minimum 0.5% of the contract value Calendar Spread Margin: Rs. 800 for 1 month spread and Rs. 1200 for 2 month spread
Daily Price Range/ Price Bands	<p>3% of Previous Close/ Base Price</p> <p>Whenever a trade in any contract is executed at the highest/lowest price of the band, the Exchange may expand the price band for that contract by 0.5% in that direction after 30 minutes after taking into account market trend. However, no more than 2 expansions in the price band will be done within a day.</p> <p>Further, SEBI in consultation with RBI may halt the trading in case of extreme volatility.</p>
Position limits	<p>Client Level: Higher of 3% of total open interest or Rs. 200 crore</p> <p>Trading Member: Higher of 10% of total open interest or Rs. 600 crore</p> <p>FILs*: Higher of 10% of total open interest or Rs. 600 crore</p> <p>Exchange Level Overall Position Limit: Higher of 25% of the outstanding of underlying bond or Rs. 25,000 crore</p> <p><i>* The total gross short (sold) position of each FIL in IRF shall not exceed its long position in the government securities and in Interest Rate Futures, at any point in time. The total gross long (bought) position in cash and IRF markets taken together for all FILs shall not exceed the aggregate permissible limit for investment in government securities for FILs.</i></p>

Frequently Asked Questions

1. What is Interest Rate Futures?

Interest rate future is a financial derivative (a futures contract) with single or basket of interest bearing instrument/s as the underlying asset/s. It is a contract in which one counterparty agrees to buy or sell the underlying asset from/to another counterparty at a future date at an agreed price.

2. What is the underlying of Interest Rate Futures?

Underlying for Interest Rate Futures is the active security issued by Government of India with a residual maturity between 9 and 10 years on the day of expiry of the futures contract. Currently, the GOI security with a coupon of 8.83% maturing in November 25, 2023 and 7.16% maturing in May 20, 2023 are identified as underlying securities for the 10 year cash settled futures contract.

3. Which are the entities eligible to participate in Interest Rate Futures?

As per RBI Notification dated December 05, 2013, persons resident in India are permitted to purchase or sell Interest Rate Futures both for hedging an exposure to interest rate risk or otherwise. Foreign Institutional Investors, registered with Securities and Exchange Board of India, are permitted to purchase or sell Interest Rate Futures.

4. When can one start using the TWS?

A new member shall be provided access to the Trader Workstation after completion of membership formalities. Exchange will provide the Membership Number and User ID, which would be unique, with which the Member / User can access the Trader workstation. The system would, as part of password policy implemented by MCX-SX, prompt the user to change the password immediately on his logging in to the system for the first time. Existing members of Currency Derivatives Segment can continue to use their existing Membership / User IDs for trading in interest rate futures. However, they can also seek separate User IDs from the exchange, if they wish to employ different Users for trading in interest rate futures.

5. What are the features available to the user / member terminal?

Besides order matching, the trading system has various features which are made available to members through the following screens:

1. Product Information: This displays the information about the product e.g. Product description, Daily Price Range, Lot Size.
2. Market Watch: This displays the best order available in the market for instrument along with other information e.g. Open Interest, Volume, Turnover, LTP.
3. Market Depth: This displays the details of top 5 pending bids and offers in the market for a particular expiry of the product.
4. Surveillance maintenance: This displays the margin available and utilized by the member and turnover limit available and utilized by its users.
5. Order Book: This displays the order placed by the user along with order status i.e. Pending, Executed, Cancelled and Rejected.
6. Trade Book: This displays details of trades executed by the user.
7. View Position: This displays the daily net position to the user and daily and expiry net position for member.

Frequently Asked Questions

6. How the contracted value will be computed for Interest Rate Futures?

Contract value is computed as:

Contracted Value = No. of Contract*Lot Size*Contracted Price

7. Does Trading in Interest Rate Futures happen during Shut period of the underlying?

Shut period of a security refers to the period during which trading and settlement are not permitted in the concerned security and hence, there would not be trading in Interest Rate Futures also during shut period of the underlying.

8. How to close out the position in Interest Rate Futures before expiry?

To close out the position before expiry, member can take the opposite position in the same expiry of same underlying.

9. How to rollover the position in Interest Rate Futures?

To rollover the position member can take the same position in the different expiry of the same underlying, simultaneously close out the held position.

10. What is a spread contract?

Spread contract is a single contract available for two different expiries of the same underlying. This enables traders to take opposite positions in the contracts having different expiries of the same underlying simultaneously. Buying (selling) a spread contract means selling (buying) near month contract and buying (selling) far month contract simultaneously.

For example, buying spread contract January over February means the participant is buying far month contract i.e. February and selling near month contract i.e. January.

