

# Getting Smarter Series – Overnight Index Swaps (OIS)



# **Understanding IRS & OIS**

## What is Interest Rate Swap (IRS)?

- ✓ Swap is a hedging contract between two parties, wherein one party pays fixed interest while other party pays floating interest rate. Floating interest rate is generally linked to MIBOR and is dependent on interest rate cycle in the country.
- ✓ The decision to pay fixed or floating rate is dependent on the perception of future interest rates. If one has the view that interest rate will rise, he/she will enter into swap for paying fixed interest & receiving floating interest.
- ✓ IRS is generally net settled wherein parties at the time of reset date/maturity pays the difference in the accrued interest arrived according to the fixed and floating interest rate.

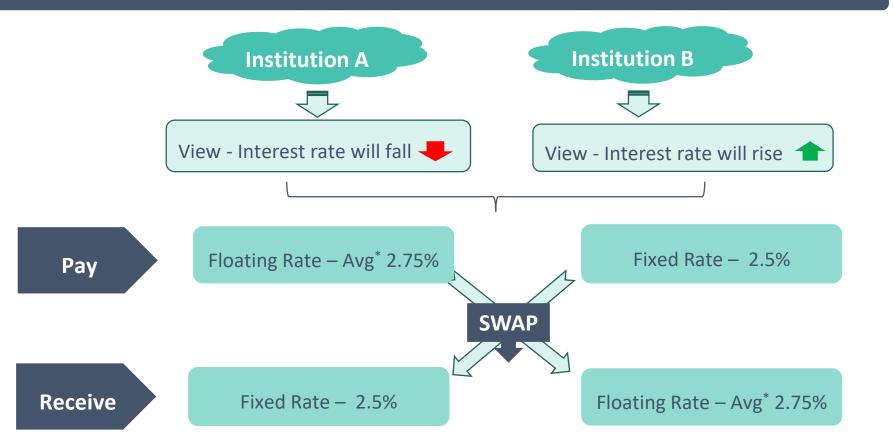
#### What is Overnight Index Swap (OIS)?

✓ Overnight Index Swap is a type of IRS wherein overnight rate (MIBOR linked) is used for floating leg of the transaction. The floating leg of the transaction is calculated & compounded daily.



## **OIS - Illustration**

#### How does OIS works?



At the end of the SWAP, Institution A will pay Institution B net 0.25% on the notional principal amount agreed at beginning of contract.



<sup>\*</sup> MIBOR Linked. It is assumed that interest rate has risen over the contract tenure

#### OIS in mutual fund context

### How a Mutual fund uses OIS to hedge interest rate risk?

A mutual fund can use OIS to convert fixed interest rate to floating interest rate

**Enter a Swap** 

Buy a fixed income security

+

Pay OIS (Fixed Rate)

Receive Overnight Rate (Floating Rate)

#### Illustration

- ✓ A fund invests in 4 year G-Sec of Rs. 1,000 Cr @ 6.00% & in order to hedge their interest rate risk pays a 2 year OIS of 4.85% on a notional value of Rs. 1,000 Cr.
- ✓ Assuming after 6 months interest rate goes up by 50 bps & OIS goes up by 70 bps. The fund will have
  - Loss on G-Sec trade = 50 bps \* 3.5 approx. duration: (-) Rs. 1.75
  - Gain on OIS trade = 70 bps \* 2 approx. duration: (+) Rs. 1.4

Hence the investor lost only 35p instead of losing Rs. 1.75



## **Importance of OIS**

## How does OIS help?

- ✓ Helps in *hedging interest rate risks*. Participating parties can hedge their fixed/ floating rate interest risk.
- ✓ Mitigates *reinvestment risks*. OIS rate can be a measure of market expectation of money market rates.
- ✓ Usage of OIS helps in *closer duration matching* of the investment portfolio by reducing interest rate volatility impact
- ✓ Can be used as an *alternative to re-position portfolio*, thereby avoiding asset sale/realize capital gains.



# Other key characteristic of OIS

- ✓ OIS is one of the commonly used interest risk management practice in India. OIS rate is based on Overnight MIBOR benchmark published by Financial Benchmarks India Pvt Ltd (FBIL)
- ✓ FBIL announces MIBOR-OIS rate for various tenor ranging from 1 month to 5 years. CCIL is the calculating agent which calculates the MIBOR-OIS rates based on transaction reported till 5 pm
- ✓ There is no premium cost required to be paid at the time of initiation of contract. Contract is net settled periodically based on agreement between parties..
- ✓ Of all the different OIS, the one-year and the five-year instruments are the most traded in India, as they offer the most liquidity.
- ✓ The volume in OIS market is low as compared to G-Sec market & private/foreign banks are major participant.
- ✓ OIS is the most popular & liquid segment of Interest Rate Swap







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