11. What would be the risk if the counterparty fails to pay the obligation?

Clearing Corporation of the exchange (MCX-SX CCL) would novate the trades thereby becoming central counterparty for such novated trades. By assuming the role of a central counterparty, the clearing corporation provides guarantee to the settlement of trades eliminating the counter party risk.

12. What is the settlement mechanism for the trades executed in Interest Rate Futures?

There are two types of settlement as under:

- a. Mark-to-Market Settlement: Done on daily basis in cash for the difference between the Current Daily Settlement Price and the traded/previous Daily Settlement Price.
- b. Final Settlement: Done in cash on the first working day after expiry of futures contract.

13. What would be the settlement cycle for Interest Rate Futures?

All the settlement (MTM and Final Settlement) will be done on T+1 day. In case if T+1 day is a clearing holiday then settlement will be done on the next working day.

Frequently Asked Questions

14. How the margin will be levied in Interest Rate Futures?

Margin in Interest Rate Futures will be levied real time on Post trade basis. Margin levied will be deducted upfront from the available margin limit of the Trading/ Clearing Member.

15. What are the types of margin will be levied in Interest Rate Futures?

In addition to Initial margin, Extreme Loss margin will also be levied at Clearing Member Level. In case the member is having spread position in contracts expiring in different months, then Calendar Spread Margin will be levied for such spread positions

16. What is initial and extreme loss of margin?

The Initial Margin shall be based on a worst case loss of a portfolio of an individual client across various scenarios of price changes. The various scenarios of price changes would be so computed so as to cover a 99% VaR over a one day horizon as calculated by SPAN[©].

Minimum Initial Margin and Extreme Loss Margin shall be 1.50% and 0.50% respectively. Initial Margin on the first day shall be 2.80%.

17. What is applicable margin for calendar spread?*

Futures position in one expiry month which is hedged by an offsetting position in a different expiry month is treated as a calendar spread and an offsetting benefit is provided on such positions for margins. The benefit for calendar spread continues till expiry of the near month contract. Applicable calendar spread margin rates varies based on the duration of the spread and the underlying. Applicable margin on Spread position in Interest Rate Futures is as under:

Spread	Calendar Spread Margin
1 Month	INR 800
2 Month	INR 1200

18. What would happen if the margin utilized exceeds the margin available?

Once the margin utilization exceeds the available margin limit, the member will move to square off mode, where all his pending orders will automatically be cancelled and the member will be able to place only opposite order to the held position.

19. Whether member can view the margin utilized?

Yes, Trading Member and Clearing Member can view the margin utilized at their respective level in the member admin terminal. Further, if the margin utilization reaches 60%, 75% and 90% of margin available, member would get an on-line alert on the system.

Frequently Asked Questions

20. Whether Clearing Member can set the margin limit for trading member?

Yes, Clearing Member can set the margin limit for their respective trading members. Further, trading member can also set the buying and selling turnover limit for their respective users.

21. In what forms margin can be deposited by the member?

Clearing Members / Professional Clearing Members can provide any deposits over and above their minimum liquid net-worth requirement in the form of:-

- Cash Deposits
- Bank Guarantees
- Fixed Deposit Receipts
- Government Securities or Treasury Bills
- Approved Securities and units of mutual funds in demat form deposited with the custodian.

22. Will a member be able to deposit the collateral during intraday and trade further, if the margin limit is breached?

Yes, a member can deposit additional collateral towards margin intra-day so as to cover his breached margin limits and trade further. Once the margin is enough to cover the position, Exchange Admin will activate the member to do trade further.

23. What are types of reports available to the members of Interest Rate Futures?

Following major reports are available to the member besides various other reports, as mentioned in Circular No.959 vide dated 21st January, 2013 issued by the Exchange:

1. Trade Report
2. Margin Report
3. Obligation Report
4. Position Report
5. Open Interest

Case Examples on Using Interest Rate Futures

Case Example 1: Bank Investments in G-Secs

ABC Bank Limited has a SLR (AFS and HFT categories) portfolio consisting of GOI securities of different maturities ranging from 10 years to 30 years. The portfolio value as on 10th November 2013 was Rs.96,610,805 and the portfolio modified duration is 6.6238. ABC Bank has a risk of increase in interest rates which would increase the yield of GOI securities eventually resulting in decrease in MTM value of the portfolio. Future expiring on 31st December, 2013 was quoting at 99.6250 having underlying as Government of India Security and modified duration as 6.3028. ABC decides to hedge the interest rate risk using Interest Rate Futures so as to mitigate the risk of decline in asset value of its portfolio. Accordingly, the bank has sold 510 contracts of IRF for a total value of Rs.101,617,500.

Computation of Number of Contracts:

No. of contracts required:

$((\text{Market Value of Portfolio} * \text{Modified Duration of Portfolio}) / (\text{Market Value of One Futures Contract} * \text{Modified duration of Futures Contract}))$

$(96,610,805 * 6.6238) / (2000 * 99.6250 * 6.3028) \approx 510 \text{ Contracts}$

On expiry of IRF contract i.e. 31st December, 2013, the rates across the yield curve have gone up by 1% due to inflationary pressure and rupee volatility, As a fall out of this, the portfolio value has gone down to Rs.90,335,908.41 and the futures price on the expiry date is 93.2682 which has brought down the value to Rs.95,133,527.83.

Change in value of Portfolio:

Revised Portfolio value: 90,335,908.41

Loss in portfolio: 6,274,896.49

Revised Futures value: 95,133,527.83

Profit in futures: 6,483,972.17

Net Profit: Rs.209,075.68

Hedging Effectiveness: 103% (Approximate)

Thus, the long position in the cash market was effectively hedged by taking a short futures position.

Case Examples on Using Interest Rate Futures

Case Example 2: Institutional Investor selling the portfolio after specific point of time

An institutional investor would like to liquidate his bond portfolio with a current market value of Rs. 1,002,948,800 in the course of the next two months. He is worried that interest rates could rise – and that prices could fall – by the time of the planned sale. The modified duration of the bond portfolio is 0.6776 and the investor uses IRF contract with 10 year GOI as underlying for hedging the interest rate risk. The futures with December expiry is quoting at 93.8801 having modified duration 6.4707 and the investor sells 559 contracts for a value of Rs.104,957,952. As expected, the interest rate has moved up by 100 basis points at the end of December due to which the portfolio and futures value have also changed as under:

Computation of Number of Contracts:

No. of contracts required: $(1,002,948,800 * 0.6776) / (2000 * 93.8801 * 6.4707) \approx 559$ Contracts

Change in value of Portfolio:

Revised Portfolio value: 996,771,000

Loss in portfolio: 6,177,800

Revised Futures value: 98,279,243

Profit in futures: 6,678,708

Net Profit: 500,908

Hedging Effectiveness: 108% (Approximate)

Case Examples on Using Interest Rate Futures

Case Example 3: Corporate Borrowing

Long-Term Debt for Infrastructure Expenses

XYZ Company Limited is a well-established infrastructure development company. It has won a contract for building the sea-link between Mumbai and Navi Mumbai. The total cost of the project is approximately Rs. 4,000 Crores, 50% of which is funded using debt over a period spanning the duration of the project – estimated to be 4 years. The loan is syndicated through 2 banks and 4 financial institutions.

In the first tranche of the entire debt structure, XYZ is planning to borrow Rs. 500 Crores, which it plans to repay in 10 years. The interest on the first tranche is payable quarterly based on a major Public Sector Bank's Base Lending Rate (BLR) prevailing on the interest payment date. The interest payment is commencing on 1st January 2014. The loan has been sanctioned and first tranche was issued on 15th December 2013, when the BLR was 11%.

XYZ is exposed to risk of increase in interest rates (which would increase BLR). If inflation increases, then there is likelihood that the Central Bank may increase interest rates, leading to increase in the BLR which would result into higher interest rate cash outflow. XYZ decides to hedge using Interest Rate Futures.

1. On 15th December 2013, the February 2014 futures contract on the 10-year benchmark coupon-bearing Government Security is trading at Rs. 99.7429, when the YTM of the benchmark was around 8.85%.
2. XYZ decides to hedge by taking short position in the February 2014 futures contract. The rationale for shorting the futures contract is as follows:
 - a. When the interest rate increases, the yield of the underlying G-Sec also increases. This effectively decreases the price of the bond, leading to corresponding decrease in price of the futures contract.
 - b. Thus, when XYZ shorts the futures contract, it would be able to close its position at a lower price thereby making profit in futures contract which would compensate the higher interest rate cash-flow.
3. The number of lots of the futures contracts should be equivalent to the debt component considered for the duration of hedge. As XYZ increases the loan exposure over the tenor of the project, it needs to increase the hedge exposure, to mitigate against interest rate risk.

Case Examples on Using Interest Rate Futures

Case Example 4: Corporate Issuing Bonds with Embedded Put Options at Fixed Rate of Interest

PQR Auto Limited is recognized for innovation and engineering excellence in the automotive industry. For funding its capacity expansion, PQR decides to source funds by issuing bonds, with an option for investors to redeem the bonds after a lock-in of 1 year. The coupon for the bonds has been fixed at a rate of 8.96%. PQR has excellent credit rating of AAA from two independent rating agencies, for issue of these corporate bonds with embedded options.

After 6 months of having issued the bonds, the General Manager – Finance and Treasury has observed that the interest rates in India has increased, due to fast growth of Indian economy. The repo rate which was under 7% has surged by over 50 basis points, due to high inflation rate. The BLR has also increased by 50 basis points. Banks have commenced increasing the deposit rates. The GM is worried that when the bonds are due for puttable option for optional redemption by investors, there would be a huge demand for funds. This may pose an asset liability mismatch for PQR. In such circumstance, PQR may be forced to redeem the bonds issued at coupon of 8.96% and reissue new bonds at a higher coupon rate.

Thus, in order to mitigate risk against increase in interest rates, leading to redemptions, the corporate decides to hedge using interest rate futures. By taking a short position in interest rate futures, the corporate can effectively ensure that increase in interest rates would lead to decrease in bond prices, thereby, protecting PQR against the interest rate differential between the coupon of already issued bonds at 8.96% and the coupon of the new bonds to be issued.

Currency futures market - A perspective

In 2008, MCX-SX had started trading in Currency futures in USD INR. The Exchange now offers futures trading in four currency future pairs -- US Dollar-Indian Rupee (USDINR), Euro-Indian Rupee(EURINR), Sterling Pound -Indian Rupee (GBPINR) and Japanese Yen-Indian Rupee (JPYINR) and Options in USD-INR pair.

Since inception, the Exchange has witnessed a steady growth in average daily turnover and open interest. The currency derivatives segment of MCX-SX witnesses a nationwide participation from major cities and towns in India and supported by a strong member base of more than 700 members.

Currency futures and options contracts on MCX-SX are enabling Indian Importers, Exporters, Corporates, Banks and other participants to effectively hedge their risks arising out of volatile currency prices. MCX-SX currency contracts also offer a better flexibility than the currency contracts traded on over-the-counter (OTC) market as the structure and pricing of an exchange-traded contract is more transparent. The MCX-SX platform provides the desired liquidity and depth to all members, be it Banks, corporate houses, brokerages or the retail investor. Furthermore, all transactions are settled through its clearing corporation, MCX-SX CCL, which makes trading on MCX-SX more secure by eliminating the counter-party risk.

Product specifications - Currency Futures

Symbol	USDINR (\$)	EURINR (€)	GBPINR (£)	JPYINR (¥)
Unit of trading	1 (1 unit denotes 1000 USD)	1 (1 unit denotes 1000 EURO)	1 (1 unit denotes 1000 POUND STERLING)	1 (1 unit denotes 100000 YEN)
Underlying	USD The exchange rate in Indian Rupees for a US Dollar	EURO The exchange rate in Indian Rupees for a EURO	POUND STERLING The exchange rate in Indian Rupees for a POUND STERLING	JPY The exchange rate in Indian Rupees per 100 JPY
Tick size	0.25 paise or INR 0.0025			
Trading hours	Monday to Friday - 9:00 a.m. to 5:00 p.m.			
Contract trading cycle	12 month trading cycle			
Last trading day	Two working days prior to the last business day of the expiry month at 12:15 p.m.			
Final settlement day	Last working day (excluding Saturdays) of the expiry month The last working day will be the same as that for Interbank Settlements in Mumbai			
Position limits				
Client	Lower of 6% of total open interest or USD 10 million	Higher of 6% of total open interest or EUR 5 million	Higher of 6% of total open interest or GBP 5 million	Higher of 6% of total open interest or JPY 200 million
Trading Member (other than banks)	Lower of 15% of the total open interest or USD 50 million	Higher of 15% of the total open interest or EUR 25 million	Higher of 15% of the total open interest or GBP 25 million	Higher of 15% of the total open interest or JPY 1000 million
Banks	15% of the total open interest or \$100 million whichever is lower	Higher of 15% of the total open interest or EUR 50 million	Higher of 15% of the total open interest or GBP 50 million	Higher of 15% of the total open interest or JPY 2000 million
Minimum initial margin	1.75% on the first day and 1% thereafter	2.8% on the first day and 2% thereafter	3.2% on the first day and 2% thereafter	4.50% on the first day and 2.30% thereafter
Calendar spreads	₹800 for a spread of 1 month, ₹1,000 for a spread of 2 months, ₹1,600 for a spread of 3 months & ₹2,000 for a spread of 4 months or more	₹700 for a spread of 1 month, ₹1,000 for a spread of 2 months, ₹1,500 for a spread of 3 months or more	₹1,500 for a spread of 1 month, ₹1,800 for a spread of 2 months, ₹2,000 for a spread of 3 months or more	₹600 for a spread of 1 month; ₹1,000 for a spread of 2 months and ₹1,500 for a spread of 3 months or more
Settlement	Daily settlement: T+1, Final settlement: T+2			
Mode of settlement	Cash settled in Indian Rupees			
Daily settlement price (DSP)	DSP shall be calculated on the basis of the last half an hour weighted average price of such contract or such other price as may be decided by the relevant authority from time to time			
Final settlement price (FSP)	RBI reference rate		Exchange rate published by the Reserve Bank in its Press Release captioned RBI Reference Rate for US\$ and Euro	

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